

Promoting choice and value for all gas and electricity customers

Metering Price Control Review

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Target audience: This document may be of particular interest to suppliers, network operators, consumer groups, meter asset providers, meter asset managers, meter operators and metering manufacturers.

Overview:

Ofgem put in place price controls on domestic gas and electricity metering to protect customers during the transition to metering competition. We are launching this review as some of the electricity metering controls fall away on 31 March 2007 and it is five years since we set the current gas metering controls.

We are currently investigating National Grid's gas metering contracts under the Competition Act and have recently issued a Statement of Objections. Our initial view is that we should not review the gas metering controls until this investigation concludes. On electricity metering, we think that competitive pressures in certain segments of the market means we can lift the current controls on the provision of new and replacement meters and on meter operation from 1 April 2007. We propose to retain controls on the rental charges for existing electricity meters and review them at the end of their five year term in 2010. We would welcome views on all of our proposals.

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Context

Since 2000 Ofgem has taken measures to facilitate competition in gas and electricity metering services, to promote lower metering costs, better service and encourage innovation and the introduction of smarter forms of metering. We remain committed to metering competition including in the context of the introduction of smart meters. We have set out why we think competition is the best way to deliver our objectives, following extensive analysis and consultation, in a companion document on metering innovation that is published in parallel with this consultation document¹.

As part of the transition to metering competition, separate price controls were set for domestic gas and electricity metering services in April 2002 and April 2005 respectively. We set out our views on the future of these controls in this consultation document and invite views on these matters.

Our work on metering innovation has been an important consideration in the development of the recommendations set out in this document. Three other initiatives are relevant to the metering price control consultation:

- Ofgem is conducting a Competition Act investigation of the Metering Service Agreements (MSAs) between National Grid and energy suppliers for the provision, installation and maintenance of gas meters
- Ofgem is also investigating allegations against EDF Energy plc in relation to its decision to withdraw meter data services from electricity suppliers that are not affiliated to EDF
- Finally, the UK Government is currently considering the implications of the Energy Services Directive (ESD) and whether changes need to be made to metering technology to provide customers with more accurate bills and real time feedback on consumption.

Associated Documents

- Domestic metering innovation: Next steps. June 2006 (Reference 107/06)
 http://www.ofgem.gov.uk/ofgem/whats-new/index.jsp
- Ofgem Press Release Gas and Electricity Markets Authority issues statement of objections against National Grid following Competition Act investigation. May 2006 (Reference R/30)

http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattache/15082_ofgem3006.pdf

 Domestic metering innovation: Consultation document. February 2006 (Reference 20/06)

http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/13745_2006.pdf

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¹ See Ofgem, Metering innovation: Next steps. June 2006 (Ref 107/06)

- The proposed restructuring of National Grid Transco's metering business: Consultation document. March 2005 (Reference 78/05)
 http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/10610_7805.pdf
- Electricity distribution price control review: Final proposals. November 2004 (Reference 256/04)

http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/9416_26504.pdf

 Ofgem's strategy for metering: Report on progress and next steps. May 2002 (Reference 40/02)

http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/1994_40metering_strategy_pdf

- Ofgem's strategy for metering: Report on progress and next steps. October 2001
 http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/2075_62_metering_update
 .pdf
- Review of Transco's price control from 2002: Final proposals. September 2001 (Reference 56/01)

http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/315_26sep01_pub1.pdf

- Ofgem's strategy for metering: A consultation paper. March 2001 http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/2105_28_metering.pdf

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Summary

An important component of Ofgem's work in establishing effective metering competition has been to set price controls on the former monopoly metering businesses, to protect customers during the transition to a competitive market while also promoting competition. Some electricity metering controls are due to fall away on 31 March 2007 and this date also marks five years since we set the current gas metering controls².

Gas metering controls

In deciding on the future treatment of the metering controls, we have considered the implications of Ofgem's ongoing Competition Act investigation into National Grid's Metering Service Agreements (MSAs). These special circumstances mean it is not appropriate for Ofgem to make or invite comment on the state of gas metering competition at this point and we do not intend to remove these controls. We will hold a full consultation on the future treatment of the gas metering price controls once the outcome of the Competition Act investigation is known. Our proposals mean that, in the interim, the current gas metering controls would remain in place. We would welcome views on our proposed approach.

National Grid has argued that the price cap for pre-payment gas meters (PPMs) is below the cost of providing the meters. It had signalled its intention to novate the MSAs to its unregulated metering business and increase PPM charges by about £15 per meter per year. National Grid postponed these plans when our Competition Act investigation was launched. We would welcome views from National Grid, competing meter suppliers and other interested parties on whether they think there is a case to review the PPM cap before the completion of our investigation.

Electricity metering controls

The electricity metering price controls apply to all domestic meters installed by former monopoly Distribution Network Operators (DNOs), including meters installed after the control was set (new and replacement meters), and on the services DNOs perform in relation to electricity meters (meter operations).

Our review shows that competition in domestic electricity metering is developing well. One major domestic supplier is already sourcing meter operation and new and replacement meters from competitive metering companies. Most of the other major domestic suppliers either have or are considering tendering for all or part of their metering portfolio in order to get better or cheaper services. Some suppliers are considering expanding the role of their in-house metering businesses to compete against the former monopolists for market share. In some cases where suppliers

 $^{^2}$ These controls apply to basic meters (not so called "smart" meters) and impact mainly, but not exclusively, on the price charged for meters on domestic premises.

have remained with the incumbent, they have tested the market to see if it can offer improved service or reduced cost.

The number of meters being installed and operated on a competitive basis has risen over the past few years and now stands at around 20%³. There are now around ten meter businesses in the GB electricity sector. There is potential for increased competition amongst these players. Importantly, there are competing metering businesses in all of the former monopoly DNOs' regions.

Electricity meters typically last between 10 and 20 years before they need to be replaced. Unless the former monopolists choose to sell all or part of their installed meters (legacy meters), or suppliers and customers choose to replace existing meters with more innovative, smart meters, the DNOs are likely to retain high market shares for the provision of legacy meters for a number of years. In the meantime, and given that suppliers face up-front installation charges when they replace a meter, competition may not be sufficient to constrain rental charges for legacy meters.

