

## Gas Distribution Price Control Review One Year Control Initial Proposals

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### Overview:

The current price controls, which specify the maximum revenue that each GDN can recover from its customers, expire on 31 March 2007. The Gas Distribution Price Control Review (GDPCR) will reset the revenue allowances that apply to the GDNs for one year from April 2007 and for the next price control period 2008-2013. This document sets out our initial proposals for the one year control to apply for 2007-08.

The gas distribution networks have spent considerably more on investing in, maintaining and replacing their networks than was anticipated at the time of the last review. This document sets out our initial views on the extent to which GDNs should be able to recover these additional costs from customers.

Our initial proposals would give rise to an increase of 9.7 per cent in gas distribution revenue, primarily reflecting the impact of cost increases in the current five year period relating to pensions, shrinkage, business rates and investment in their networks.

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## Context

The price control that currently applies to the gas distribution networks (GDNs) expires on 31 March 2007. In 2004 we decided to extend the current control by one year in order to allow gas distribution to be considered separately from transmission.

The gas distribution price control review (GDPCR) will reset the revenue allowances that apply to the GDNs for one year from April 2007 and for the next full price control period from 2008 to 2013. This document sets out our initial proposals for the one year control to apply for 2007-08.

We consider that the work associated with extending the price control should be proportionate to a one year interim arrangement, and so where appropriate assumptions underlying the present price control have been extended or updated in a straightforward way to cover 2007-08. Most policy issues associated with GDPCR are being considered as part of the main (five year) price control review. We plan to publish the third consultation document for the main review in November 2006.

## Associated Documents

- GDPCR One Year Control Initial Proposals Supplementary Appendices, September 2006 (Ref. No. 169b/06)
- GDPCR Initial Consultation, December 2005 (Ref. No. 259/05):  
[http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/13055\\_259\\_05.pdf](http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/13055_259_05.pdf)
- GDPCR Second Consultation, July 2006 (Ref. No. 123a/06):  
[http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/15829\\_GDPCR\\_2CD\\_FINAL19July.pdf?wtfrom=/ofgem/work/index.jsp&section=/areasofwork/gasdistpriccon](http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/15829_GDPCR_2CD_FINAL19July.pdf?wtfrom=/ofgem/work/index.jsp&section=/areasofwork/gasdistpriccon)
- GDPCR Second Consultation Supplementary Appendices, July 2006 (Ref. No. 123b/06):  
[http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/15759\\_GDPCR\\_2CD\\_supplementary\\_appendices\\_FINAL.pdf?wtfrom=/ofgem/work/index.jsp&section=/areasofwork/gasdistpriccon](http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/15759_GDPCR_2CD_supplementary_appendices_FINAL.pdf?wtfrom=/ofgem/work/index.jsp&section=/areasofwork/gasdistpriccon)

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## Summary

The price control that currently applies to the gas distribution networks (GDNs) comes to an end on 31 March 2007. We propose to replace this with a control for one year while further work is carried out on the five year control to apply from 2008. GDNs will be allowed to recover £2.3 billion<sup>1</sup> from their customers. This represents a real increase in allowed revenue from 2006-07 of 9.7 per cent. For the average domestic customer this will probably mean an increase in their gas bill of less than £9<sup>2</sup>.

In carrying out the one year review we have focussed our efforts on four key areas where it is intended that our proposals will endure for at least the next six years and potentially beyond: the treatment of historical capital and replacement expenditure since the last price control review; the risks and incentives for GDNs with respect to shrinkage gas; pensions and the introduction of a company specific tax allowance. For all other areas of the control where most of the effect of the proposal will be for one year only we have either not reopened the existing settlement or tailored our work to reflect the impact of our proposals on GDNs and customers.

Since setting the last price control, the GDNs have spent considerably more in maintaining and renewing their networks than was anticipated. In total we have forecast that GDNs would over spend their allowances for capital and non-mains replacement expenditure by £843 million in 2005-06 prices (or 65 per cent). We consulted on a method for deciding who should pay for this additional expenditure – customers or companies - based on a view about the risks which it was appropriate to expect the GDNs in the context of this review to bear. Our proposals result in companies being exposed to almost 40 per cent on average of the cost of the over spend. The impact of our proposed treatment of overspend on allowed revenues (PO) will be to increase them by approximately 0.6 per cent for 2007-08, with a further 2 per cent increase by the end of the next control period.

GDNs are presently incentivised to reduce the volume of gas lost through distribution (approximately 0.7 per cent of the volume transported). The incentive mechanism exposes the companies to the full risk of gas price changes on the volume of shrinkage gas from the time the control is set. GDNs are forecasting a loss of £125 million under the current five year control. We are proposing to remove the price risk from GDNs while leaving in place an incentive to reduce shrinkage volumes. This change in policy has no PO impact as such but higher gas prices will now feed through to the customer and this will increase allowed revenues by 2.5 per cent.

Pension costs have risen for GDNs in the last five years in much the same way as they have across the rest of the GB economy. We are proposing to allow the GDNs

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<sup>1</sup> This figure is in 2005-06 prices, which is the standard basis used for the figures presented in this document. Based on expected inflation rates, this will be £2.4 billion in nominal prices.

<sup>2</sup> Based on expected inflation rates.

to recover the cost of their ongoing pension contributions, together with the cost of previous under funding of pensions costs in the current price control, and additional contributions to repair their pension deficits over a ten year period. In total these adjustments which are consistent with Ofgem policy previously in this area, account for an increase in revenue of 4.8 per cent.

We have also taken this opportunity to introduce a company specific tax allowance instead of an implied allowance bedded within a pre tax cost of capital. This is consistent with the approach Ofgem has adopted in all previous controls since adopting this policy in 2003. All GDNs are presently paying no tax or tax at levels significantly below the allowance implied by the pre tax cost of capital. The effect of this change is to reduce the allowed revenue by 5.0 per cent.

Summarised below are the other main decisions which have been taken to set a price control for one year and which will be substantively reviewed as part of the ongoing main price control review:

- operating expenditure allowances (excluding shrinkage and pensions) for 2007-08 are slightly less than 3 per cent below allowances for 2006-07 at £563.4 million,
- capex and repex allowances, at £925.9 million in total, are approximately 60 per cent higher than allowances for 2006-07 and 9 per cent higher than the GDNs are spending this year but on average 7 per cent less than the GDNs sought, and
- the cost of capital remains unchanged at a post tax real rate of 4.38 per cent equivalent to the pre-tax real rate of 6.25 per cent used at the last review.

There is still a lot of work to do to deliver a price control review for the five years from 2008 which builds further on our ability to make comparisons between independently owned GDNs and addresses the wider policy issues including incentives, outputs and network extensions. Taken together we consider these proposals an important step in addressing some of the difficult issues which have emerged since the last review, providing companies with the revenue they require to maintain, renew and operate safe and reliable gas distribution networks and so fulfilling our principal objective to protect the interests of customers.

## 1. Introduction

### Chapter Summary

This chapter sets out the purpose of the document and describes the background to and objectives of the GDPCR one year control.

### Question box

There are no specific questions in this Chapter.

### Purpose of this document

1.1. The price control that currently applies to the gas distribution networks (GDNs) comes to an end on 31 March 2007. The gas distribution price control review (GDPCR) will reset the revenue allowances that apply to the GDNs for one year from April 2007 and for the next price control period 2008-2013. This document sets out our initial proposals for the one year control to apply for 2007-08.

1.2. Most policy issues associated with GDPCR are being considered as part of the main (five year) price control review. During the one year control, in addition to resetting the price control for one year, we have sought to address issues from the present control which, without resolution, would extend uncertainty for GDNs unnecessarily. This includes:

- the treatment of the GDNs' historical capital and replacement expenditure during the current price control period, and
- the treatment of shrinkage gas costs in the face of rising wholesale gas prices.

1.3. Consultation responses are welcome on all aspects of this document. In particular, we welcome responses on the issues identified at the beginning of each chapter. These are summarised in Appendix 1 together with details on how to respond.

### Background to the one year control

1.4. Following consultation during the Developing Network Monopoly Price Controls consultation, in March 2004 we issued an open letter that set out our intention to extend the current gas distribution price control by one year to 31 March 2008.<sup>3</sup> This was intended to provide a more balanced workload for companies and Ofgem and to allow gas distribution and transmission issues to be considered separately. The one

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<sup>3</sup> Ofgem open letter, Gas Distribution Price Controls, 16 March 2004.

year control also creates an opportunity for us to review an additional year's data when setting the main price control.

1.5. The open letter noted that the work associated with extending the price control would need to be proportionate to a one year interim arrangement, and so where appropriate assumptions underlying the present price control would be extended or updated in a straightforward way to cover 2007-08.

1.6. We have recently set a two year control for the Scottish electricity transmission businesses<sup>4</sup> and a one year control for National Grid Electricity Transmission (NGET).<sup>5</sup> Our proposed approach to the GDPCR one year control is similar to the high level approach used in these reviews.

1.7. We published consultation documents that considered both the one year control and the main control in December 2005 and July 2006. Our initial proposals have been developed taking into account views expressed in the responses to the second consultation document<sup>6</sup>, the findings of our consultants, and views expressed in discussions with the GDNs.

1.8. We plan to publish the one year control final proposals in December 2006.

## Objectives of the one year control

1.9. While we consider that a full review would neither be appropriate nor proportionate for a one year control - in particular for those elements of the control which will be revisited as part of the main control - our proposals must be consistent with the Authority's principal objective and general duties to:

- protect the interests of consumers, and
- ensure that the companies can finance their activities.

1.10. The Authority's powers and duties are set out in Appendix 2.

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<sup>4</sup> Transmission price controls and BETTA, Final proposals and impact assessment, Ofgem December 2004 279/04

<sup>5</sup> Extending NGG Electricity Transmission Ltd's Transmission Owner Price Control for 2006-07 - Final proposals, Ofgem, November 2005, 253/05.

<sup>6</sup> A summary of responses to the second consultation document insofar as they relate to the one year control is set out in Appendix 5.

## 2. Operating expenditure (opex)

### Chapter Summary

This chapter sets out our proposed approach for setting the GDNs' opex allowances for 2007-08 and the specific allowances for opex, shrinkage and pension costs.

### Question box

**Question 1:** Is Ofgem's approach for determining an opex allowance for 2007-08 appropriate? Are the resulting allowances appropriate?

**Question 2:** Is Ofgem's proposed approach to setting pensions allowance for 2007-08 appropriate?

### Shrinkage related questions (see Appendix 9)

**Question 3:** Is Ofgem's assessment of the costs and benefits associated with the three options for setting shrinkage allowances, as set out in the impact assessment, reasonable?

**Question 4:** Do you support Ofgem's proposed approach to setting shrinkage allowances (i.e. Option 1a)?

**Question 5:** In the event that Ofgem adopts Option 1a for shrinkage, which market index (or indices) should GDNs' shrinkage allowances be linked to?

**Question 6:** In the event that Ofgem adopts Option 1b for shrinkage, should allowances be based on shrinkage costs incurred by the average GDN or lowest cost GDN?

**Question 7:** Should Ofgem remove throughput-related shrinkage volume risk from GDNs?

## Approach to setting opex allowances

2.1. The initial and second consultation documents set out two possible options for a simple approach to setting the opex allowance for 2007-08:

- Option 1 - carrying forward the opex allowance for 2006-07, possibly with a further 2.5 per cent reduction in controllable opex for efficiency, or
- Option 2 - rolling forward actual levels of opex with possible adjustments for efficiency.

2.2. As discussed in those consultations, each approach has advantages and disadvantages. The principal disadvantage of carrying forward the existing allowances is that it perpetuates allocation of costs used by National Grid Gas (NGG) in 2000 which may not be appropriate in subsequent years, and fails to reflect known subsequent changes that would also affect that allocation; for instance mergers of the local distribution zones (LDZs) into GDNs. The principal disadvantage of setting allowances on the basis of actual levels of opex is that the most recent data available

(2004-05 and 2005-06) may be atypical due to the impact of GDN sales in June 2005.

