

**Regulation of Independent Electricity  
Distribution Network Operators**

**Initial Proposals Document**

January 2005 18/05

## Summary

This document sets out Ofgem's initial proposals on the development of the long term regulatory regime for new independent distribution network operators (IDNOs) and existing distribution network operators providing services outside their traditional service area, taking into account the responses received to the consultation paper published in July 2004, with respect to:

- ◆ charging arrangements;
- ◆ financial ring fencing conditions; and
- ◆ commercial issues.

The objective of the review is to develop sufficiently robust long term arrangements for the regulation of IDNOs to protect the interests of consumers.

The July 2004 consultation paper outlined five options for charging arrangements. These were:

- ◆ keep the existing arrangements, i.e. IDNOs' charges cannot exceed those of the incumbent DNO;
- ◆ RPI-X regulation based on the IDNO's costs;
- ◆ RPI-X regulation based on the incumbent DNO's charges as a starting point;
- ◆ relative price control (RPC) regulation; and
- ◆ rate of return regulation.

This document proposes a relative price control framework for a set review period of ten years where IDNO charges will continually follow the incumbent distribution network operator's (DNO) charges subject to a pre-determined floor and ceiling. Where the pre-determined limits are not reached, this protects consumers' interests directly by ensuring that they are not charged more than they would be by the incumbent DNO and indirectly by facilitating supply competition (different charges between an incumbent DNO and IDNO could increase suppliers' costs and/or discourage them from competing to supply the IDNO's customers). However substantial movements in DNO tariffs would then be a material risk to the financial position of the IDNO. Ofgem considers that

consumers' interests may be best served by capping this risk, through a pre-determined floor and ceiling.

Ofgem has recognised that the ring fencing conditions were designed bearing in mind the circumstances of incumbent DNOs rather than smaller companies and has proposed alternative arrangements to the requirement for an investment grade credit rating under condition BA5. This document proposes that this basic approach should not be changed. However, modifications to the financial ring fence licence conditions for DNOs are currently being proposed as part of the Electricity Distribution Price Control Review and it is proposed that analogous amendments should be made to the financial ring fencing conditions in section BA of the IDNO licence.

Finally, this document develops thinking and further consultation on the commercial framework for IDNOs. The areas discussed are contractual arrangements, metering and quality of supply.

Ofgem is seeking views on the issues discussed in this paper and responses should be received by 18<sup>th</sup> March 2005. Ofgem intends to publish a decision document in May or June 2005.

# Table of contents

<b>1. Introduction.....</b>	<b>1</b>
Purpose of this document .....	1
Background .....	1
Previous documents and consultations .....	2
Structure of this document.....	2
Timetable and responses .....	3
<b>2. Industry Developments.....</b>	<b>5</b>
Electricity distribution.....	5
Independent Distribution Network Operators .....	5
Out of Area Networks .....	7
<b>3. Charging Arrangements – Summary of Responses.....</b>	<b>9</b>
Options.....	9
<b>4. Evaluation of Options .....</b>	<b>14</b>
Criteria for evaluating options.....	14
Ofgem’s View .....	14
Conclusions .....	18
<b>5. Proposals for IDNO charging arrangements .....</b>	<b>19</b>
Form and scope of price control .....	19
Approaches .....	21
Comparison of Approaches .....	25
Ofgem’s Initial View.....	26
Additional issues .....	26
Views invited .....	27
<b>6. Financial Ring-Fencing of IDNOs.....</b>	<b>29</b>
Alternative Arrangements .....	30
Summary of Responses .....	31
Ofgem’s View .....	32

Ring Fencing Licence Modifications .....	33
Views invited .....	34
<b>7. Commercial Issues .....</b>	<b>36</b>
Current contractual arrangements .....	36
Aligning gas and electricity structures .....	37
Boundary Equipment .....	38
Quality of service .....	42
Views invited .....	44
<b>8. Next Steps .....</b>	<b>45</b>
<b>Appendix 1 : List of Respondents .....</b>	<b>46</b>

# 1. Introduction

## *Purpose of this document*

- 1.1. In July 2004 Ofgem published a consultation paper<sup>1</sup> opening the review on the appropriate long term regulatory regime for new independent distribution network operators (IDNOs)<sup>2</sup>. The main aim of the review is to develop sufficiently robust long term arrangements to protect the interests of consumers.
- 1.2. This document sets out Ofgem's initial proposals on the development of long term arrangements, taking into account the responses received to the July consultation, with respect to:
  - ◆ charging arrangements;
  - ◆ financial ring fencing conditions; and
  - ◆ commercial issues.

