

DPCR4 Ofgem's Second Consultation – December 2003

Detailed Comments from Central Networks

The following detailed comments follow the order and numbering of Ofgem's consultation paper.

3. Structure of the price control

3.4 - 3.10 Revenue Drivers

[Ofgem are seeking views on whether the existing revenue driver is sufficient to reflect changes in costs driven by load growth.](#)

We do not see any justification for changing the existing 50% units and 50% customer-driven revenue driver for this review, since these two components are largely a proxy for a capacity driver and have worked well in the past.

However, the relationship between revenue and costs is likely to change with increased penetration of distributed generation (DG), and there will be a need to ensure that the driver continues to reflect changes in costs. A mechanism may therefore be required that compensates for the effects of DG and, in particular, domestic CHP, on units distributed, without fundamentally changing the architecture of the revenue driver. Our current view is that this will not be required until after 2010 unless things change significantly beforehand.

3.11 – 3.21 NGC Exit Charges

Incentives

[Ofgem are considering whether there is any aspect of NGC exit charges that are within the control of a distribution network operator \(DNO\).](#)

DNOs have no influence over either connection charging policy or the level of costs incurred, and thus NGC exit charges should continue to remain as full pass through. The Frontier Economics report on uncertainty produced a decision-making framework to test whether incentives or pass through is more appropriate for a particular issue. Using this approach, DNOs have no control over the costs of existing connections. In practice, new NGC connections are uncontrollable as their requirements are capacity driven by security standards and the design of the new connection by engineering principles. Furthermore if new connection costs were even partially incentivised, this could lead to perverse incentives to minimise costs by deferring capex, which would need to be balanced by new network quality incentives.

As Ofgem are aware, the recent introduction of "plugs" has made this much less of a material issue than it was.

Interaction with Distributed Generation

[Ofgem request views on whether incentivising NGC exit charges would encourage take-up by distributed generators.](#)

It is our experience that where DG affects exit charges, it leads to increased costs. This is generally where DG increases fault levels beyond the capability of existing switchgear, both for a DNO and NGC. Two principal options are available to resolve this situation, being either the replacement of the switchgear, or revising the operating regime at the GSP. The former would incur additional exit charges, whilst

the latter as a minimum is likely to require additional expense by NGC on a sequence scheme and may require additional assets to be installed to work within planning standards.

A change in the treatment of exit charges from that used at present is therefore unlikely to affect the take-up of DG, because the impacts are likely to be marginal compared with the overriding driver of location.

Wheeling

[The consultation paper considers possible changes to the existing treatment of wheeling costs.](#)

We support balanced incentives to encourage more use of connections between adjacent DNOs as opposed to reinforcing assets at GSPs.

At present a DNO can make a fair assessment of the costs and benefits of a connection between its own network and NGC because costs can be included in CAPEX submissions and recovered in the usual way through DUOS. Such assessments cannot be made for direct connections between DNO networks since the costs are not similarly recoverable under the current regulatory regime.

We propose that this be addressed by permitting the importing DNO to recover the use of system cost in much the same way as NGC costs are currently recovered.

3.22 – 3.39 EHV Charges

[Ofgem wants to understand how continuing with the current exclusion of EHV from the price control protects the interest of customers.](#)

We have followed the guidance as set out at the last review for EHV charges i.e. charges have broadly followed an RPI – 3 glide-path. Whilst we believe that the existing approach provides adequate protection to customers, we would be prepared to support explicit guidelines on how these charges should be set, and for publishing such information.

The site-specific nature of EHV customers makes it difficult, if not impossible, to accurately forecast costs. Applying the Frontier Economics framework to EHV charges would therefore imply that an RPI – X mechanism may not be appropriate. Any inclusion of EHV charges within a price control would as a minimum need to maintain the locational signals within the connection charges and have an appropriate mechanism in place to avoid the risk of stranded costs.

3.40 – 3.49 Non-contestable Charges

Scope of competition

[Ofgem have asked for views on the further development of competition in connection charges.](#)

We support Ofgem's intention to further develop the contestable element of connections. We believe the achievement of the greater transparency and flexibility required to respond to a changing environment is best undertaken under the auspices of a formal license framework. In addition, we would urge Ofgem to work with the Health and Safety Executive (HSE) to provide clarity and certainty on which parties are liable for doing work on assets owned by a DNO.

Protecting customers

Ofgem are proposing to introduce new service standards to protect customers who are provided with a non-contestable connection.

The provision of a non-contestable service requires some form of regulation. Appropriate revenue drivers would be difficult to determine on a robust basis, due to inherent volatility, and so we recommend that this remains an excluded service with increased transparency, perhaps in the form of a more comprehensive LC4 statement. We would support the introduction of a focused extension to the existing service standards provided they are proportionate, and take into account the cost and benefit of delivery. Furthermore the standards should not discriminate between competitive and statutory connections to avoid possible distortion of the market.

3.51 – 3.53 Business Rates

Ofgem have asked for views on whether DNOs should be subject to some form of incentive to manage the level of rates charged.

Business rates are currently set by Central Government and DNOs have little ability to influence their level. In our view, business rates should be a full pass-through cost.

Ofgem's reasoning for believing we have the ability to influence the outcome is the fact that for the first time we have been given rights of appeal against the final business rates given to us by the Valuation Office.

However, in practice, because of the up-front negotiation process we are unlikely to be able to reject our valuation at a later stage. And, in any case, DNOs' ability to negotiate is restricted to a few key points only.

Consequently the only way to control rates is to change the physical characteristics of the network, which for long lived assets will take decades. Therefore the full costs of business rates should be recovered from customers, as is currently the case for NGC.

3.57 – 3.60 Dealing with Uncertainty

In the consultation, Ofgem do not believe there are sufficient reasons to align its approach for dealing with uncertainty with Ofwat. Instead it considers the application of "letters of comfort" on specific areas for DPCR 4.

We are disappointed that Ofgem has not taken the Frontier Economics work on uncertainty further forward, and indeed have real concerns that this is being dropped from the DPCR 4 agenda.

Compared with previous price controls, there is unprecedented uncertainty, the opportunities to offset unexpected cost pressures are becoming scarcer and, as a consequence, the risks to DNOs are increasing. It is therefore important that this is brought into the equation when making a judgement on the cost of capital.

Ofgem's specific proposal of comfort letters is insufficient to address coming uncertainties, particularly with respect to items such as lane rentals. Instead we require a framework that provides a predictable way of dealing with uncertainty, which is more substantial than a "letter of comfort", but less bureaucratic than Ofwat's opening up of the full price control. We believe this warrants a formal mechanism.

The DNOs are jointly considering an improved approach to this. Such an approach is likely to propose that Ofgem set out notified items, which are codified within the price control formula. These items would have a high degree of materiality. It is envisaged that a DNO could apply for a specific cost allowance mid-way through a price control for a particular notified item, and Ofgem could either agree with this assessment or have the ability to introduce a counter-proposal. If agreement cannot be achieved, both parties would have the legal authority to go to the Competition Commission for specific resolution. We would support such a transparent approach, which avoids the necessity to open up the entire price control, whilst providing some protection against new obligations or unexpected costs pressures. Without such a formal mechanism, there is a real danger that the finances of a DNO could be materially jeopardised.

Areas that currently seem appropriate for a notified item include:

- Traffic management bill (NRSWA)
- DG costs
- ESQC regulations
- Tax rates and allowances
- Pensions
- Government measures under the Civil Contingencies Bill or other emergency legislation where costs are not recoverable from Government
- New obligations

3.62 – 3.83 Incentive Framework

Rolling Mechanisms

We welcome Ofgem's commitment to apply the rolling savings retention mechanism to operating expenditure in the next price control, but we still have concerns about whether it is suitable for capital expenditure.

OPEX Savings Retention - Alignment with Ofwat

[Ofgem intend to allow companies to retain the benefits of out-performance for a fixed period from \(and including\) the year in which the saving was originally made.](#)

There is no substantive argument as to why Ofgem and Ofwat should not be aligned on this issue. We support a DNO paper, submitted to Ofgem on 26 January 2004, which argues that incremental out-performance should be retained for a fixed period (e.g. 5 years) on top of the year in which the saving is made. Furthermore, at the start of each price control, the baseline for incremental savings should be re-set to zero to account for a revised benchmark, rather than compared with incremental savings in the last year of the old price control. This would avoid savings being deducted twice.

When Ofgem undertake their financial modelling, the incentive reward (or penalty) from this mechanism, as well as for the other incentives on capex, IIP and losses, must be treated outside the NPV model for calculating base price control revenue. Otherwise, by definition, this is not an incentive as the potential rewards will be used in assessing the financial viability of the business against the key interest, dividend and cash-based ratios set for investment grade qualification.

Exceptional and Atypical Items

[Ofgem propose to include exceptional and atypical items within the cost base.](#)

We continue to advocate the approach taken by Ofwat for improving the rolling mechanism framework whereby exceptional and atypical items are excluded. In principle, where costs not foreseen at the price control review subsequently impact the business, they should be excluded from the rolling opex calculation.

There clearly need to be allowances to DNOs for atypical and exceptional items as these types of costs will occur every year.