2.3. Most respondents supported an approach based on rolling forward 2006-07 allowances. GDNs differed in their preferences for an approach based on rolling forward actuals or allowances. One GDN owner expressed concern that an approach based on rolling forward actual costs could favour inefficient GDNs or GDNs that submitted inflated cost forecasts.

2.4. On balance we propose to base the allowances for 2007-08 on actual costs rather than 2006-07 allowances because this approach is based on more recent GDN specific data and results in reasonable projections compared to the GDNs' forecasts. To reduce the impact of atypical costs in either year, we propose to use an average of 2004-05 and 2005-06 costs. We also consider that it is appropriate to reduce that average by a further 2.5 per cent to allow for efficiency improvements. At an aggregate level this approach produces an almost identical outcome to one based on allowances, although it has a different effect on GDNs individually.

2.5. These proposals, as set out in Table 2.1, result in allowances for controllable operating costs (excluding shrinkage and pensions)<sup>7</sup> which are lower than the forecasts submitted by the companies. The results that arise under each option are compared in Appendix 6.

**Table 2.1 Comparison of GDN forecast costs and proposed 2007-08 allowances (£m, 2005-06 prices)**

	<b>GDN</b>	<b>GDN BPQ Forecast</b>	<b>Allowance</b>	<b>% change</b>
NGG	East England	101.7	96.5	-5%
	London	69.2	62.3	-10%
	North West	84.0	70.5	-16%
	West Midlands	59.6	53.4	-10%
NGN	North England	69.3	67.7	-2%
SGN	Scotland	59.1	52.9	-11%
	South England	107.7	89.6	-17%
WWU	Wales & West	70.8	70.6	0%
	<b>Total all GDNs</b>	<b>621.4</b>	<b>563.4</b>	<b>-9%</b>

2.6. In addition to pensions and shrinkage (which are discussed below) GDNs argued for a number of other costs (eg insurance cost increases and contractor rate increases) to be separately addressed as part of the one year control. We do not consider that these factors are significant enough to warrant special treatment and, given that there should be other areas where GDNs are facing reduced costs, it is appropriate for GDNs to absorb any cost pressures within their efficiency

<sup>7</sup> Controllable operating costs of the price controlled activities. This does not include costs of excluded services and de minimis activities

improvements. This approach is consistent with the principle of a simple approach to opex for the one year review. We will conduct a detailed review of operating costs during the main review.

### **Traffic Management Act 2004 (TMA)**

2.7. All GDNs are forecasting significant cost increases to cover the permits, penalties and other compliance costs associated with the TMA. There is still considerable uncertainty about the level of these costs and also the date from which they will be incurred. For this reason we do not propose to include TMA costs when setting the operating cost allowance. A specific reopener for such costs is likely to be necessary for the main price control consistent with the approach adopted as part of DPCR4. To the extent that GDNs incur material costs during 2007-08 they will be considered as part of this new mechanism.

### **Pass through costs**

2.8. In setting the price control it is necessary to set an allowance for non-controllable costs such as business rates and licence fees. This allowance is adjusted through the cost pass through mechanism of the price control formula to ensure the GDNs are allowed the costs they actually incur. To set this allowance we propose to use the GDNs' forecasts for licence fees and business rates for 2007-08. This amounts to £269 million across all GDNs.

### **Third party damage and water ingress**

2.9. For the purposes of the one year control, we propose to roll forward the existing arrangements for third party damage and water ingress. Appendix 11 provides further details. GDNs' opex allowances for these arrangements will be reset as part of the general approach to the opex allowance discussed above.

### **Shrinkage**

2.10. As discussed in the second consultation document, GDN shrinkage costs are forecast to have approximately doubled over the current price control period (mainly due to increasing gas prices). GDNs are now paying significantly more than was assumed in setting the current allowance. Given the scale of the divergence and the difficulty of forecasting gas prices going forward, we consider it appropriate to revise the shrinkage arrangements as part of the one year control.

2.11. An impact assessment (IA) on the price control treatment of shrinkage is included in Appendix 9. Our proposal is to base shrinkage allowances on a pre-determined index of market prices, in effect removing gas price risk from companies. For the purposes of initial proposals we have used a modelling assumption for the shrinkage price of 57 pence per therm.

## Pensions

2.12. Pension costs incurred by GDNs have been significantly more than the costs assumed in setting the current price control. The cost increases are being experienced throughout the UK economy and have been predominantly driven by factors outside the GDNs' control. Ofgem's policy on pensions and the treatment of over- and under-funding was consulted on fully as part of the electricity Distribution Price Control Review (DPCR4).<sup>8</sup> We intend to adopt the approach set out in DPCR4 as part of GDPCR. In practice, the nature of the proposal means that customers will incur the same overall present value cost whether or not the changes are introduced as part of the one year control or the main control. On this basis, and given our preference to reduce uncertainty, we propose to introduce these changes as part of the one year control.

### Ongoing funding allowance

2.13. Within the one year control, we propose to provide an allowance consistent with the higher contribution rates recommended in the GDNs' recent actuarial reviews. We propose to apply these rates to an average of 2004-05 and 2005-06 salary costs, in line with our approach to other operating expenditure.

### Allowance for under-recoveries

2.14. In addition to ongoing pension allowances, we propose to provide allowances for changes to the level of pension contributions in the period resulting from changes in assumptions since the current price control was set.<sup>9</sup> Our modelling assumption is that these allowances will be spread over the one year and the five years of the main control.

### National Transmission System (NTS) charge for non-active deficit

2.15. The allowance for changes in contributions will be provided in respect of employees who were active at the time of GDN sales only. The cost of pensions relating to former employees of the GDNs who retired prior to GDN sales will continue to lie with NGG and will be recoverable under the NTS control (as a charge to GDNs). As the level of these charges are regulated through the Transmission Price Control Review (TPCR), we propose that these charges are treated as pass through items in the GDN control.

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<sup>8</sup> Ofgem, Electricity Distribution Price Control Review, Final proposals, November 2004, No. 265/04.

<sup>9</sup> The current price control assumed an 8.5 per cent contribution rate, but in practice actual contributions have risen to over 20 per cent for all GDNs.

### Deficit funding for actives

2.16. The new GDNs are in the process of finalising their initial actuarial review, but we expect them to have pension deficits. If the actuarial reviews are not completed within the timeframes of the one year control, it may be necessary to use an assumption during the one year control and adjust for any differences as part of the main control.

2.17. Indicative numbers for pension allowances are given below. Final levels may vary from these estimates as a result of revised actuarial reports from the GDNs, and the output of the continuing TPCR review of the NGG deficit.

**Table 2.2 Indicative pension allowances in GDPCR one year control (£m, 2005-06 prices)**

	GDN	Ongoing funding allowance	Allowance for under-recoveries	NTS charge for non-active deficit	Deficit funding for actives	Total
NGG	East England	12.4	4.4	4.3	1.1	22.3
	London	8.9	3.6	2.5	0.6	15.7
	North West	9.2	3.3	3.0	0.7	16.1
	West Midlands	6.7	2.4	2.1	0.5	11.8
NGN	North England	7.9	2.2	2.8	3.3	16.1
SGN	Scotland	6.3	1.3	1.9	0.7	10.3
	South England	9.4	1.8	4.4	1.7	17.3
WWU	Wales & West	5.6	2.1	2.6	2.1	12.4
	<b>Total all GDNs</b>	<b>66.4</b>	<b>21.1</b>	<b>23.7</b>	<b>10.9</b>	<b>122.1</b>

### 3. Capital and replacement expenditure (capex and repex)

#### Chapter Summary

This chapter discusses Ofgem's proposed methodology for updating the regulatory asset values (RAVs) and establishing the opening RAVs for the one year control period (known as the "RAV roll forward"). It sets out our efficiency assessment of GDNs' historical and forecast capital expenditure (capex) and replacement expenditure (repex) and the implications for the RAV roll forward. This includes the assessment of:

- ➔ historical and forecast capex and non-mains repex for April 2002 to March 2007 for each GDN,
- ➔ historical capex and repex for January 2001 to March 2002 at a UK distribution level, and
- ➔ the assessment of the appropriate capex and repex requirements for 2007-08.

#### Question box

**Question 1:** Do you agree with our proposals regarding expenditure that we should treat as wasteful and unnecessary?

**Question 2:** Do you agree with our proposals regarding expenditure that we should treat as efficient overspend and, in particular, expenditure that should be subject to a reopener?

**Question 3:** Do you agree with our proposed adjustments to the RAVs to reflect expenditure incurred between 1 January 2001 and 31 March 2002?

**Question 4:** Is our proposed approach for determining capex and repex allowances for 2007-08 appropriate? Are the resulting allowances appropriate?

**Question 5:** Is our proposed update of the mains replacement incentive mechanism for 2007-08 appropriate?

## Background

3.1. GDNs have spent considerably more investing in and replacing their networks than was anticipated at the last price control review. In total, GDNs have forecast that they will overspend their total allowances for capital and non-mains replacement expenditure in the current price control period by approximately 65 per cent or £843 million in 2005-06 prices. The main areas of overspend are:

- a small number of large Local Transmission System (LTS) projects,
- connections – the unit costs of connections work have been significantly higher than allowed at the last price control and competition in one-off domestic connections has not developed as anticipated in 2001, with the result that GDNs effectively continue to supply all of this market, and
- services repex – both the unit costs and workload for services replacement have been higher than allowed at the last price control review.

3.2. The significant overspends incurred by the GDNs during this control period, combined with the absence of a clear framework for treatment of those costs set out in advance, have made it necessary for us to carry out a detailed review of historical expenditure. An important aspect of the one year control is to form a view on the extent to which GDNs will be able to recover costs incurred during the current control period.

3.3. In order to be able to form a view on this issue, we have carried out a detailed assessment of GDNs' historical capital and replacement expenditure. Together with our consultants, we reviewed GDNs' responses to the Business Plan Questionnaires (BPOs) and carried out 2-3 day visits to each GDN group in April and May. We also raised a number of supplementary questions for each group, and held a round of meetings to discuss relevant issues.

3.4. The second consultation document consulted on how we should apply the principles set out in the March 2004 open letter on the regulatory treatment of historical capital and replacement expenditure. We have now applied the process proposed in the second consultation document to the costs incurred by each GDN. We have reached a judgement based on consideration of the recommendations of our consultants, comments from GDNs, consultation responses and the wider regulatory context.

## **Methodology for the efficiency assessment and the RAV roll forward**

### **Proposed approach**

3.5. The second consultation document described Ofgem's proposals for assessing the efficiency of historical and forecast capex for January 2001 to March 2007 and applying the principles set out in the March 2004 open letter.

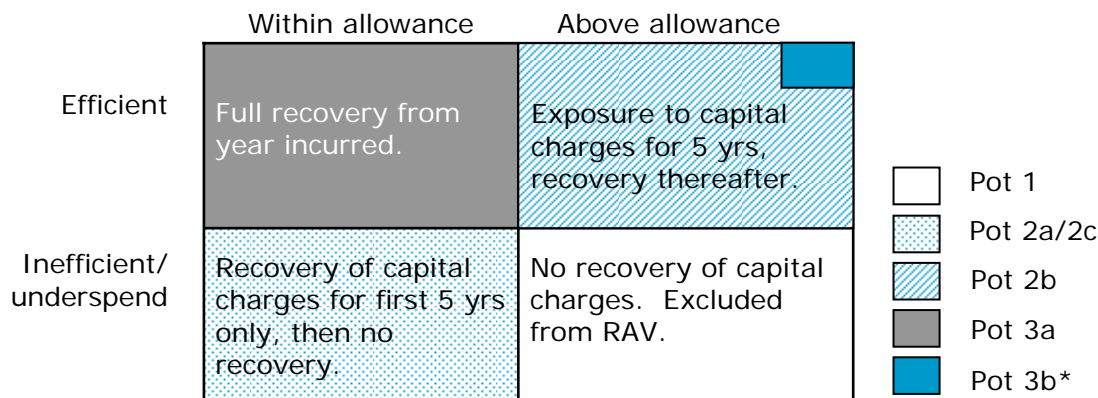
3.6. To apply the principles, we assess the efficiency of workload and associated expenditure given the outputs that were delivered. This includes an assessment of efficiency of unit and total costs, whether any additional work in excess of that implied by the price control allowances could have been deferred, and whether it could have been forecast at the last review or resulted from a major change of circumstances outside the GDN's control. We then determine the treatment of the expenditure by considering whether it is within or above the price control allowance. Figure 3.1 (next page) summarises the treatment of different types of spend.

