

## Treatment of the early replacement of prepayment meters in the electricity metering price controls

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### Overview:

The electricity metering price controls contain a provision allowing distribution companies to apply for an increase in the price they charge for prepayment meters (PPMs), if suppliers decide to replace existing PPMs with newer, cheaper PPM technology. EDF Energy Networks has recently made an application under this provision. We are concerned that the current mechanism has a number of problems, including that it could artificially increase the costs of existing PPMs and create perverse incentives for suppliers to replace existing PPMs. We are therefore consulting on an alternative provision to allow distribution companies to reset metering charges without distorting incentives in this way. We are inviting views on our proposals, and will issue any intended licence modifications by February 2007 in order to take effect from 1 April 2007.

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## Context

Since 2000, Ofgem has taken measures to facilitate metering competition in both gas and electricity to reduce costs, improve service levels and encourage innovation through the use of smarter forms of metering. In this context, we have recently consulted on the future treatment of the gas and electricity metering price controls and will issue a decision document on this matter shortly. The current price controls were introduced as a temporary measure in the transition to a fully developed competitive metering market. However, as long as controls remain in place it is important that they provide appropriate price signals and, as far as possible, do not distort competition. Controls also need to fulfil commitments made to Distribution Network Operators (DNOs) and Gas Transporters (GTs) during the price control settlements.

A number of suppliers are now either implementing or planning an accelerated changeout programme of electricity token PPMs in their region. This is a positive sign that the competitive metering model is working as intended: the replacement of less reliable, more expensive PPMs with improved technology has obvious benefits to PPM customers. Nonetheless, these developments raise the question of who should bear the costs of PPM premature replacement. Having received our first application for an adjustment to the price cap to address this situation, we have concerns about the mechanism currently set out in the distribution licence. We are therefore consulting on a possible alternative, which we hope will meet the commitments made by Ofgem at the time the price controls were set while minimising any adverse impacts on metering competition and incentives.

## Associated Documents

- Metering price control review. June 2006 (Reference 108/06)  
[http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/15593\\_metering\\_price\\_control\\_con\\_doc\\_V7-final.pdf?wtfrom=/ofgem/whats-new/archive.jsp](http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/15593_metering_price_control_con_doc_V7-final.pdf?wtfrom=/ofgem/whats-new/archive.jsp)
- Electricity distribution price control review: Final proposals. November 2004 (Reference 256/04)  
[http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/9416\\_26504.pdf](http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/9416_26504.pdf)
- Electricity distribution price control review: Update paper. September 2004 (Reference 222/04)  
[http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/8738\\_22204\\_dpccrseupdate.pdf?wtfrom=/ofgem/work/index.jsp&section=/areasofwork/metering\\_gpc](http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/8738_22204_dpccrseupdate.pdf?wtfrom=/ofgem/work/index.jsp&section=/areasofwork/metering_gpc)
- Review of Transco's price control for 2002: Final proposals. September 2001. (Reference 56/01)  
[http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/315\\_26sep01\\_pub1.pdf](http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/315_26sep01_pub1.pdf)

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## Summary

When setting price controls in the transition to a competitive market, the regulator has to decide on the appropriate treatment of any stranded costs that may arise. In the context of metering, this comprises the costs that the regulated entity efficiently incurred when obliged to provide metering services prior to the introduction of competition, and that it may not be able to recover once competition becomes established - or that it is not compensated for in other ways, such as through the overall price control package on offer or the additional commercial opportunities that competition may give rise to. Stranding may be an issue in metering because metering technology has improved in recent years and the costs of certain types of meters have fallen significantly.

A somewhat different approach to stranding risk was taken by Ofgem when introducing competition into electricity and gas metering. In electricity, some general regulatory protection from stranding was afforded by transferring some of the historic costs of meters to the distribution businesses<sup>1</sup>. In addition, as discussed further below, a mechanism was put in place to allow distributors to recover some, but not all of the stranded costs that might arise in the event that electricity prepayment meters were replaced early.