Eligibility Test for OPEX

[Ofgem are considering whether there should be alignment between opex and capex and hence introduce an eligibility test for opex.](#)

We would not support an eligibility test in addition to those already contained within the GS and IIP mechanisms for opex. This provides a healthy balance between cost savings under RPI-X and output delivery. However, a fundamental issue remains the sustainability or otherwise of the cost allowances against which DNOs performance will be assessed in DPCR4.

CAPEX Savings Mechanism, Efficient Over-spend and An Eligibility Test

[Ofgem ask for comments on what would be an appropriate eligibility test for capex.](#)

We welcome Ofgem's intention to reward CAPEX efficiency savings on the same 5-year retention basis used for OPEX. Similarly, where a capital programme allowed more or less definite delivery of planned annual expenditure, we would support the principle of a rolling savings mechanism, giving DNOs the opportunity of annual out-performance.

However, we remain unconvinced of the suitability of this mechanism in the current context of increasing asset replacement programmes.

We believe the current situation may require us to continue viewing investment allowances as overall amounts for a price control period (or longer) with no year-by-year reward or penalty based on theoretical periodic gains against an assumed investment profile.

We believe CAPEX should be subject to an eligibility test, but that such a test cannot currently be linked solely to the delivery of outputs. Currently measured outputs do not show the underlying performance of the network. However, an appropriate balance of capital monitoring, valued outputs and a more qualitative approach, using ARM surveys, could form the basis for robust judgements.

DNOs and Ofgem have made good progress in this area through the development of the Asset Risk Management (ARM) Survey. The processes that underpin the capital expenditure forecasts made for the DPCR4 Forecast Business Plan Questionnaire are now more visible than in the past. Indeed the decision to also separate the "in depth" evaluation of the capital forecasting processes from the actual monetary outputs in the HBPQ audit has been a welcome development of DPCR4. Whilst recognising that Ofgem cannot sign a blank cheque for capital expenditure programmes, we believe that the ARM survey and the re-focus during DPCR4 on the capital forecasting processes separate from the investment levels give firm foundations to an eligibility test. Indeed, Frontier Economics envisaged such a role for the ARM survey in its paper for Ofgem, "Balancing Incentives".

Separating the constituent parts of capex into load-related and replacement expenditure will continue to be part of the overall judgement. Load-related capex is predominantly demand-driven and hence is not very controllable. Therefore the commitment to carry out programmes submitted in Business Plans should be weighted towards replacement investment. However it will be important to avoid over-intrusiveness so as to allow companies the freedom to work efficiently.

The annual ARM survey will provide further comfort on processes underpinning the robustness of the network. Longer term there is clearly a need for a reliability/resilience output measure (measure of network stewardship) which could be used within a future eligibility test.

To conclude, we believe the eligibility test for achieved investment programmes should comprise a mix of directly measured final and proxy outputs (e.g. volumes of assets) and include a more qualitative aspect based on ARM surveys. In order for judgements to be made from an appropriate perspective, we believe they should be undertaken at the 5-year (or longer) periodic review, supported by information captured on a year-by-year basis. Only then should judgements of the appropriateness of year-by-year capex investment be made and decisions on any reward be made (through the RAV if appropriate).

Further work is clearly needed here to develop a suite of directly measured final outputs and proxy outputs and a mechanism that can then use them to underpin actual capital programmes and the “regulatory contract”. We would welcome being able to develop this further as the review progresses.

Rewards linked to scale of investment plans

[Consideration is being given to providing higher rewards to DNOs submitting smaller capex increases in DPCR 4.](#)

We have serious concerns about the proposal to use sliding rewards based on the size of investment programmes. It is based on an assumption that inefficiency is likely to be greater in large or increased capex programmes. A key element to the modification being that higher rewards would be given to DNOs submitting smaller capex increases in DPCR 4.

The principle of rewarding low capex submissions completely ignores the inherent and inherited features of each network and, as the basis for a starting judgement of “efficiency”, seems particularly flawed. The UK Distribution assets are inevitably coming to a period in their life-cycle where there are identifiable needs to significantly increase investment. Necessarily, the scale and timing of the investment will be affected by company specific factors. However, to judge and then reward or penalise the need for the investment in relation to past investment programmes is perverse, particularly when the factors are outside the direct control of management. This type of mechanism can only lead to reductions in investment rather than encourage efficient levels of investment appropriate to proven needs.

This proposal has the potential to encourage major infrastructure failure in the electricity industry, akin to that in the railway industry. The aftermath of Hatfield and resulting disruption to the running of a key element of the national infrastructure shows that this must be avoided. We therefore firmly reject the idea of a variable regime of rewards based on the past paradigm of unsustainable asset sweating. We cannot state strongly enough that this is not in the longer term interests of customers

and is inconsistent one of Ofgem's key strategic themes, encouraging a robust network for future security of supply.

Treatment of CAPEX Overspend

Ofgem propose to make a retrospective adjustment to the RAV where a DNO can substantiate arguments for spending in excess of their capex allowance.

We support the proposals outlined in the consultation paper and we look forward to working with Ofgem to establish ex-ante criteria for deciding whether such an "overspend" can be treated in this way and so provide certainty to management. Otherwise there is a distinct probability that DNOs will not take the risk and spend in excess of the allowance, even if this is in the interests of customers.

3.84 – 3.106 Metering

Ofgem are committed to a separate metering price control, and consider depreciated replacement cost as the means of addressing the stranding of metering asset value.

Whilst accepting that Ofgem intend to split metering from the distribution price control, we have major concerns over the number of issues, that need to be resolved between now and November 2004 to facilitate such a change. These include:

- the costs that will be left in distribution;
- cost of capital for metering;
- treatment of stranded opex costs, including pension and other liabilities;
- form of price control if required following Competitive Market Review; and
- obligations that will remain on incumbents.

A mechanism needs to be developed which ensures that any costs not faced by a third party are recoverable through distribution charges. This should ensure no distortion to the market.

The form of price control needs to recognise and allow for the volatility in volumes of meter operations services. Both price caps and average revenue caps could achieve this, provided in the latter case the right volume-drivers were used. We support the work being undertaken within the Metering Price Control Working Group to define the form and operation of the control.

We support depreciated replacement cost as a means for recovering unavoidable historic costs. Nevertheless, unless termination provisions are included, it will not be sufficient to prevent stranded assets if, as seems likely, meters are replaced by suppliers prematurely. This would will increase risk and send the wrong signal to the market just as the industry seeks to significantly increase investment over the coming decade.

4. Quality of Service

Ofgem expects phase 2 of the “Customers’ Willingness To Pay” (WTP) survey to inform choices on quality of supply, in particular on extending the scopes of both GOSPs and IIP. We believe the survey is unlikely to deliver definitive answers and that Ofgem, perhaps in conjunction with the DTI, will need to make societal decisions to shape future direction.

To a large extent, our comments here do not question whether Ofgem’s proposals are valuable (that is for the WTP survey); our remarks are more about their consistency and practicality.

Some general principles inform our thinking:

- Delivery of quality of supply (QoS) is best achieved through a network which is *generally* more reliable, though recognising that networks will always be subject to events which will result in customer outages;
- We believe in good customer service;
- We do not, from first principles, believe in discriminating between different groups of customers. Quite apart from our obligation not to discriminate, the network itself “does not distinguish” between customer groups as typically specified by Ofgem - if a part of the network goes down, there will almost always be a mix of customer types affected. This means that:
 - Distinguishing between customer groups by means other than network characteristics such as voltage, will be “cost-additive” to DNOs and, ultimately, to consumers.
 - Delivering different QoS to different customer groups is effectively undeliverable.
- There must be robust and compelling grounds for making any distinction between customers at all.
- There must also be robust and practical means of identifying and maintaining any such customer groupings.

We believe these principles are largely realised in the current framework of GS for individual customers, IIP for overall performance and licence conditions for specific obligations. However, the interaction of these, particularly under severe weather, needs to be developed further.

4.2 – 4.8 Guaranteed and Overall Standards of Performance

1.1.1 Treatment of severe weather

[Ofgem propose a separate Guaranteed Standard \(GS\) for restoration during severe weather, and are considering whether some exemptions should apply to this.](#)

The principle of GS is that it should set minimum standards that are attainable, and that the standards should allow an efficient DNO to be capable of avoiding payments for failure. We support the above proposal and will work with Ofgem to build on the existing interim arrangements for severe weather. We believe this is an area where the Quality of Supply working group would be an appropriate forum in which to develop the threshold set out in the interim arrangements.

In order to ensure simplicity of the approach to customers we would caution against the establishment of numerous payment thresholds. The interim arrangements are

relatively new and the clarity they bring has been welcomed. We should give them a chance to prove themselves in practice before considering whether they should be modified. Otherwise we are liable to be forever chasing weather events rather than establishing a certain and effective framework.

However, the present arrangements do not prevent the risk of multiple jeopardy, as performance of the DNOs is assessed both under the GS mechanism and the IIP. Fundamentally, the arrangements for DPCR 4 must not permit a DNO to suffer multiple penalties for the same event, and hence the *force majeure* rules should be developed to ensure that severe events are removed from both the IIP and the GS regimes.

We would be concerned by any reduction in exemptions for GS relating to severe weather or industrial action since this would increase the risk of failure against conditions that the network or the company is not reasonably expected to withstand. For example, significant ice accretion where the extent of repair work will continue for a considerable period, severe flooding, or restricted site access are three areas where restoration strategies may be delayed. We would also strongly caution against any removal of the exemption for industrial action. The removal of this exemption in particular could work completely against the long term interests of customers.