3.7. Where expenditure is inefficient and above the allowance, the expenditure is allocated to Pot 1 and there is no recovery of the capital charges.

3.8. Where expenditure is efficient and above the price control allowance, a rolling incentive will normally apply (Pot 2b). This means that the GDNs will be exposed to the capital charges for a period of five years. Symmetrically, where there is inefficient expenditure within the allowance (Pot 2a) or where the GDN spent less

than their allowance for a given category of spend (Pot 2c), the GDN will be able to retain the allowed capital charges for a period of five years.

**Figure 3.1 - Regulatory treatment of expenditure**



\* Reopener for change of circumstance - full recovery up to allowed unit cost.

3.9. The GDNs will receive full recovery of capital charges for efficient expenditure within the allowance (Pot 3a). There will be a limited range of circumstances where Ofgem will allow a reopener (Pot 3b) of the existing price control to take account of additional workload over and above that implied by the allowances.<sup>10</sup> This could cover cases where the workload arises from new legislation which was not anticipated at the last review, or where the additional workload is directly consumer driven and could not have been predicted at the review. In such cases, GDNs will be protected from the volume but not the price risk (i.e. the associated spend will be given the same treatment as if it had been forecast and an allowance had been made at the last review).

**Responses to the proposed methodology**

3.10. The GDNs have raised a range of concerns regarding Ofgem's proposed approach for assessing expenditure in the current price control period and rolling forward the RAV.

3.11. A number of the GDNs suggested that a detailed review of all historical expenditure and disallowance of significant amounts of spend is unprecedented and would increase the degree of regulatory risk perceived by investors. They indicated that a high burden of proof is required as part of such a process.

<sup>10</sup> Where a reopener applies, an allowance will be given for the under-recovery of capital charges and depreciation within the 2002-07 price control period. This will be allowed on an NPV-neutral basis. We propose to spread the allowances over the one year and the main control.

3.12. Most of the GDNs indicated that there was insufficient clarity about the RAV roll forward methodology at the time the last price control was set. In any event, GDNs considered that Ofgem's proposals did not reflect their expectations in light of the March 2004 open letter.<sup>11</sup> They felt that a reasonable interpretation of the open letter is that all non-discretionary, efficient expenditure should be treated as Pot 3 irrespective of the original allowance as such spend provided significant benefits to customers. They suggested that the policy of only allocating overspends to Pot 3 in exceptional cases where there were changes of circumstance outside the GDNs' control was inconsistent with the open letter. They felt that it was inequitable only to apply Pot 3 treatment for variations in workload, exposing GDNs to price risk where unit costs were above those used to set the price control.

3.13. The GDNs consider that the proposed process gives undue weight to forecast workloads and unit costs which were inappropriately low in some cases and only accepted as part of an overall price control package. GDNs suggested that this approach potentially creates perverse incentives to over-forecast, and if they had been aware of this treatment of spend, they would have behaved differently. One GDN owner commented that we should take account of the fact that Ofgem scaled back repex services forecasts significantly at the last price control review and should therefore make allowance for the additional service volumes.

3.14. One GDN owner argued that the proposed treatment of underspends within individual categories of capex is unprecedented. They suggested as underspends are disallowed, companies cannot offset underspends in one year against overspends in subsequent years or offset over and underspends across different types of expenditure.

3.15. Most other respondents were broadly supportive of our proposed treatment of capex and repex although some of them expressed reservations about certain aspects of the proposals. Two respondents were concerned that Ofgem's proposed approach would be applied retrospectively rather than in advance. One respondent was concerned that companies could be disadvantaged by the disaggregation of expenditure.

3.16. Finally, NGG suggested that an adjustment should be made to each GDNs' RAV to reflect certain shared assets (information systems, property and business services investment) which were allocated proportionally to each of the GDNs as part of the RAV calculations underlying the separate GDN price controls but which were not sold as part of the GDN sales process. This would involve a transfer of RAV value from the four sold GDNs to NGG of approximately £60 million.

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<sup>11</sup> Ofgem open letter, Gas Distribution Price Controls, 16 March 2004

## Initial proposals

3.17. The GDNs forecast that over the current price control period they will overspend their allowances for capex and non-mains repex by 65 per cent (£843 million in 2005-06 prices). This degree of overspend is very significant. It is not in consumers' interests to include this into the RAV without detailed scrutiny. Given that, in practice, it is not possible to identify the parts of GDN spend which are overspent, it is necessary to scrutinise all of the GDNs' historical capex and non-mains repex.

3.18. The intrinsic difficulty of carrying out ex-post efficiency reviews and the poor quality of some of the data has made it necessary to apply judgments. Some of the unit cost information provided by NGG is unreliable. There have been changes in categorisation of costs from the basis used to set allowances for the current price control period.

3.19. In order to classify spend as Pot 1, we need evidence of wasteful and unnecessary spend. In order to classify spend as Pot 3b, we need to be able to justify reopening the price control. We have applied a high hurdle before allocating spend to either category, with the effect that a significant proportion of the GDNs' overspend falls within Pot 2.

3.20. Network businesses are generally expected to manage their costs within their price control allowances and are exposed to both price and volume risk. The purpose of the March 2004 open letter was to make clear that a five year rolling incentive would normally apply to both efficient overspends and underspends by GDNs consistent with the earlier conclusions on Developing Network Monopoly Price Controls. This approach provides strong incentives for GDNs to manage their expenditure as they can earn higher returns through outperforming the allowances.

3.21. Companies are expected to manage costs within allowances during the price control as retrospective adjustments to price control parameters undermine the incentives of the periodic review process. Elsewhere in the 2002 price control settlement, actual costs have turned out to be significantly lower than those assumed in the price control. GDNs have benefited in these cases. In general we consider that our proposal to use the detailed forecasts underlying the current price control package, even where these assumptions are now considered to be too low, is reasonable and consistent with the principles of RPI-X.

3.22. The intention was for a (Pot 3b) reopener to apply in very limited circumstances such as where additional workload has arisen from new circumstances or legislative changes outside the GDNs' control and not fully taken into account at the last review. In such cases we consider that it is appropriate to give the associated spend the same treatment as if the additional work had been anticipated and allowance made at the last review. In this case GDNs would continue to be exposed to the price risk on the additional work.

3.23. In light of the responses to the second consultation document we consider that there are two main areas where a reopener should be applied:

- additional connections workload, as the extra work due to GDNs retaining market share was not anticipated at the last price review,
- additional service replacement work, as in setting allowances in 2002 Ofgem made significant reductions to the GDNs' original workload forecasts. Exposing the GDNs to the full volume risk in this case would expose them to risks outside their control as this extra work was linked to the revised HSE requirement to replace mains.

3.24. We do not consider that a reopener is appropriate in this case for price risk or for other capex or repex volumes.

3.25. We propose to apply the RAV roll forward methodology set out in the second consultation document to all of the current price control period rather than just 2003-2007. For 2002-03, (the first year of the price control period) the GDNs would in effect have been exposed to the capital charges for the first five years on an efficient overspend under the previous RAV roll forward methodology. Under this approach we are also proposing to give GDNs the protection of a Pot 3 reopener for additional connections and services volumes consistent with other years.

3.26. Based on the above considerations, in developing our initial proposals, we are not proposing to change our method for rolling forward the RAV in the light of consultation responses, other than the treatment of services repex and the application of the approach to the full price control period rather than just 2003-07.

3.27. We have applied the RAV roll forward at a disaggregated level based on the following categories of expenditure as there is sufficient clarity regarding the allowances and workload information at the following level: LTS and storage capex; general mains reinforcement; governor capex; mains connection capex; service connection capex; plant & machinery; land & buildings; non-operational capex; service repex and other repex.

3.28. Finally, we do not propose to adjust the GDNs' RAVs to reflect shared capex incurred prior to March 2002 as proposed by NGG. While these physical assets were retained by NGG as part of the GDN sales process, we do not propose to adjust the GDNs' RAVs. As indicated in the March 2004 open letter RAVs are an indicator of financial rather than operational capital and therefore a change to a physical asset is neither a necessary nor a sufficient condition to trigger a change in the RAVs. The purchasers of the four sold GDNs would have valued the business including the full RAV value.

3.29. Amending the RAVs for shared capex incurred prior to 1 April 2002 would be inconsistent with the work to rebalance RAV values to maintain broadly similar gas distribution charges when national charging was replaced with eight regional charges. A proportion of the shared capex for April 2002 to June 2005 was included in the capex tables in each of the sold GDN's BPQ responses based on information

provided by NGG to each the new GDN owners. Our efficiency assessment and allocation of expenditure to the categories included this expenditure.

### **Assessment of capex and non-mains repex for April 2002 to March 2007**

3.30. Our proposed efficiency adjustments are based on PB Power's analysis together with further work by ourselves to consider the GDNs' BPQ responses and their initial views on the PB Power reports. We have considered both the level of evidence of inefficiency and the appropriate quantification of the associated costs. A summary of the GDNs' actual and forecast costs compared to their price control allowances and our proposed treatment of their expenditure is set out in Table 3.1 (page 17). A more detailed breakdown for each year by GDN is set out in Appendix 7.

3.31. We propose the following treatment for the overspend of £843.3 million:

- £50.0 million is wasteful and unnecessary (Pot 1) spend over the allowance for which there will be no recovery of costs by the GDNs,
- £634.2 million is treated as an efficient overspend (Pot 2). Under the principles of the rolling incentive the GDNs will be exposed to the capital charges (i.e. rate of return and depreciation) for a period of five years,
- £86.3 million will be treated as a reopener (Pot 3b) and the GDNs will receive full recovery of the capital charges,
- £35.0 million is attributable to under-recovery of connections income from customers for which we propose there will be no recovery of costs by GDNs,
- £20.1 million of the overspend consists of related party margins on net connection costs which will be disallowed from the RAV consistent with the approach applied for DPCR4, and
- £17.7 million is attributable to GDN sales costs which are not recoverable (see paragraph 3.59).

3.32. Of the allowed spend of £1.3 billion we propose that:

- £1.29 billion is attributable to efficient allowed expenditure for which the GDNs will receive full recovery of allowed capital charges, and
- the remainder of £14 million is attributable to inefficiencies within the allowance for which the GDNs will have full recovery of capital charges for five years and no further recovery (Pot 2a).

3.33. Table 3.2 sets out a summary of the treatment of overspend and inefficient expenditure within the allowance by expenditure category. Appendix 7 includes detailed tables setting out the treatment of annual expenditure by GDN.