Against this background, our initial view is that from April 2007, the price controls for electricity meter operations and for the provision of new and replacement meters should be removed. This would also mark the end of the incumbent DNOs' obligation to supply meters. In contrast, we propose to retain the controls on the rental charges for the legacy meters of the incumbent DNOs, and to review these controls at the end of their five year term in 2010.

We would welcome views on our proposals. We would also be interested in views on any barriers preventing suppliers from being able to use competitive rather than regulated metering businesses. We would also welcome views from smaller suppliers on the development of competition in the provision of meters, meter operation and meter reading services.

Energy Services Directive

Finally, the Energy Services Directive has the potential to have a significant impact upon the development of competition in the metering market, specifically if government decides to place obligations on suppliers to introduce more innovative meters. We continue to monitor developments and will assess their implications for metering price control when there is greater certainty on how the Directive will be implemented in the UK.

³ ie, 20% of the new/replacement meter and meter operation segments of the market.

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 remain committed to metering competition including in the context of the introduction of "smart" meters. We have set out why we think competition is the best way to deliver our objectives, in a companion document on metering innovation that is published in parallel with this consultation document⁴.
- 1.2. The current metering controls were set in April 2002 and April 2005 for gas and electricity respectively. These apply to the incumbent meter businesses, that is, the Gas Transporters⁵ and the Distribution Network Operators⁶ in each of the electricity distribution regions. They place a cap on basic (not smart) meters only and mainly relate to the prices charged in relation to meters installed at domestic premises.
- 1.3. Ofgem has decided to consult on the price controls ahead of 31 March 2007 when certain electricity metering controls are due to fall away. This date also marks the fifth anniversary of the current gas metering controls.
- 1.4. This paper considers the most appropriate future treatment of the gas and electricity metering controls and invites views on these matters. We discuss the gas and electricity metering price controls separately since different factors need to be taken into account when deciding on the treatment of each control.
- 1.5. This consultation occurs in a context where metering has received considerable attention. Over the past few months, Ofgem has been consulting on the benefits of metering innovation in order to reach a decision on what we should be doing to encourage the introduction of smart meters. This exercise has reaffirmed our view that removing obstacles to metering competition is the most appropriate means of facilitating metering innovation. The ongoing interest in metering innovation, and the need to create an environment conducive to promoting the prospects for smart meters, has been an important consideration in our review of the price controls.
- 1.6. At the same time, Ofgem and market participants are awaiting the Government's guidance on how it intends to implement the Energy Services Directive (ESD). The directive includes provisions that may be interpreted as requiring

⁴ See Ofgem, Metering innovation: Next steps. June 2006 (Ref 107/06)

⁵ National Grid Gas and the four independent distribution networks created through the partial divestment of National Grid's distribution business in 2005.

⁶ Electricity DNOs are those companies operating distribution networks in the 14 ex-PES regions, and currently comprise Scottish & Southern Energy (SSE), Scottish Power, United Utilities, Yorkshire Electricity Distribution Ltd (YEDL), Northern Electricity Distribution Ltd (NEDL), EON, Electricity de France (EDF Energy), and Western Power Distribution (WPD).

suppliers to make changes to billing and introduce more widespread time of use metering. In this case the further development of competition in basic metering services would cease. Our recommendations regarding metering price controls have, as far as possible, taken the implications of the ESD into account but our decisions on metering price control may need to be revisited in future depending on the outcomes of the ESD decision.

1.7. Ofgem is also currently carrying out two Competition Act investigations related to metering. The first investigation, into National Grid's Metering Services Agreements with gas suppliers, has been an important influence on our thinking regarding the gas metering controls as set out in Chapter 2. The second investigation centres on allegations against EDF Energy plc, in relation to its decision to withdraw meter data services from electricity suppliers that are not affiliated to EDF. While price controls do not apply to domestic meter reading and data services, we welcome comments particularly from smaller suppliers on their experience in obtaining meter data services in a competitive environment.

Document structure

- 1.8. In the first part of this consultation (Chapter 2) we set out our approach to the gas metering controls, where the key factor influencing our views has been the ongoing Competition Act investigation of the Metering Service Agreements between National Grid and energy suppliers for domestic gas meters.
- 1.9. The remainder of the document sets out in more detail the issues that impact upon the future treatment of the electricity metering controls. We provide an overview of the controls and how they were set (Chapter 3) before turning to discuss the current state of competition in the electricity metering market (Chapter 4). We consider the mechanisms by which competition can occur in this market and assess the development of competition over recent years as well as how the market may develop in future.
- 1.10. We conclude (Chapter 5) by setting out our preliminary recommendations for the future treatment of the electricity price controls.

Terminology

1.11. From Chapter 3 onwards, we use the terms "meter provision" and "meter operation" when referring to electricity meter asset provision on the one hand and the installation and maintenance of electricity meters on the other⁷. Throughout the document we use the term "metering businesses" to denote companies engaged in one or other or both of these activities. A full glossary is contained in Appendix 4.

⁷ According to Section 36B of the electricity distribution licence, meter operation activities include the installation, commissioning, testing, repair, maintenance, removal and replacement of metering equipment.

2. Gas Metering Price Controls

Chapter Summary

This chapter sets out our preliminary decisions regarding the treatment of the gas metering price controls from April 2007. We do not intend to review these controls until the conclusion of Ofgem's ongoing Competition Act investigation into National Grid's gas metering contracts.

Question Box

Question 1: Is it necessary to review the price controls on gas meters prior to conclusion of the Competition Act investigation?

Question 2: Is it necessary to reset the level of the cap on gas PPM meters prior to conclusion of the investigation?