Priority customers

[Ofgem are considering strengthening the Guaranteed Standards for priority customers, being identified as special needs and business classes.](#)

In line with our principles above, we believe introducing higher penalties for business customers is inappropriate. Strengthening the standards as suggested would divert resources away from the majority of affected customers, leading potentially to inefficient operational and network strategies. Reducing the trigger point beyond which compensation payments can be claimed would similarly affect restoration strategies.

In this light, we welcome the view outlined at the QoS working group meeting of 3rd February 2004 that increased payments to business customers connected at HV and above may not be appropriate.

Rather than increase compensation payments or reduce the trigger points for these customers, we would encourage all business customers to consider incorporating appropriate protection within their business insurance policies.

We also have fundamental concerns regarding the possible imposition of a new standard that reduces the acceptable restoration time to special needs customers. This would imply more widespread use of mobile generation, with the medical risks that that entails, rather than appropriate medical care by the local health infrastructure. Alternative, more efficient arrangements instead should be made by local council care infrastructures that are better placed to deal with these customers, and hence avoid the need for a DNO to make moral judgements between such customers. However DNOs should still have the discretion to use mobile generation as one of a number of options within its efficient restoration strategy tool kit.

Ofgem ask what other steps could be taken by DNOs to protect priority customers.

As a first step it is essential for Ofgem to provide a stronger definition of a priority service customer and what should be held in an improved Priority Service Register. If a differentiated level of service is to be provided, we believe the definition should be limited to those customers that have a medical dependence upon electricity

Information on special needs customers is included in a priority register through data provided directly to DNOs or via supply businesses. The information varies in quality and quantity due in part to the already-stated lack of clear definitions, but also due to inconsistent behaviour on the part of suppliers. Before DNOs can act effectively suppliers must also fulfil their obligations in respect of collecting and passing on the data. Only when an enhanced register is established with fully supported data flow processes would the industry be able to move forward and meet Ofgem's expectations in this area.

This framework could also be applied to business customers, but clearly the criteria will, as argued above, need to be tightly defined in order to minimise the cost pressures that would arise, and be consistent with customers' willingness to pay. An alternative would be to charge business customers for the option of having a differentiated (higher) level of service.

We do not consider that it is appropriate or practical to deliver a differentiated QoS to business customers generally.

The current GS already recognises the economic difference for LV-connected business customers. Increasing the payment, for example through relating it to the level of DUOS, may be practical, though it is difficult to understand whether small businesses would relate to the DUOS charge which is not visible on their bills.

There may also be a case for providing customers connected at HV or above with targeted information to enable them to plan or react better to interruptions for instance.

Both of these measures are dependent upon establishing whether the customers concerned are prepared to pay for the improved level of service and then ensuring that the costs of the service are reflected in higher payments by them, and them only.

Semi-automatic payments

Ofgem are evaluating the practicalities of introducing semi-automatic payments for Guaranteed Standards.

Introducing automatic payments for all customers is prohibitive in terms of costs, as our Forecast Business Plan Questionnaire submissions will have demonstrated. We believe that the costs of introducing LV phase connectivity will be difficult to justify on the basis of automatic or semi-automatic payments alone. Also, whilst Ofgem may view semi-automatic payments as a first step towards automatic payments, we do not share this belief.

The supplier hub principle means that DNOs do not have up-to-date information on customers' names for making payments. Passing the payment to suppliers as an alternative not only introduces another layer of bureaucracy for tracking payments, but there is no guarantee that customers affected will receive the actual payments. The analogy here is with IIP penalties where we would expect any DUoS savings to be retained by suppliers.

Instead we support the idea of DNOs being more proactive in increasing the awareness of GS, whilst placing the onus on customers to make a claim.

Overall Standards and Monitoring

[Ofgem are reviewing whether ineffective standards should be revised or removed.](#)
[Overall Standards may also be replaced with monitoring and publication under IIP.](#)

We support the replacement of the Overall Standards, including their thresholds, by the collection of data under the IIP regime. We would point out that systems will need to be modified to enable transfer under the IIP template, particularly if the amount of data required were to increase, for example, in line with the proposals for the restoration time bands. It may also be necessary to review the provision of data timescales prescribed in the licence, especially if disaggregated network performance data for QoS purposes is required in the future. Finally, it should also be recognised that the RIG and its definitions would need to be enhanced in order to ensure robust data collection for both the new additions and OS data.

4.9 – 4.22 Reviewing IIP

[Ofgem are reviewing whether ineffective standards should be revised or removed.](#)
[Overall Standards may also be replaced with monitoring and publication under IIP.](#)

As a principle, the IIP should be limited to a few outputs that customers value in order to assist and maintain management focus and avoid unnecessary and potentially perverse tensions between outputs. We now consider the various proposals in the consultation

Reporting against customer categories

[In the consultation paper, the possibility of distinguishing between customer types is raised, which could also be used for attributing limited financial incentives to these outputs in DPCR 4.](#)

Whilst we are not opposed to distinguishing between customer-types for reporting purposes, there are likely to be additional costs for system changes, data collection and reporting.

We are firmly opposed, however, to using this information as a basis for discriminatory incentives. It is inconsistent with our starting principles, ignores the underlying configuration of the network, in which inherent performance to different customer groups, for example at LV, is already predetermined, and ignores the “supplier hub” environment which makes it difficult for DNOs to accurately identify customer types.

In addition, the measurement issues already encountered in the development of IIP would apply similarly to any new output. We would be firmly against attributing financial incentives to these measures not least because it requires consistency of measurement.

We believe a more suitable form of disaggregation would be that developed by the joint Ofgem/DNO QoS Working Group. This form of disaggregation is underpinned by inherited and inherent network characteristics and therefore forms a valid foundation to understanding what can be done in terms of improvement if so required.

Treatment of worst served customers

Ofgem raise the issue of whether the IIP provides an appropriate level of protection to worst served customers or whether new outputs are required.

IIP measures global performance and is designed to incentivise DNOs to get the maximum number of customers back on supply as quickly as possible. Guaranteed Standards in contrast are responsible for incentivising the delivery of minimum standards. We believe the latter is the most appropriate way of protecting worst served customers.

Form of the incentive for interruptions to supply

Ofgem has set out a number of options for improving the existing arrangements for the next price control; annual rewards and penalties; rolling average; and deadbands.

We support the intention to have annual rewards in any future incentive scheme similar to those existing for the final year of the current scheme, and believe that these should be symmetrical to the penalty exposure. This will provide stronger incentives for DNOs to outperform their annual targets. With this in mind it would seem appropriate to equally consider increasing the incentives to outperform operating allowances beyond the current five year fixed retention period. This could be achieved by applying a multiplier in excess of one to the reward payment.

The current regime adopts annual spot targets against which delivery of network performance is judged. This implies that the networks, which are subject to natural variability in performance as a consequence of weather and other types of events, need to be designed and operated to achieve an even lower underlying level of performance. This is to ensure delivery of the target during “severe event” years.

We consider that the first stage in accounting for variability is to have clarity on just what is excluded from the incentive regime, and, as already outlined, we believe that *force majeure* should apply to the entire impact of a severe event. Companies may be able to influence the underlying trend in performance through consistent improvement, but the nature of electricity distribution means there is insufficient control to achieve absolute targets year on year.

Whilst exemptions from the scheme will address variability under severe weather and other events, there is still the issue of annual volatility under “normal” weather conditions to be addressed. A rolling average does not directly accommodate the volatility, but instead smoothes the impact, so that the effect lasts for a number of years. We consider that this has the potential to both reduce the incentive and obscure the visibility of actual network performance experienced by customers. As a consequence, we strongly believe that adopting a deadband around the annual target as a means of accounting for normal variability is the most appropriate option.

With the exception of severe events, the use of deadband targets obviates the need to correct performance inherent in the rolling average option. They are easier to understand, simple to use and more readily communicated to stakeholders.

We are confident that, with appropriate exemptions and suitable deadbands, a mechanism can be developed that will be acceptable to customers and their representatives.

We do not believe the incentives on DNOs to hit targets will be weakened by the introduction of deadbands. Companies would still be incentivised to outperform against the deadband, since this would be the basis of the reward. The use of

deadbands in an incentive scheme will ensure that both customers and DNOs are financially protected against the fluctuations in normal weather that cannot be controlled. DNOs would be given a degree of protection from the effects of worse than “normal” weather, whereas customers would not be exposed to the risk of rewarding companies for the “free-ride” effects of benign weather.

The Weightings of IIP

[Ofgem ask whether the existing weightings of incentives under IIP are appropriate and whether there should be increased revenue exposure](#)

The future weighting of IIP incentives between number of interruptions and the duration of interruptions may be settled by the outcome of the second phase of the willingness to pay survey.

The current IIP places more emphasis on CMLs than on CIs and as such is “tilted” more towards short term performance and “dealing with symptoms” rather than on the longer term and prevention or cure.

As stewards of a long-term network we believe there is merit in tilting the balance of future incentives towards CIs, but we recognise this is a matter for further judgement, taking into account the willingness to pay results and broader “societal view” of the outputs of future networks.