In gas Transco (now National Grid Gas) had benefited considerably from the use of an unfocussed, historic-cost valuation for transportation in setting the overall price control, and the control on metering was part of the regulatory settlement with Transco as a whole. For these reasons, Ofgem decided that it was not appropriate to put in place regulatory arrangements to guarantee the recovery of stranded gas metering costs<sup>2</sup>. While the regulatory settlement provided Transco with no specific protection against meter stranding, Ofgem set a generous gas metering price cap through using a higher cost of capital and an accelerated rate of depreciation. To the extent that Transco's metering business was successful in retaining market share in the early years of competition without reducing prices, this provided Transco with some ability to recover its historic investments in metering.

A specific issue that arose in the course of setting the electricity metering price controls in 2005 was the expected premature replacement of some types of electricity prepayment meters (PPMs). We understood that some of these meters could be replaced early in the transition to metering competition and supplier choice over metering technology, due to the existence of competing PPM technologies (token, key, and smartcard) each with an associated infrastructure characterised by economies of scale<sup>3</sup>. Token PPMs in particular were considered to be likely

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<sup>1</sup> See Ofgem (2004), Electricity distribution price control review: Final proposals.

<sup>2</sup> See Ofgem (2001), Review of Transco's Price Control from 2002 - Final Proposals.

<sup>3</sup> This situation contrasts with gas metering, where only one viable PPM technology was in existence at the time of setting the price controls and there was no equivalent risk of asset stranding due to supplier choice over gas PPM technology. While there is a risk that price

candidates for replacement due to their high overall costs-to-serve and their need for manual recalibration in the event of price changes.

Because the risk of stranding had arisen in part due to previous regulatory decisions to allow investment in a range of PPM technology, Ofgem accepted that in the case of electricity, DNOs had a legitimate case for some form of protection from PPM premature replacement costs. We therefore introduced a mechanism into the distribution licence allowing DNOs to apply for an increase in the price cap for PPMs, in circumstances where these meters are replaced early due to supplier action. Ofgem's decisions signalled that some but not all of the stranded costs would be recovered in this way with decisions to be taken on a case-by-case basis.

A recent application under this licence provision from one of the DNO businesses of EDF Energy Networks has highlighted a number of problems with the mechanism we put in place. If suppliers respond to the price increase by accelerating their changeout plans, this in turn could create problems for the DNO in trying to recover costs from a rapidly diminishing meter base. The mechanism therefore provides limited certainty to DNOs regarding cost recovery and may create a conflict between suppliers and DNOs regarding the rate of meter replacement.

In light of these and other concerns, we have decided to carry out a consultation process to seek comments on the current mechanism and the desirability of replacing it with new arrangements. Our proposed alternative is that where DNOs can demonstrate that their token meters are about to be prematurely replaced with another PPM technology, they would receive compensation through a temporary increase in the price cap on all price controlled meters - ie, credit meters as well as all types of PPMs. The increase in the price caps would be designed to deliver compensation to DNOs equivalent to around 30% of estimated token meter stranding costs. The new mechanism would only be available for token PPMs, not for key and smartcard meters and these meter types would no longer be afforded regulatory stranding protection.

As well as avoiding the perverse incentives noted above, the proposal means that there will be no risk that the cost of premature replacement will be recovered only from PPM customers who are typically on low incomes or in debt. If these new arrangements are agreed to by DNOs, a number of licence changes will be required to give them effect and to remove the existing asset life adjustment mechanism. We also propose to modify the licence to bring the tariffs for multi-rate PPMs within the same control framework as that for single-rate meters. We intend to issue formal notification of any proposed licence changes by February 2007 at the latest, which should allow us to complete any changes to the distribution licence by 1 April 2007.

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control limitations on the differential between gas PPM and credit meters may distort competition, and lead to suppliers unbundling part of their metering portfolio, in these circumstances arrangements are in place to allow National Grid to apply to Ofgem for a change to the price cap (see Amended Special Licence Condition 31 (4)(1)).

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## 1. Introduction

1.1. Securing effective competition in metering is one of Ofgem's key objectives. Since 2000, Ofgem has taken several steps to deliver this policy including setting separate price controls for electricity and gas meters. We have recently consulted on the future treatment of these controls and will issue a decision document on this matter shortly.