**Table 3.1 – Comparison of five year actual and allowed capex and non-mains repex and treatment of spend (£m, 2005-06 prices)**

GDN	NGG				NGN	SGN		WWU	Total
	East of England	London	North-west	West Midlands	North England	Scotland	South England	Wales West	
<b>Comparison of actual and allowed spend</b>									
Total Allowed Capex and Non-Mains Repex	197.4	105.2	129.4	120.7	182.0	139.4	260.8	170.6	1,305.4
Total Actual	348.4	182.8	232.9	168.6	242.0	260.8	387.5	325.7	2,148.7
Overspend	151.0	77.6	103.5	47.9	60.0	121.4	126.7	155.1	843.3
% overspend against allowances	77%	74%	80%	40%	33%	87%	49%	91%	65%
<b>Treatment of overspend</b>									
Inefficient above allowance (Pot 1)	5.6	3.4	6.9	2.4	5.0	5.0	9.6	11.9	50.0
Efficient overspend (Pot 2b )	106.9	68.8	88.5	29.8	39.1	104.4	103.1	93.5	634.2
Reopener (Pot 3b)	25.7	1.4	1.2	10.4	6.8	4.1	8.1	28.6	86.3
Related party margins	4.6	1.7	2.4	1.7	1.8	2.7	2.4	3.0	20.1
DN sales costs	0.0	0.0	0.0	0.0	3.6	0.0	0.0	14.1	17.7
Under recovery of connections income	8.2	2.2	4.5	3.6	3.7	5.3	3.5	4.1	35.0
<b>Total overspend</b>	<b>151.0</b>	<b>77.6</b>	<b>103.5</b>	<b>47.9</b>	<b>60.0</b>	<b>121.4</b>	<b>126.7</b>	<b>155.1</b>	<b>843.3</b>
<b>Treatment of allowed spend</b>									
Inefficient spend within the allowance (Pot 2a)	1.9	0.9	0.8	0.9	2.9	1.0	1.8	3.8	14.0
Efficient allowed spend (Pot 3a)	195.5	104.3	128.6	119.8	179.1	138.3	259.0	166.8	1,291.5
<b>Total allowance</b>	<b>197.4</b>	<b>105.2</b>	<b>129.4</b>	<b>120.7</b>	<b>182.0</b>	<b>139.4</b>	<b>260.8</b>	<b>170.6</b>	<b>1,305.4</b>

**Table 3.2 – Treatment of overspend and inefficient expenditure within the allowance by expenditure category (£m, 2005-06 prices)**

GDN	NGG				NGN	SGN		WWU	Total
	East of England	London	North-west	West Midlands	North England	Scotland	South England	Wales West	
<b>Split of inefficient spend above allowance</b>									
LTS & Storage capex	0.0	0.0	3.3	0.0	0.8	0.0	0.0	0.0	4.1
Mains Reinf. & Gov capex	0.7	0.2	0.1	0.1	0.1	0.7	1.8	0.9	4.7
Connections capex	2.5	1.4	1.3	1.0	1.8	1.9	2.0	2.1	14.1
Other capex	0.6	0.3	0.7	0.1	0.0	0.2	0.5	6.6	8.9
Repex Services	1.9	1.5	1.4	1.2	2.4	2.1	5.3	2.3	18.2
Repex other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>5.6</b>	<b>3.4</b>	<b>6.9</b>	<b>2.4</b>	<b>5.0</b>	<b>5.0</b>	<b>9.6</b>	<b>11.9</b>	<b>50.0</b>
<b>Split of inefficient spend within allowance</b>									
LTS & Storage capex	0.0	0.0	0.0	0.0	1.4	0.0	0.0	2.4	3.8
Mains Reinf. & Gov capex	0.1	0.0	0.0	0.1	0.0	0.2	0.1	0.1	0.7
Connections capex	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Other capex	1.7	0.9	0.7	0.9	1.4	0.9	1.6	1.4	9.4
Repex Services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Repex other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>1.9</b>	<b>0.9</b>	<b>0.8</b>	<b>0.9</b>	<b>2.9</b>	<b>1.0</b>	<b>1.8</b>	<b>3.8</b>	<b>14.0</b>
<b>Split of efficient over(under) spend (Pot 2b)</b>									
LTS & Storage capex	-1.5	3.0	22.3	-11.4	-4.5	22.9	-5.2	7.9	33.7
Mains Reinf. & Gov capex	12.9	6.2	-0.7	-4.3	-0.1	8.6	25.3	13.4	61.3
Connections capex	32.0	15.0	20.7	14.1	21.8	49.4	33.1	35.6	221.6
Other capex	16.9	13.3	18.4	4.3	-5.1	-10.1	-0.6	5.1	42.1
Repex Services	50.0	32.2	37.6	29.4	27.7	30.8	52.3	33.5	293.4
Repex other	-3.5	-1.0	-9.8	-2.2	-0.5	2.9	-1.9	-1.9	-17.9
<b>Total</b>	<b>106.9</b>	<b>68.8</b>	<b>88.5</b>	<b>29.8</b>	<b>39.1</b>	<b>104.4</b>	<b>103.1</b>	<b>93.5</b>	<b>634.2</b>
<b>Split of reopener by category (Pot 3b)</b>									
LTS & Storage capex	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mains Reinf. & Gov capex	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Connections capex	6.0	0.2	1.2	1.9	3.7	1.0	8.1	4.7	26.8
Other capex	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.4	9.4
Repex Services	19.6	1.2	0.0	8.5	3.2	3.1	0.0	14.5	50.1
Repex other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>25.7</b>	<b>1.4</b>	<b>1.2</b>	<b>10.4</b>	<b>6.8</b>	<b>4.1</b>	<b>8.1</b>	<b>28.6</b>	<b>86.3</b>

### **Pot 1 - Wasteful and unnecessary spend**

3.34. Based on PB Power's recommendation and further analysis we have identified a number of areas of inefficiency relating to costs incurred between 2002 and 2007 which are set out in Table 3.2 (page 18).

#### *Local Transmission System (LTS) projects*

3.35. The costs of the contract work on the Samlesbury to Helmshore pipeline in the North-West GDN overrun by 93 per cent, which is far more than would typically be expected for this type of work. PB Power considers that the contract strategy of naming Transco as the designer failed to transfer risk to the contractor and it retained liability for all aspects of the work despite the fact that the work was being managed by the contractor. Based on this information we have found £3.3 million of costs (or 7 per cent of project costs) to be inefficient.

3.36. The costs of the West Hull reinforcement project in the Northern GDN area overrun by 56 per cent. £2.2 million of the increased costs related to the settlement of a claim by the contractor for increased welding costs. PB Power recommend that these costs should be treated as inefficient as they either relate to the quality of the pipeline that was originally purchased, deterioration while the pipeline was in NGG's keeping or the quality of the original welding work.

3.37. The cost of the Gilwern to Hafodyrynys pipeline in the Wales and West area overrun by 49 per cent. PB Power found that NGG had not allowed sufficient lead time to allow for potential planning permission issues which led to delays and upward pressure on costs. Based on this information we have found £2.4 million of costs (or 9 per cent of project costs) to be inefficient.

3.38. In aggregate we have identified £7.9 million of inefficiencies which are split between £4.1 million in Pot 1 and £3.8 million in Pot 2a.

#### *Management information*

3.39. PB Power has identified a number of areas of poor management practice from the BPO submissions and subsequent discussions with the GDNs as part of the costs visits:

- there was generally a lack of evidence of routine detailed information to monitor the productivity of individual teams such as unit cost information and unproductive time analysis which could be used to set performance improvement targets for direct labour,
- there was a lack of evidence of appropriate information within NGG and Fulcrum Connections to manage and monitor the efficiency of connection costs and performance, and

- there was a failure to re-tender Engineering Period Contracts in 2002 which had proved unsuccessful in incentivising reductions in costs. NGG renegotiated the contracts bilaterally with existing suppliers rather than going to market.

3.40. There is strong evidence to support the view that there have been inefficiencies in these areas. It is difficult to quantify the scale of impact due to the poor quality of the unit cost information that was provided by NGG and limited information on contractual arrangements prior to 2002. As it is important that the price control process does not allow GDNs to benefit as a result of submitting poor quality data, we have estimated the savings that could have been made through improved management of both direct and contract labour and contractual arrangements. We propose to remove inefficiencies of £35.8 million (an average of 3.4 per cent) for contract labour and £2 million (an average of 3.1 per cent) for direct labour costs. The inefficiencies are split between £5.4 million for mains reinforcement and governor capex, £14.2 million in connections capex and £18.2 in services repex.<sup>12</sup>

*Inefficiencies in historical information system (IS) and system operation*

3.41. PB Power has identified inefficiencies relating to the Ulysses and QB (Mars) projects, £12.4 million of which apply to the current price control period:

- *Ulysses*. This was a turnkey project approved by Transco in 1999 to undertake the complete replacement of Transco's System Operation's systems support suite. This included telemetry outstations, the communications network and transmission and distribution control systems. Inefficiencies have been identified in both distribution and transmission SO costs associated with this project. NGG allocated £24.0 million of project spend to replacement of the distribution control system. The replacement system was never delivered and was eventually removed from the project scope. In addition there was some duplication in site survey work to update telemetry equipment amounting to £1.5 million. We have estimated that £7.9 million of the inefficiencies relate to the period before 2001 and are not subject to this review. £6 million of inefficiencies apply to the 15-month period (see paragraph 3.61) and the remaining £11.6 million of inefficiencies relate to the current price control, and
- *QB (Mars)*. This project was designed to allow maintenance staff to receive and send information in the field. PB Power estimated that costs increased by approximately £5 million because of a number of changes in scope related to business restructuring. These issues should have been identified as part of the initial planning stage of the project. Approximately £0.9 million of these inefficiencies relate to capex arising during the period January 2001 to March 2002 (see paragraph 3.61), £0.7 million relate to capex arising during the current price control and the remainder relate to opex.

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<sup>12</sup> These inefficiencies are divided between Pot 1 and Pot 2a in Table 3.2.

3.42. PB Power has also recommended that there are inefficiencies in WWU's IS expenditure to establish itself as a standalone business. PB is of the opinion that the complexity of the new systems implemented by WWU, together with the short timescales for carrying out the project, will have resulted in a cost premium. We have carried out additional work to compare the costs of WWU's IS project against that of NGN which has been carrying out similar work to establish itself as a stand alone business. This suggests a similar level of inefficiency to that identified in PB Power's analysis. On this basis we have treated £5.9 million of WWU's IS spend as inefficient.

3.43. Under our initial proposals, the total inefficiencies relating to IS spend amount to £18.3 million. They are split between £8.9 million in Pot 1 and £9.4 million in Pot 2a in Table 3.2.

### **Pot 2b - Efficient overspend**

#### *Connections net capex*

3.44. The majority of connection costs are recovered directly from the customer requiring the connection through connection charges. Some connection costs are recovered from the generality of customers through the RAV. These include an allowance for the costs of the first ten metres of a connection in the public highway to domestic customers and a final connection allowance.

3.45. The efficient unit costs of connections work excluding disallowances for inefficient costs, related party margins and under-recovery of connection costs (see below) have been significantly higher than those allowed at the last price control. Competition has not developed in domestic one-off connections with the result that GDNs effectively continue to supply all of the market and have carried out more work than anticipated at the last review. In accordance with the RAV roll forward methodology set out in July, we propose that GDNs should be exposed to the price risk for both the allowed and additional connections work. This results in £221.6 million of connections capex being treated as an efficient overspend. GDNs are exposed to the capital charges on these costs for a period of five years.

#### *Service repex*

3.46. GDNs have also incurred a significant overspend on services repex due to both higher unit costs and workload. We propose that GDNs should be exposed to the price risk of both the allowed and additional service replacement work. This treatment results in GDNs being exposed to capital charges on £293.4 million of services repex for a period of five years.

3.47. PB Power has suggested that there has been a distortion in the split of costs between mains and services repex for some GDNs. PB Power is concerned that GDNs have adopted different contractual approaches to mains and service replacement even though they are part of the same work program carried out by the same contractors. This has given rise to large increases in service replacement costs while

mains costs have been more tightly controlled. PB Power's concern is that this may have been done in response to different regulatory incentives which apply to mains repex as opposed to services. We have considered the treatment of these costs. If some service costs were re-allocated to the mains replacement incentive scheme, GDNs on average would be exposed to 44 per cent of the net present value of those costs. If these costs were treated as part of the Pot 2 overspend, the GDNs would be exposed to approximately 31 per cent of the net present value. Given the difficulty of robustly estimating the proportion of service costs that is attributable to mains, we have treated such costs as part of the Pot 2 overspend.

### **Pot 3b - Reopener**

3.48. We propose to apply a reopener for connections workload as the additional workload in this area is due to GDNs retaining market share which was not anticipated at the last price control review. GDNs will fully recover capital charges on the additional workload up to the allowed unit cost. The reopener accounts for £26.8 million of the total overspend.