In respect of the revenue exposed, we believe the willingness to pay survey is unlikely to deliver categorical answers and, until there is agreement amongst the industry’s stakeholders on what networks should deliver in future in terms of security of supply and other energy policy objectives, we do not support any change to the current 2% of base price control revenue.

It must be remembered that the IIP incentive works in conjunction with the main price control; it should not be viewed as the main mechanism driving capital investments. Any change to the revenue exposed must be balanced against the effect on risk for a DNO, the treatment of exemptions, and the other incentives including losses and the rolling opex and capex efficiency schemes.

Planned interruptions in final year of the current scheme

[A concern is raised in the consultation document over whether the current design of the IIP creates perverse incentives with regard to planned interruptions in 2004/05 and whether DNOs could roll forward a proportion of planned interruptions in 2005/06.](#)

We consider that adjusting the current IIP mechanism, which is in fact symmetrical in its last year of operation, is neither appropriate nor practical. The current IIP targets, which are inextricably linked to the price control targets and their underlying allowances, are already factored into the work programmes and operating regimes of companies. In addition, as there is no replacement to IIP outlined for 2005 onwards, just whether rolling forward interruptions would be advantageous or practical cannot be judged.

Additionally, we consider that to re-open the incentive mechanism at such a late stage could not only lead to serious confusion over just what outputs are to be delivered, but it is inconsistent with the principle of “no retrospection” regulation.

With respect to the treatment of planned and unplanned interruptions going forward, we would urge caution. Planned interruptions have a different driver to faults, being

influenced predominantly by capex programmes. It is imperative that capex programmes are taken into account in the setting of any targets for planned interruptions.

This is completely un-chartered territory and further work is required to understand how to set appropriate targets.

Assuming that separate targets for both planned and unplanned interruptions can be achieved, then to give flexibility to the IIP, whilst still keeping a focus on the final product to the customers, they could be rolled back together without explicitly targeting either.

However, if an acceptable planned target cannot be achieved, then we believe that planned interruptions and their durations should be excluded from the incentive scheme. This would avoid the potential of penalising DNOs in carrying out their regulatory contracts, which would, of course, be perverse and not in the long term interests of the customers.

4.23 – 4.32 Network Resilience

Using output measures to assess resilience

[Ofgem is seeking views on the form of the measurement of storm resilience of the network and the associated incentives to deliver improvements.](#)

Before proceeding with measures to assess and improve network resilience, we believe there needs to be clear evidence that customers are willing to pay. So far, surveys reveal that customers understand that there will be power cuts even from “reliable” networks during extreme storms.

Assuming such evidence is forthcoming, we believe that investing in the network to improve storm resilience is only quantifiable for the foreseeable future in terms of delivery of inputs, such as the replacement of certain assets.

We do not yet have a full understanding of the reliability of networks under severe weather, how all the variables work together, what might be appropriate output measures and how any new incentive scheme could utilise them to generate the levels of funding required. We therefore do not believe that the concept of an IIP-type mechanism, linked to benchmarked performance during different types of weather events, as proposed during the QoS Working group meeting 3 February 2004, is a practical option.

However, we do welcome the work proposed to develop an understanding of the reliability of the network during severe weather and consider that this would be an appropriate area for input by the joint Ofgem/DNO QoS working group. We also believe that this may be an area where a research and development programme could be developed over the next few years

For the short-term, we believe that inputs, acting as proxy resilience outputs, are needed and that circuit mix (i.e. overhead line and underground cable) will need to be added to the list of inputs. Using such proxy resilience outputs will accommodate the risk associated with an output regime, where both the weather type and location may not impact those areas of the network where investment has taken place.

Removing exemptions

One way being considered by Ofgem for strengthening resilience incentives is to include most or all of the impact of exceptional events within the IIP.

We believe that performance under severe weather should not be included within the IIP framework, as we have discussed above. Customers affected by severe weather are already protected by the “interim arrangements”, which also assess the performance of DNOs under these conditions. Good performance is rewarded with a high degree of pass-through, whereas the cost of compensation is predominantly financed by DNOs for a sub-standard delivery of quality.

The first phase of the customer survey showed that there should be an element of reasonableness, with the general acceptance that supplies will be interrupted under such conditions. The biggest incentive on companies to restore supplies to customers as quickly as possible is the associated impact on reputation. Therefore we believe customers’ interests are already safeguarded without the need to remove Force Majeure from IIP.

We do not believe there is a robust model for mechanically linking weather to restoration performance assessment under severe weather. The interim arrangements need to be operated for a period of time to gain further experience.

Introducing reward and penalties

An alternative proposed for improving restoration incentives for severe weather is to introduce financial penalties and rewards for good and bad performance.

There is currently no robust model for linking weather to restoration performance assessment under severe weather.

However we want to work with the industry to improve the understanding of the relationship between severe weather and network performance.

It is therefore unclear to us how Ofgem could set pre-defined targets for different restoration profiles. Setting ex-ante targets is in our view not possible, and raises significant risk for DNOs if such targets were set. The interim arrangements already provide good incentives for DNOs to restore supplies to customers as quickly as possible.

Ex post assessment

An incentive based on relative performance assumes that it would be possible to compare companies’ abilities to respond to the same event. However we are not convinced that this would be possible on a robust basis as the experience with the 2002 October storms has shown. A further concern about this proposal is the effect it has on NEWSAC resource. We do not believe that NEWSAC is tenable under a relative incentive scheme, and therefore would strongly resist its implementation into the licence, given the knock-on effect this would have on customers.

4.33 – 4.37 Telephone Response

Ofgem are reviewing the incentives for the quality of telephone response to decide whether the relative scheme should remain for DPCR 4.

Performance in this area by DNOs is high compared with other industries and there is significant convergence in performance amongst DNOs under the quality of telephone response incentive. Continuing with a league table will potentially lead to

further resources being diverted to this area in search of further financial rewards, which is inconsistent with the priorities of customers. Ofgem should instead set company specific targets for both speed and quality of telephone response against which no penalty could be invoked.

4.38 – 4.39 Environmental Outputs

[Ofgem are seeking views on the under-grounding of overhead lines and other environmental outputs.](#)

Whilst we support the ability to allow additional expenditure for projects with particular environmental benefits, it is important that a wider view is taken of the “preservation of amenity” and other environmental improvements.

The information we submitted as part of the FBPQ preferred scenario makes allowance for a number of pro-active environmental improvements. These include selective under-grounding in sensitive areas such as the Peak District National Park. We consider that these types of improvements are essential to help us to meet our obligations under Section 38 of the Electricity Act 1989 and Schedule 9 statement commitments.

We also support Ofgem’s recognition of the broader environmental responsibilities of DNOs and that there may be additional costs associated with meeting these obligations. However, the introduction of monitoring for environmental outputs of DNO activities without any supporting environmental objectives seems inappropriate.

The environmental outputs of DNO activities are highly regulated at both statutory and economic levels. In addition the electricity industry is at the forefront of reporting its environmental obligations and actively engages a range of stakeholders in this area. We are happy to work with Ofgem to develop environmental measures that could be used to support capital investment programmes the aim of which is to improve environmental performance. Ofgem and the industry need to ensure that a holistic approach is taken with all stakeholders to avoid any unnecessary duplication of activities.

5. Distributed Generation

How the market for distributed generation will develop remains uncertain.

Although the Government has defined targets, actual levels of penetration and the technologies likely to be employed are unclear. These may be affected by changes in Government policy toward the development of renewables and combined heat and power, including the effects of UK implementation of the EU Emissions Trading scheme.

Despite Government efforts to enhance the local planning framework, planning issues also remain an obstacle for renewables development and add to uncertainty about the geographical location of future schemes.

In addition, and partly as a result of the uncertainties outlined above, we still believe there is insufficient “bottom-up” information and experience to derive the “definitive-looking” cost and incentive figures Ofgem have calculated for the hybrid incentive.

DNOs are being asked to accept considerable increases in risk with distributed generation, particularly if there are to be no means of re-opening the price control or at least reviewing specific cost allowances.

Whilst we will always look for synergies with demand-related investment, we are unlikely to undertake any strategic investment specifically for DG because of these uncertainties.

5.10 – 5.34 Hybrid Incentive Scheme

[Ofgem has reaffirmed its commitment to a hybrid scheme to incentivise the connection of distributed generation to the network, setting out two options both based on the principle of partial pass through of costs associated with “shared” and “strategic” assets.](#)

We recognise the need to offer encouragement to DG and are willing to support the principle of a hybrid incentive scheme that delivers a premium rate of return in recognition of the higher risks associated with connecting generators.

However, whilst the two options set out in the proposed menu may be broadly acceptable where or when connection costs are relatively or generally low, we are concerned that the hybrid scheme offers insufficient mitigation of risk in areas where connection costs are likely to be high.

DNOs have an obligation to connect all generators and we believe this policy would not be consistent with Section 19 of the Electricity Act, which entitles the recovery of the reasonable cost of connection.

We believe we face some imminent, high-cost DG connections, requiring significant reinforcement of the network, including replacement of switchgear, with an additional high risk of stranded assets. We have obligations to make such connections, but, especially with the diminished locational charges introduced through the Structure of Charges consultation, we have significant risks of not recovering our costs.