Background

- 2.1. The gas metering price controls were set in 2002, and cap the price that gas transporters can charge in respect of both credit and prepayment (PPM) meters. More detail on the methodology used to set the caps and their level is set out in Appendix 2.
- 2.2. Since the current controls were set, National Grid has entered into Metering Service Agreements (MSAs) for the provision, maintenance and installation of domestic gas meters with most suppliers⁸. These contracts provide credit meter prices below the price cap in return for suppliers agreeing to replace meters at a rate prescribed by National Grid. Those suppliers not party to the MSAs are served via the Provision and Maintenance Agreements that were negotiated between National Grid and suppliers as a group.
- 2.3. The price controls currently apply to meters covered by the MSAs because the contracts have been struck with National Grid Metering, a wholly owned subsidiary of National Grid Gas which is a licensed gas transporter. However, provisions in the MSAs allow them to be novated to other businesses within the National Grid group. Were this to occur, the price controls would no longer apply to meters covered by the MSAs.
- 2.4. In 2004 National Grid notified us of its intention to transfer these contracts to UMS, its commercial metering business, as part of a broader restructuring of its

⁸ One major supplier, EDF Energy and a number of smaller suppliers have not entered into these contracts.

metering operations. The company also notified us of its intention, on novation, to rebalance the relative price for credit and prepayment meters while ensuring that total contract revenues remain unchanged. In March 2005 Ofgem held a consultation on National Grid's proposed restructuring plans⁹.

- 2.5. In July last year, and following receipt of a complaint, Ofgem commenced a Competition Act investigation into the MSAs. While we have not yet made a final decision as to whether National Grid has infringed the Competition Act, our initial findings, set out in a Statement of Objections, were that the contracts lock suppliers into National Grid for a significant share of their domestic gas meter requirements, and thereby restrict the development of competition in the metering market ¹⁰. In the next stage of the investigation we will consider National Grid's response to these findings.
- 2.6. National Grid's plans to restructure its metering business are currently on hold pending the outcome of the ongoing Competition Act investigation into the MSAs.

Treatment of the price controls

- 2.7. While the Competition Act investigation is ongoing it is not appropriate for Ofgem to make or invite comment on the state of gas metering competition, nor would it be appropriate for us to make a decision on the controls based on our preliminary findings to which National Grid has yet to respond. These special circumstances mean that we do not intend to review the gas metering controls at this point. Assuming there is no compelling argument for conducting a review in the short term, it is more appropriate to hold a full consultation and review the controls once the outcome of the investigation is known and all parties are in a better position to comment on the continued need for the controls.
- 2.8. According to our proposal, the current gas metering controls will be kept in place, to be adjusted in line with RPI annually from 1 April 2007 as in the previous five years, until conclusion of the Competition Act investigation. The controls will continue to apply to National Grid Gas and the four independent distribution networks (IDNs) that were created through partial divestment of National Grid's distribution business in 2005¹¹. These gas transporters will also retain their licence obligations to provide a meter at the price controlled rate if requested by a supplier. The evergreen licence conditions through which the controls were implemented will stay in place.
- 2.9. We invite comments on our proposal.

⁹ See Ofgem, The proposed restructuring of National Grid Transco's metering business, March 2005 (Ref 78/05)

¹⁰ See Ofgem press statement R/30, 17 May 2006

¹¹ These are owned by Scotia Gas Networks, Northern Networks and Wales and West Utilities

Prepayment meter price controls

- 2.10. We particularly invite views on our proposal as it affects the regulated price for prepayment meters.
- 2.11. The gas meter controls were set with a maximum limit of £15 (in 2000 prices) on the differential of between the regulated price for credit and prepayment meters, primarily due to concerns that limited choice was available in the market for PPM technology. PPM customers are also typically on low incomes or in debt, although only around one in five are in fuel poverty.
- 2.12. Gas prepayment meters are expensive relative to gas credit meters and electricity prepayment meters because the meters tend to have high maintenance costs and low reliability. One of the reasons for introducing metering competition was to promote more innovation and to encourage suppliers to contract for better, more reliable and cheaper prepayment meters in gas. The PPM price cap was set in the expectation that competition would drive down costs and that any initial underrecovery of PPM costs would be addressed over time ¹².
- 2.13. However, in notifying us of its restructuring plans described above, National Grid has argued that the price cap for gas PPM meters still does not reflect underlying costs. While the price cap stands at around £30, the company has indicated that its cost to serve is around £47¹³. At present this suggests that the company is recovering a shortfall of PPM costs of over £30 million from credit meter charges. National Grid's rebalancing proposals would address this situation. Ofgem's discussions with suppliers and competing PPM providers also suggest that the commercial rate exceeds the price cap by at least 10%.
- 2.14. We do not propose to review the price cap on PPM meters at this point unless National Grid or other metering businesses can make a case that there is a short term requirement to do so. As such, we invite National Grid to demonstrate that the cap is below its cost to serve. We also invite other metering businesses to comment on whether the cap is at a level that inhibits competition in the short term and should be reset prior to April 2007. We also invite views on the level at which the cap should be set.
- 2.15. Notwithstanding the above, until the Competition Act investigation has run its course, it may be difficult to assess how much regulation is required over the provision of PPM meters. We therefore invite views on whether it is preferable to delay consideration of the current arrangements until the outcome of the investigation is known.

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See Ofgem, Review of Transco's price control from 2002: Final proposals. September 2001 (Ref 56/01)
 See Ofgem consultation document, The proposed restructuring of National Grid Transco's metering business. March 2005 (Ref 78/05), page 12

3. Electricity Metering Price Controls

Chapter Summary

This chapter sets out the objectives of the electricity metering price controls and describes the controls that are in place for meter provision and meter operation respectively.

Objectives for the controls

- 3.1. Ofgem's overarching objective in setting metering price controls is to protect the interests of customers during the transition from monopoly provision to a fully developed competitive market. In particular Ofgem aims to:
- Promote competition in the provision of metering services: as a general principle price controls are only applied to the incumbent providers while they have monopoly or near-monopoly power in the market. The controls need to be set at a level compatible with new entry given that new entry and competition is the most effective form of consumer protection in the long run. The controls reflect the maximum price or revenue allowance that the incumbents can charge and not the actual price that they must levy
- Allow licence holders to finance their activities: the controls include an allowance for providers to generate a reasonable return from activities based on an assessment at the time of the price control. However, this is not a guaranteed return and incumbents have to ensure that they maintain the necessary market share or margin to ensure they generate sufficient revenue to cover costs (for example by competing with any new entrants on price, innovation and so on)
- Promote efficiency and economy
- Facilitate the development of new technology: the controls only apply to the basic range of meters available at the time of setting the controls. Since suppliers and their customers are free to use more advanced, expensive metering where they choose to do so, the controls do not apply to such meters. Providers of new types of metering services have to convince suppliers that for the additional cost of a more advanced meter, they can achieve higher service levels or lower overall costs to serve.