3.49. We propose to apply a reopener for the additional service replacement workload because, when Ofgem set allowances in 2001, we made significant reductions to the GDNs' original workload forecasts. Exposing the GDNs to the full volume risk in these circumstances would place too much emphasis on the final allowed workload and would expose them to significant costs outside their control as this extra work was linked to the revised HSE requirement to replace mains. GDNs will fully recover capital charges on the additional workload up to the allowed unit costs. This accounts for £50.1 million.

3.50. We also propose to treat £9.4 million of WWU's IS capex as part of the reopener as their systems will provide additional functionality and customer benefits through improved data reliability and business processes.

### **Other capex not included in the RAV**

#### *Connections*

3.51. All other things being equal, net connections capex should not be higher than the allowances for the first ten metres of a connection and the final connection allowance. PB Power has found net connection costs are significantly higher than could be accounted for by these allowances (i.e. after removing the customer contribution). This is due to a number of factors including:

- time lags between quotations being issued and construction taking place and time lags associated with quotations being valid for long periods of time. Given that contractors' charges were increasing over the period, these lags had the effect that actual costs higher than the amount charged,
- a conservative approach to charging,
- employee ordered works additional to the original quotation, such as mains upsizing, and additional costs arising from inaccurate records,

- unaccepted quotations, and
- overheads associated with unaccepted quotations.

3.52. PB Power has recommended that GDNs could have taken additional steps to manage under-recoveries in connection costs from customers due to time lags and conservative charging. They could have shortened the period for which quotations were valid or based customer charges on expected costs for when the connection work was due to be completed. Table 3.3 sets out:

- PB Power's estimate of the breakdown of net connections capex based on information provided by NGG in their BPQ response and additional information, and
- PB Power's proposed percentage disallowances for net capex for each of the periods January 2001-March 2002 and April 2002-March 2007, given the issues described in paragraphs 3.51-3.52.

**Table 3.3 – Breakdown of net connections capex by cause (per cent)**

	Estimated split of net capex		Disallowance for under-recovery of income (PB Power recommendation)			
			Jan 2001 - Mar 2002		Apr 2002- Mar 2007	
Category of net capex	Mains	Services	Mains	Services	Mains	Services
Allowances for 10m rule and final connections	37	74	0	0	0	0
Time Lag	15	15	10	10	15	15
Conservative charging	28	1	18	1	28	1
Employee Ordered Works*	13	3	0	0	0	0
Unaccepted quotations*	7	7	0	0	0	0
Total	100	100	28	11	43	16

\*Employee ordered works are essential works required for the connection. The costs of unaccepted quotations are largely outside the GDNs' control.

3.53. The connections market is segmented into three – new housing, industrial and commercial (I&C) and domestic one-offs. Competition has developed well in new housing and in some parts of the I&C market. It has not developed at all in domestic one-off connections. We propose to treat these market segments differently, reflecting differences in the extent to which competition has developed:

- *New housing.* We propose to disallow 43 per cent of net capex relating to mains and 16 per cent of full net capex relating to services,
- *I&C.* We propose to disallow 28 per cent of net capex relating to mains and 11 per cent of net capex relating to services,<sup>13</sup> and

<sup>13</sup> We have disallowed a lower proportion of net capex associated with I&C connections than new housing connections because we have assumed that only 66 per cent of the I&C market is competitive. The 28 and 11 per cent adjustments are calculated by multiplying the 43 and 16 per cent adjustment by 66 per cent. We do not propose to disallow the under-recovery in the non-competitive portion of the I&C market.

- *Domestic one-off connections.* We have not applied an adjustment to net capex for domestic one-off connections.

3.54. We propose to disallow a proportion of costs in the new housing and I&C sectors because we expect NGG to recover fully their costs minus any allowances from the customers receiving those services, as in any other competitive market. This results in £35 million of net capex being disallowed. Given that competition has not developed in domestic one off connections, we do not propose to disallow the under-recovery in this market segment.

*Related party margins and capitalisation policy*

3.55. Fulcrum Connections has applied an average margin of 6.9 per cent to their connection costs. These margins are included in both customer charges and net capex related to the ten metre rule and final connections allowances. We propose to disallow margins on net capex amounting to £20.1 million from the RAVs of all GDNs until 1 June 2005 and from the RAVs of NGG's retained GDNs after that date as Fulcrum is part of National Grid Group and the majority of its turnover is to the group.

3.56. United Utilities Operation Limited (UUOL) is contracted through an eight year Asset Services Agreement (ASA) to carry out all capital and mains replacement activities other than those related to System Operation on behalf of NGN. CKI, HongKong Electric Holdings and Li Ka Shing together hold a majority shareholding and may be expected to ensure that the contract with UUOL is at arms length and on normal commercial terms. UUOL was awarded the work following a competitive tender, in compliance with the European Directive requirements, in which there was one other bidder. UUOL is part of the wider United Utilities Group which performs asset management activities for a range of other network businesses including North-West Water and Hyder. Based on our analysis of forecast spend for NGN 2005-06 to 2006-07, inclusive of margins, relative to forecasts for the other GDNs for 2005-06 to 2006-07 we consider that a 4 per cent margin is reasonable for inclusion in the RAV. We will review this when actual information enables further comparative analysis of costs and associated level of margins.

3.57. We are currently requesting further information from Scotia on capex and repx activities contracted out to subsidiaries within their group and associated margins.

3.58. NGG has argued that software development costs (£51.3 million) associated with the Quarterback field systems which were charged to opex in the regulatory accounts should be capitalised as the costs led to the creation of an asset which was a direct substitute for the Private Mobile Radio Network. The current price control was set on the basis of Transco's 2000 accounting policies which meant that software development costs were expensed. We have excluded these costs from the RAV roll forward analysis.

*GDN sales costs*

3.59. WWU has identified that £14.1 million of its IS costs are GDN sales related, which has been verified by independent analysis by PB Power. These costs are associated with the development of new IS systems to establish themselves as a stand alone business and will be disallowed from the RAV. A further £3.6 million of IS costs relating to GDN sales have been disallowed from NGN's RAV.

## Assessment of capex and repex for January 2001 to March 2002

3.60. The work on the RAV roll forward at the last price control review only considered actual costs up to December 2000 and used projected expenditure for January 2001 to March 2002 to establish the opening RAV balances for the new price control. We have reviewed the efficiency of the out-turn costs for January 2001 to March 2002 as part of the analysis for the one year control. This work has been carried out at a UK distribution level because at the time gas distribution was still a single entity within Transco plc. Rolling forward the RAV for this period on an individual GDN basis would not be meaningful as the April 2002 RAV values were rebalanced across GDNs to maintain broadly similar gas distribution charges when national charging was replaced with eight regional charges. Table 3.4 below sets out a summary of our analysis.

**Table 3.4 – Capex and repex, January 2001 to March 2002, £m 2005-06 prices**

	2001	Q1 2002	15 month total
Allowed expenditure	733.8	193.8	927.6
Actual expenditure	798.3	178.4	976.7
Overspend (underspend)	64.6	-15.5	49.1
Inefficient expenditure	7.8	2.0	9.8
Connections income under-recovery	4.7	1.7	6.4
Overspend allowed into RAV	52.1	-19.2	32.9

3.61. Over the 15-month period from January 2001 to March 2002 NGG overspent the price control allowance by £49 million (5 per cent). Based on the PB Power recommendations and further consideration of GDNs' responses we have identified several key areas of inefficiency where adjustments should be made, including:

- *Ulysses and QB (Mars) projects.* Our reasons for disallowing this expenditure are discussed in paragraph 3.41. For the period January 2001 to March 2002, we propose to disallow £6 million of inefficiencies relating to Ulysses and approximately £0.9 million of inefficiencies relating to QB (Mars),
- *LTS projects.* We also identified inefficiencies in the planning processes and contract management for two large LTS projects. NGG failed to manage certain aspects of the main contractor's performance on the Horndean to Newalls Lane reinforcement project leading to delays, increased costs and complex claim assessments. In addition, planning issues should have been more effectively

managed for the Newbury reinforcement project. PB Power has estimated these inefficiencies at £2.9 million, and

- *Connections.* For reasons discussed in paragraphs 3.51-3.53, we propose to disallow 28 per cent of net capex relating to mains and 11 per cent of net capex relating to services insofar as those costs were incurred providing competitive connections services.<sup>14</sup> This results in £6.4 million of net capex being disallowed. We propose to disallow a smaller proportion of spend than for the five year period because the 15-month period occurred shortly after Fulcrum Connections was set up as a separate business and at this stage the GDNs would have had limited evidence on the extent of any under-recovery of connection costs.

3.62. Overall we propose to disallow £16.2 million (33 per cent) of the £49.1 million overspend for January 2001 to March 2002. The remaining £32.9 million, adjusted for inflation and depreciation, will be added to the opening RAVs of each GDN, pro-rated to their April 2002 RAV values.

## Conclusions

3.63. The overall impact of our efficiency assessment and treatment of expenditure on the total GDN RAV is set out in Table 3.5. The opening RAV for April 2002 used for the current price control allowances is adjusted to take into account a number of factors:

- £32.9 million efficient overspend for January 2001 to March 2002 (see above),
- £51.5 million of regulatory value in respect of datalogger activity that has been transferred from the metering RAV to the distribution RAV. The transfer is a result of Ofgem's determination that datalogger activity should form part of the distribution price control.<sup>15</sup> An adjustment was made to allowed revenue to account for additional return and depreciation as part of the work on the separation of price controls but no adjustment was made to the RAV,
- £9.7 million of meter governor regulatory value that was incorrectly included in the distribution RAV and has now been moved to the metering RAV<sup>16</sup>, and
- £16.1 million of regulatory value relating to NTS offtakes that has been transferred to the distribution RAV to reflect a transfer of responsibility for those assets in April 2002. There also needs to be a retrospective adjustment to revenue to reflect the additional assets similar in effect to a Pot 3 reopener.

3.64. The RAV is rolled forward year by year to take into account additions minus disposals and depreciation. Net additions include allowances for net capex and 50 per cent of the allowances for repex. They also include efficient capex or non-mains repex which has been treated as an overspend (Pot 2) or as a reopener (Pot 3).

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<sup>14</sup> This applies to all of the market for new housing and 66 per cent of the I&C market.

<sup>15</sup> Transco price control and NTS SO incentives 2002-7. Explanatory notes to accompany the section 23 notice of proposed modifications to Transco's Gas Transporter Licence.

<sup>16</sup> Ofgem open letter on treatment of I&C and meter governors, 29 April 2005.

3.65. While the RAV includes both the allowance and the efficient Pot 2 overspend for net capex and non-mains repex, the GDNs are exposed to the capital charges (including depreciation) in respect of the Pot 2 overspend for five years. These are subtracted from the resulting revenue allowance as an incentive adjustment. Similarly if there is an underspend or inefficient spend within the allowance this is removed from the RAV, but the GDN will retain the allowed capital charges for five years. This is added to revenue as an incentive adjustment.

**Table 3.5 – Total GDN RAV Roll Forward (£m, 2005-06 prices)**

	2002-03	2003-04	2004-05	2005-06	2006-07
Opening value per last price control	10,634.7				
Additions to pre-2002 assets	90.9				
Revised opening value bf	10,725.6	10,844.8	10,844.8	10,814.7	10,792.0
Depreciation	(376.3)	(380.6)	(382.4)	(383.5)	(384.7)
Net capex additions	507.0	379.4	351.4	365.3	380.4
Disposals	(11.4)	1.2	0.8	(4.5)	(3.5)
Closing RAV (incl. Pot 3, excl. Pot 2)	10,844.8	10,844.8	10,814.7	10,792.2	10,784.3
Pot 2 additions (cumulative)	53.3	126.6	213.7	411.6	620.3
Pot 2 depreciation (cumulative)	0.0	(1.2)	(4.0)	(8.7)	(17.9)
<b>Total closing RAV</b>	<b>10,898.1</b>	<b>10,970.3</b>	<b>11,024.4</b>	<b>11,194.9</b>	<b>11,386.7</b>

## 2007-08 forecast capital and replacement expenditure

### Capex allowances

3.66. We have made no adjustments to the GDNs' capex workloads as PB Power has reviewed them and found them to be reasonable. We have assessed mains reinforcement and connections unit costs by comparing the GDNs' forecasts against historical unit costs for 2004-05 and 2005-06. We have also benchmarked GDNs' assumptions for real price effects such as increases in contractors' charges and material prices above inflation and applied the lowest increases for each activity.