We believe that DNOs should be offered incentives to facilitate and make generator connections, particularly in areas where potential for DG is high. However, where potential is minimal or the existing network configuration makes reinforcement costs high, DNOs should not be penalised. So, whilst we offer broad support for the two

options of the hybrid scheme, we would also like to see DNOs offered a third option of full pass-through.

An alternative way for dealing with high reinforcement costs is to make this a specific interim determination issue which companies can invoke.

In the consultation, Ofgem state that the proposals allow an average rate of return of 7.5% for a typical cost of connection of £50/kWh. We do not believe this is sufficient to reward those DNOs who choose to take higher risks, and would therefore recommend a higher incentive rate to align with the internal hurdle rates that companies typically employ.

We also have concerns regarding the potential stranding of assets if a generator uses less than 100% of the capacity or abandons the connection prior to the full cost recovery of the asset under 70% and 80% pass through. This could be addressed by ensuring that the incentive rate is paid for the regulatory life of the asset, starting from when the contract is signed with the generator. Where a generator exits the market prior to the recovery of these costs, and is in financial distress, these costs should instead be recovered from all customers.

Availability payments

Ofgem has suggested a fixed £/MW rebate that is ten times greater than the incentive rate provided for connecting a generator.

We oppose this on principle, for being unfair and for not being aligned with the standard connection terms for demand customers. We cannot guarantee availability as a matter of course to demand customers (who, after all have paid for most of the network) and we see no reason why generators should be given preferential treatment. Moreover, this would undermine one of the aims of the recent changes to the structure of charges, that demand and generation connections are treated consistently.

In addition, introducing a standard rebate to generators for network unavailability would be extremely difficult to manage, especially where there are a large number of small generators connected to the network.

Insofar as access rights are required, we believe they should instead be treated as an ancillary service, negotiable between DNOs and generators. Network access rights (ancillary services) should be part of a negotiation process which might also include recognition of network access obligations and deferred-reinforcement benefits.

5.40 – 5.56 Innovation Funding Incentive (IFI)

Ofgem is considering whether to provide additional support for DNOs to innovate and apply new solutions through the IFI.

We support the underlying principles of the use-it-or-lose-it incentive to increase the level of research and development within the industry, though we do not see its effective application being limited solely to DG. We believe a potential allowance of 0.5% of revenue, combined with 70-90% pass through to be appropriate. This represents a fraction of a domestic customer's bill, but the potential for longer term benefits from innovation are likely to be considerably greater.

Inefficiencies inherited at privatisation have been removed, but through research, more innovative ways of doing work on the network may be found that would otherwise be prohibitive. Examples could include:

- a greater appreciation of the condition of the underground network, which can be incorporated in future investment plans;
- finding a statistical relationship between weather and performance for developing resilience output measures;
- developing a reference network model for losses and quality of supply for deriving optimal configuration and performance;
- finding cost effective solutions for connecting Distributed Generation and for developing an active network; and
- training centre to give engineers the skills to meet the future operating environment.

5.57 – 5.70 Registered Power Zones (RPZs)

[Ofgem is considering whether to provide additional encouragement to innovation for DG by offering DNOs incentives to develop RPZs, areas which utilise novel network design, equipment or operating techniques.](#)

We have little enthusiasm for this proposal. It offers too much uncertainty, additional cost and too little reward.

We believe rules for granting RPZ status should be made clear and simple and be laid out before the start of the DPCR period. DNOs should then be able to apply those rules as they see fit, standing by any decisions made at the end of the DPCR period through open Ofgem reporting.

We believe the proposal to exclude IIP and GS penalties from RPZs in exceptional circumstances only means potentially good solutions will not be trialled, because the risk of short-term penalties will be seen to outweigh larger, but long-term, even possibly unanticipated benefits.

We believe the proposed process for granting RPZ status by a panel would increase bureaucracy unnecessarily and add to the uncertainty.

6. Assessing Costs

We support Ofgem's previously declared commitment to transparency and now welcome the further three principles for assessing DNOs' costs:

- That comparable data be used;
- That models have genuine and intuitive explanatory power over time; and
- That results from different techniques should be consistent (or, where not, that any differences can be explained).

However, it is important to recognise that analysis is subject to error, and hence should only be used as one of many inputs into the price control process, and is by no means the sole basis for setting future revenues.

6.7 – 6.29 Cost Normalisation

Comparative analysis of performance is one tool for projecting future allowances, and we support Ofgem's attempt to normalise costs such that the analysis can be conducted on as reasonable a consistent basis as possible. However, the quality of the analysis does depend significantly on the consistency of the data available,

It is Ofgem's responsibility to ensure costs are effectively normalised. DNOs should provide accurate and detailed information in response to Ofgem's questions, and point out areas of potential inconsistency which Ofgem must investigate and normalise for in a transparent way.

We believe that normalisation is not producing robust results, mainly because of different definitions amongst DNOs. Indeed, the greater the granularity and detail costs are broken down to in order to compare across DNOs, the more extreme definition and allocation issues become, making detailed comparisons meaningless. This is compounded by different Ofgem agents visiting and discussing costs with DNOs, with the overall consequence that there is no consistency and depth of understanding of each DNO by Ofgem.

In our opinion it is only valid to compare companies' costs at a fully absorbed activity level, e.g. incorporating all corporate costs and overheads.

We would also point out that the approach adopted to date on normalisation has focused on removing atypically high costs. All atypically low costs brought to Ofgem's attention have not been included in analysis so far. This bias will generate unfeasibly low assumptions of costs.

Moreover, because of the issues regarding comparable data, any analysis dependent on frontier companies is highly likely to produce misleading results. We urge Ofgem to use an average approach or recognise incomparability of data when benchmarking costs.

With these issues still to be resolved, we believe there are considerable risks for DNOs if Ofgem translate future allowances for DPCR4 directly from this analysis.

In particular, we have great concern that Ofgem does not have the time to understand the costs of each DNO at the level of detail they aspire to, especially if a robust analysis of costs is to inform the draft price control paper in June 2004.

6.30 – 6.31 Bottom-up modelling

The use of bottom-up modelling is a useful tool for assessing efficiency, but we would have grave concerns if the analysis was used in any way to produce a “virtual” company based on best practice amongst the industry for each activity. This could lead to a cost allowance that would be unachievable by any company, and would instead place significant risk on the financial viability of the business. We therefore encourage Ofgem to provide further clarity on the scope envisaged for bottom-up benchmarking.

If it is to be used for the entire distribution business, which may be a valuable exercise, we do not believe that the timetable for DPCR4 allows for such an exercise to be undertaken with any degree of robustness. Questions that need to be answered for conducting even a limited form of bottom-up benchmarking include the criteria applied for judging whether an activity is “efficient”.

Clearly there is an important role for some form of risk assessment to be incorporated in the decision making process. Otherwise the hypothesis used will simply be lowest cost is “efficient” cost. This however ignores the reality that lowest cost might be achieved by increasing risk to such an extent that it is unacceptable to customers.

We would be happy to work with Ofgem to identify the key processes that would be valuable for informing debate and the criteria that should be used for determining “efficient” behaviour.

6.32 – 6.73 Top-down Benchmarking

Techniques proposed

Ofgem are proposing to use a number of techniques for undertaking top-down comparative analysis, focussing on DEA and regression.

We have consistently advocated the use of a number of different approaches for assessing top down efficiency, and welcomed the CEPA report on Benchmarking that endorsed this view. We support the use of DEA and regression techniques proposed for DPCR 4, which can easily be adapted for benchmarking average as well as a frontier costs.

Cost drivers

The CEPA report suggested using units distributed and network length as the two primary cost drivers in the analysis. We broadly support this approach. However there is still a risk of alternative competing hypotheses or that some of the cost variation between DNOs will not be explained by the model, and instead be incorporated with the residual term. This risk could be mitigated by using a stochastic approach to both DEA and regression, but requires robust panel data.

Panel data

We support the principle of using a panel data approach but do not believe there is sufficient time to accurately normalise data over a number of years, given the difficulty in undertaking this exercise for 2002/03. Nevertheless it should be a prime objective for the next review to ensure that annual data is reported which would allow sufficient time for normalising data over a number of years. In the meantime, Ofgem should apply caution to the results produced by 8 or 14 observations.

Quality of supply

[Ofgem are consulting on whether quality of supply should be taken into account and if so how.](#)

We accept that both regression and DEA can be used to accommodate quality of supply, either through an adjustment to cost or as an additional output. However as with the debate over costs, the data needs to be normalised before such analysis could be contemplated.

The disaggregated quality of supply model explains less than a quarter of the performance. Consequently we do not believe that this can be incorporated within the analysis without increasing risk for the DNOs. Furthermore there will be an inadequate number of degrees of freedom to provide robust results with more than 2 outputs if the analysis is conducted on the basis of 8 observations, using 2002/03 data. This in our view prohibits the use of quality as an output measure.

Whilst costs could in theory be adjusted for quality, we fail to see how this could be achieved in a reliable manner for DPCR 4, given the timetable available between now and June 2004. Instead we continue to believe that quality should be separately incentivised via the IIP and Guaranteed Standards. Fundamentally if quality was directly or indirectly taken into consideration in assessing efficiency, this would represent multiple jeopardy (IIP, Guaranteed Standards, Utilities Act), which is neither a fair outcome nor good regulatory practice, and must be avoided.