1.2. This consultation paper addresses a specific issue that has arisen with respect to the electricity metering price controls - namely, the premature replacement of electricity prepayment meters (PPMs). When the electricity price controls were set in 2005, DNOs expected that in the transition to metering competition, replacement of certain types of PPMs might occur before the cost of these meters had been recovered. The main driver of this risk was the existence of competing PPM technologies (token, key, and smartcard), each with an associated infrastructure. Of these three technologies, token PPMs are notably less efficient than the others due to their high costs-to-serve. Moreover, PPM Interoperability Protocol (PPMIP) also requires a minimum number of meters to provide economies of scale.

1.3. Taken together with the introduction of supplier choice over technology, these issues made it likely that suppliers in particular ex-PES regions would coalesce around one type of PPM technology in order to minimise costs. Such developments are a welcome result of the transition to metering competition, and should lead to reduced costs and improved service levels for PPM customers. Nonetheless, they do create an asset stranding risk for DNOs. When the electricity metering price controls were set in 2004/05, Ofgem acknowledged that this risk had arisen in part due to previous regulatory decisions to allow investment in a range of PPM technology, and therefore accepted that DNOs had a legitimate case for some form of protection from PPM premature replacement costs:

"In Great Britain there are three different types of technology used for [electricity] PPM (token, key, and smartcard). Each has an associated infrastructure. Owing to the infrastructure costs, if a supplier decides on a particular PPM technology then it is possible that the installed PPM will be replaced... even if the DNO lowers the price of the meter to encourage continued use. Since these meters have been provided as a result of regulatory obligation it would be inappropriate for all the burden of this risk to fall solely on the DNOs.<sup>4</sup>"

1.4. In the course of consultation there was debate over the most appropriate mechanism for compensating DNOs for these premature replacement costs. Regulated termination charges were proposed by some DNOs, but this option was specifically ruled out by Ofgem because of the likelihood that it could stifle the development of metering competition. Instead, a mechanism was introduced into

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<sup>4</sup> see Ofgem (2004), Electricity distribution price control review: September update paper, p8.

the licence to allow DNOs to apply to Ofgem to reduce, for the purposes of setting the price control rate, the asset life of PPMs, in circumstances where these meters are replaced at an accelerated rate due to supplier action. Under the price control formula, reducing the asset life of a specific type of PPM (eg, token PPMs) has the effect of increasing the tariff cap on those meters for the time that they remain in use - thereby allowing DNOs to recover some of the costs of premature PPM replacement from suppliers and their customers. The relevant provisions are set out under Special Condition F1 of the distribution licence, Parts A and E.

1.5. While Ofgem made a commitment to offer some protection to DNOs via this mechanism, the price control decision documents made clear that customers were not expected to bear the full costs of PPM premature replacement in all cases. A maximum PPM asset life adjustment of 30% was signalled in the price control review but with decisions to be taken on a case-by-case basis.

## Application from EDF Energy Networks

1.6. One of the DNO businesses of EDF Energy Networks recently made the first application to Ofgem for an adjustment to the asset life of token electricity PPMs under the licence provisions outlined above. This followed a request from the incumbent supplier to accelerate the replacement of token meters in the relevant area. Based on the projected replacement programme of suppliers in its region, EDF Energy Networks applied for a reduction of more than 50% in the asset life of its token meters. If this adjustment were allowed by Ofgem under the price control formula, it would more than double the allowed rental tariffs on these meters (from £9.51 to above £20.00) over the period that EDF Energy Networks estimates it will take for token meters in the area to be changed out.

1.7. This application has raised a number of issues with the operation of the asset-life adjustment mechanism. We are also aware that other suppliers have changeout plans for token meters that may lead other DNOs to make similar applications in the near future. In light of this, we have reached agreement with EDF Energy Networks that they temporarily withdraw their application while we carry out a consultation process to inform our view on the best way forward.

1.8. While Ofgem fully intends to honour commitments made at the time of the last price control review regarding PPM premature replacement costs, we are not convinced that the current asset life adjustment mechanism is the best means of achieving this. This consultation process seeks comments on the current mechanism and a possible alternative, with a view to arriving at a robust solution agreeable to all parties.