#### *Connections and mains reinforcement capex*

3.67. The first step in our analysis was to estimate unit costs for each GDN for 2007-08 based on their own average unit costs for 2004-05 and 2005-06 (rolled forward to take account of benchmark real price effects). Where the estimated unit costs for any GDN exceed the national average unit costs for 2007-08 we have applied an efficiency adjustment to close the gap by one third, similar to approaches used for other price controls.

3.68. We have then compared the GDN's forecast unit costs for 2007-08 with our own estimates for the national average unit cost and the unit cost of each individual GDN. Where a GDN's forecast unit cost for 2007-08 is below our estimate for the national average unit cost for 2007-08 we have allowed their forecast in full. This is the case for Wales and the West, Scotland and Southern GDNs for connections and all GDNs other than North London and East of England for mains reinforcement.

3.69. Where a GDN's forecast unit cost is above our estimate of the national average unit cost for 2007-08, we have revised their forecast unit cost down to the greater of our estimate of the national average unit cost and our estimate of the unit cost for that GDN. We have derived a net capex allowance for each GDN by multiplying their workload by our allowed unit costs and (where appropriate) deducting customer contributions.

#### *Governor capex*

3.70. For governor capex we have compared GDNs' forecasts of unit costs to their own historical unit costs adjusted for benchmark real price effects. Where their forecast unit costs exceed the adjusted average for 2004-05 and 2005-06, we have adjusted their forecast down to the historical average. We have then derived a net capex allowance for each GDN by multiplying their workload by our allowed unit costs. Our proposed capex allowances for each GDN are set out in Table 3.6 (page 30). Further breakdowns of workload and unit costs for all GDNs can be found in Appendix 8.

#### **Repex allowances**

3.71. PB Power has reviewed the appropriateness of GDNs' forecast mains and service replacement workloads. PB Power have recommended some adjustments to the GDNs' forecast service workloads to reflect differences between GDNs' assumptions for the ratio of services replaced to kilometres of mains abandoned and historical actuals. We have accepted GDNs' forecast workload for risers.

3.72. We have also reviewed assumptions for the ratio of mains installed to mains abandoned underlying each GDN's repex forecasts. The mains replacement costs and incentive matrix for the current price control period were set on the assumption that Transco would install 0.9 kilometres of mains for every 1 kilometre of mains abandoned to meet the HSE's requirements for mains abandonment and risk reduction. This is consistent with the average ratio for 2002-03 to 2004-05. The forecasts for 2007-08 for three of the GDNs are consistent with this or assume a lower ratio of mains installed to abandoned which results in lower costs. The forecasts for all of NGG's GDNs and WWU assume a higher ratio of mains installed to abandoned (approximately 1 to 1) resulting in higher costs. We have scaled back their forecast for installed mains to the historical ratio and adjusted total costs accordingly. If GDNs can provide further evidence to justify the increase in volumes of mains installed, we will consider this in advance of final proposals.

3.73. PB Power has compared the relative efficiency of forecast unit costs for replacement work across GDNs taking account of regional cost and volume differences. PB Power has set a benchmark on the basis of the fourth most efficient GDN and proposes that the GDNs above the benchmark should close one third of the gap between the GDN and the benchmark. We have applied the PB Power recommendations for repex to establish our proposed repex allowances for 2007-08.

3.74. The total capex and repex allowances for 2007-08 for all GDNs are set out in Table 3.6 below. The allowances at £925.9 million in total, are approximately 60 per cent higher than allowances for 2006-07 and 9 per cent higher than the GDNs are spending this year but on average 7 per cent less than the GDNs sought.<sup>17</sup> The increase in allowances is driven by increases in workloads compared to what was assumed at the last price control review, increases in contractor costs and a small number of large LTS projects.

3.75. Further details of how the allowances are built up for each GDN from volume and unit cost information are set out in Appendix 8. As part of this work we have updated the parameters of the mains replacement incentive scheme for 2007-08 for each GDN.

3.76. The forecast repex allowances and mains replacement incentive matrices for NGG's GDNs for 2007-08 are based on the information set out in their April BPO submission. NGG has recently agreed a revised mains replacement programme with the HSE. They will be submitting updated repex forecasts for 2007-08 in their October BPO response for the main price control review. We will be reviewing their 2007-08 repex allowances between initial and final proposals to take this new information into account.

### **Capex rolling incentive**

3.77. In the second consultation document, we proposed two simple options for applying a rolling incentive: either extending the existing approach for an additional year (Option 1), or applying the agreed method for the main control to the one year control (Option 2).

3.78. The approach which has been developed to roll forward the RAV in the current period reflects the particular issues which have arisen since the current control was set. In six years' time, the method for rolling forward the RAV at the next price control may be different. It appears more straightforward to roll forward the RAV on a single basis and potentially avoid the need for carrying out an ex post efficiency review for one year only. On balance we prefer Option 2.

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<sup>17</sup> Consistent with the current price control review, we propose to capitalise 50 per cent of repex and expense 50 per cent.

**Table 3.6 – Proposed capex and repex allowances for 2007-08 by GDN (£m, 2005-06 prices)**

GDN	NGG				NGN	SGN		WWU	Total
	East of England	North London	North West	West Midlands	North England	Scotland	Southern	Wales and West	
<b>GDN forecast total capex and repex</b>	151.8	93.0	115.8	75.9	107.9	124.5	225.8	97.0	991.7
Adjustment	-13.2	-6.4	-10.3	-5.8	-1.0	-8.4	-12.5	-8.3	-65.9
% adjustment	-9%	-7%	-9%	-8%	-1%	-7%	-6%	-9%	-7%
<b>Ofgem forecast total capex and repex</b>	138.6	86.6	105.4	70.1	106.9	116.2	213.3	88.8	925.9
<b>GDN forecast</b>									
LTS and storage capex	9.6	27.6	5.8	3.1	2.2	24.0	34.2	9.5	116.1
Mains reinforcement and governors	4.7	5.8	3.9	2.7	6.2	9.7	18.6	6.2	57.8
Connections	8.0	2.1	3.9	2.6	9.6	14.5	14.1	7.4	62.1
Other capex	19.7	10.9	14.1	10.1	20.5	16.8	25.1	18.1	135.3
Mains repex	64.9	25.8	56.0	35.2	41.6	33.9	68.5	32.3	358.3
Services Repex	47.2	22.3	33.4	23.3	22.7	24.6	63.5	23.6	260.6
Other repex	-2.3	-1.5	-1.3	-1.2	5.1	1.0	1.8	0.0	1.6
<b>Total capex and repex</b>	<b>151.8</b>	<b>93.0</b>	<b>115.8</b>	<b>75.9</b>	<b>107.9</b>	<b>124.5</b>	<b>225.8</b>	<b>97.0</b>	<b>991.7</b>
<b>Ofgem forecast</b>									
LTS and storage capex	9.6	27.6	5.8	3.1	2.2	24.0	34.2	9.0	115.6
Mains reinforcement and governors	4.7	3.8	3.9	2.4	6.2	9.6	18.3	6.2	55.1
Connections	6.7	1.9	3.3	2.2	8.6	12.4	13.0	6.3	54.2
Other capex	19.7	10.9	14.1	10.1	20.5	15.7	24.0	15.0	130.0
Mains repex	59.0	23.0	50.9	32.0	41.6	31.6	64.4	30.5	333.1
Services Repex	41.2	20.9	28.7	21.5	22.7	21.9	57.6	21.9	236.4
Other repex	-2.3	-1.5	-1.3	-1.2	5.1	1.0	1.8	0.0	1.6
<b>Total capex and repex</b>	<b>138.6</b>	<b>86.6</b>	<b>105.4</b>	<b>70.1</b>	<b>106.9</b>	<b>116.2</b>	<b>213.3</b>	<b>88.8</b>	<b>925.9</b>

## 4. Financial issues including overall impact of initial proposals

### Chapter Summary

This chapter sets out Ofgem's proposals on the cost of capital, tax and pensions for the one year control. Taking these proposals together with the analysis of opex, capex, and repex in earlier chapters, it outlines the overall impact of the proposals.

### Question box

**Question 1:** Do you agree with our proposed approach to calculating the cost of capital to apply for 2007-08?

**Question 2:** Do you agree with our proposed approach to the treatment of tax?

**Question 3:** Do our initial proposals, taken in aggregate, represent a reasonable outcome that both protects the interests of consumers and ensures that GDNs are able to finance their activities during 2007-08?

### Cost of capital

4.1. The current control uses a cost of capital of 6.25 per cent pre-tax. This assumed a 30 per cent tax wedge, and so is equivalent to a vanilla WACC of 5.25 per cent or a post-tax cost of capital of 4.38 per cent. Several respondents supported a simple roll-forward of this figure. In line with this being a one year extension review, we have not conducted a full review of the cost of capital. It is in a similar range to the figure currently used as a modelling assumption in TPCR of 4.2 per cent post-tax, which supports the view that it is still broadly consistent with market conditions over the medium-term. We propose to roll forward the cost of capital unchanged, other than in relation to the treatment of tax.

### Post-tax cost of capital

4.2. In line with established Ofgem policy, we propose to convert the cost of capital to a post-tax figure (4.38 per cent), and calculate a specific ex ante tax allowance for each GDN. Ofgem's policy to calculate the cost of capital on a post-tax basis was initiated in the Developing Network Monopoly Price Controls consultation in 2003. It was introduced in order to provide incentives on companies to manage their tax liabilities that are the same as the incentives they face for other expenses, i.e. that they could benefit from outperformance, but consumers could also benefit from long-term savings via reduced allowances at subsequent price controls. It was also recognised that some network operators were likely to face increasing tax liabilities from the ending of accelerated tax allowances on much of their expenditure. Most respondents to the consultation endorsed the new policy, and it has been applied in practice since then in DPCR4, the NGET one year extension and TPCR. In the two year extension of the Scottish TO controls, company specific allowances for tax were calculated on the assumption that their effective tax rates would be similar to those of the affiliated DNOs as reflected in the tax allowance determined at DPCR4. This

rate was then used to calculate a pre-tax equivalent WACC for purposes of setting the TO controls.

4.3. The GDNs accept a post-tax approach in principle, but they oppose its introduction as part of the one year control. GDNs have benefited significantly under the current price control as they are paying little or no tax but the current return on capital was calculated based on an assumed 30 per cent tax wedge. Although the impact will be significant, as highlighted in Figure 4.1 (page 34), it is offset by the specific increases in allowances we are proposing for other items such as shrinkage and pensions.

## Tax

4.4. The tax allowances have been calculated based on information provided to us by the GDNs. We have assumed notional gearing of 62.5 per cent and real cost of debt of 4.65 per cent, as per the cost of capital calculation in the current price control. To discourage excess gearing, any GDN with higher actual gearing and higher actual interest costs will be subject to an ex post adjustment.

4.5. Our modelling of tax allowances suggests that some GDNs are forecast to make tax losses. Although these tax losses may be usable by the GDNs in the year, either to sell as group relief to a related party or to offset other profits in the same statutory company (particularly in the case of NGG), we do not propose to give these GDNs negative tax allowances. This is consistent with our standard regulatory approach of treating each GDN as a stand-alone company. We recognise that GDNs will benefit from these losses and so we will log up any tax losses as calculated on a regulatory basis and deduct them from expected tax allowances when the timing differences that led to the loss reverse.

## Financeability

4.6. In setting the price control, Ofgem needs to ensure that companies can finance their regulated activities. Financeability is most appropriately considered over the medium term and against the background of future capex requirements. As we are only setting allowances for one year, and will be resetting the control the following year, we are not able to assess trends forward from 2007-08.