Mergers

[Ofgem are considering the approach to mergers for the DPCR 4 review.](#)

Whilst there will be considerable difficulties with analysing on a 14-company basis, we support Ofgem's intention to assess efficiency on the basis of 8 and 14 observations as a way of treating merged and non-merged entities on a level playing field. However, since judgements will need to be made on the "true" value of mergers, there is a significant risk that the results will not treat all DNOs in a balanced way. The principle that must be adopted in deciding whether merger synergies should be reflected in a DNO's cost base is to ensure that such savings are retained for a period of time that is aligned with the rolling opex mechanism i.e. treat merger savings like any other cost efficiency.

Frontier v Average cost benchmark

[Ofgem has yet to decide on whether to use a frontier or average cost benchmark.](#)

Last year, Frontier Economics produced an independent report on incentives, and advocated the adoption of an average cost benchmark for assessing efficiency, on the grounds that it mimics a competitive market. Consequently frontier companies are able to earn above average returns and vice versa for below average companies. The paper also demonstrated the very high incentive properties of adopting average costs. Customers benefit from this approach in the longer term, as the frontier is shifted southwards, especially when combined with a rolling mechanism, which incentivises DNOs to make a marginal efficiency saving as soon as it is identified. We firmly believe that Ofgem should adopt this principle for the price control review in order to protect the wider interests of customers at large, whilst ensuring that unsustainable targets are not set for DNOs that may potentially cause financial distress.

The desired approach set out above also has the advantage of mitigating some of the risks of having an incorrectly specified regression or DEA model, and from not

normalising costs sufficiently for creating a level playing field. Furthermore the CEPA report on benchmarking rightly discusses the risks of relying on a single firm for setting the frontier, and from including outliers in the model. Once again an average cost benchmark would limit the risks of this eventuality.

6.64 – 6.68 Productivity Growth

We support Ofgem in conducting research into predominantly historic performance across the regulated industries. Historic performance however is in no way a guide to predicting future efficiencies, which needs to be recognised if this analysis is in any way to be used as an input into the price control process.

CEPA have produced a report on productivity, predicting future operating efficiencies of 3.5% per annum and TFP of 2.4%.

Projections of productivity growth provide an indicator of the scope for efficiency savings in the future. However we believe that such a projection should only be applied to average costs, as it would seem reasonable that the strong incentive properties of this approach would lead to a shift in average costs over the course of DPCR 4. However no such certainty can be applied to the frontier level of costs, particularly if there are inaccuracies in the modelling process identified above. We would therefore reject any application of future productivity growth being applied to frontier costs.

With regards to the analysis contained in the CEPA report, we believe that the historic DNO data used has not been sufficiently normalised to be credible. For example, the costs are likely to have included merger savings, inconsistent treatment between DNOs of faults and overheads, differing impacts of outsourcing on operating costs, and business separation. All of these are likely to have inflated the results.

The inefficiencies inherited at privatisation have been removed by the industry. Using this hypothesis, the potential to outperform the general productivity of the UK economy is that much reduced. Indeed a London Economics report commissioned by Ofwat published in November 2003 concluded that annual efficiency savings of 0.1% to 1.3% per annum is sustainable for 2005-10. Previous higher assumptions made by Ofwat for completing draft Business Plans have now been accepted as being too optimistic. We believe the London Economics study represents a much more sustainable basis for projecting the trend of average costs in DPCR 4, and one we would be prepared to support.

6.76 – 6.90 RAV Roll forward

[Ofgem has stated in the document that the RAV should be rolled forward from March 1998 on the basis that all cable and overhead line repair costs incurred between then and 2004/05 is expensed, and would therefore be excluded from the RAV.](#)

We will be responding to this statement under separate cover, which will provide evidence to substantiate our belief that a proportion of fault costs were allowed as capex in DPCR 3 and hence should be included in the RAV. Looking forward, we support Ofgem in providing clear and unambiguous guidelines for how DNOs should treat fault costs to ensure consistency within the industry.

7. Finance Issues

7.3 – 7.17 The financial ring-fence

Ofgem is proposing to strengthen the financial ring-fence by introducing an explicit mechanism to apply in cases where the retention of an investment grade rating is in doubt.

We maintain that the existing financial ring fence provisions have generally worked well, and therefore support the proposal not to strengthen the financial ring-fence substantially. The licence already contains adequate constraints, such as the permitted purpose of indebtedness, obligations to maintain credit rating, and availability of resources. Indeed credit quality can be supported by having appropriate mechanisms, as discussed earlier in our response, for dealing with uncertainty.

With regards to the explicit mechanism, we would welcome consistency across the industry. However in designing the mechanism, any trigger points need to be carefully considered. Otherwise there could be a risk that it unjustifiably increases perception of regulatory risk. A pragmatic approach may be to set the trigger point at the minimum investment grade credit rating of BBB-, to avoid second guessing the rating agencies. However this mechanism is only supportive where the financial problems resolve upstream (i.e. parent) and does not address financial problems focussed exclusively on the distribution entity.

In terms of the role of Special Administration, this must be used as a last resort and all other options set out above need to be fully explored first, including the use of interim determinations to deal with unforeseen cost shocks that have a material impact on the financial viability of the DNO.

7.18 – 7.40 Cost of capital

We welcome Ofgem's approach of using different methods to calculate the cost of capital as a way of cross-checking results.

In applying the CAPM model, care must be taken to ensure that the recent high volatility of the stock market does not lead to incorrect conclusions. Given the long-term nature of the investments being made, CAPM modelling should be based on forward looking rates derived from long-term historical data.

Given the number of methods available for estimating the cost of capital and the likely ranges that these will produce, there will be a temptation to use mid-point estimates. However, the DPCR4 period is one requiring significant investment in the network, with increased uncertainty through distributed generation and the IIP, and there is a significant risk of under-funding should the cost of capital be set too low. Recent regulatory precedent from the UK and overseas suggests that, in such an environment, a cost of capital figure higher than any mid-point estimate should be used.

Efficiently incurred historic debt should be remunerated. Some DNOs may have a high level of embedded debt that incurs interest charges at a higher rate. This should be considered on a case-by-case basis. Should Ofgem not do this, then they will be putting DNOs under pressure to take on shorter-term or floating rate finance and must take this into account in setting the base cost of capital.

Whatever the outcome of any theoretical cost of capital exercise, given that cash flows will be negative during the DPCR4 period for all DNOs, it is important that the

cost of capital is set at a level which encourages companies to invest in the distribution network, and maintains companies' abilities to source the appropriate financing. In particular, if the cost of equity is set too low, then DNOs will be forced to finance investment in the network through an increasingly high proportion of debt.

High levels of gearing need to be discouraged for a number of reasons. They lead to an increased risk of systemic failure and hence the real risk of entering Special Administration. High debt levels reduce the financial flexibility of DNOs to respond to unforeseen circumstances. There is a higher probability of financial strain that could put at risk the investment programme proposed in the Business Plan Questionnaire submission. Finally a low proportion of equity weakens incentives for innovation and risk taking, which is not in the interests of customers over the medium and longer terms.

7.41 – 7.46 Pre Tax v Post Tax

[Whether Ofgem should adopt a post-tax approach to the cost of capital and whether this should be an industry-wide cost of capital with company specific tax allowances directly incorporated into the financial model](#)

With effect from 1 April 2005, the industry will suffer a significant increase in its tax burden due to the change in treatment of deferred revenue expenditure announced by the Inland Revenue in June 2001. This change will reduce free cash-flow, increase gearing, and potentially put at risk the full delivery of the proposed investment plan. We welcome therefore Ofgem's recognition that this should be taken into account in setting allowed revenues and the intention to consider the expected tax position of each company as part of the financial modelling.

We believe it is necessary to make full compensation for tax costs and that these should be assessed on an individual company basis. We concur with Ofwat in favouring calculation of the cost of capital on a post-tax basis going forwards.

We welcome Ofgem's approach that the tax allowance should be based on the position of the licensed entity as if it were taxed on a standalone basis (disregarding group relief). Tax payments should not be distorted by Group arrangements; the Group should not exploit or subsidise the distribution business.

It has been proposed that company specific tax allowances could either be directly incorporated in the financial model or could be incorporated through the cost of capital estimation by incorporating a company specific tax rate. Ofgem favour the adoption of an industry-wide post tax cost of capital figure rather than presenting a cost of capital on a company by company basis, because the latter is more complex and less transparent. We support this view.

Furthermore, it should be noted that the change in treatment of deferred revenue expenditure is not the only change that could affect the industry. The Inland Revenue is currently considering various proposals for the reform of the corporation tax system. One of the potential reforms is the replacement of the current system of capital allowances for capital expenditure with tax relief for depreciation. This would have the effect of further increasing tax liabilities for distribution companies.

7.47 – 7.50 Gearing

Ofgem is consulting on whether an assumed or actual level of gearing should be used and whether this should reflect the increase in average gearing during the current price control.

We believe that consumers' interests are best protected by ensuring that DNOs have access to a diverse source of capital. A low proportion of equity weakens incentives for innovation and risk taking, which is not in the interests of customers over the medium and longer term.