Structure of the controls

3.2. Separate price controls have been set in relation to providing electricity meters (known in the industry as Meter Asset Provision or MAP) and operating these meters

(known in the industry as electricity Meter Operation or MOp). Meter Operation includes services relating to the installation, commissioning, testing, repair, maintenance, removal and replacement of electricity metering equipment¹⁴.

- 3.3. When the price controls were set in April 2005 it was envisaged that the control on the provision of new and replacement meters and the control on meter operation would only be required for a transitional period during which competition in these parts of the market would develop. As such, Standard Condition 36 of the Electricity Distribution Licence requires these controls to fall away at the end of March 2007¹⁵. The Authority would have to give a minimum of 6 months notice if it wanted to continue with the controls, rather than allow them to expire as planned.
- 3.4. Under the current arrangements, the control on the provision of all meters installed up to the end of March 2007 (legacy meters) will remain in place at least until 2010, when it reaches the end of its five year term.
- 3.5. Both the MAP and MOp electricity metering price controls apply to all DNOs, and are combined with licence obligations to provide metering services at the price controlled rates if requested by a supplier. Price caps only apply to basic meters (defined as meters with the same functionality as that provided by the DNO as at 1 June 2003). This is intended to encourage meter providers to develop new products that offer improved functionality to meet the needs of suppliers and their customers.
- 3.6. Each control is discussed below.

Meter Provision (MAP)

3.7. Separate electricity MAP price controls were set in April 2005 to cap the annual rental charges in respect of domestic single phase credit meters and token, key and smartcard prepayment meters (as set out in Table 1). The controls were calculated on the basis of depreciated replacement cost and reflect the value of a basic meter spread over the remaining life of the asset allowing for a 6.9 per cent pre tax cost of capital and operating cost. The assets were separated out of the DNOs' regulated asset value on this basis. Price caps were not set on Half Hourly (HH) meters as competition in the provision of these meters had already developed.

¹⁴ As set out in Section 36B of the electricity distribution licence.

¹⁵ See Ofgem's (2004) Electricity Distribution Price Control Review: Final Proposals

Table 1: MAP Price controls

Meter type	Price cap - £ per year 2002/03 prices
Domestic credit	1.12
Prepayment - Token	8.56
Prepayment - Key	9.01
Prepayment - Smartcard	11.68

Note: These caps are indexed for inflation for subsequent years

Source: Electricity Distribution Price Control Review: Final Proposals, Ofgem, November 2004

- 3.8. The price caps for electricity prepayment meters were set at full cost recovery levels, which resulted in an increase in PPM tariffs in some regions. At the time there was concern that this would disadvantage those customers on low incomes. However, Ofgem's view was that it is better for the caps to be cost reflective and provide suppliers with the incentive to install more efficient technology. Most of the areas that experienced an increase in their tariffs use token PPMs, which have high costs to serve as site visits are required to update tariffs or adjust the amount of debt to be recovered.
- 3.9. The high costs to serve of token PPMs means that suppliers and DNOs have strong incentives to replace them with meters that have cheaper lifetime costs. To account for this, DNOs can apply to the Authority for adjustments to the token PPM caps that reduce the asset life by a maximum of 30 per cent.
- 3.10. Although non-domestic non-half hourly meters are not covered by the electricity price caps, a provision was made to protect these customers against discrimination. DNOs are required to adopt a similar basis for calculating the charge for non-half hourly as Ofgem used in calculating the price caps for domestic meters.

Meter Operation (MOp)

- 3.11. For meter operation, Ofgem set a revenue cap per chargeable activity that is indexed to the volume of activities that meter operators can undertake. A revenue cap form of control was used to reflect the fact that, in the short term, some costs are fixed regardless of the volume of activity.
- 3.12. There are three basic types of chargeable activity, as set out in Table 2. These are appointments offered by meter operators for servicing single phase meters (typically for domestic use), poly phase meters (typically installed in larger domestic sites and many non domestic sites), and current transformer meters that are restricted to larger industrial and commercial premises.

Table 2: Chargeable activity drivers for Meter Operation

Chargeable activity	Revenue cap - £ per activity (2002/03 prices)
Single-phase meter appointment (domestic credit or PPM)	21.37
Poly-phase meter appointment (larger domestic and some non-domestic)	34.91
Current transformer meter appointment (large industrial and commercial)	106.67

Note: Activity charges 2002/03 prices and are indexed for inflation for subsequent years

Source: Ofgem

3.13. The revenue control applies to standard appointments only and not to higher service levels such as offering short notice or 2 hour banded appointments. This is intended to encourage meter operators to offer new types of service to suppliers. Other appointment types are required to be cost reflective and a 1.5% mark up on cost is allowable to cover cost of capital.

4. Review of the Electricity Metering Market

Chapter Summary

This chapter sets out our understanding of the characteristics and dynamics of the electricity metering market. We also set out how the market has developed over recent years and assess the prospects for future market growth.

Question Box

Question 1: Have we identified the key characteristics and dynamics of the electricity metering market?

Question 2: Have we identified the key developments in the electricity metering market over recent years?

Question 3: Have we identified the factors which determine whether suppliers use the market to meet their electricity metering needs?

Question 4: Have we made a fair assessment of the prospects for further development of the electricity metering market?

Characteristics and dynamics of the market

Forms of competition

- 4.1. To understand the forms that electricity metering competition could take, it is important to look at the structure of the electricity industry and how this has evolved over time.
- 4.2. In response to the Utilities Act 2000, the vertically integrated Public Electricity Supplier (PES) in each region had to separate out their supply and distribution businesses. The DNO businesses took responsibility for metering, and were given obligations to provide metering services in their home areas on price control terms.
- 4.3. Following a series of acquisitions and takeovers, it is now the case that in some ex-PES areas, the incumbent supplier and the DNO belong to different corporate groups. Examples of this include the Yorkshire and Midlands regions. In other regions, such as London and Scottish Power, the incumbent supplier and the DNO remain part of the same group. The DNOs and incumbent suppliers for each ex-PES region are shown in Appendix 5.

