

---

## **Gas Distribution Price Control Review**

### **Fourth Consultation Document**

A response by Centrica

---

Author: A. Russell  
Version Number: 1.0  
Status: Final  
Date Issued: 26<sup>th</sup> April 2007

## INTRODUCTION

Centrica's response to the Gas Distribution Price Control Review: Fourth Consultation Document contains three main parts.

The first section focuses on key issues, setting out our main concerns on a number of areas relating to the consultation document and the price control process more generally.

The second section addresses those questions specifically raised by the consultation document and related issues.

Finally, Appendix 1 contains the full text of a non confidential CEPA paper entitled "The Allowed Cost of Capital, Ofgem: GDPCR 2008-2013". The paper was commissioned by Centrica, but the views expressed in the paper are those of CEPA. However, Centrica supports the views expressed in the paper.

## SECTION 1: KEY ISSUES

In responding to this fourth consultation document, Centrica raises a number of significant concerns we have with the Gas Distribution Price Control Review (GDPCR) to date, as well as proposing a new and positive approach to the cost of debt.

### **Cost of Capital:**

Centrica commissioned CEPA to research market evidence on the key elements of the cost of capital. The research conclusions are summarised under Section 2, Chapter 6, and the full paper is included at Appendix 1. The paper concludes that the cost of debt under the Transmission Price Control Review (TPCR) was probably overstated and that a significant reduction is appropriate. Historically, Ofgem's concern that low rates might not endure has resulted in an inappropriate allowed cost of debt. Customers should not bear this burden any longer.

In addition to a significantly reduced cost of debt, Ofgem should consider introducing a trigger mechanism to allow the cost of debt to be adjusted within the price control should the cost of debt change for an extended period. This could be simple and transparent, protecting the GDNs at the same time as allowing customers to share in the benefits of any actual reduction in the cost of debt.

In addition, the market evidence indicates that the notional gearing of 62.5% assumed by Ofgem is comfortably conservative and the cost of equity allowed is likely to be on the generous side.

In our view, the market evidence, in the absence of an adjustment mechanism would allow Ofgem to set a revised Vanilla WACC of between 4.3 and 4.5% against the current Vanilla WACC of 5.25%. We believe that this change alone would result in benefits to customers of £85-105m. If a trigger mechanism was also implemented, this should reduce the Vanilla WACC below the lower end of the range.

### **Capital & Replacement Expenditure:**

Centrica has experienced difficulty in responding effectively to the document, due to the lack of comparability with the previous 5 year control and the one year control. However, we believe that the bids on capex and repex put forward by the GDNs represent a substantial increase on the one year control, which in turn involved a big increase from the last 5 year control.

We welcome the work Ofgem has initiated (via their consultants) to investigate the GDNs bids and we urge a tough approach on behalf of customers. More information from the BPQs should be shared with the industry to provide clear evidence of the need for investment and to help respondents answer the GDN proposals effectively.

The increases contained in the capex proposals are a matter for robust challenge, given that forecast demand from the Long Term Development Statements indicates only minimal demand growth. In our view, the information contained in the document does not adequately explain this gap.

Whilst we accept that the Mains Replacement Programme is driven by the HSE, it is essential that the customers receive value for money, given the GDNs forecast repex over the next 5 years to be nearly £4billion. Again, we support the scrutiny and challenge to the proposals being exerted by Ofgem and its consultants, and believe greater transparency on this work should be given at an earlier stage in the process.

### **Treatment of Non Operational Capex and Repex:**

Ofgem has suggested expensing non-operational capex; Centrica does not support this approach. It has been suggested that this would be beneficial as the efficiency incentives associated with opex are stronger than those on capex. Whilst this may have been true previously, we believe that incentives will be more balanced if a Capex Roller and the Information Quality Initiative are implemented as preferred by Ofgem, and hence non-operational capex should continue to be treated as capex. The cost to customers of such a change can be estimated to be of the order of £100m annually. Unless the incentive properties of an opex treatment outweigh this, then the change should not be made.

In addition, we continue to have concerns on the treatment of repex. As this expenditure clearly relates to capital investment, we do not believe that expensing 50% of the cost is appropriate. As such, we welcome Ofgem's commitment to reviewing the treatment of repex. Whilst treatment of repex is mainly a financing device, our estimates show that relatively small increases in percentages capitalised have major customer benefits.

### **DN Sales Benefits:**

As we have put forward strongly in previous responses, Centrica believes it is vitally important that customers see benefits from DN Sales at the earliest opportunity. Some GDNs have asserted that strong comparative regulation should not be applied in this price control period, on the basis of their recent ownership.

DN Sales were completed in 2005 so by the start of the next price control period in April 2008, the new owners will have been in place for nearly 3 years, and will have had the opportunity to make and retain savings. Anecdotal evidence indicates that this has indeed been the case. Whilst we accept Ofgem faces some difficulty in data collection due to the different bases, we believe that challenging targets should be set for the GDNs based on the benchmarking work carried out by Ofgem and its consultants.

### **Constructive Engagement:**

Centrica continues to advocate an approach to the price control process closer to that of Constructive Engagement employed by the CAA. We have welcomed Ofgem's efforts in this direction, including the industry dialogue on xoserve and the useful costs workshop held as a roundtable discussion with the GDNs in April. We would strongly support further initiatives of this type following the issue of the initial and updated proposals. We would very much appreciate the opportunity to ask questions, and would recommend a longer period for questions be allowed at the next events. Finally, we hope that Ofgem will use the experience of GDPCR to expand on the Constructive Engagement approach in DPCR5.