Most companies are part of a large group and the level of gearing is a construct of the parent company. The debt structure of Groups is determined by issues such as efficient tax planning and Ofgem should not seek to influence how a group manages the risk between debt and equity. Ofgem should encourage, not discourage this by disallowing the cost of debt outside but supported by the licensee company.

We believe use of company-specific gearing would be open to manipulation by parent companies, which can impose any gearing level, and so we support a common assumption on gearing to avoid manipulation. This would then give rise to a common cost of capital, which is more transparent.

Work is currently being undertaken by Oxera to review an appropriate cost of capital, Ofgem should consider the results of this study with respect to the inputs into the cost of capital.

7.51 – 7.63 Financial Modelling and Indicators

Financial Indicators

Ofgem has published a range of financial indicators that may be used, and which are predominantly cash based measures, for assessing the financial criteria and in particular being consistent with credit ratings that are comfortably in the investment grade range and provide a reasonable return to shareholders.

The larger a capex programme is, the greater the probability that it will cause a negative impact on debt and hence interest cover ratios. To avoid simply gearing up, it is important that the cost of capital is set at a reasonable level to attract equity into the business, and hence maintain or strengthen financial flexibility.

Whilst cash-based financial indicators go some way to addressing this, we also urge Ofgem to include dividend cover ratios. This would have the effect of linking the credit rating to the sustainability of dividend payments, and hence the degree to which new equity can be attracted to finance new investment. Without this recognition in setting the cost of capital, debt will continue to grow, which weakens incentive properties on management for innovation and is therefore inconsistent with Ofgem's statutory duties to protect the interests of customers.

These ratios should be based on arms-length dividend and interest policies; dividend and interest payments should not be distorted by Group arrangements. The model should take into account proper tax assumptions, and the need to ensure DNOs maintain the ability to fund pension liabilities.

Estimates of dividends, tax and interest should all be consistent with gearing assumptions included in the Cost of Capital.

Positive cash flows are required to allow dividend payments and ensure an appropriate return to equity investors. There are several reasons for concern regarding cash flow:

- The scope for opex efficiency savings is now much reduced
- Any increase in capital expenditure in DR4, required to ensure security of supply and social and environmental objectives are met
- The changes in the treatment of non-load related capital for tax purposes, effective from April 2005
- Interest rates are likely to rise in the future
- Increased pension contributions to fund deficits

Under these circumstances it is likely that cash flow will be negative for DNOs under the current financing arrangements. This is clearly not viable and the funding mechanism should address this issue.

In this Consultation Ofgem have detailed the indicators they expect to use and defined their calculation. However in some cases the definition is not clear, for example:

- Gross interest expense – do you mean gross of tax or gross of interest received?
- Maintenance capex - what is the definition of maintenance capex?
- Total debt - should this not be net debt?

We welcome this information, but Ofgem still need to finalise the discussion on what indicators are to be used, their appropriate definitions and the minimum and maximum levels for each. We believe that the ranges should be based on an A-rated company, consistent with Ofgem's desire for DNOs to be able to retain a credit rating that is comfortably within the investment grade range. Ranges that credit rating agencies have historically published should not necessarily be used as a guideline for the future since the high-investment, negative-cash-flow environment we are now entering is significantly different to that historically experienced. The work that both the industry and Ofgem are undertaking in conjunction with the credit rating agencies will help in this discussion

Financial Modelling

We have made detailed comments on Ofgem's draft financial model in the attached appendix. We would like to emphasise the following points here.

It is imperative that the treatment of interest and tax costs is explicit in Ofgem's financial model so that the impact of the price control on the key credit rating ratios can be assessed. In particular, the model will need to take proper account of the changes in treatment of capital expenditure for tax purposes, which come into effect from 1 April 2005.

Assumptions on the calculation of income (eg capitalisation of faults) are critical to the financial robustness of companies. Any changes to these assumptions need to be taken into account when assessing financial viability.

Clarification is required on how Ofgem intend to use the outputs from the financial modelling work.

7.64 – 7.91 Treatment of pension costs

Ofgem has reaffirmed its position on how it will treat pension costs, in respect of under/over payment of contributions in prior periods, apportionment of future company pension fund contributions to the distributor and the use of pension fund surpluses to fund redundancies. It has also added a fourth test on stewardship.

As indicated in previous responses we still have strong objections to some of the main principles that Ofgem intend adopting. In particular Ofgem's desire to make retrospective adjustments to previous allowances to cater for the funding of Early Retirement Deficiency Costs (ERDC's) from pension scheme surpluses and the imputing of a pensions allowance for the DPCR3 period are clearly contrary to the widely understood principles of no-retrospection regulation. Furthermore, Ofgem seem to have disregarded the fact that the ERDC payments are driven by ESPS rules, which are governed by statute. In achieving the level of efficiencies required by Ofgem, these are unavoidable costs and should be allowed by Ofgem, irrespective of whether the cost was initially funded through additional contributions or legitimately offset against scheme surpluses.

Our detailed comments on the methodologies are set out below:

7.67 – 7.63 Basic methodology

We support the basic methodology described by Ofgem and in particular that:

- the allowance for pensions costs at each price control review should be based on the cash funding rate recommended by the most recent full actuarial valuation, provided that such valuation is based on reasonable assumptions;
- pension costs should include those incurred within related party contractors; and
- exclude any excess costs arising from a material failure of stewardship

7.68 We believe that deficits should be recoverable over a period shorter than the average remaining service life of the active membership. In practice deficit repair cannot be longer than the average remaining service life of the active membership. The remaining average life should be the maximum not minimum time period for recovery. As the number of actives decreases the weight of the deficit on the remaining actives, with reducing working lives, will become untenable.

7.69 Of the four options presented:

- Option 1 will encourage companies to be extremely cautious in future forecasts
- Option 3 only defers the problem and does not provide clarity or certainty
- We favour options 2 & 4
- Option 4 – we already pass through some costs, so this approach would not add complexity. Contribution rates do not vary every year. Rates normally only change when a valuation is done, unless something significant or unexpected happens.

7.75 – 7.79 Allocation between price controlled and non-price controlled activities

In various meetings with Ofgem, we have pointed out the difficulty of accurately splitting pension liabilities between price controlled and non price controlled activities due to:

- the unclear distinction prior to the transfer scheme implementation between price controlled and non price controlled activities;
- the non availability of data of pensioners and/ or their dependants;
- the problems associated with staff who have worked within many functions; and

- the allocations required within central services.

We therefore support the pragmatic and proportionate approach to splitting pension liabilities.

In particular, Ofgem must ensure that no DNO is unfairly treated purely because of the approach it has adopted to calculate the split.

We believe that it would be appropriate to allocate specific assets to the various categories of membership. It is this matching of assets to liabilities that has driven our investment policy.

The pre - 1 October 2001 service for all Supply employees (past and present) should be included in the allowable liabilities. This is because Supply was regulated before 1 October 2001. Ofgem think it is right to disallow these Supply liabilities, partly on the grounds that DNOs may have transferred out their liabilities in respect of active Supply members after 1 October 2001. This certainly would not apply to non-active Supply members' liabilities which will have been retained by the corresponding ESPS Groups. Ofgem argues that there should be no cross-subsidy of regulated and unregulated businesses. However, the responsibility for the non-active supply liabilities is clearly a responsibility of all the DNOs; as such, no supply business is being subsidised.

7.80 – 7.84 Under or Over Provision

Ofgem have recognised that there was no specific allowance within the DPCR3 allowance for pensions, but have suggested a number of methods for imputing an allowance. Each of these methodologies is equally arbitrary. The allowance given to companies was that paid by the frontier company in the base year for DR3. This should form the assumed allowance for every company.

Assuming Ofgem decides to make an adjustment for past contributions being at variance with allowed costs, then the period over which Ofgem looks back will be important. In practical terms a line should be drawn at the end of DPCR2.

7.85 – 7.88 Early Retirement Deficiency Costs

In the December paper, Ofgem challenged DNOs to provide evidence that there was any commitment or basis for expectation that ERDC costs could be recovered via the price control settlement. This challenge is made in the full knowledge that the issue did not arise during the last review and that there is therefore no evidence available. However Ofgem must accept that there is also no evidence to suggest that these costs would not be allowed.

As explained earlier these costs have been unavoidably incurred in the achievement of the efficiency levels required by Ofgem and as such must be allowed. If Ofgem now wish to disallow these costs from March 2003 (effectively the date at which this policy was first discussed) then it must do so in the full knowledge that this will limit the ability of DNO's to make further efficiency savings.

7.86 The method by which the employer has used a share of the surplus might have included a reduction in regular contributions, a reduction in ERDC payments and, in some instances, even the cancellation of instalments of ERDCs. The issue is that the ERDC payments, regardless of how they were funded, are a valid cost and should be allowed.

7.87 Consumers are getting a benefit in overall employee costs as a result of early retirements. It would be wholly inequitable if customers did not have to bear the cost of the benefit they are enjoying.

7.89 Stewardship

Whilst we accept that there should be some stewardship test, in doing so, Ofgem must understand that the company is already closely scrutinised by the trustees and other regulatory bodies. There should therefore be an overall assumption of good stewardship and the onus must be on Ofgem to demonstrate the contrary.

Moreover, it is unclear how Ofgem will determine failure of stewardship.

Trustees must take advice on investments and they may well fail because their selected manager fails to deliver. Provided proper advice is sought and taken and that they have not chosen a non-typical course or policy for their investment strategy this point is not acceptable.