4.7. We have reviewed our proposals in the context of the GDNs' current financial position. Since we are proposing to increase their revenue allowances, although there is no evidence that their actual costs between this year and next will rise by the same amount, we expect that the trend will be positive for typical financial indicators. As all the GDNs currently have an investment grade credit rating, and, overall, our proposals do not worsen their financial position, we are satisfied that they pass the financeability test.

4.8. The results of our financial model, including proposed 2007-08 revenue allowances by GDN, are set out in Appendix 12.

## Revenue Driver

4.9. Allowed revenue will not vary with throughput during the one year control. The volume driver is designed to operate over a period of more than one year, within the context of an RPI-X price control formula. Since we have reset the revenue allowance to reflect rising costs, the volume driver is not applicable. The appropriateness of the volume driver in its current format will be considered as part of the main control.

## Impact of proposals

4.10. The overall result of our proposals is a total revenue allowance of £2,288.9m for 2007-08, representing an increase of £202m or 9.7 per cent over 2006-07 allowances.<sup>18</sup> These figures are split by GDN in Table 4.2.

**Table 4.2 Changes in allowances from 2006-07 to 2007-08 (£m, 2005-06 prices)**

		2006-07	2007-08	% change
NGG	East of England	380.1	426.1	12.1%
	North London	223.0	244.7	9.7%
	North West	258.0	282.6	9.5%
	West Midlands	196.3	217.8	11.0%
NGN	North England	251.7	273.5	8.6%
SGN	Scotland	172.1	184.5	7.2%
	Southern	382.8	418.6	9.4%
WWU	Wales and West	223.3	241.2	8.0%
	<b>Total all GDNs</b>	<b>2,087.3</b>	<b>2,288.9</b>	<b>9.7%</b>

4.11. The net increase in allowances (PO) can be explained by a number of factors. The principal ones are:<sup>19</sup>

- changes to the shrinkage arrangements (see paragraph 2.10 for details) - 2.5 per cent increase,

<sup>18</sup> The final 9.7 per cent figure represents the real difference between 2006-07 allowances and proposed 2007-08 allowances. This measure is the best way of reflecting the price control settlement, however it is not exactly the same as the impact of our proposals on charges. For example, actual revenues recovered by GDNs in 2006-07 will already be higher than 2006-07 allowances due to the effect of the pass through mechanism.

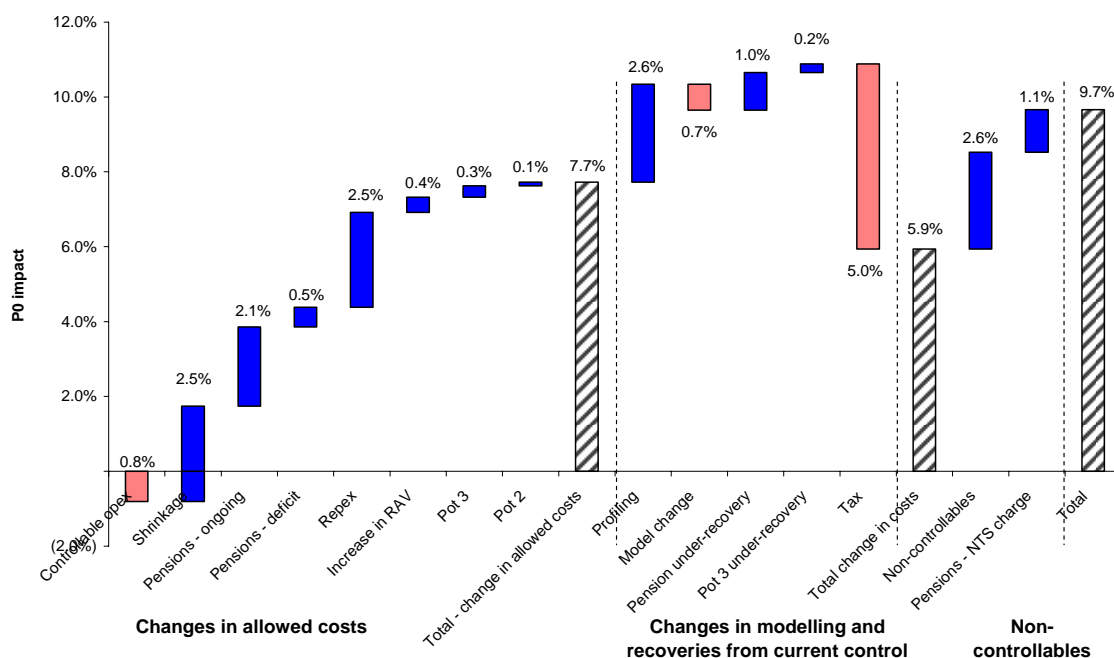
2006-07 allowances are based on a forecast of non-controllable costs (business rates and licence fees) but GDNs are permitted to recover actual costs associated with these items - in particular business rates were increased mid way through the current price control and charges to customers already reflect this. In addition companies adjust their charges every year to take account of any under or over recovery from the previous year. As all figures are in constant prices, there will also be a further increase in allowances caused by inflation, which is expected to be around 2.5%.

<sup>19</sup> Some items have been aggregated in the explanations.

- increased pensions allowances for ongoing contributions, special NTS charge and deficit payments (see paragraph 2.12 for details) - 3.8 per cent increase,
- an increase in replacement expenditure (see paragraph 3.71 for details) - 2.5 per cent increase in PO,
- the impact of profiling costs in the current price control using a constant 2 per cent reduction rather than forecast trends<sup>20</sup> - 2.6 per cent increase,
- the move from an implicit 30 per cent tax wedge under a pre-tax cost of capital to a more realistic ex ante tax allowance (see paragraph 4.4 for details) - 5.0 per cent decrease, and
- under-recoveries from the current control - 1.2 per cent increase.

4.12. In addition to the increases in 2007-08, there is an ongoing effect between 2008-09 and 2011-12 as Pot 2 capex becomes eligible for allowances. This will occur gradually and will amount to around 2 per cent additional allowances by the end of the period. The impact of our initial proposals is represented graphically in Figure 4.1.

**Figure 4.1 Components of the increase in allowances**



<sup>20</sup> See paragraph 3.56 of GPCR Second Consultation, July 2006 (Ref. No. 123a/06) for an explanation of the profiling effect.

### **Implication for gas distribution charges**

4.13. The price control allowances represent the maximum revenue that the licensees can collect via gas transportation charges (primarily use of system charges and customer charges). Other revenue streams such as connections contributions, metering and meter reading are not affected.

4.14. The GDNs are required to use best endeavours to minimise the frequency of changes to charges. They generally update them annually on 1 October. Although the allowances may be recovered over the 12 months starting 1 April 2007, in practice charges may not begin to increase until 1 October 2007.

4.15. This date coincides with a number of changes to the structure of gas distribution charges, as outlined by Ofgem earlier this year<sup>21</sup>. Given that aspects of these changes have yet to be finalised, the impact on charges to different types of customers is not clear. Additionally, shippers may not pass the full increase in charges on to customers immediately. Over the longer term customer charges will increase by an average amount close to the PO figure of 9.7 per cent, plus inflation. For domestic customers, for whom distribution charges are around 15 per cent of their total bill, this represents an increase of less than 2 per cent, or less than £9 per annum.

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<sup>21</sup> Conclusion on the review of the structure of gas distribution charges, February 2006

## 5. Timetable and process

### Chapter Summary

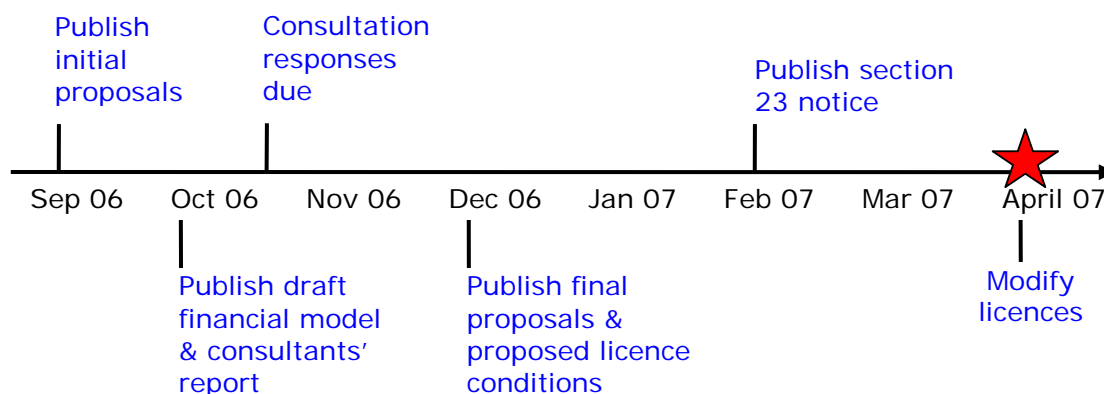
This chapter details our proposed process and timetable for completing the one year price control review.

### Question box

**Question 1:** Are the high level licence drafting changes proposed in Appendix 10 appropriate? Should we consider any other licence drafting changes?

5.1. Having considered the responses to this consultation, we intend to publish final proposals in December 2006. Figure 5.1 shows Ofgem's timetable for completing the one year control review.

**Figure 5.1 - Timetable for GDPCR one year control**



5.2. If we draft the revised licence conditions after final proposals have been published, there is scope for disagreement with licensees over the interpretation of our final proposals document. We propose to work on the licence drafting for the one year control in conjunction with the development of final proposals. Our high level proposals for the licence drafting changes required to support the one year control are set out in Appendix 10.

5.3. Our timetable for completing the GDPCR main review is unchanged since the second consultation document. We intend to publish the third consultation document for the main control in November 2006 and the fourth consultation document in March 2007. We plan to hold an industry seminar to discuss main control issues in early December 2006.

## Appendices

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### Supplementary appendices

Appendix	Name of appendix
5	Responses to the second consultation document
6	Options for 2007-08 opex allowances
7	Historical capital and replacement expenditure
8	Forecast capital and replacement expenditure
9	Impact assessment on the price control treatment of shrinkage
10	Licence changes
11	Third party water ingress arrangements.
12	Results of financial model

The supplementary appendices can be found in a separate appendices document.

## Appendix 1 - Consultation Response and Questions

1.1. We would like to hear the views of interested parties in relation to any of the issues set out in this document. In particular, we would like to hear from gas consumers and their representatives, gas distribution networks (GDNs) and any other interested parties.

1.2. We would especially welcome responses to the specific questions which we have set out at the beginning of each chapter heading and which are replicated below.

1.3. Responses should be received by 23 October 2006 and should be sent to:

GDPCR Responses  
Ofgem  
9 Millbank  
London SW1P 3GE  
E-mail: [GDPCR@ofgem.gov.uk](mailto:GDPCR@ofgem.gov.uk)

1.4. Unless marked confidential, all responses will be published by placing them in Ofgem's library and on its website [www.ofgem.gov.uk](http://www.ofgem.gov.uk). Respondents may request that their response is kept confidential. Ofgem shall respect this request, subject to any obligations to disclose information, for example, under the Freedom of Information Act 2000 or the Environmental Information Regulations 2004.

1.5. Respondents who wish to have their responses remain confidential should clearly mark the document to that effect and include the reasons for confidentiality. It would be helpful if responses could be submitted both electronically and in writing. Respondents are asked to put any confidential material in the appendices to their responses.

1.6. Any questions on this document should, in the first instance, be directed to:

Jessica Hunt  
Senior Manager, Price Control Policy & Management  
Office of Gas & Electricity Markets, 9 Millbank, London, SW1P 3GE  
Tel: 020 7901 7431  
Email: [jessica.hunt@ofgem.gov.uk](mailto:jessica.hunt@ofgem.gov.uk)

1.7. The remainder of this appendix restates the consultation questions for convenience.

**CHAPTER 1**

**Question 1:** There are no specific questions in this chapter.

**CHAPTER 2**

**Question 1:** Is Ofgem's approach for determining an opex allowance for 2007-08 appropriate? Are the resulting allowances appropriate?