- 4.4. Despite this activity, each of the five incumbent suppliers is part of a group that owns an electricity metering business in all but one case, in the form of a regulated DNO¹⁶. These suppliers may be considered effectively to have an "in-house" metering business. In parallel, and with the development of supply competition, incumbent suppliers now have customers outside their ex-PES regions ("out-of-area" customers), in addition to the market shares they retain in their ex-PES region ("in-area customers").
- 4.5. Against this background, there appear to be three main mechanisms by which metering competition and loss of incumbent DNO market share could occur:
- a supplier in any given area appoints a new metering business, as occurred under the British Gas tender (discussed further below)
- a supplier uses its in-house metering business, rather than the relevant DNO, to service its out-of-area customers
- a supplier uses its in-house metering business, rather than the relevant DNO, to service in-area customers in regions where the incumbent supplier and DNO are not in the same corporate group.

Scope of competition

- 4.6. Within each of the three mechanisms noted above, competition could occur in: the provision of new and replacement meters; the provision of the installed metering asset base (for example, incumbents selling off some or all of their existing meters to a competitor, or an accelerated replacement of installed meters); meter operation; or a combination of these options.
- 4.7. Clearly, the scope of competition will influence the speed at which incumbents lose market share. The quickest way of introducing competition will be through transfer of ownership of installed meters. However, to achieve this, DNOs must be willing to sell their meters and competitors must be able to offer suppliers a rental at or below the regulated price (by virtue for example of having a lower cost of capital).
- 4.8. If competition is limited to the provision of new and replacement meters its development will be constrained by the rate of meter replacement. At present this rate tends to be low because suppliers will generally only embark upon meter replacement if the meter is becoming inaccurate or reaching the end of its certified life, or if the cost savings/improvement in service levels is large enough to justify the replacement.

¹⁶ The exception is RWE nPower which provides the regulated MOp services on behalf of NEDL and YEDL, the DNOs in two of its ex-PES regions.

- 4.9. For suppliers to have a business case for an accelerated replacement of installed meters (that is, replacing a meter before the end of its certified life), the benefits associated with the new meter will need to be sufficient to offset the additional cost that suppliers will incur when they pay the up-front installation charge for the new meter¹⁷. This charge gives incumbents an additional advantage over competitive metering businesses and also explains why the rate of meter replacement even in a competitive market may tend to be relatively low.
- 4.10. Nonetheless, as the cost of new metering technology falls, and the service level improvements associated with them are proven, suppliers may want to exchange out legacy meters faster than at present. For example, we understand that the business case for widespread deployment of Automated Meter Reading (AMR) meters is not yet established, but is developing steadily over time. This may have a significant impact on competition and replacement rates for legacy meters.

Economies of scale

- 4.11. Another important characteristic of the metering market is the presence of economies of scale in both meter provision and servicing. In total, incumbent DNOs currently share approximately 27m installed electricity meters they therefore possess significant purchasing power with meter manufacturers and can also install, service and replace meters on a high density basis in their own areas. Competitors have to offer good prices and/or service improvements to compete with the incumbents in any given region.
- 4.12. Nevertheless, we do not see these economies of scale issues as a critical obstacle to the further development of the electricity metering market, particularly given that there are already so many metering businesses active in the market. The three mechanisms by which competition could occur indicate that there are ways for competitors to obtain the scale and density required in order to compete against incumbents.

Asset stranding issues

4.13. The risk of asset stranding is also often raised as an issue in the metering market. Metering businesses that provide meters under contract face some risk of asset stranding if the customer switches to another supplier, in cases where the new supplier does not use the existing meter and the meter cannot be re-used or sold. To manage this risk, businesses operating in the competitive market often enter into "churn contracts" with suppliers setting out the terms for continued meter rental by the incoming supplier.

 $^{^{17}}$ As noted in Chapter 3, this can cost between £20 and £35 depending on the type of meter being installed.

- 4.14. Metering businesses also face stranding risks from technological change. As the cost of smarter forms of metering continue to fall, this may lead to existing meters being replaced by more sophisticated meters before they have reached the end of their life.
- 4.15. The issue of asset stranding is not unique to the metering market and the same risk is faced by many other customer-facing businesses: for example, telephone and television companies who have to install equipment at the customer's premises to provide a service. In metering, as in other competitive markets, the issue is primarily one for meter companies and suppliers to manage through their contractual arrangements that will determine who bears the risk. This could include agreements between meter providers and suppliers such as churn contracts. Alternatively suppliers may choose to bear the risk and rely on competitive pricing and excellent customer service to retain their customers and manage the risk. Many suppliers are now offering customers longer term contracts and this also helps to manage stranding risks for meters.

Development of the market

Market liberalisation

- 4.16. There was no formal date for liberalisation of the electricity metering market; rather two key changes encouraged competitors to enter the market.
- 4.17. First, industry electricity metering arrangements were agreed in May 2003 to facilitate competition in the provision of metering services. These arrangements help ensure that any change of supplier results in the necessary change in responsibility for the customer's meter from the old to the new supplier, and allows for a change in the associated metering business where appropriate.
- 4.18. Separate price controls for electricity meters were then set in April 2005 to make it transparent to suppliers how much DNO metering services were costing their business. Suppliers now have the information to decide if they can find ways of reducing metering costs including finding alternative providers.

Market response

4.19. In parallel with the steps taken to encourage competition, British Gas undertook competitive tenders for electricity meter operation and provision. In 2003 it appointed alternative metering businesses for both electricity and gas meters, via regional agreements with Meterfit, Capital Meters and Onstream¹⁸. While it has taken some time for electricity meter points to be migrated to these

¹⁸ Capital Meters is a joint venture between Siemens and Macquarie Capital; Meter Fit has a joint venture with United Utilities; and Onstream is a wholly owned subsidiary of National Grid.

companies these contracts now mean that competitors, and not the regulated DNOs are responsible for meter operation at all British Gas customer sites as well as for providing new and replacement meters on behalf of British Gas. Under the terms of the contracts British Gas was able to negotiate improvements to prices and metering service levels. These improvements centred on introducing appointments at short notice, keeping appointments and the quality and timeliness of the data handled and provided by the metering business.