### **Information Transparency:**

As we have previously highlighted, Centrica believes there is a need for additional transparency of information both during and after the price control process.

We believe it is essential that GDN reporting of key elements during the control is improved. This is to allow suppliers to estimate the future path of prices for budgeting purposes, and to ensure that any future overspends (such as the £840m in the last control) are advised to the industry. We believe that greater transparency of information around price control revenues and transportation charges will support competition and greater customer choice.

We welcomed the publication of additional information and the financial models after the initial and final proposals for the one year control and hope that Ofgem will repeat this as soon as possible after document issue. We would also find it helpful if, as part of each consultation document, Ofgem provides indicative estimates of the effect of the proposals on customers.

## SECTION 2: QUESTIONS AS RAISED BY THE DOCUMENT

In this section, we address the questions as listed in the appendix to the consultation document.

### *CHAPTER 2 – Accounting Policy and Adjustments*

**Question 1:** Do you agree with our proposed accounting adjustments? Are there any other accounting adjustments that we should be considering?

In our view it is reassuring at this stage that the difference between the GDNs in respect of accounting treatment is relatively small. In order to aid future comparisons and benchmarking between GDNs, we hope that this will continue to be the case and welcome Ofgem's intention to develop improved guidelines in this area.

It is helpful that Ofgem has set out the accounting adjustments (which we assume are annual figures), but we experienced difficulty in achieving a comparison with the previous price control values.

We continue to support Ofgem's approach of removing costs associated with GDN Sales and staff costs associated with restructuring.

We are not aware of any other specific accounting adjustments that Ofgem should be considering.

**Question 2:** Do you agree with our adjustments for related party margins?

Centrica believes it is important to ensure that customers do not pay a return twice for the same service, and hence we support removal of costs attributable to related party margins, as per paragraph 2.11.

However, we can accept that where there is clear evidence that the relevant contract is on normal commercial terms and at arms length, that such margins may be allowable. Where this is the case, we believe that the contract should be kept under review, either directly or through a regular reporting mechanism, and the relevant GDN should be required to notify Ofgem pro-actively of any substantive change to the contractual terms, which might affect the margin charged. We also believe that the test should be applied to all related parties, not simply those which are wholly owned subsidiaries.

**Question 3:** Do you think we should change our treatment of non-operational capex?

In our view, non-operational capex should continue to be treated as capex and not expensed. We appreciate that the incentives associated with opex efficiencies might be considered stronger than those on capex, however, we believe that with the proposed introduction of a capex roller and the information quality incentive (IQI), the downward pressures on opex and capex expenditure will be more equal, and hence, that on balance, the treatment of non-operational capex should not be changed.

In addition to the above, we note that due to the scale of non-operational capex, this change in treatment would be expected to lead to a Po increase of c. 5%. Centrica believes that this is an unacceptable additional burden to place on customers. Obviously, the assets associated with non-operational capex are more short term than the generality of the RAB, but we believe that this could be addressed by other means. One option may be to depreciate these assets over a shorter period more aligned with the asset life.

We understand that the existing capex treatment of this expenditure is not aligned to other price controls, but of itself, we do not believe that this is a sufficient reason to make the change without substantial additional benefits to customers being evidenced.

## ***CHAPTER 3 – Operating Expenditure Analysis***

**Question 1:** How should we bring together the various consultants' analysis to establish an efficient cost benchmark and cost allowances? In light of our approach to setting a benchmark, what approach should we take to glidepaths?

We believe it is very important Ofgem takes advantage of the opportunities afforded by comparators at the earliest opportunity to drive out efficiencies resulting from DN Sales to the benefit of customers.

Some GDNs have suggested that the relatively short period of ownership means that this should not be the case. In our view, whilst in the early part of the period, this may create some difficulties in assessing benefits, this will not be true for the whole control period and hence a challenging benchmark should be set.

The overall approach for measuring the frontier shift through the difference in Total Factor Productivity seems reasonable, though we believe it would be helpful to respondents to share additional information on the sectors considered in the analysis.

In respect of the supporting analysis conducted by the consultants, we believe that additional research would have been useful, for example, by expanding the dataset used to include international comparators. Such additional data would allow more complex approaches to be used.

We would also welcome further information on the underlying work supporting the conclusions that different companies are efficient in different areas, as this might tend to indicate that various trade offs are at work. It would be helpful if the consultant work to explore these possibilities and their conclusions were shared.

In principle, we support the approach of using a glidepath assumption to achieve a reasonable balance, but would prefer to see the balance between the frontier chosen and the assumption on gap closure to be less in favour of the GDNs and more in favour of the customer. Hence, an assumption that 70% of the gaps will be closed by 2012-13 is reasonable if the frontier company is chosen. Where an upper quartile benchmark is chosen, this already incorporates a degree of relaxation into the objective and hence a tougher assumption on gap closure, either in terms of percentage or timing, would be appropriate.

In respect of bringing together the various consultants' analysis, we believe that the GDNs, as efficient companies should be aiming for "best in class" across the board, and hence that the creation of a virtual "best in class" GDN as the target to aim for is a good thing, and in the longer term will lead to better, and more efficient service for customers. Genuine issues evidenced by GDNs on the creation of a virtual DN could be addressed by using the more relaxed gap closure suggested by PB Power of 70% by 2012-13 if necessary, though we are not persuaded this would be needed in all cases.