## Structure of Document

1.9. In what follows, we first set out in more detail the operation of the current licence mechanism and the problems flowing from it. We then outline a possible alternative approach and seek comment on how this could operate. We also seek

information from DNOs on a number of related issues, including estimates of the likely size of electricity PPM stranding costs within their region(s).



## 2. Key Issues Relating to the Current PPM Adjustment Mechanism

### Chapter Summary

This chapter describes the current PPM asset life adjustment mechanism and outlines the concerns we have with it. We also discuss and seek input on the likely size of electricity PPM stranding costs across Great Britain.

### Question Box

**Question 1:** Have we made an accurate assessment of the problems with the current electricity PPM asset life adjustment mechanism?

**Question 2:** As part of our assessment, it would be useful for us to obtain a more accurate picture of the likely size of electricity PPM stranding costs due to technological standardisation, across Great Britain. We would therefore be grateful if all DNOs could provide us with the following, on a confidential basis if required:

- ➔ information on the number of installed token meters in their region(s) and the age profile of these meters
- ➔ information on the proportion of single-rate versus two-rate meters in the token meter asset base
- ➔ information on the likely timeframe for changeout of the token meter asset base (supported with evidence where possible) and a fully worked estimate of the stranded costs that this is likely to present
- ➔ information on any supplier plans to conduct an accelerated replacement of other types of PPM technology (key or smartcard), the rationale behind these plans and the number of meters that might be affected by these plans.

### Description of Current Mechanism

2.1. As discussed in the previous chapter, the current mechanism for allowing DNOs to recover costs associated with premature replacement of PPMs consists of an adjustment to the meter asset life within the Meter Asset Provision (MAP) price control formula<sup>5</sup>. This adjustment in turn has the effect of increasing the allowed rental for that type of meter (whether token, key, or smartcard PPM) for the time it

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<sup>5</sup> Meter Operations are regulated through separate price control formulae.

remains in use. The relevant provisions are set out under Special Condition F1 of the distribution licence, Parts A and E.

2.2. According to the price control formula, reductions in regulatory asset life lead to increases in the tariff. Moreover, large reductions lead to increasingly high unit rate increases - for example, a 50% reduction in asset life would translate into a 70% increase in the tariff, whereas a 30% reduction in asset life (the figure signalled in the price control decision document) would lead to only a 26% increase in the tariff<sup>6</sup>.

2.3. The process for triggering the asset life adjustment mechanism begins with the licensee (ie, a DNO) proposing a "relevant reduction" in meter asset life, in cases where supplier action has caused the meter asset life to fall below that which was assumed in setting the original price control. A "relevant reduction" is defined in the licence as "one which, in the opinion of the licensee, would, if made, have the effect of enabling the licensee to recover the efficient costs incurred or likely to be incurred in relation to basic meter asset provision" (paragraph 18 of Special Condition F1).

2.4. In making its proposal to the Authority, the licensee must set out the basis on which the relevant reduction has been calculated, and the date on which the reduction is desired to take effect. On the basis of this information, the Authority then has the power to determine what the actual reduction should be, and must do so within 28 days of receiving the notice. The Authority is required to consult with the licensee and have particular regard to the purposes of the licence condition in making its decision.

### **Problems with Current Mechanism**

2.5. In the course of assessing the application from EDF Energy Networks, it has become apparent that there are a number of difficulties with the current asset life adjustment mechanism. Most importantly, the mechanism has the potential to distort incentives on both suppliers and DNOs with respect to the changeout of PPMs.

2.6. If suppliers respond to the price increase by accelerating their changeout plans, this in turn could create problems for the DNO in trying to recover costs from a rapidly diminishing meter base. The mechanism therefore provides limited certainty to DNOs regarding cost recovery and may create a conflict between suppliers and DNOs regarding the rate of meter replacement.

2.7. Other apparent problems with the licence mechanism include the following:

- there is a lack of clarity in the licence regarding the basis that should be used for allocating stranded costs between DNOs and customers
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<sup>6</sup> The basic reason for this pattern is that the value of the asset is being recovered over a timeframe which is trending towards zero as the asset life reduces.