- 4.20. Although these companies have installed meters under contract with British Gas, retail competition means that they have had to negotiate churn contracts with other suppliers in anticipation of customers switching supplier. Based on current switching rates, we estimate that as many as 40% of meters installed under the British Gas agreements could be on sites supplied by other suppliers by the end of the meter lifetime.
- 4.21. Most other major suppliers have also gone out to tender for alternative dual fuel meter provision and operation, but have not yet appointed any of the respondents. The possible reasons for this are set out below and this is a matter on which we particularly invite views and comment.
- 4.22. To our knowledge, since the first measures were taken to encourage metering competition, there has been no significant divestment of the installed electricity meter base nor has any supplier embarked upon an accelerated meter replacement programme. We welcome any further information on this point.

Current market structure

- 4.23. For the reasons set out above, the incumbents in the electricity metering market maintain a strong overall market share and to date, competitors in the meter provision market are thought to have obtained less than 1% of the market.
- 4.24. In contrast, and as a result of British Gas's tender, we understand that competitors now provide meter operation in respect of around 20% of electricity meters and that around 20% of new and replacement meters are being installed via competitively-sourced contracts¹⁹. We also understand that market penetration for electricity prepayment meters has been higher than for credit meters. This might be explained by the shorter life of these meters, the desire to substitute away from inefficient token meter technology, and the need for new prepayment meters to be installed to recover bad debt.
- 4.25. Importantly, the outcome of the British Gas competitive tender is that there are now over 10 meter operators in the GB electricity metering market and in each

¹⁹ Assuming British Gas's rate of meter replacement is similar to the industry average.

ex-PES area there is a commercial metering business with some customer density who can provide an alternative to the regulated DNO.

4.26. In the past two years all of the major suppliers have launched competitive tenders, showing their interest in capitalising on the benefits that can be unlocked through metering competition and indicating that suppliers are increasingly aware of how the market offerings compare with the regulated service. We also understand that some suppliers have trialled offering metering services for their own out of area customers while others are considering taking over meter activities from the DNO in their ex-PES region.

Prospects for further market development

- 4.27. Looked at together, the above features may suggest that the conditions are ripe for the further development of competition in electricity meter operation and in the provision of new and replacement electricity meters. The combined effect of a number of metering businesses and the pressure that retail competition puts on suppliers to control their cost-to-serve may be sufficient both to encourage more vigorous use of the metering market and to constrain the prices that incumbents can charge. The benefits brought by smart meters may also open up market opportunities for a higher proportion of the installed meter base.
- 4.28. Moreover, experience in the market so far suggests that the requirement for economies of scale and density need not be an insurmountable barrier for new entrants to the electricity metering market, and that it might be possible to achieve these economies through winning a contract with a major supplier. Our discussion above also suggests that solutions have been found to enable the electricity metering market to co-exist with retail competition and the change of supplier process that it entails.
- 4.29. This optimistic view point needs to be tempered by the fact that no supplier other than British Gas has concluded a competitive tender for third party electricity metering services and while this situation exists there could be a constraint on the further development of competition.
- 4.30. We have some anecdotal evidence that the electricity metering controls may be too low to adequately promote competition. But it is unclear whether this is a national issue for both meter provision and meter operation, or primarily a regional issue for meter operation in certain high cost-to-serve regions such as London²⁰. If this is a fair assessment metering businesses will struggle to compete with the price controls, which could explain the reluctance of suppliers (other than British Gas) to appoint alternative providers. We also note that if the controls are too low:

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²⁰ Since the MOp price controls are set at a fixed level nationally, they may not adequately account for variations in costs-to-serve across different regions.

- they will reduce the attractiveness of investing in smarter meters. Artificially low tariffs weaken the case for investing in more expensive but more efficient technology, and
- suppliers will be in a strong position when negotiating churn contracts with metering businesses if they know that they can always fall back on a regulated service that is tightly controlled. This may lead to difficulties in negotiating these churn contracts, and create a risk that the metering businesses cannot recover the full cost of the asset.
- 4.31. It is also possible that the uncertainty created by the Competition Act investigation into the gas metering contracts with National Grid has caused suppliers to stall their competitive tender process for electricity as well as gas meters. This uncertainty may be being exacerbated by the Energy Services Directive and the impact that this could have upon metering competition. If these uncertainties underlie suppliers' decisions, lifting the price controls may not be sufficient to encourage suppliers to make full use of the competitive metering market. However, an alternative interpretation is that the current lull in market activity is only temporary, as some suppliers consider bringing metering activities in house following the market testing achieved by their tender processes.
- 4.32. These issues are key considerations in determining if the electricity controls should be reviewed or lifted as planned from the end of March 2007 and we welcome comment on our assessment of them as set out above.

5. Recommendations for Electricity Metering Price Controls

Chapter Summary

This chapter sets out our preliminary proposals in respect of the electricity metering price controls. We are minded to:

- → Allow the controls on meter operation and the provision of new and replacement meters to fall away at the end of March 2007, as currently provided for in Standard Condition 36 of the Electricity Distribution Licence. The current obligation to supply on DNOs will also fall away on that date
- → Retain the controls on rental charges for all meters installed by incumbents as at 31 March 2007 (legacy meters) and review them at the end of their five year term in 2010

Question Box

Question 1: Should the electricity meter price caps be allowed to fall away on 31 March 2007 in respect of meter operations and the provision of new and replacement meters?

Question 2: Should the price controls on legacy electricity meters be maintained at least until 2010?

Question 3: Are the concerns over potential issues for small and/or out of area electricity suppliers valid?

Question 4: If so, would a non-discrimination obligation on suppliers be an appropriate response to these concerns?