On the 3 options proposed in the document, we support Ofgem's view that allowances based on historical costs are not appropriate, and hence do not support option 3. Our preference would be for a full gap closure approach with an assumption of ongoing efficiency savings, as we believe this offers the best balance of reward between GDNs and customers.

**Question 2:** Is there a case for making adjustments to allowances for real price effects, specifically direct labour, contract labour or materials?

**Question 3:** Is there a case for making adjustments to allowances for regional factors and if so what approach should be adopted?

As we believe questions 2 and 3 to be closely related, we have answered them together.

In Centrica's view, there is some merit in considering adjustments for regional differences, but great care is required in application to ensure that this does not lessen incentives to find innovative solutions to cost reduction, such as new approaches to laying mains or different working arrangements

If, on balance, it is deemed that adjustments for regional differences should be applied, we believe that one sided regional adjustments for "expensive" areas such as London would not reflect the full story. It is also possible that sparsely populated rural areas may carry additional costs in different ways, or that urban areas lend themselves better to cost reductions. Hence, any regional adjustment process should be applied to all GDNs, with adjustments about a defined average. Calculating the required adjustments will be complex, and it will be necessary to ensure that the effort is fully justified.

In the case of regional adjustments being applied, the relative levels of the adjustments should be taken into account when setting efficiency targets for the GDNs. It will also be important to consider the impact on transportation charges in the relevant area.

**Question 4:** Should we adapt our pension principles to address the forecast defined benefit pension contributions, which are both extremely high and vary widely across GDNs, (despite funding very similar benefit packages)?

**Question 5:** Should we change our pension recovery mechanism in order to avoid distorting incentives between making salary and non-salary cost savings?

As we believe questions 4 and 5 to be closely related, we have answered them together.

We find the degree of variation across DN's to be a matter for concern given Ofgem's confirmation that the benefits offered by the schemes are similar. We also believe that these contributions are significantly higher than would be expected in general, and that this too should be challenged.

Centrica has repeatedly raised concerns with the pension arrangements under the price control. Commercial companies are constantly driven to review the sustainability of legacy pension arrangements and make adjustments where necessary; in principle, therefore, we do not consider that network companies should be accorded more protection than is generally faced by their customers.

One of our major concerns has been the treatment of Early Retirement Deficiency Costs (ERDCs) as we believe that these can lead to the companies receiving a dual allowance due to the different treatment of redundancy and pensions costs. In our view, companies should absorb the risk of these as they will already have benefited from the efficiencies. Such costs and benefits should be taken into account when the case of early retirement is considered. We have also raised concerns with respect to the effective pass through of the generality of pension costs. Ofgem has previously granted an allowance based on the pass through of an efficient level of costs, but it is not clear to us that a formal independent assessment and benchmarking exercise has been carried out. In view of the costs the GDNs' schemes impose on customers, we believe an independent review to be appropriate.

We are encouraged by the recognition of some of these issues in the consultation document and welcome Ofgem's willingness to consider the points afresh. However, we have found it very difficult to comment in detail based on the information in the document. At a high level, it appears likely that the proposals around the equalisation of incentives would be beneficial to customers, but we would welcome publication of the data underlying this proposal to confirm this effect.

Similarly, we believe that option 1, basing the allowance on a benchmark contribution rate (from GDNs and comparable companies) would be the appropriate way forward, but again, we do not believe we have sufficient information to comment in detail. We would recommend that the benchmark reflect a wide variety of companies and schemes, not only regulated companies in various sectors. In order to comment more fully, we would appreciate additional information being provided in this area.

## *CHAPTER 4 – Capital and Replacement Expenditure Analysis*

**Question 1:** What are your views on PB Power's adjustments to the GDNs' forecast capital and replacement expenditure?

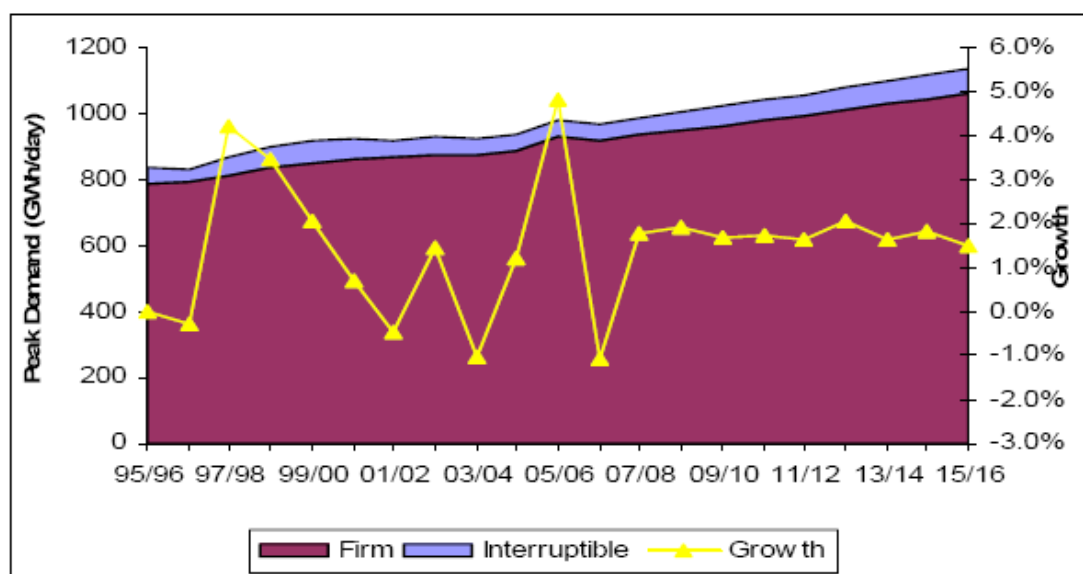
### LTS and Storage Capex

We agree with PB Power's assessment that substantial reductions should be made to the forecast level of this expenditure. However, in our view there is insufficient data to be able to make anything other than a superficial judgement.

