Network, Environment and Customer Issues

This paper considers the key themes in the Ofgem consultation not covered by the other appendix papers in this Centrica submission. These are network, environmental and customer issues and the stakeholder engagement in formulating the DNO business plans (one major environmental issue, the treatment of distribution losses, is the subject of a separate appendix).

1. Networks

This section focuses on the operating (opex) and capital (capex) requirement allowances and the associated incentives. The scale of any proposed allowances for DPCR5 should be set against the projected growth (both demand and generation) and the ability of the DNOs to deliver to this.

Our findings are as follows:

- the performance of the DNOs to date, highlights the varying degree to which they manage their cost pressures. DNOs continue to:
 - overspend against their opex allowance at an average rate of 10%.
 - significantly *underspend* against their capex allowance at an average rate of over 18%.

We do not believe that DNOs will be able to catch up as is being suggested for the remainder of DPCR4, and the implications should be considered carefully during DPCR5.

- while supportive of the intentions of menu regulation, the evidence to date suggests that its practical benefits for customers have been limited, because DNO performance has not met the required outcome expected by the incentives.
- although we would expect DNOs to have broadly similar approaches to the ways in which they
 address their specific work areas for both capex and opex, DNOs continue to operate different
 practices¹. For example for capex, there are inconsistent approaches adopted for the
 procurement of and management of external contractors. An example of an opex variation, is
 the way in which DNOs procure their fleet of stock² ranging from an ownership scheme through
 to a leasing scheme. It will be extremely important for Ofgem to eliminate these inconsistencies
 in their reviews, especially if benchmarking is to work effectively.
- DNOs approaches to developing their business plans have been poor. In particular, Ofgem highlights a number of DNOs who where required to re-submit their business plans¹ on a number of occasions to address errors including data inconsistencies. We would urge Ofgem to use its enforcement powers against those DNOs who fail to deliver accurate business plans.

1.1 DNO performance to date

The large capex underspends to date and forecast underspend for the whole of DPCR4 have implications for menu regulation, which are discussed later. The charts contained within this section are derived from Ofgem's cost review reports³ unless specifically stated otherwise.

Ofgem has published limited information on earlier controls. However, from the data available, it appears that on aggregate there was a significant variation in the opex and capex from target.

¹ The DNOs varying practices are highlighted in Ofgem's "Electricity Distribution Cost Review 2006-2007".

² The Cost Review of 2006-2007 highlights an increase of 137% in vehicle replacement despite a move by some DNOs to leasing.

^{3 &}quot;Electricity Distribution Cost Review 2005-2006" and "Electricity Distribution Cost Review 2006-2007" reports.

1.1.1 Opex performance

2005 to 2006



The chart below compares DNOs actual opex and allowances for the above period.

Of the fourteen DNOs, two spent exactly the allowance amount (CE across both their regions), five underspent, while the remaining seven overspent compared to their allowances. On average across the DNOs there was a £33 million overspend, which is an average overspend of just below 5%. There are wide variations, with Scottish Power in the Manweb region having a 38% overspend compared to a 9% underspend by SSE in the Hydro region.

2006 to 2007

The chart below compares DNOs actual opex and allowances for the above period.



Of the fourteen DNOs, ten overspent compared to their opex allowance in 2006/2007, while four underspent. On average there was a 10% overspend compared to their opex allowance. However, this average includes a wide variation, with United Utilities under spending by 15% while EDF in the Eastern Power Network region overspending by 25%. It is also notable that only two DNOs spent within +/-10% of their opex allowance, which were Scottish Power Distribution with a 3% underspend and CE in the North Eastern region with a 9% overspend. Three DNOs had an underspend of more than 10%, while nine DNOs had an overspend of more than 10%.

Between 2005 and 2007 there has been an increase in the number of DNOs overspending and a reduction in the number under spending or spending in line with their allowance. The average overspend has also doubled from just under 5% to 10%.