- the licence sets out a clear price control and asset life adjustment mechanism only for single-rate PPMs - the tariff caps for dual-rate PPMs are not well specified
- the licence mechanism applies not just to token PPMs (which are at particular risk of stranding due to their high costs-to-serve), but also to key and smartcard PPMs. It is not immediately obvious that there are stranding risks worthy of regulatory protection associated with these other meter types
- the mechanism is complex to administer, particularly in light of the relatively small amounts of money at stake overall.

Each of these issues is discussed in more detail below.

### **Lack of clarity regarding basis for cost allocation**

2.8. Although the price control decision documents clearly state that customers should not bear the full costs of PPM premature replacement (a maximum 30% reduction in asset life was signalled by Ofgem), the licence does not provide a clear basis for allocating these costs between DNOs and suppliers/consumers. The 30% cap on asset life adjustment is not actually specified in the licence, which instead makes reference to the need for DNOs to recover "efficient costs".

2.9. In any case, the relationship between asset life adjustment and the allocation of premature replacement costs is not straightforward or predictable, since the final allocation will depend on the length of time which the meter type in question actually stay on the walls. A 30% reduction in asset life could actually lead to customers bearing all of the costs of premature replacement depending on how quickly the meters are changed out (i.e. if the assets lasted only 70% of their useful economic life). In light of this, it may be preferable to agree on and set a figure for the split of stranding costs to be recovered from DNO shareholders and consumers, rather than setting a figure based on asset life adjustment. This could also reduce regulatory uncertainty for DNOs and lead to a transparent, uniform cost sharing mechanism.

### **Single-rate vs dual-rate PPMs**

2.10. Under the licence, the price control formula and asset life adjustment mechanism for single-rate PPMs are clearly spelled out. However, for dual-rate or multi-rate PPMs, tariffs are covered under a separate licence provision which is not well specified. In particular, the asset life term for multi-rate PPMs is left undefined in the licence, and there is no process set out for adjusting it. This suggests that provided the asset life used to set tariff charges is not unreasonable, DNOs currently have a degree of flexibility over their tariffs for dual-rate PPMs - although the licence provisions are not entirely clear on this point.

2.11. Given that two-rate and single-rate PPMs are effectively the same asset, but simply configured differently, we do not think the current licence provision around multi-rate PPMs is sensible - nor is it clear that the Authority would consider it

reasonable for DNOs to charge different prices for these meters<sup>7</sup>. If DNOs are required to seek approval from the Authority for an adjustment to single-rate PPM tariffs, it seems logical that the same process should apply to two-rate meters. While our understanding is that two-rate meters comprise a minority of the PPM asset base in most regions, in others they in fact comprise the bulk of PPM meters. Bringing both types of meters under the same transparent price cap would reduce regulatory uncertainty for DNOs and make the control arrangements equitable across DNO regions.

### **Token PPMs vs other types of PPMs**

2.12. Finally, the asset life adjustment mechanism in the licence currently applies not just to single-rate token PPMs, but also to single-rate key and smartcard PPMs. This means that there is the potential for DNOs (either now or in future) to apply to Ofgem for an adjustment to the tariff for these other meter types. While in theory it is possible that these other meter types could face premature replacement due to technology standardisation, it seems to us that it is primarily token meters that are at risk in the transition to competition due to their high costs-to-serve. Moreover, Ofgem has encouraged suppliers to replace token meters for social reasons, since they can leave consumers with considerable debt due to the need to be manually recalibrated when prices rise.

### **Administrative complexity**

2.13. In part because of the issues outlined above - particularly the lack of clarity around cost allocation between DNOs and their customers, and the fact that the mechanism extends to other types of PPMs rather than solely token PPMs - the current adjustment mechanism is relatively complex to administer and is burdensome for both the regulator and DNOs. This does not seem to be warranted by the scale of the PPM stranding cost problem, as discussed in the next section.