To take a specific example to illustrate this point PB Power state that they have removed a pipeline project from the South of England forecast. Our questions in response to this are:-

- What project is this?
- What projects make up the rest of the expenditure in that area (£150m when this GDN historically has spent only £15m in the last two years)?
- What independent assessment will be carried out of the underlying forecast growth in this GDN (and others that show large capex) to justify this level of increased expenditure?
- Average peak demand growth from the South England 2006 Long Term Development Plan between 2005/6 and 2015/6 is only 1.7% (compared to a national average from the NG NTS 10YS of 1.9%) with a profile as per graph below. This does not appear to support the large capex forecast in itself, and, in fact, appears to provide evidence that demand growth cannot be the driving factor. What are the drivers other than demand growth for these projects? We believe that a detailed breakdown by project of the drivers behind each significant investment should be provided as part of the process.





In addition to the specific example given above, we have a number of more general points and questions in this area.

The NTS has been investing substantially for supply reasons; it is not clear why the GDNs are proposing to invest so much more than historically. It is therefore important to consider whether at the GDN level this is reasonable, given the limited level of projected growth and investment being made in the NTS for demand lead projects.

Given the above, and the scale of the proposed increases, we believe that Ofgem should seek clarification from each relevant GDN of the specific drivers behind substantial capex increases compared to recent levels. It would also be helpful for respondents to be able to see the full actual expenditure at the same level of detail for the last control period.

In the absence of substantial demand growth compared to historical levels, there must be other drivers for the investment. Total GDN growth (from NG NTS 10YS) between 2005/6 and 2008/9 is only 0.6% but capex spend rises substantially in 2007/8. There are differences between the GDNs, and some extremes that are affecting the overall picture (e.g. the South England example above).

Comparisons between the NG NTS views of demand growth and the GDNs suggest that GDN demand forecasts may out of sync with slower growth. It would be helpful if this point were to be considered more closely in PB Power's analysis of demand growth and the GDNs evidence for their assessments. In addition, when reviewing the peak forecasts further it would be helpful to understand whether PB Power will examine the methodology used to develop the 1 in 20 peak day forecast.

### Reinforcement and Governors

As with the LTS and Storage investment there appear to be large levels of investment for modest levels of growth. PB Power has stated that there has not been any adjustment to the forecast capex in these areas reflecting any analysis of the relationship between investment and demand growth.

Again using specific examples, the South England DN, after adjustment by PB Power, this area still shows £100m expenditure with only modest levels of peak growth forecast (1.7% pa), yet this represents around 27% of total capex. However, the East England DN has only 9% of total capex in this category, but exhibits similar levels of growth. In total, for the primarily growth related categories of LTS & Storage, Connections, Mains Reinforcement and Governors, South England is investing a total of £284m over five years for added load (2007

to 2012) of 11.3 TWh compared to East England which is investing £99m for an added load of 18.9 TWh.

In the absence of the responses to the relevant parts of the BPQ, we are not in a position to judge why these large differences have occurred. However we believe it would be reasonable for Ofgem to obtain commentary on any explanations for these apparent differences in investment approach by these two GDNs and publish it as an illustrative example. Therefore we request that Ofgem should ask PB Power as part of its further work on reviewing the demand forecasts for LTS and Storage capex to seek clarification of the reasons for such widely varying relationships between demand growth and investment for these two GDNs.

#### Non-Operational Capex

We note that further work is ongoing in this area and would request that as part of this work that Ofgem ask PB Power to obtain from the GDNs what cost/benefit analysis has been done to justify IT expenditure and what alternative solutions have been considered to investment in IT. We believe that IT as a capex item may create increases, or opex savings which are potentially hidden and yet which will affect customers.

With regard to GTMS and SOMSA proposed outlay we request that Ofgem seek additional clarity in the following areas: -

- In developing their solutions are GDNs adopting a solution that delivers the most efficient solution by keeping an open mind to the possibility of joint development between GDNs?
- Are common service costs incurred by the GDN owner in this area equitably allocated between the gas network business and other businesses owned by the GDN that use the same services?

#### Replacement expenditure

PB Power has also carried out considerable work in the area of repex, challenging the GDN bids, this is welcome. The overall levels of replacement expenditure continue to cause us concern and though we accept that the activity is driven by HSE requirements, Ofgem and its consultants must challenge such levels of expenditure as robustly as possible to ensure that the best deal is being achieved for customers. It is essential that the work is carried out efficiently and economically, given that we understand this level of expenditure could continue for the next 20-25 years. We comment further on the treatment of repex under chapter 6.

As with capex, given the limited data available in the consultation, we find it difficult to comment in detail on the proposals. We also found it very difficult to compare the bids with previous controls.