**Question 1:** Is Ofgem's approach for determining an opex allowance for 2007-08 appropriate? Are the resulting allowances appropriate?

**Question 2:** Is Ofgem's proposed approach to setting pensions allowance for 2007-08 appropriate?

**Shrinkage related questions (see Appendix 9)**

**Question 3:** Is Ofgem's assessment of the costs and benefits associated with the three options for setting shrinkage allowances, as set out in the impact assessment, reasonable?

**Question 4:** Do you support Ofgem's proposed approach to setting shrinkage allowances (i.e. Option 1a)?

**Question 5:** In the event that Ofgem adopts Option 1a for shrinkage, which market index (or indices) should GDNs' shrinkage allowances be linked to?

**Question 6:** In the event that Ofgem adopts Option 1b for shrinkage, should allowances be based on shrinkage costs incurred by the average GDN or lowest cost GDN?

**Question 7:** Should Ofgem remove throughput-related shrinkage volume risk from GDNs?

**CHAPTER 3**

**Question 1:** Do you agree with our proposals regarding expenditure that we should treat as wasteful and unnecessary?

**Question 2:** Do you agree with our proposals regarding expenditure that we should treat as efficient overspend and, in particular, expenditure that should be subject to a reopener?

**Question 3:** Do you agree with our proposed adjustments to the RAVs to reflect expenditure incurred between 1 January 2001 and 31 March 2002?

**Question 4:** Is our proposed approach for determining capex and repex allowances for 2007-08 appropriate? Are the resulting allowances appropriate?

**Question 5:** Is our proposed update of the mains replacement incentive mechanism for 2007-08 appropriate?

**CHAPTER 4**

**Question 1:** Do you agree with our proposed approach to calculating the cost of capital to apply for 2007-08?

**Question 2:** Do you agree with our proposed approach to the treatment of tax?

**Question 3:** Do our initial proposals, taken in aggregate, represent a reasonable outcome that both protects the interests of consumers and ensures that GDNs are able to finance their activities during 2007-08?

**CHAPTER 5**

**Question 1:** Are the high level licence drafting changes proposed in Appendix 10 appropriate? Should we consider any other licence drafting changes?

## Appendix 2 – The Authority's Powers and Duties

1.1. Ofgem is the Office of Gas and Electricity Markets which supports the Gas and Electricity Markets Authority (“the Authority”), the regulator of the gas and electricity industries in Great Britain. This Appendix summarises the primary powers and duties of the Authority. It is not comprehensive and is not a substitute to reference to the relevant legal instruments (including, but not limited to, those referred to below).

1.2. The Authority's powers and duties are largely provided for in statute, principally the Utilities Act 2000, the Gas Act 1986, the Electricity Act 1989, the Competition Act 1998, the Enterprise Act 2002 and the Energy Act 2004, as well as arising from directly effective European Community legislation. References to the Gas Act and the Electricity Act in this Appendix are to Part 1 of each of those Acts.<sup>22</sup>

1.3. Duties and functions relating to gas are set out in the Gas Act and those relating to electricity are set out in the Electricity Act. This Appendix must be read accordingly<sup>23</sup>.

1.4. The Authority's principal objective when carrying out certain of its functions under each of the Gas Act and the Electricity Act is to protect the interests of consumers, present and future, wherever appropriate by promoting effective competition between persons engaged in, or in commercial activities connected with, the shipping, transportation or supply of gas conveyed through pipes, and the generation, transmission, distribution or supply of electricity or the provision or use of electricity interconnectors.

1.5. The Authority must when carrying out those functions have regard to:

- The need to secure that, so far as it is economical to meet them, all reasonable demands in Great Britain for gas conveyed through pipes are met;
- The need to secure that all reasonable demands for electricity are met;
- The need to secure that licence holders are able to finance the activities which are the subject of obligations on them<sup>24</sup>; and
- The interests of individuals who are disabled or chronically sick, of pensionable age, with low incomes, or residing in rural areas.<sup>25</sup>

1.6. Subject to the above, the Authority is required to carry out the functions referred to in the manner which it considers is best calculated to:

<sup>22</sup> entitled “Gas Supply” and “Electricity Supply” respectively.

<sup>23</sup> However, in exercising a function under the Electricity Act the Authority may have regard to the interests of consumers in relation to gas conveyed through pipes and vice versa in the case of it exercising a function under the Gas Act.

<sup>24</sup> under the Gas Act and the Utilities Act, in the case of Gas Act functions, or the Electricity Act, the Utilities Act and certain parts of the Energy Act in the case of Electricity Act functions.

<sup>25</sup> The Authority may have regard to other descriptions of consumers.

- Promote efficiency and economy on the part of those licensed<sup>26</sup> under the relevant Act and the efficient use of gas conveyed through pipes and electricity conveyed by distribution systems or transmission systems;
- Protect the public from dangers arising from the conveyance of gas through pipes or the use of gas conveyed through pipes and from the generation, transmission, distribution or supply of electricity;
- Contribute to the achievement of sustainable development; and
- Secure a diverse and viable long-term energy supply.

1.7. In carrying out the functions referred to, the Authority must also have regard, to:

- The effect on the environment of activities connected with the conveyance of gas through pipes or with the generation, transmission, distribution or supply of electricity;
- The principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed and any other principles that appear to it to represent the best regulatory practice; and
- Certain statutory guidance on social and environmental matters issued by the Secretary of State.

1.8. The Authority has powers under the Competition Act to investigate suspected anti-competitive activity and take action for breaches of the prohibitions in the legislation in respect of the gas and electricity sectors in Great Britain and is a designated National Competition Authority under the EC Modernisation Regulation<sup>27</sup> and therefore part of the European Competition Network. The Authority also has concurrent powers with the Office of Fair Trading in respect of market investigation references to the Competition Commission.

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<sup>26</sup> or persons authorised by exemptions to carry on any activity.

<sup>27</sup> Council Regulation (EC) 1/2003

## Appendix 3 - Glossary

### Business Plan Questionnaire (BPQ)

Expenditure information requested by Ofgem from the GDNs to inform decisions about setting the price control.

### Distribution Price Control Review 4 (DPCR4)

The price control review for the electricity distribution network operators which covers the five years from 1 April 2005 to 31 March 2010.

### Engineering Period Contracts (EPCs)

Contracts drawn up by the asset owner and a service provider to provide a level of work at an agreed price for a certain length of time.

### Fulcrum Connections

A business established by Transco plc to undertake all connections activities on behalf of the GDNs.

### Gas Cost Reference Price (GCRP)

The gas price based on an indexed formula of forward prices which is used by the regulator to determine the revenue allowance to cover GDNs' shrinkage costs.

### Gas Distribution Network (GDN)

GDNs transport gas from the NTS to final consumers and to connected system exit points. There are currently eight GDNs in Great Britain which comprise twelve LDZs.

### Gas Distribution Price Control Review (GDPCR)

The review of the price control applying to gas distribution networks. The review will extend the existing price control for the year 2007-8 and reset the control for the period commencing 1 April 2008.

### Gas Transporter (GT)

The holder of a Gas Transporter's licence in accordance with the provisions the Gas Act 1986.

### Health and Safety Executive (HSE)

The Health and Safety Commission is responsible for health and safety regulation in Great Britain. The Health and Safety Executive and local government are the enforcing authorities who work in support of the Commission.

### Independent Gas Transporter (IGT)

IGTs are GT licence holders that own and operate small local gas networks and levy distribution charges on shippers.

### Local Distribution Zones (LDZs)

LDZs are low pressure pipeline systems which deliver gas to final users and Independent Gas Transporters. There are twelve LDZs which take gas from the high pressure transmission system for onward distribution at lower pressures.

### Local Transmission System (LTS)

The pipeline system operating at >7barg that transports gas from NTS offtakes to distribution systems. Some large users may take their gas direct from the LTS.

### National Grid Gas (NGG)

The GT licence holder for the North West, West Midlands, East England and London GDNs. NGG also hold the GT licence for the gas national transmission system (NTS). Prior to 10 October 2005, NGG was known as Transco.

### National Transmission System (NTS)

NGG's high pressure gas transmission system. It consists of more than 6,400 km of pipe carrying gas at pressures of up to 85 bar (85 times normal atmospheric pressure).

### Northern Gas Networks (NGN)

The GT licence holder for North England GDN.

### QB (Mars) Project or Quarterback Project

An information systems project, implemented by Transco plc, which involved the rolling out of a software application suite that managed the issue and return of work between the office and the field.

### Reconciliation by Difference (RbD)

The method of reconciling the difference between actual and deemed measurements of gas allocated to Small Supply Points (SSPs).

### Regulatory Asset Value (RAV)

The value ascribed by Ofgem to the capital employed in the licensee's regulated distribution business (the 'regulated asset base'). The RAV is calculated by summing an estimate of the initial market value of each licensee's regulated asset base at privatisation and all subsequent allowed additions to it at historical cost, and deducting annual depreciation amounts calculated in accordance with established regulatory methods. These vary between classes of licensee. A deduction is also made in certain cases to reflect the value realised from the disposal of assets comprised in the regulatory asset base. The RAV is indexed to RPI in order to allow for the effects of inflation on the licensee's capital allowances for the regulatory depreciation and also for the return investors are estimated to require to provide the capital.

### Service pipes (or services)

Pipes for supplying gas to premises from a distribution main, being any pipe between the distribution main and the emergency control valve.

### Scotia Gas Networks (SGN)

The GT licence holder for Southern GDN and Scotland GDN.

### Shrinkage

Shrinkage is gas lost from the distribution system due to leakage or theft and gas used for operational reasons. Shrinkage gas constitutes approximately 0.7 per cent of annual throughput and 90 per cent of this relates to leakage. GDNs are required to procure gas to cover shrinkage losses.

### Therm

A unit of heating value equivalent to 100,000 British thermal units (Btu) (0.1 MMBtu).

#### Traffic Management Act (TMA)

The Traffic Management Act is intended to provide better conditions for all road users through proactive management of the national and local road network<sup>28</sup>.

#### Transco plc (see NGG Gas)

Transco plc changed its name to NGG Gas on 10 October 2005.

#### Transmission Price Control Review (TPCR)

The TPCR will establish the price controls for the transmission licensees which will take effect in April 2007 for a 5-year period. The review applies to the three electricity transmission licensees, NGET, Scottish Power Transmission Limited, Scottish Hydro-Electric Transmission Limited and to the licensed gas transporter responsible for the gas transmission system, NGG.

#### Ulysses project

A turnkey project approved in 1999 to undertake the complete replacement of Transco System Operation's systems support suite. This included telemetry outstations, communications network, control systems and decision support tools

#### Wales & West Utilities (WWU)

The GT licence holder for Wales & West GDN.

#### Water ingress

An incident where water enters gas pipes resulting in a loss of gas supply.

#### xoserve

A transporter agency which provides a single, uniform interface between the IT systems of relevant GTs and shippers.

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<sup>28</sup> Department for Transport:  
[http://www.dft.gov.uk/stellent/groups/dft\\_roads/documents/divisionhomepage/032064.hcsp](http://www.dft.gov.uk/stellent/groups/dft_roads/documents/divisionhomepage/032064.hcsp)

## Appendix 4 - Feedback Questionnaire

1.1. Ofgem considers that consultation is at the heart of good policy development. We are keen to consider any comments or complaints about the manner in which this consultation has been conducted. In any case we would be keen to get your answers to the following questions:

1. Do you have any comments about the overall process, which was adopted for this consultation?
2. Do you have any comments about the overall tone and content of the report?
3. Was the report easy to read and understand, could it have been better written?
4. To what extent did the report's conclusions provide a balanced view?
5. To what extent did the report make reasoned recommendations for improvement?
6. Please add any further comments?

1.2. Please send your comments to:

Andrew MacFaul  
Consultation Co-ordinator  
Ofgem  
9 Millbank  
London  
SW1P 3GE  
andrew.macfaul@ofgem.gov.uk