### **Scale of PPM Stranding Costs**

2.14. In deciding on the best approach to be taken with respect to protection for PPM premature replacement costs, it is useful to have some idea of what the scale of these costs could be across Great Britain. We have made a rough estimate of this based on the methodology used by EDF Energy Networks in calculating stranding costs for their token meters in the relevant DNO area, and multiplying this by estimates of the total number of token meters across GB. This gives us a figure of around £26 million (NPV) in total GB-wide stranding costs, which is a relatively small figure in the context of the market as a whole - equating to around £1 per electricity

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<sup>7</sup> It is worth noting that, to our knowledge, most DNOs currently charge the same tariff for single and multi-rate PPMs of the same technology.

customer, even if the full cost of stranding were recovered from customers themselves.

2.15. The methodology we have used to estimate GB-wide stranding costs is imprecise and relies on assuming that:

- EDF Energy Networks have made an accurate calculation of their stranding costs per token meter
- the age profile of token meters across GB is similar to the age profile of EDF Energy Networks' token meters. They have advised us that the average age of token meters in the relevant DNO region is around 7.5 years
- the timeframe for changeout of token meters across GB is similar to that in EDF Energy Networks' DNO region. In their stranding calculations, EDF Energy Networks assumed an average token meter changeout period of approximately 18 months from the present date.

2.16. As part of the current consultation exercise, it will be important for Ofgem to arrive at a more robust understanding of the likely size of PPM stranding costs. We therefore invite DNOs to submit to us - on a confidential basis if they wish - an estimate of these costs in their region(s). As part of this, we would expect DNOs to provide Ofgem with the following empirical information:

- the number of installed token meters in their region(s) and the age profile of these meters
- the proportion of single-rate versus two-rate meters in the token meter asset base
- the likely timeframe for changeout of the token meter asset base and a fully worked estimate of the stranded costs that this is likely to present
- supplier plans to conduct an accelerated replacement of other types of PPMs (key or smartcard) and the number of meters that might be affected by these plans.

### 3. Proposed Approach

#### Chapter Summary

This chapter proposes an alternative to the current asset life adjustment mechanism for compensation of PPM premature replacement costs. We seek feedback on all aspects of our proposal, including the licence changes that would be needed to implement it.

#### Question Box

**Question 1:** Do the problems with the current electricity PPM asset life adjustment mechanism justify replacing it with an alternative mechanism?

**Question 2:** If so, do you agree with the alternative we have proposed? In particular, we welcome comment on the following points:

- ➔ the proposal to compensate DNOs for token PPM premature replacement costs via a tariff increase across all price-controlled meters
- ➔ the proposal to remove further stranding protection from key and smartcard meters
- ➔ the proposal to bring two-rate/multi-rate PPMs within the current tariff cap for single-rate PPMs (and also whether it would make sense to carry out a similar procedure with respect to multi-rate credit meters)
- ➔ the appropriate "split" that should be applied in allocating PPM premature replacement costs between DNOs and suppliers/consumers.

**Question 3:** Have we made an accurate assessment of the changes that would be needed to the distribution licence in order to give effect to our proposals?

**Question 4:** [DNO licensees only] Would you be willing to agree to modifications to the distribution licence along the lines of those set out in this chapter? If not, in what ways do our proposals fall short of your addressing your concerns?

3.1. In light of the issues and problems discussed in the previous chapter, we would like to propose and seek feedback on an alternative approach for compensation of PPM premature replacement costs. This approach would require a number of changes to the distribution licence, and therefore requires the approval of DNOs.

3.2. Our initial proposal is that where DNOs can demonstrate that their token meters are about to be prematurely replaced by another PPM technology, they would receive compensation through an increase in the price cap on all price controlled meters -

credit meters and other PPMs as well as token PPMs. The increase in the price caps would be broadly designed to deliver compensation to DNOs equivalent to around 30% of estimated token meter stranding costs.

3.3. In light of our estimates above that the total token PPM stranding costs equate to around £1 per electricity customer, this suggests that (for example) allowing DNOs to recover 30% of this amount would equate to a per meter charge of around 30 pence. In this case, the meter charge uplift would need to be applied as a temporary measure for one year only.