It is clear however, that the costs of the repex programme are rising significantly. GDNs have attributed this, at least in part, to the need to start replacing larger diameter mains which carry a higher cost. This appears to be an issue affecting GDNs differently according to the proportion of large diameter mains on the relevant network. However, the requirement to replace these mains has been known about since the start of the process, and is not a new issue. Before allowances are increased so significantly, we believe it would be appropriate for GDNs to provide evidence of the diameter mix agreed as the basis for the allowance in the last price control and further that GDNs did indeed replace the agreed diameter mix.

**Question 2:** What are your views on PB Power's general approach to the assessment of costs?

No further comments

**Question 3:** What are your views on PB Powers' approach to the cost assessment for each activity?

No further comments

**Question 4:** Is it appropriate at this time to reconsider the approach to prioritisation within the risk model and should the approach to encroachment and diversions should be amended?

In respect of the zonal approach propounded by NGG, we do not object to the approach per se, providing that it can be demonstrated that customers are not disadvantaged and that the approach does not bring costs forward or generate additional costs to customers.

We believe it is important that GDNs consider innovative and efficient ways of delivering such a large programme. In addition, it is essential that the GDNs demonstrate value for money to customers, given the level of cost customers are expected to fund.

## *CHAPTER 5 - Incentives*

In addition to the questions raised in the consultation document, we continue to have concerns in the area of shrinkage. We have offered our views below in respect of potential requirements; we then address the consultation questions.

### Shrinkage

With regards to the design of the shrinkage incentive we continue to assert that a reform of the arrangements will be required to overcome the current deficiencies with the price control incentive. In a previous response, we were willing to support the protection of the GDNs from the shrinkage price risk, providing that customers were compensated for this transfer in risk. This did not occur in the one year control, and we believe that Ofgem should reconsider this matter of compensation as well as whether the allowed uplift on the market related price can be justified. We continue to believe that the GDN's should be fully exposed to the shrinkage volume risk as this area is within their remit. In our view, to remove the volume driver would significantly weaken the incentive as other market participants are significantly less able to control this risk.

There are several facets of concern with the scope of the current arrangements which we have previously raised to Ofgem comprising issues across both the price control arrangements and the design of the Uniform Network Code (UNC). The combination of the two results in a systematic bias against the predominantly domestic Small Supply Point (SSP) market. The GDN shrinkage assessment inaccuracies, metering errors, errors within the Large Supply Point (LSP) sector and omissions from the Supply Point Register are all passed through to the SSP sector and in aggregate are debit charges. We also note the following:

- The scope of the shrinkage incentive may or may not require an expansion into a total losses approach (excluding energy) but this is dependent upon the achievement of improvements to other contributory factors;
  - A proposed redesign of an element of the UNC arrangements is underway with modification 0115 "Correct apportionment of NDM Error". This modification is seeking to address the inequity of the aforementioned errors being passed to the SSP sector by correctly reapportioning the error across all Non-Daily Metered (NDM) sites, removing the current cross-subsidising of the larger non-domestic loads by the Domestic sector and providing incentives on the

wider NDM sector to improve accuracy of Settlement affecting processes and data;

- We assert that the completeness of the Supply Point Register requires improvement and currently consider that stronger incentives need to be in place to ensure that all sites receiving or capable of receiving gas are recorded on central industry systems.
- There are practical improvement actions that we believe can be taken with relative ease. one example is regular reconciliation of the national gas portfolio with both the Emergency Meterworks database and an independent source. This should be accompanied by active follow up action to ensure all sites potentially receiving gas were identified and billed. This would;
  - support the GDN's in their obligation to maintain an accurate Supply Point Register
  - identify those shipperless sites whose consumption is currently passed through to the RbD community, and whose status poses a safety risk
  - add confidence that those errors that are excluded from the shrinkage incentive scope (and picked up by the predominantly domestic RbD market) are tolerably accurate and as a result enable actual volume improvements by the GDN's within the incentive scheme.
- Supporting improvements with the Gas Safety (Management) Regulations in terms of the reporting and transparency of performance would be required to provide evidence and confidence that the GDNs are fulfilling their obligations in relation to the maintenance of an accurate Supply Point Register in a timely manner.
- We agree with Ofgem's initial thinking in response to the RbD consultation as noted at the August 2006 Distribution Work stream in that "dynamics between theft & LDZ shrinkage considered to create a perverse incentive on GDN's to detect upstream theft". We support an initiative requiring collective Industry participation to undertake a targeted theft quantification exercise with the objective to identify real levels of theft within a pre-defined geographical area. The collection of this data coupled with a necessary revision to the current methodology that differentiates between GDN & Shipper theft such that the proportions of assumed theft are based on detected theft volumes as opposed to absolute number of cases should better inform the differentiation between upstream theft (UAG) and downstream theft (non-shrinkage losses) and therefore strengthen the GDN shrinkage incentives which are currently weakened in the absence of credible data.

In summary we are seeking reform of the price control arrangements and UNC design to allow for a more accurate calculation of inputs and exclusions within the scope of the incentive scheme, therefore removing any perverse incentives, and, introducing revised obligations and amended frameworks to strengthen the shrinkage incentives and bring about the desired reduction in shrinkage volumes.

#### General Incentives

On more general incentives, Centrica believes that where a revenue driver is to be employed, there are a number of elements to be considered, the key points being whether or not the proposed driver will generate an improvement and also whether it is measurable and auditable.

#### **Question 1:** Is it appropriate to retain the current volume driver?

In the consultation document, Ofgem has suggested the removal of the current volume driver, which means that 35% of the GDNs' allowed revenue varies with throughput. GDNs have asserted that less than 5% of their costs are volume related. We believe that the outcome of this proposal would be to leave GDNs in a position such that even if they did not flow gas, they would still collect their allowed revenue. Hence, we do not support the removal of the volume driver.