The average 10% overspend during 2006/2007 which followed an overspend during the previous reporting year, suggests that the DNOs have experienced some genuine cost pressures. Ofgem identifies a range of pressures facing DNOs although it is unclear whether the additional expenditure has had any positive impact on the quality of service and performance of the DNOs, which could be a justification for some of the additional expenditure. It is paramount that any capex increases are fully justified and thoroughly costed to ensure that any increases reflect genuine cost pressures.

It will be important for Ofgem to understand the reasons why some DNOs have been able to perform significantly better than others as well as understanding the nature of the variations across the DNOs.

1.1.2 Capex performance

During DPCR2 and DPCR3, although there is limited information available, it is clear from the chart below⁴ that the performance of the DNOs was on average characterised by significant underspends.



The underspend pattern continues through DPCR4. The chart below compares DNOs actual capex with the allowances for 2005/2007.

⁴ This chart has been derived from material published by Congrès International des Réseaux Electriques de Distribution.



When setting the current price control Ofgem published DNOs capex allowances as a flat profile across the five year period. Therefore, when calculating the capex allowances for the first two years of the control we have simply multiplied Ofgem's annual allowance by two. Although presented as a flat annual allowance by Ofgem when setting the price control we doubt that in reality DNOs would have such a profile of expenditure, so the chart below may under or over estimate DNOs expenditure compared to the allowance.

The most notable point is that with the exception of WPD in their South West region who precisely spent their allowance, all the remainder have underspent against their capex allowance. The largest underspends are 32% by SSE in the Southern region and EDF in the EPN region. It is notable that these are also the two DNOs with the largest absolute allowances. Although not uniformly the case, it is also notable that some of the smaller underspends are by those DNOs with the lowest absolute allowances; this may suggest that there is some relationship between the allowance level and the ability to effectively deliver their capex programmes.

It is notable that two of the DNOs with large opex underspends (United Utilities and Scottish Hydro) also have substantial capex underspends. In these cases, Ofgem should assure itself that such underspends are not negatively impacting on service quality in the short or long term or that DNO expenditure is not being incorrectly classified.

In order to achieve the 6% anticipated underspend at the end of DPCR4, DNOs will need on average to overspend by 8% of the remaining three years.

Ofgem cited four reasons why DNOs have failed to deliver the increased expenditure. However, the extent to which DNOs have taken steps to forecast these constraints and make alternate plans is unclear:

- shortage of skilled labour (internal and external). We have established ourselves as a market leader in terms of our approach to manpower planning and investment in training and development of our skilled workforce. Our home services apprenticeship scheme enables us to recruit individuals and then provide them with the appropriate skills in order to become qualified gas engineers; adopting this proactive approach has ensured that we have not suffered from skill shortages. At a recent Ofgem workshop, Edf⁵ suggested that DNOs should evolve their approach to prevent skill shortages. It is surprising and disappointing that DNOs either individually or as a broader community have not previously put in place adequate long term programmes, to address any shortfalls.
- delays in mobilising the contractor base. Most DNOs have developed sophisticated procurement practices. However for those DNOs failing to deliver due to a potential limitation in the

⁵ Presented during Ofgem's "Introduction / overview – networks and financial issues" workshop on 19 May 2008.

contractor market, further consideration needs to be given in terms of the effectiveness and efficiency of those procurement practices. We recommend given the consistent underspend across the industry that Ofgem commission a review of contractor sufficiency and extent to which DNOs are ensuring liquidity in their service provider market. Good procurement and supply chain management should be able to identify and take corrective action to limit lead time constraints.

- delays to major projects due to planning issues. This may have led to some delay, however, it would be normal for delayed projects to be superseded by projects that have permissions. DNOs should have the necessary skills at managing this crucial element of programme management.
- adverse weather diverting resources from capex to fault repairs. High Impact Low Probability
 risk assessments could go some way to assisting DNOs with identifying risk areas so that preemptive action could be deployed.

All of the above appear to be factors that the DNOs could have foreseen; these failures should not be compensated through increased allowances during DPCR5.

1.2 Implications of DNO performance for menu regulation

Prior to the introduction of the Information Quality Incentive 'IQI' mid-way through the last price control, there were long standing difficulties associated with the asymmetry of information between the regulator and the DNOs. There was also a perception, across other sectors, that regulated companies benefited from submitting very high expenditure business plans, and that there was no real cost for regulated companies to submitting high expenditure business plans.