3.4. Clearly a benefit of smearing the charges across all meters is that the increase per meter required to deliver a given amount of cost recovery is relatively low. As well, the approach means that there will be no risk that the cost of premature replacement will be recovered only from PPM customers who are typically on low incomes or in debt.

### **Licence Implications of our Proposals**

3.5. Implementing the proposals set out above is likely to require the following adjustments to the distribution licence.

3.6. Firstly, the current PPM asset life adjustment mechanism would need to be removed from the licence for all meter types. This would entail removing paragraphs 17-21 as currently set out in Special Condition F1, and also removing the asset life adjustment term (LRTPPM) from the price control formulae for token, prepayment, and smartcard meters.

3.7. Secondly, a new adjustment mechanism would need to be introduced into the licence to give effect to our proposals set out above. While the structure and wording of this will need to be determined following feedback from respondents, the general approach would be to require DNOs to first submit evidence regarding premature replacement of token meters in their region, with the Authority then able to approve a consequential adjustment to the rental tariff on all price controlled meters. The adjustment would be designed to allow recovery of a set proportion of the estimated token PPM premature replacement costs, through a temporary tariff increase for one year only.

3.8. Finally, changes would be needed to the licence in order to bring the tariffs for two-rate PPMs within the same control framework as that for single-rate meters. This could be achieved by simply removing the phrase "single-rate" from the current price controls on single-rate token, key and smartcard PPMs (paragraphs 4-6 of the distribution licence) and at the same time removing the reference to multi-rate single-phase PPMs under paragraph 8 of the licence which sets out the current "loose control" on these types of meters. (For consistency, it could also be worth carrying out a similar procedure to bring the tariffs for multi-rate credit meters into the current control for single-rate credit meters. We welcome any comments on this.)

3.9. We would welcome comments on all aspects of our proposals and in particular an indication from DNOs as to their likely support for the licence modifications set out above.

### **Process/Next Steps**

3.10. Once we have received all responses to this consultation exercise (by 10 November 2006), we will look to conclude our analysis of the electricity PPM premature replacement cost issue based on the information provided. If we receive indicative agreement from DNOs to our proposals, we will then proceed with the drafting of necessary amendments to the distribution licence provisions.

Our legislative requirements state that we must formally consult on any proposed changes to licence provisions with a minimum of 28 days for interested parties to make representations. At this stage, we intend to issue formal notification of any proposed licence changes by February 2007 at the latest. This should allow us to complete any changes to the distribution licence by 1 April 2007.



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## Appendix 1 - Consultation Response and Questions

1.1. Ofgem would like to hear the views of interested parties in relation to any of the issues set out in this document.

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 10 November 2006 and should be sent to:

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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/s 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. Next steps: Having considered the responses to this consultation, Ofgem intends to issue formal notification of any proposed licence changes by February 2007 at the latest. This should allow us to complete any changes to the distribution licence by 1 April 2007. Any questions on this document should, in the first instance, be directed to:

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Regulatory Economist, Retail Competition  
Ofgem  
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### **CHAPTER: One**

No questions.

### **CHAPTER: Two**

**Question 1:** Have we made an accurate assessment of the problems with the current electricity PPM asset life adjustment mechanism?

**Question 2:** As part of our assessment, it would be useful for us to obtain a more accurate picture of the likely size of electricity PPM stranding costs due to technological standardisation, across Great Britain. We would therefore be grateful if all DNOs could provide us with the following, on a confidential basis if required:

- ➔ information on the number of installed token meters in their region(s) and the age profile of these meters
- ➔ information on the proportion of single-rate versus two-rate meters in the token meter asset base
- ➔ information on the likely timeframe for changeout of the token meter asset base (supported with evidence where possible) and a fully worked estimate of the stranded costs that this is likely to present
- ➔ information on any supplier plans to conduct an accelerated replacement of other types of PPM technology (key or smartcard), the rationale behind these plans and the number of meters that might be affected by these plans.

### **CHAPTER: Three**

**Question 1:** Do the problems with the current electricity PPM asset life adjustment mechanism justify replacing it with an alternative mechanism?