- 5.1. The obligation to supply and price controls for new and replacement electricity meter provision and meter operation are due to fall away on 31 March 2007 unless Ofgem decides otherwise. Proceeding to lift the electricity caps has a number of advantages:
- Ofgem undertook to lift the controls in 2007, subject to a review of the development of competition. Following through with this commitment maintains an environment of regulatory certainty, and sends the right signals to suppliers, metering businesses and investors about the direction of the metering market
- There is evidence that suppliers have made and will make use of the competitive metering market as a way of securing cheaper, better services for their customers, as discussed in Chapter 4
- There are now around 10 metering businesses with a presence in the market and there is potential for increased competition between these companies. These

different sources of competition provide protection from one of the providers increasing prices

- Retail competitive pressures will also help to keep metering prices from rising. In ten of the fourteen regions the metering businesses are part of a group of companies that include a retail supplier. In each of these groups the supplier will be passing through competitive pressures to the metering businesses
- The current price caps may be reducing the scope for new providers to enter the market at a competitive price and could also have the secondary impact of making churn contracts more difficult to negotiate. The controls may also be reducing the incentive for suppliers to invest in smart metering.
- 5.2. The key question in relaxing the electricity controls as scheduled is whether we have reached the point where we can be confident that competition, rather than regulation, will offer the best protection for customers' interests in the long run. In particular, are competitive pressures sufficient to encourage more suppliers to enter into competitive metering arrangements? Ofgem will pay particular attention to responses to these questions in making its final decision on the controls. It is also worth noting that our preliminary views on the prospects for electricity metering competition could be affected by Government's decision on how to implement the Energy Services Directive. This is a matter that we will keep under review.
- 5.3. While we believe that competitive pressures will generally suffice to keep prices in check, concerns have been raised that small suppliers (that are not affiliated to an incumbent metering business), and large suppliers that have only a small customer base in a particular region, could face greater difficulties in procuring competitively priced metering services once controls are removed. Due to the importance of economies of scale to the metering business, these suppliers arguably depend most upon the current price cap and the obligation to supply to obtain well priced services from the incumbent DNOs. The difficulty of obtaining competitively priced services may be exacerbated if competition primarily develops through suppliers extending the scope of their in-house metering businesses.
- 5.4. One possible response to this concern would be to introduce a non-discrimination obligation (NDO) via the supply licence, such that suppliers with inhouse metering businesses would be required to offer metering services to a third party supplier on the same terms as they do in-house. We welcome views on whether these concerns regarding small and/or out-of-area suppliers are valid, and if so whether an NDO would be a suitable mechanism for addressing them. It could be argued that a NDO is unnecessary, since the concerns raised are already addressed under general competition law and/or existing supply licence conditions. We note also the parallel with the difficulties that small suppliers may face in obtaining meter reading services in a competitive market and also welcome views on this matter.
- 5.5. While we recommend lifting the controls on new/replacement meters and meter operation, our market assessment suggests that there are additional hurdles to competing for a share of the installed meter base. This suggests that competition provides a weaker constraint upon incumbents' prices for rental of these meters and

for this reason we propose to retain the controls on legacy meters (that is meters installed by incumbents before 31 March 2007). We propose instead to reassess the erosion of the incumbents' market share and the need for continued control over the rental price for legacy meters in 2010 when these controls have reached the end of their 5 year term.

Appendices

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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 11 August 2006 and should be sent to:
- Rachel Fletcher
- Head of Retail Markets
- Ofgem
- 9 Millbank
- London
- SW1P 3GE
- 020 7901 7194
- rachel.fletcher@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. 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 a decision document regarding the future treatment of the electricity metering price controls and any changes to the tariff arrangements for gas prepayment meters. Any questions on this document should, in the first instance, be directed to:
- Rachel Fletcher
- Head of Retail Markets
- Ofgem
- 9 Millbank
- London
- SW1P 3GE
- 020 7901 7194
- rachel.fletcher@ofgem.gov.uk

CHAPTER: One

No questions

CHAPTER: Two

Question 1: Is it necessary to review the price controls on gas meters prior to conclusion of the Competition Act investigation?

Question 2: Is it necessary to reset the level of the cap on gas PPM meters prior to conclusion of the investigation?

CHAPTER: Three

No questions

CHAPTER: Four

Question 1: Have we identified the key characteristics and dynamics of the electricity metering market?

Question 2: Have we identified the key developments in the electricity metering market over recent years?

Question 3: Have we identified the factors which determine whether suppliers use the competitive market to meet their electricity metering needs?

Question 4: Have we made a fair assessment of the prospects for further development of the electricity metering market?

CHAPTER: Five

Question 1: Should the electricity meter price caps be allowed to fall away on 31 March 2007 in respect of meter operation and the provision of new and replacement meters?

Question 2: Should the price controls on legacy electricity meters be maintained at least until 2010?

Question 3: Are the concerns over potential issues for small and/or out of area electricity suppliers valid?

Question 4: If so, would a non-discrimination obligation on suppliers be an appropriate response to these concerns?

Appendix 2 – Gas Metering Price Controls

- 1.1. The regulation of gas metering was originally set under the National Grid Gas (then Transco) transportation price controls. Separate controls for metering were established in April 2000 as part of an industry wide consultation on the development of competition in the provision of gas metering services. These were reviewed in April 2002 as part of the general review of Transco's price control, and at that time Ofgem stated the metering controls would remain in place until metering competition was sufficiently developed.
- 1.2. The metering controls were set to reflect the relative costs of different services and to allow Transco/National Grid Gas to recover its allowed revenue assuming current activity levels. The final control proposals were based on a 7 per cent cost of capital for metering activities, as compared with 6.25 per cent for transportation activities. The extra allowance for metering reflects the influence of competitive pressures in the metering market²¹. The control figures were also subject to "market testing" with potential new entrants to ensure that they were not deemed unreasonable.
- 1.3. Initially the form of the metering control was an allowed revenue cap, but following the April 2002 review this was revised and changed to a price cap covering the installation, maintenance and provision of a domestic meter, which varies by meter type. These price caps are shown in Table 1. The caps do not cover the industrial and commercial meter market, or the provision of meter reading activities for Non-Daily Metered (NDM) meters. However, non-discrimination conditions were imposed in the licence provisions to ensure that these uncapped metering services are offered on a cost reflective basis.