It is not yet clear that in practice, this incentive has delivered material benefit to customers. The evidence suggests that IQI does not appear to have significantly improved the quality of DNO's forecasts of capex. However, on the basis that this is a relatively new incentive, we believe a reasonable period of time (allowing at least one whole price control to elapse) is required before there is any attempt to materially reform it.

In the interim, we consider that:

- there is a strong case for reviewing the IQI parameters to ensure that they appropriately share the potential benefits. The key weakness is that the breakeven point for the DNOs is not reflective of other comparable models. This point appears to be overly high compared to the menu for the gas price control (set at 5%) and Ofwat's initial menu (proposed at 5% below that which Ofgem approved for the gas price control).
- Ofgem could also consider rewarding DNOs with a higher breakeven point if the difference between their initial business plan and Ofgem's assessment is below a certain level, perhaps a ratio below 1.05.

We have considered the two aspects of the practical impact of menu regulation – DNOs initial bidding behaviour and their expenditure to date.

1.2.1 DNOs initial bidding behaviour

During the last price control, Ofgem used consultants⁶ to assess the business plans. We have considered how the DNO's business plans compared to Ofgem's / their consultants' assessment of expenditure.

Three DNOs had their submissions endorsed in full. Conversely three DNOs (EDF in London and Eastern regions and Scottish Power in the Manweb region) had submissions of at least a ratio of 1.20 to the Ofgem / consultant assessment. It is important to note that the DNOs did not know that the menu would be proposed until after their initial business plan submission. The average ratio of DNO business plans to the Ofgem / consultant assessment is 1.10, ie. a difference of 0.1.

The difference between the DNOs initial submissions and the Ofgem / consultant assessment is as follows:

⁶ PB Power.



We have also considered how the DNOs revised position (ie. choice on the menu) compared to the Ofgem / consultant assessment. All DNOs chose an allowance or menu position that exceeded the Ofgem / consultant assessment, irrespective of whether their initial submission was in line with this assessment. For DNOs with a higher initial submission than the Ofgem / consultant assessment, the reduction in their choice is greater the bigger the initial gap. This might suggest that DNOs would naturally prefer to have an allowance a little bit above the regulator's allowance. The absolute average (counting positive and negative movements as absolute values) between initial and revised DNO business plans is 0.06, while the average difference is 0.03.

The difference between the DNOs initial and revised submissions, with reductions and increases in the level of expenditure is included below.



From the evidence of bidding behaviour, it appears that DNOs have a conservative bidding strategy. It will be important that Ofgem moves the DNOs away from such behaviour during DPCR5.

1.2.2 Actual expenditure

As Ofgem's menu approach has only been in place for three full years (with only two year's worth of information published) as well as the limited information made available, it is very difficult to make a detailed assessment of its merits at this time. Ofgem presented its forecasts of DNO's capex as being evenly spread over the five years when it set the price control and in comparing actual and forecast spend for 2005/2007. While this is possibly an accurate reflection of the expected expenditure profile, we think it is more likely that the capex programmes will be characterised by some lumpiness. Without

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knowledge of the actual profile the DNO expect to follow it is difficult to assess "true" annual under and overspends before the end of the current five year control.

The extent of the underspend to date and overall anticipated underspend within menu regulation could be explained by a range of factors, including "conservatism" in the menu choices by the DNOs, an overly conservative baseline set by Ofgem or substantial unanticipated opportunities for efficiency savings on the part of the DNOs. It might also be the case that the outcomes suggest that overall the menu provides stronger incentives for DNOs to make efficiency savings than to forecast accurately in the first place. The DNOs stated that the extent of their underspends to date was primarily because they had not been able to increase resources quickly enough to implement the capex programme. It will be difficult to determine which of these factors has been most important until we understand the final under / overspend position for DPCR4. It is notable, however, that substantial underspends also occurred during DPCR3, when menu regulation was not in place.