**Question 2:** If so, do you agree with the alternative we have proposed? In particular, we welcome comment on the following points:

- ➔ the proposal to compensate DNOs for token PPM premature replacement costs via a tariff increase across all price-controlled meters
- ➔ the proposal to remove further stranding protection from key and smartcard meters

- ➔ the proposal to bring two-rate/multi-rate PPMs within the current tariff cap for single-rate PPMs (and also whether it would make sense to carry out a similar procedure with respect to multi-rate credit meters)
- ➔ the appropriate "split" that should be applied in allocating PPM premature replacement costs between DNOs and suppliers/consumers.

**Question 3:** Have we made an accurate assessment of the changes that would be needed to the distribution licence in order to give effect to our proposals?

**Question 4:** [DNO licensees only] Would you be willing to agree to modifications to the distribution licence along the lines of those set out in this chapter? If not, in what ways do our proposals fall short of your addressing your concerns?

## 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 Gas Act 1986, the Electricity Act 1989, the Utilities Act 2000, 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>8</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>9</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>10</sup>; and
- The interests of individuals who are disabled or chronically sick, of pensionable age, with low incomes, or residing in rural areas.<sup>11</sup>

<sup>8</sup> entitled “Gas Supply” and “Electricity Supply” respectively.

<sup>9</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>10</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>11</sup> The Authority may have regard to other descriptions of consumers.

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:

- Promote efficiency and economy on the part of those licensed<sup>12</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>13</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>12</sup> or persons authorised by exemptions to carry on any activity.

<sup>13</sup> Council Regulation (EC) 1/2003

## Appendix 3 - Glossary

### C

#### Credit meters

Credit meters record customers' use of energy on an ongoing basis and allow billing and payment to be made in arrears. This is in contrast to Prepayment Meters (PPMs) which require payment in advance via cards, keys or tokens.

### D

#### Distribution Network Operators (DNOs)

DNOs came into existence on 1 October 2001 when the ex-Public Electricity Suppliers were separated into supply and distribution businesses. There are 14 DNOs covering discrete geographical region of Britain. They take electricity off the high voltage transmission system and distribute this over low voltage networks to industrial complexes, offices and homes. DNOs must hold a licence and comply with all distribution licence conditions for networks which they own and operate within their own distribution services area. DNOs are currently obliged to provide electricity meters at the request of a supplier.

### E

#### EDF Energy Networks

A distribution company which owns and operates DNOs in London, the South East and East of England.

### G

#### Gas Transporter

A company, licensed by Ofgem, which transports gas through its network on behalf of a gas shipper.

### M

#### Meter Asset Provision/Meter Asset Provider (MAP)

The ongoing provision of the meter installation at a meter point. In electricity the Meter Asset Provider is responsible for supplying electricity-metering equipment for the purpose of satisfying the electricity settlements process, the requirements of the

relevant Use of System Agreement and the relevant primary and secondary legislation.

#### Meter Operation/Meter Operator (MOp)

Meter operation comprises all work associated with the installation, commissioning, testing, repair, maintenance, removal and replacement of electricity metering equipment, as defined in Section 1B of standard condition 36B of the electricity distribution licence.

#### Meter Provision

Shorthand term for Meter Asset Provision.

#### Metering Services

Metering Services has been used in this document as a shorthand term to refer to the full range of services relating to both gas and electricity meters, including meter provision, installation, repair, removal and maintenance. Metering Services are defined in the electricity distribution licence as comprising the services of both Meter Asset Provision and Meter Operation.

## N

#### National Grid Gas (formerly Transco)

The major UK gas transporter which transports gas through its networks on behalf of shippers. NGG provides installs and maintains the vast majority of domestic gas meters in this country.

## P

#### Prepayment meters

Prepayment meters currently use electronic tokens, keys or cards which require payment for energy to be made in advance of use. The customer therefore needs to be provided with a network of outlets where tokens can be purchased, or cards and keys can be charged up. This network of outlets needs to be linked to a payment settlement system for suppliers.

#### Premature replacement costs

In the context of electricity prepayment metering, costs associated with the replacement of existing PPMs with an alternative PPM technology before the full cost of these meters have been recovered from suppliers and their customers.



## 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:

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