Table 1: Price controls for gas metering services

Service	Final price caps (2002/03) £ pa
Providing, installing and maintaining a credit domestic meter	12.91
Providing, installing and maintaining a pre payment meter	28.67
Providing a daily meter reading	357.12
Replacing a domestic credit or pre payment meter	48.32

Note: The original tariff caps were set in 2000 prices and are subject to annual indexation by RPI Source: Ofgem

Office of Gas and Electricity Markets

25

²¹ See Ofgem's (2001) Review of Transco's Price Control - Final Proposals.

- 1.4. The gas metering price controls shown in Table 1 were set with a maximum differential between credit and prepayment tariffs of £15 (in 2000 prices), as discussed in Chapter 2.
- 1.5. The gas metering tariff caps only apply to the provision of basic services as defined at the time of setting the controls. Other more advanced services in the form of new types of meter or enhanced customer service are outside the scope of the controls, in order to encourage innovation in the metering market.
- 1.6. The gas metering price controls were implemented via evergreen licence provisions in Transco's (now National Grid Gas) Gas Transporter licence. They apply to National Grid Gas and the four independent distribution networks (IDNs) that were created through divestment of parts of National Grid Gas's distribution business in 2005²². The licence provisions include an obligation to provide metering services if requested by a supplier, at the price controlled rate.

²² These are owned by Scotia Gas Networks, Northern Networks and Wales and West Utilities.

Appendix 3 – 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. ²³
- 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 accordingly²⁴.
- 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 them²⁵; and
- The interests of individuals who are disabled or chronically sick, of pensionable age, with low incomes, or residing in rural areas.²⁶
- 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:

²³ entitled "Gas Supply" and "Electricity Supply" respectively.

²⁴ 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.

²⁵ 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.

²⁶ The Authority may have regard to other descriptions of consumers.

- Promote efficiency and economy on the part of those licensed²⁷ 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 Regulation²⁸ 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.

²⁷ or persons authorised by exemptions to carry on any activity.

²⁸ Council Regulation (EC) 1/2003

Appendix 4 - Glossary

Α

AMR - Automated Meter Reading.

This describes metering arrangements that have one way communication from the meter itself to the data collector (electricity) or supplier (gas).

AMM - Automated Meter Management.

This describes metering arrangements that have two way communications between a meter and the data collector (electricity) or supplier (gas).

С

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 (DNO)

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 obliged to provide electricity meters at the request of a supplier.

Ε

ESD - Energy Services Directive

A directive recently issued by the European Union, which EU members are required to incorporate into national law. The directive contains provisions that may be interpreted as requiring changes to be made to metering technology to provide customers with more accurate bills and real time feedback on consumption.

G

Gas meter

A measuring instrument that records the volume of gas passing through it.

Gas transporter

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

ı

In-area customers

Customers of an electricity supplier who are located within the supplier's original ex-Public Electricity Supplier (PES) region.

Interval metering plus AMM

This describes more advanced metering arrangements which not only have two way communication but also the capability to store more frequent information.

M

Meter Asset Manager (MAM)

A person approved by the Authority as possessing sufficient expertise to provide gas metering services. A gas MAM essentially provides the services that would be provided by a MAP and MOp in electricity.

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 Owner

The person owning a gas meter and/or a meter installation.

Meter Provision

Shorthand term for Meter Asset Provision.

Meter Reading or Data Services

A periodic reading of a meter. It involves two separate functions namely data retrieval and data processing.

Metering Businesses

Metering Businesses has been used in this document as a shorthand term to refer to companies engaged in one or both of the activities of Meter Asset Provision and Meter Operation.

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.

Metering Service Agreements

Contracts negotiated between National Grid and gas suppliers for the provision of domestic gas metering services. These agreements are currently the subject of an investigation by Ofgem under the Competition Act.

Ν

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.

National Grid Metering (formerly Transco Metering Services)

A wholly owned subsidiary of NGG responsible for discharging NGG's metering obligations.

NDO - Non-Discrimination Obligation

An obligation on a licensee not to discriminate against external parties in the provision of services. For example, a non-discrimination obligation on suppliers with respect to metering services would require suppliers with in-house metering businesses to offer these services to external parties on the same terms as they do in-house.

0

Out-of-area customers

Customers of an electricity supplier who are located outside of the supplier's original ex-Public Electricity Supplier (PES) region.

Ρ

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.

Public Electricity Supplier (PES)

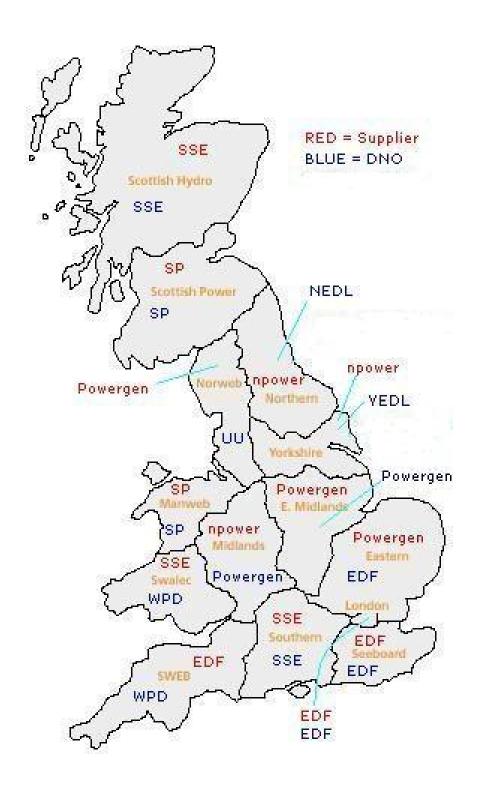
One of the publicly-owned regional electricity suppliers that existed prior to 1 October 2001. There were originally 14 PES's across the UK, each comprising an integrated supply and distribution business.

S

Smart Meter

A generic term for innovative forms of metering that provide increased levels of functionality above that of a basic meter. This may include Automated Meter Reading (AMR), Automated Meter Management (AMM), and Interval Metering plus AMM.

Appendix 5 - Incumbent Suppliers / DNOs in ex-PES Areas



Appendix 6 - 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