If the under / overspends are compared with the difference between the DNOs original proposed capex and the allowance, there is a small negative correlation in the relative position. If you compare the under / overspends with the difference between Ofgem's consultants assessments of efficient capex and the allowances there is a slightly larger positive correlation in the relative position of the DNOs. Neither relationship is strong, although it is interesting that the sign for the correlation has switched. This might suggest that Ofgem's consultant's forecast of capex were to some extent a more reliable predictor than the DNOs actual requirements; this would suggest that menu regulation had not delivered substantial improvements in information quality.

The underspend requires Ofgem scrutiny; this is not intended to penalise those DNOs that made genuine efficiency savings, but without a robust review and detailed understanding of the reasons for the underspend; it will be difficult to ensure that the incentives for DPCR5 are appropriate. A thorough review will also be an important baseline for assessing the reasonableness of capex plans for DPCR5. It appears that DPCR4 will be the second consecutive price control period when DNOs have on average had significant capex underspends and yet will be requesting substantial increases in allowances for DPCR5. This arguably increases the caution that Ofgem should exercise when evaluating DNO's requests for higher capex.

1.3 Approaches to cost assessment

We are encouraged that Ofgem has placed a strong emphasis on benchmarking and believe it will provide an important role in ensuring that as a minimum, DNOs are moving towards and achieving industry best practice, and in due course, wider best practice. Wider cross-sector benchmarking together with the incentive properties of RPI-X can be used to provide an incentive for DNOs to discover a new efficiency frontier.

The nature of benchmarking of this type is that it is only as good as the quality of data used and the analytical techniques applied. Therefore, it will be important to review and "cleanse" the data provided by the DNOs to allow effective comparisons. Ofgem will then also need to consider which analytical set of techniques to apply. We encourage transparency with interested parties having the ability to review and comment on the analysis.

It is worthwhile noting that a number of other regulators⁷ have used benchmarking as a prominent part of price control efficiency. Learnings from these sectors should be brought across for DPCR5 in order to establish a best practice approach.

We anticipate that DNOs will be keen to identify reasons why a company or region specific factor might negate the relevance of benchmarking; it will be important that any such issues are subject to scrutiny by Ofgem and other interested parties.

⁷ These regulators are Ofwat (comparative competition has been a prominent feature of their price control review process since 1989 and they have used the results of benchmarking to set "catch-up" efficiency targets for the companies) and Postcomm (for comparisons of Royal Mail's mail centres and delivery offices to set the efficiency targets to bring performance to that of the best performing).

Although all stakeholders potentially have important perspectives to contribute, we consider that customers and suppliers are likely to have amongst the most balanced perspective because they directly benefit from or suffer from poor quality of service, and pay the costs of higher or lower expenditure. Other more indirect stakeholders may not have such a balanced perspective.

1.4 Conclusion

- 1. For capex and opex allowances:
- a) Ofgem should be sceptical about the validity of any requests by DNOs for higher allowances and reject any such proposals that do not meet the required levels of scrutiny.
- b) we endorse the use of benchmarking as well as other techniques to enable Ofgem to robustly scrutinise opex and capex requirements.
- c) consideration should be given to allowing DNOs to choose their capex allowances below Ofgem's baseline, if the DNOs can genuinely demonstrate that they can deliver the required outputs for less than the Ofgem forecasts.
- d) Ofgem should consider the link between menu choices and the achievement of outputs; a clearer link could reduce any incentive for DNOs to underspend relative to their capex allowance if this endangered the achievement of clearly measurable outputs.
- e) Ofgem should consider commissioning a review of contractor sufficiency and extent to which DNOs are ensuring liquidity in their service provider market.
- f) Ofgem should give consideration for ways in which the DNOs can reduce their opex and capex costs.
- g) Ofgem should provide any further guidance required by the DNOs to ensure that the forecast assumptions for DPCR5 are based on firm foundations.
- h) wherever possible, DNOs should be required to standardise the way in which they approach the financing of comparable work areas, based on an industry best practice.
- 2. For IQI:
- a) Ofgem should consider whether the parameters of IQI, and in particular the breakeven point, of the DNOs menu are contributing to the conservatism evidenced and accordingly we would recommend a reduction in the current rate to bring this, as a minimum, in line with the gas model.
- b) Ofgem should consider rewarding DNOs with a higher IQI breakeven point if the difference between their initial business plan and Ofgem's assessment is below a certain level, perhaps a ratio below 1.05.
- c) at the earliest opportunity, Ofgem should provide any further guidance sought by DNOs to determine the key assumptions for DPCR5, for example, quality of supply targets and incentive rates.