Whilst we agree that GDNs have licence obligations and incentives as well as contractual obligations to provide services, we believe that this is a very significant transfer of risk from GDNs to customers, and would constitute a general weakening of incentives around quality of forecasting and accuracy of revenue collection. The magnitude of this risk transfer would be such that we believe customers should be compensated for bearing this additional risk by an explicit and significant reduction in the cost of capital.

In respect of the actual volume driver, we believe that variations in throughput will have an effect on activity levels and hence costs, but we appreciate there may not be a single direct link. Whilst not ideal, we believe that this measure does provide a reasonable proxy which is measurable and can be audited, and is also capable of an element of tuning as evidenced by the weightings currently incorporated.

**Question 2:** Is it appropriate to implement any of the revenue drivers discussed in this chapter and are there any other drivers that we should consider that we have not included in this chapter?

In table 1 below, we set out our view of the relative risk associated with the four revenue drivers discussed in the document.

*Table 1: The four proposed revenue-drivers.*

Revenue driver	Link to cost base	Link to market risk	Comment
Volume	Mostly variable	Proposal to remove volume driver will reduce exposure to market risk	In principle this reflects the true underlying cost structure. However, the chosen allocation of 35% to volume is above GDN's view of the real variable cost element. Since there is a link between non-diversifiable risk and volume (some I&C and electricity demand is bound to vary as the economy varies) removing this risk will decrease the beta value.
Connections	Mixed fixed and variable – but variable with respect to the number	Minimal exposure to market risk	While the costs of new connections will actually vary as the number of new connections vary, the link to the state of the economy is minimal. So, while it may be an appropriate case for a revenue driver, the impact on the WACC is low.  The GDN market risk exposure under a connections driver would be much less than the exposure under the previous volume driver.
Customer numbers	Impose a mix of fixed and variable costs – but variable with respect to the number	Minimal exposure to market risk	As per connections.
Capacity	Imposes a fixed cost if the capacity of the system has to be increased	Increases in capacity could arise from an increase in demand caused by increased economic activity	Increments in capacity are variable and could arise if demand grows faster/slower than forecast. However, the relationship is not smooth since there will be block increments.  Whilst there is clearly risk associated with a capacity driver, it is less than that under a volume driver as the risk is more susceptible to planning and management.

We have considered further the drivers proposed from a more general as opposed to a risk perspective below.

#### Capacity Revenue Driver

Given that network operators have a statutory obligation to provide a gas supply, if economic to do so, and in doing so they would have to meet the peak demand of that load, this should be sufficient incentive to install capacity. Overall, we do not believe this would be a better candidate for a revenue driver than volume.

#### Customer Numbers Revenue Driver

Change in customer numbers will be forecast in order to set the price control. If this forecast is accurate there should be minimal variation in activity for the GDNs. In general, Customer numbers have a low and reasonably predictable growth pattern. If numbers are greater or less than forecast then clearly, transported gas volumes (and to some extent capacity requirements) will vary. Unless a driver triggers a variation in costs for each year it would be necessary to wait till the end of the price control to adjust costs with a customer numbers driver. The existing volume based driver adjusts the revenue generated each year with the change in transported gas volumes.

#### Connections Related Revenue Driver

The number of new connections is closely linked to customer numbers making it difficult to think of any merits that this has a driver over customer numbers.

In our view, there are no other obvious revenue drivers which meet Ofgem's key criteria; costs vary materially; costs are difficult to forecast; variation in cost is outside the GDN's control; and variability can be easily measured and independently audited. It is questionable whether the revenue drivers in question meet these criteria, but we believe a volume driver comes closest.

Notwithstanding our comments above, if the volume driver were to be removed, we believe it would be appropriate to replace this with another driver of allowed revenue. However, we consider that there may be concerns with using any other single driver as it may not reflect costs across all GDNs. It will also be important to achieve a balance between GDNs and customers on risk bearing, with appropriate compensation attached.

We note that Ofgem is proposing further analysis in this complex area. With this in mind, we will reserve further comments until the results of the additional work are available.

### **Question 3:** Is it appropriate to strengthen the capex rolling incentives?

As stated in response to the 3<sup>rd</sup> consultation document, in principle, Centrica supports the application of a capex roller in conjunction with an information quality incentive.

However, we believe there are some outstanding questions in this area. The present capex incentive proposals use the PB Power forecasts as the basis for judging each GDN's performance. Whilst in principle, this should be acceptable, at the moment there is no material to evidence that PB Power have fully analysed the GDNs peak forecasts (they appear to have just compared NG NTS figures with those of the GDNs). In addition, the document does not contain thorough analysis of investment drivers at this point, so in our view there are outstanding questions on how effective this approach will be. The detailed work needed in order to implement an effective capex roller is considerable, and given the consultancy work involved, will generate costs to the industry. It is therefore

essential that the benefits achievable by the implementation of the capex roller outweigh these costs.

Now that there are 4 network operators there is an opportunity to benchmark them against each other and create an incentive based on the best performing operator. The incentive needs to penalise any network operator that overstates its investment requirement and needs a mechanism to remove the value of delaying investment to the latter part of the price control period. We believe that if properly implemented with sufficiently tough parameters, the combination of a capex roller and the IQI incentive has the potential to deliver all these requirements.