There will be a need to ignore the chosen method of funding from this determination (namely Project Unit credit or Attained Age) as the AA method typically produces a higher contribution rate for the same liabilities but it more stable as in theory surpluses are built up to meet the higher cost of the aging membership.

Different schemes have different liability profiles (eg ratio of pensioners to actives). Companies need to adjust their investment strategies to meet these different liability profiles. Every scheme will therefore have its own unique benchmark of performance that can not be readily compared.

Appendix – Ofgem’s draft financial model

We welcome the principle of an open and transparent model that can be used by Ofgem and the DNOs to model the outputs of costs and allowed income in a consistent and clear way.

We found the workshop held on 28 January very useful in helping us understand the workings of the model and allowing us to highlight issues we have discovered when populating it.

We believe that to ensure transparency there should be a clear audit trail between data submitted through the Business Plan Questionnaire (BPQ) and the data used in the financial model. We recognise that to include this within the main body of the model would make it very cumbersome and we would therefore welcome a separate audit trail as agreed by Ofgem at the workshop.

At the workshop the following issues were raised and it was agreed that, where possible, the model would be revised:

Price control calculations

- The operating costs quoted on line 10 of “Price Control Calcs” worksheet should include NTR costs and other costs of sale on lines 23 and 24 on the “Selected Inputs” worksheet.

Tax calculations

- The IBA s closing balance in “Notes ToFinReps” worksheet should not be reduced by the annual writing down allowance.
- The tax charge on line 53 of “Price Control Calcs” worksheet should be populated by a goal seek macro when updating the model. This macro does not run.
- The treatment of deferred revenue in 2003/04 and 2004/05 as 100% WDA does not work as total capital investment still gets split across the other tax pools.

Capital Incentive calculation

- The adjustment for depreciation charges on underspends five years previous does not appear to adjust RAV back to the figure it would have been if the actual allowance had been the same as the actual spend.

Revenue growth index

- The formula in “Price Control Calcs” worksheet row 31 links to the wrong column in “Formula Inputs” worksheet row 39.

We would welcome the opportunity to review the model further as it develops to include Ofgem’s final proposals on issues currently under consultation.

In addition to the above we would also like to make the following comments:

Financial indicators

The outputs from the model will be used to assess the financial impact of the Price control on each DNO. When assessing this, it is important that any rewards or penalties attained through incentive schemes are excluded from the calculations. The price control set should allow the DNO to meet all the financial indicators before incentives or penalties are added.

Statutory depreciation calculation

The calculation of depreciation in “Notes ToFinReps” worksheet takes the statutory depreciation charge as forecast for the year ended March 2005 and then adds depreciation on fixed asset additions. This does not allow for the retirement of any fully depreciated assets after 31 March 2005. The differences in the early years will not be significant, but will be material by 2020.

The calculation also assumes all fixed assets are depreciated at the same accounting rate. The asset life for non operational assets will be significantly lower than the lives of network assets.

Forecast movements in working capital

The model assumes that working capital items such as debtors and creditors will remain flat. Each DNO will have made a prediction for working capital as part of their BPQ response and this prediction should be considered when producing forecast balance sheet and cash flow.

Appendix 1 Developing the RIAs for Distributed Generation, IFI and RPZs

Introduction

*Here Ofgem sets out the questions that need to be answered in developing full RIAs for distributed generation, IFI and RPZs – and in particular to assess the relative costs and benefits of the various incentives to decide whether they should be introduced and, if so, the strength of incentive required. Full RIAs will be produced for the March 2004 document and to assist Ofgem in this process respondents are asked to provide comments on **each** of the proposed incentive mechanisms including, where appropriate, quantified responses to the questions that have been identified.*

Costs and benefits

In developing the RIAs for the incentive framework for distributed generation, IFI and RPZs it is important that the main costs and benefits are identified, and where possible, quantified, to ensure that the introduction of the new policy is appropriate.

In assessing the costs and benefits arising from the incentive framework for distributed generation, the IFI and RPZs, Ofgem will consider the impact on consumers, distributed generators and the DNOs. Specific questions on which respondents are requested to comment are set out below although Ofgem welcomes any other information (preferably quantified) that will assist in the development of the RIAs. Any assumptions that respondents make in answering these questions should be clearly identified.

Questions for developing the RIAs

What would be the impact of each of the:

- distributed generation incentive;***
- IFI; and***
- RPZ mechanisms***

on the volume (or capacity) of distributed generation connecting to the distribution networks?

There is considerable uncertainty about the future for DG, but we believe it will be driven by considerations other than incentives on DNOs.

We believe the proposed incentives on DNOs are unlikely to affect volumes of DG.

There may be some cost benefits from RPZs and IFI, but these are likely to be longer-term and are unquantifiable at this stage.

In terms of cost impacts, the main one is the move from deep to shallow-ish connections charging, which will raise general DUOS prices.

What would be the additional expected costs of the incentive framework to distributed generators for connecting to the network? What benefits would it provide?

What would be the impact of IFI and RPZs on research and development and network innovation? What benefits would these provide to generators and other connected consumers in comparison to the associated costs that would be incurred?

What would be the impact of each of the proposed incentive schemes on the costs of connecting distributed generation in the period to 2010 and in the longer term – both in terms of £/kw and total system costs?

How would you expect new technological developments to reduce the £/kW cost of connecting distributed generation over that period?

To what extent does the connection of distributed generation require new R&D by the DNOs?

What would be required to do to administer each of the proposed incentive schemes and what would be each of the associated costs?

What would be the impacts of changes in the volume of distributed generation on

- quality and security of electricity supply; and***
- losses?***

We believe there will be minimal effect on quality of supply. There has been no effect in the past and, our best view at the moment, is that this will probably be the case for at least the medium-term future.

Longer-term DG is likely to reduce losses. In the short-term, whilst penetration is low, losses could increase as a result of DG, but the difference is likely to be undetectable.

Will distributed generation provide benefits in these areas, and if so, can they be quantified?

One of the main benefits of setting appropriate incentives for the DNOs in relation to distributed generation will arise through facilitating progress towards the government's energy policy targets. In addition to the questions above, Ofgem would welcome any views on the following questions:

How much of the increased volume in distributed generation would be of environment friendly types (eg renewables)? By how much would this be expected to replace electricity from non-renewable sources?

Most of the DG we anticipate is environmentally friendly, mainly on- and offshore wind.

Would such generation contribute to the reduction of emission levels and, if so, how should these benefits be quantified?

These questions should also apply to IFI and RPZs if they are expected to have an impact in this area.

Distributional effects

When considering the distributional effects of the distributed generation related regulatory framework, it is expected that costs should be borne by those that incur them. Exceptions may arise if investments are made to accommodate distributed

generation which does not then materialise or subsequently disconnects or where innovation and R&D provides benefits to other consumers connected to the network.

Would there be significant costs outstanding if expansion of the network was not taken up by distributed generators? Could the additional capacity be utilised in another way, and if so, how should any costs be treated?

There is a risk of stranded assets and increased costs to consumers. Alternative use depends on its location. If network assets are designed specifically to accommodate DG, then the likelihood of non-utilisation will increase. And even in cases where alternative use is possible, this is likely to take time.

Some risk may be mitigated by generator lead times.

Are the IFI and RPZs likely to provide benefits to all consumers connected to the network, and if so, how would these compare to the benefits realised by distributed generators and DNOs?

In the short-term, customers are unlikely to benefit. There are potential benefits of lower DUOS and lower losses, but these are dependent upon size, penetration and location of DG.

The incentive framework for distributed generation assumes an asset life of 15 years for infrastructure assets required for connecting distributed generation. Is this appropriate and how does it compare to the assumed lives for other network assets?

Risks and unintended consequences

There could be a number of risks and unintended consequences associated with each of the incentive mechanisms. Some of these will be influenced by the value (or strength) of any incentive provided. For example, if an incentive is too strong it may encourage inefficient expenditure, but if it is not strong enough, it may not have the desired impact on DNOs' behaviour and the expected benefits may not be realised. Answers to the questions that have been identified above will help in assessing the appropriate level of any incentive, but it is important to consider whether there are any other potential risks or unintended consequences. For example, for IFI there may be a risk that expenditure incurred by DNOs does not realise any benefits for consumers or that the transfer of best practice is not facilitated.

Ofgem would welcome views in this area, including, where possible, quantification of the likely impact.

Competition

The proposed incentive framework for distributed generation does not relate to particular types of generation technologies and hence are not expected to have major impact on competition amongst new distributed generation. Whilst Ofgem expects the increased volume of distributed generation to have a positive effect on the general competition in the generation sector, it will examine and limit any scope for distortion in competition between existing and new distributed generation, as well as between distributed generation and generation connected directly to the transmission network.

Ofgem does not expect that the IFI and RPZs will give rise to any competition issues.

Views are invited on the impact of the incentive framework for distributed generation on competition in the generation sector.

Review and compliance

Ofgem will set up appropriate monitoring system to review the effectiveness of the adopted regulatory framework in the next price control. Monitoring for IFI and RPZ is discussed in the relevant section of the paper.

Views are invited on the likely costs of any monitoring that would be required for each of the incentive framework for distributed generation; the IFI; and RPZs.