2. Environmental issues

This section focuses on environmental concerns which form a central theme of DPCR5. It is important that DNOs have cost and service incentives that properly reflect the costs that their operations impose on the local community and the climate more generally. These incentives should be properly designed so that the DNOs are encouraged to reduce their environmental impact in such a way that the rewards they can earn are proportionate to the costs they can save by changing their behaviour. We believe the existing distribution losses incentive does not meet this test. The attached paper from CEPA sets out our concerns in this area. Our views on other environmental issues are set out in this section.

2.1 Distributed generation 'DG'

We welcome the holistic focus Ofgem is bringing to bear on the issues facing DG, as reflected in this consultation document and in Ofgem's work to create more flexible market and licensing arrangements for distributed energy⁸. This is all the more important given the 2020 targets now that the government will be looking more closely than ever at effective ways to promote greener and low carbon power and heat solutions. As Ofgem's consultation recognises, DNOs to date have, through inaction in areas such as charging methodologies, held back the development of distributed energy by failing to ensure that the

⁸ We note Ofgem's paper "Distributed Energy - Further Proposals for More Flexible Market and Licensing Arrangements" of 18 June 2008 outlining the proposals to address the weakness of the existing framework.

charges they face fairly reflect the benefits they (often, if not always) bring to all customers through reduced network costs.

Ofgem acknowledges that the existing DG incentive needs reviewing. This is part of a wider question about how the revenues DNOs can earn are related to the charges they levy on customers and generators and how in turn this sends appropriate signals to customers and generators. Clearly if energy suppliers are to promote and develop the small scale generation market, they and their customers need to be able to earn revenues that properly reflect DNOs passing through the benefits to them of more small scale generation through reduced charges.

Indeed, since government seems certain to set targets for small scale generation as part of meeting its 2020 commitments, we believe Ofgem may need to consider more radical innovations consistent with providing market rules and mechanisms that pro-actively support distributed energy. Ofgem's new proposals on distributed energy might show the way forward in this respect. But Ofgem needs to be careful that any new incentives adopted through the price control to support the development of DG only put customer money at stake where Ofgem has reasonable certainty that the benefits will come at a cost that reasonably reflects the benefits of new DG in terms of reduced network investment, reduced losses and lower carbon emissions (where those benefits apply). There is a danger that in the interest of accelerating the growth of small scale generation projects, Ofgem may lose sight of value for money for customers unless it keeps in mind the need to ensure that new incentives are subject to same level of assessment and rigour as all other parts of the price control.

2.2 Willingness to pay surveys

Unlike carbon, many other forms of environmental impact do not have a publicly available monetary value attached to them. This can make it difficult for organisations such as Ofgem to decide what value to attach to environmental improvements. A good example of such an environmental benefit is undergrounding of electricity cables, where valuations will depend on individual consumers perception of the value of the benefit.

Wherever possible it is generally desirable to directly observe preferences. However, we recognise that this may not always be achievable in the field of network services.

Although there are some weaknesses to such surveys, these can be a helpful approach to inform the value that customers place on certain environmental improvements, and therefore, the amount of money that should be spent. There are a number of factors that we believe that Ofgem should take into consideration:

- ensure that the questions posed provide suitable context so as to achieve a more realistic choice. For example, responses may be different if customers are simply asked whether they would be prepared to pay an additional £5 for further undergrounding, than if they are told before being asked the question how much of their bill already contributes to environmental improvements.
- questions should be constructed so that they reflect meaningful amounts of money for customers to consider when making trade-offs. If the sums of money are too small or too large then the question will lead to a biased answer.
- questions are repeated in a slightly different form to ensure consistency and reliability of results.
- customers are asked a small number of focused questions otherwise there is a risk that answers are affected by previous questions. Shorter surveys with different groups of customers covering different trade-offs may be more informative than a large survey with one group of customers.
- we encourage Ofgem to test any surveys it develops on a small number of customers first to assess their suitability, before undertaking a wider sample survey.
- 2.3 Heat networks, energy efficiency and smart metering
- 2.3.1 Heat⁹

⁹ Our response to BERR's recent call for evidence provides further information "BERR's 'Heat Call for Evidence" of 31 March 2008.