We look forward to the more detailed information on this incentive in the initial proposals document.

**Question 4:** Are our proposals for the treatment of offtake reform related costs and mains replacement costs under the IQI appropriate?

We agree that at the time of the preparation of the BPOs, there was insufficient information available for the GDNs to fully forecast the effects, however, we would expect them to have had an informed view. In permitting the GDNs to update their forecasts in advance of the updated proposals due in September, we believe it is essential that Ofgem and their consultants challenge the updated figures to ensure that no overlaps have occurred.

At a high level, it seems a reasonable approach to mirror the incentive strength to avoid distortion whilst excluding the capex costs from the IQI. However, given the complexity of the proposals, we believe that it would be helpful to include modelling of these effects in the initial proposals.

## *CHAPTER 6 – Methodology for considering financial issues*

In addition to the questions raised in this chapter, we have some specific observations we would wish to make in respect of repex.

We welcome Ofgem's openness to reconsidering the treatment of repex under GDPCR. At the time of introduction, the mains replacement programme was only in its infancy. Now the programme is fully operational and the scale of expenditure is greater by far. At the beginning of the 2002/7 control, 50% of repex being expensed amounted to less than £220m. However in the next 5 year control, we believe this figure would be nearer £400m on average, based on GDN figures.

With this in mind, we believe the review is timely and should result in a significant reduction in expensed repex. Replacement expenditure is clearly capital investment and should be treated as such, for significant amounts of it to be treated as opex, means that today's customers will be further cross subsidising future customers.

We are also willing to explore the potential opportunities of addressing financeability concerns by profiling revenues in line with costs. However, if this were an option to be pursued, it would be absolutely essential that detailed and timely information is available to shippers and suppliers to support them in their efforts to forecast the future path of prices and manage their risks. If Ofgem intends to bring such a proposal forward as part of the initial proposals, we request that detailed modelling of the possible effects, including likely impacts on end user prices year on year, is included.

**Question 1:** Do you agree with our proposed plan of work to determine the cost of capital? Are there other key areas of analysis that we should be carrying out?

Overall, we agree that the process for determining the cost of capital as set out in the document is reasonable. We understand the reasons why Ofgem prefers not to fix the cost of capital until the final proposals document. However, as a supplier, we are very concerned that the timing of the price control creates considerable difficulties in planning and budgeting for the succeeding year. Whilst this is only a significant problem in respect of the cost of capital during the setting of the Price Control process itself, we believe that for future processes the decision should be reached sooner to provide greater certainty to the industry as a whole.

Centrica agrees with Ofgem's view expressed in 6.2 that the cost of capital should reflect the risks and rewards available to the network companies and hence that the cost of capital needs to be determined as part of the wider price control package. However, we believe that under TPCR, the cost of capital was not challenging and did not properly take account of the market evidence, especially in the area of cost of debt.

In support of our view that the TPCR cost of capital is too high, and that the GDPCR cost of capital should be significantly lower, we have commissioned CEPA to conduct an in depth analysis of the market evidence for the key elements of the cost of capital. The key points of the CEPA paper are extracted below, and the full, non-confidential paper is attached as Appendix 1.

The views expressed in the paper are those of CEPA, but the conclusions are supported by Centrica. In Centrica's view, the evidence contained in the paper supports an even stronger conclusion on the outcome of the Vanilla WACC.

**Extract from CEPA Paper:**

The key elements of the cost of capital considered are:-

- 1.1 Notional Gearing
- 1.2 Cost of Debt
- 1.3 Triggers
- 1.4 Cost of Equity
- 1.5 Taxation costs
- 1.6 WACC

*1.1 Notional Gearing*

.

Market evidence for GDNs indicates that the perceived revenue and cost risks are low and that they can secure senior investment grade rated debt at debt: RAB ratios up to 70%. Therefore our judgment is that the 62.5% national gearing currently used by Ofgem is, if anything, relatively conservative.

*1.2 Cost of Debt*

There is no doubt that the real cost of debt in the markets has fallen sharply since the late 1990s. In considering an appropriate range for the cost of debt over the next price control period we have considered the historic average, the current cost of debt issues by comparable regulated utilities and judgements about likely future debt market developments over the period.

Market evidence of the real risk free rate based on nominal gilt yields deflated for expected inflation indicate a range from 2-2.5% (depending on the judgement about the market's



expected inflation rate). However the real risk free rate embedded in index-linked gilts is significantly lower, at about 1.8%.

Market evidence of the debt premia based on nominal investment grade rated debt issues indicate that the debt premium for A rated debt has been at or below 1.0% since 2003. Debt premia on corporate index-linked issues have been lower than this.

The key regulatory judgments around the cost of debt for Ofgem are:

- To what extent should the lower cost of index-linked debt issuance be taken into consideration when setting the GDNs' allowed cost of debt?
- How should Ofgem deal with the risk that current low rates could rise unexpectedly during the next 5 year control period?

On the **first question**, our view is that when setting the allowed cost of debt the regulator should take account of the cost of index-linked debt and possible capacity constraints in the index-linked market. In our assessment of the cost of debt we suggest that a GDN debt portfolio might reasonably be expected to be made up of 25% 'index-linked debt' and 75% 'nominal' debt.