We believe that there is significant scope for the heat market to make important contributions to renewable and carbon targets, both through continued energy efficiency improvements and through the deployment of low carbon and renewable microgeneration. We believe DNOs can have an important role as a facilitator of these schemes and encourage Ofgem to consider how its price control regime can provide incentives in this area. However, such steps are only likely to have a major impact in the context of a wider government strategy to promote the renewable heat market.

2.3.2 Energy efficiency and smart metering

We believe that suppliers rather than DNOs are best placed to provide energy efficiency services to their customers. DNOs do however benefit from reduced demand where customers actively take up the energy efficiency products that suppliers offer. Then of course customers who finance the DNOs should feel the benefits through reduced network costs. The fact that DNOs often have little visibility in debates on matters such as energy efficiency and smart metering suggests that their incentives are not well aligned with those of their customers. For example, while suppliers rather than distributors should play the key role in delivering smart meters, we would expect to see the DNOs being much more engaged in the smart metering debate than appears to be the case. It is however unclear that financial incentives will necessarily change DNO behaviour so Ofgem needs to think carefully about the scope and means for making the DNOs a more positive force for change and transformation in the industry.

3. Customer issues

This section focuses on a number of the customer issues raised in the consultation.

3.1 Reliability and quality of supply

Ofgem's consultation acknowledges that service incentives overall are working well and have delivered benefits for customers. Indeed Ofgem acknowledges that customers do not necessarily believe that the DNO performance bar should be raised. We note that DNOs are currently introducing a range of operational practices now aimed at improving service levels. We recognise that where there is specific evidence of very poor service, that targeted measures should be considered. The quantitative output from Ofgem's Consumer First research, which is due this month, should be used to drive forward any specific remedial work.

3.2 Connections

Although connection revenue does not currently form part of the price control, we support the introduction of any mechanisms which increase transparency and improve certainty in terms of price and service. At Ofgem's recent workshop, SSE argued that connections for domestic consumers should be reregulated into the DNO portfolio, but without the provision to set a standard price, on the basis that the competitive market was not delivering benefits for consumers. We do not agree. We believe that the introduction of independent DNOs to the connections market has significantly improved the choices available from the DNOs and we would not want to see competition undermined.

3.3 Consumer representation

We believe that a consumer panel can offer some insight but are sceptical that it can sustain the necessary interest levels consistently throughout this process. In our experience through the last gas price control, we in conjunction with energywatch and Ofgem struggled to achieve any regular dialogue with consumers.

4. Stakeholder engagement in formulating the DNO business plans

This section focuses on the manner in which DNOs will use their stakeholder engagement to develop their respective business plans. We commend Ofgem for taking due consideration of the criticisms raised from the previous price controls around insufficient stakeholder engagement. We also recognise that in general, regulators are increasingly recognising the benefits of involving stakeholders in formulating business plans.

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However, we are concerned that there will be a general lack of direction, given that DNOs have been given the responsibility of engaging with their stakeholders in preparing their business plans, with no coordination from Ofgem. It is true that this process potentially enables DNOs to be innovative in their methods of engagement. However, our experience of the process to date is that DNOs are unclear who their customers really are. We detect little sense that they want to engage with Centrica – a company whose customers pay 20% of their costs. We are therefore unclear that anything substantial will come out of this process, in terms of benefits to suppliers or customers

We suggest that Ofgem brings together the DNO and broader stakeholder community at more periodic intervals than is suggested in the consultation, using the May 2008 workshop approach as an effective benchmark. On the basis that DNOs will have developed and refined their business plans over the coming months, we believe that the autumn might be an appropriate time for an Ofgem-led workshop.