On the **second question**, it is clear that, in the past, regulators across most sectors in the UK have dealt with the risk of an unanticipated increase in the cost of debt by "aiming high". The allowed cost of debt has been set significantly higher than the actual cost of debt to allow for the risk that market rates could rise during the 5 year price control period. This response by regulators has (i) raised user prices above where they would have been if the actual cost of debt had been allowed, and (ii) increased the actual return on equity well above the allowed cost of equity. This "arbitrage" opportunity is a major reason that regulated assets trade, on listed markets and in asset transactions, at a significant premium to their RABs.

In our judgement, given the persistence of low costs of debt issuance for the last 10 years, Ofgem should now reduce the allowed cost of debt to more accurately reflect the real cost of debt in this decade. Ofgem should also take account of the opportunity for regulated companies to benefit from the lower cost of debt in the index-linked markets. On this basis our view is that the appropriate allowed real cost of debt is 3%.

### *1.3 Triggers*

If regulators are now to set the cost of debt at a level reflecting the market evidence then there is merit in providing new mechanisms to deal with the risk of unanticipated rate increases. This report describes various adjustment mechanisms which could be triggered in the event that market cost of debt moved outside a pre-agreed band, thereby providing a symmetric hedge against unexpected rate movements within a 5 year price control period.

Adjustment mechanisms, if adopted, should be transparent, predictable and not subject to influence by the regulated companies or by third parties. Clear benchmarks for risk-free rates exist (e.g. from the Bank of England) and "triggers" (i.e. bands around these benchmark rates) could readily be established. Adjustment mechanisms could be devised which were symmetric and which shared the cost of significant upward or downward shifts in the market cost of debt equitably between shareholders and users.

#### 1.4 *Cost of Equity*

We have consistently been of the view that uncritical reliance on CAPM to derive the cost of equity is inappropriate and gives implausibly low values. This is also Ofgem's view. Rather, we place greater reliance on available market information. In particular, we note:

- The same global liquidity that is driving down returns on cash and bonds is likely to be driving down the required return on equities as well. The clear implication is that the current equity market risk premium is likely to be lower than the long run average of 4-5%<sup>1</sup>, not higher.
- The trading valuations of listed regulated companies with few non-regulated assets are at a significant premium to their RABs. Adjusting for the "arbitrage opportunity" arising from the allowed cost of debt being higher than the actual cost of debt suggests the current cost of equity is in the range 6.5-7.0%. Valuations of asset transactions support this assessment.
- The recent phenomenon of infrastructure funds with considerable liquidity and aggressively priced and structured bids for infrastructure assets should be taken into account. The evidence indicates that the required return on equity of these funds is significantly lower than the implied cost of equity referred to above.

In our view Ofgem should give greatest weight to market evidence of the cost of equity from trading and asset valuations. This indicates a cost of equity range for GDNs of 6.5-7%. When forming its judgement about the 'point estimate' it is reasonable to take account of the entry of infrastructure funds with a low cost of capital. This may suggest adopting a point estimate towards the lower end of this range.

#### 1.5 *Taxation costs*

We support the approach adopted by Ofgem in the TPCR. We believe that Ofgem should in principle agree to ex post adjustments to take account of unanticipated changes in taxation law (including the recent budget changes to corporation tax).

#### 1.6 *Overall assessment of WACC*

We note that it is the WACC that matters, rather than the individual components.

Our estimate of the Vanilla WACC based on the analysis in the report is 4.3-4.5%. The market evidence may suggest a point estimate towards the lower end of this range. These estimates do not take account of the possibility of Ofgem adopting a trigger mechanism on the cost of debt.

**Question 2:** Is the range of key ratios we have identified adequate for carrying out an assessment of financeability?

---

<sup>1</sup> The Smithers Report, September 2006.

As mentioned in our response to the Third Consultation Document, we think that Ofgem should take account of the ratios that are most important to the ratings agencies and, that, as you are aware, key ratios include:

- FFO invest cover
- Adjusted FFO invest cover
- FFO / debt
- Retained cash flow / debt
- Debt / RAV

When considering financeability issues, these ratios should be modelled and evaluated in order to assess ex ante the possible impact of determinations on credit assessments of the GDNs. We encourage a flexible approach to the interpretation of key financial ratios as Ofgem described in 'Financing Networks: A Discussion Paper'.

More specifically, as already said in our response to the Third Consultation Document, we wish to be clear that Centrica does not accept that breach of specific financial ratios in the short term, with a given assumed financing strategy, necessarily implies that allowed revenues should be increased. In practice, situations of this nature are often best addressed via changes in financing structure.

**Question 3:** Is our approach to the issues raised by adjusted interest cover ratios appropriate (see Appendix 10 for details)?

Companies are rated based on a package of financial ratios, the adjusted FFO/interest ratio included. According to credit rating agencies, this latter ratio measures "the ability of the company to cover its cash interest expenses once maintenance capex has been funded<sup>2</sup> and we think that it should be included in the financeability analysis.

As to the approach described in Appendix 10 of the Fourth Consultation Document, Ofgem suggested including the PMICR of a GDN with 100 per cent of debt at nominal interest rates and to consider the assumption of proportion of index-linked financing only in case the PMICR is weak. As utilities companies are increasing the use of index-linked debt (see the Cost of Capital Paper), we think it would be more appropriate to assume a proportion of index-linked financing in the first place.

---

<sup>2</sup> "UK Independent Gas Distribution Companies" Moodys ([www.moodys.com](http://www.moodys.com)), March 2004.

## **Appendix 1**

### **The Allowed Cost of Capital Ofgem: GDPCR 2008-2013**

**Report by CEPA for Centrica plc, appended as  
separate document**