## *Background*

- 1.3. As a consequence of changes to the Electricity Act 1989 ("the Act") as amended by the Utilities Act 2000 ("the Utilities Act") which introduced distribution as a separate activity requiring authorisation, the Gas and Electricity Markets Authority ("the Authority") can grant a licence authorising a person to distribute electricity for the purpose of giving a supply to any premises ("a distribution licence")<sup>3</sup>. This means other parties can apply for a licence to operate existing or newly built distribution networks in addition to the ex-Public Electricity Suppliers (ex-PES) distribution network operators (DNOs) that came into existence on 1 October 2001.

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<sup>1</sup> Regulation of Independent Electricity Distribution Network Operators – Consultation Paper, July 2004 (180/04)

<sup>2</sup> The term 'independent distribution network operator' (IDNO) will be used to define any electricity distributor other than the ex-PES distribution network operators that came into existence on 1 October 2001.

<sup>3</sup> The Electricity Act 1989 (as amended), section 6(1)(c).

- 1.4. IDNOs will operate electricity distribution networks which will predominantly be network extensions connected to existing distribution networks, eg. to serve new housing and mixed domestic/non-domestic developments on both greenfield and brownfield sites.
- 1.5. Since publishing the July document Ofgem has granted three licences to IDNOs and is currently considering one further application.

### ***Previous documents and consultations***

- 1.6. An earlier consultation paper, Regulation of Independent Electricity Distribution Network Operators, was published in July 2004. This document opened the wider consultation on the appropriate long term regulatory regime and developed the discussion in two previous open letters.<sup>4</sup>
- 1.7. In response to an application for a licence the Authority may, following consultation, modify the standard licence conditions to such extent as it considers requisite to meet the circumstances of the particular case<sup>5</sup>. Notices under section 8A (3) of the Act proposing modifications to the standard licence conditions for a new electricity distribution licence were published for each of the four applications Ofgem has received for an IDNO licence<sup>6</sup>.

### ***Structure of this document***

- 1.8. The structure of this document is as follows:
  - ◆ Chapter 2 outlines recent developments in the electricity distribution industry in terms of applications for new distribution licences and DNOs operating out of area.

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<sup>4</sup> Ofgem's open letters on the regulation of new electricity distribution licence holders, 31May 2002 and 16 April 2003.

<sup>5</sup> Electricity Act 1989 section 8A (2) (as amended by the Utilities Act 2000)

<sup>6</sup> These are available on Ofgem's website under the 'IDNO Regulation' area of work.

- ◆ Chapter 3 provides a summary of responses to the options for charging arrangements identified in the July consultation document.
- ◆ Chapter 4 evaluates the options for charging arrangements.
- ◆ Chapter 5 proposes and discusses two approaches for regulating IDNO charging.
- ◆ Chapter 6 provides a summary of responses and Ofgem's view on the financial ring fencing conditions and the alternative arrangements under condition BA5. It also seeks views on modifications to the financial ring fencing conditions as proposed under the Distribution Price Control Review.
- ◆ Chapter 7 discusses other important issues such as aligning gas and electricity structures, boundary equipment and quality of service.
- ◆ Chapter 8 outlines next steps.
- ◆ Appendix 1 sets out a list of respondents to the July consultation.
- ◆ Appendix 2 provides the full text of condition BA1 Charging Arrangements.
- ◆ Appendix 3 sets out a marked up version of the proposed modifications to conditions BA2-BA6 on financial ring fencing.

### ***Timetable and responses***

1.9. Ofgem would welcome responses and comments on the content of this initial proposals document and these should be received by 18<sup>th</sup> March 2005. Ofgem intends to publish a decision document later in 2005.

1.10. Responses should be sent to the address below:

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- 1.11. All responses will be held electronically in Ofgem's Research and Information Centre. In addition, they will normally be published on the Ofgem website unless they are clearly marked confidential. Where possible, consultees should put confidential material in appendices to their responses. Ofgem prefers to receive responses electronically so they can easily be placed on the website.
- 1.12. Copies of this document and other material relating to this review are available on the Ofgem website under the 'IDNO Regulation' section of work.
- 1.13. Should you have any questions regarding issues raised in this document please contact Mark Cox on 020 7901 7458.

## 2. Industry Developments

- 2.1. This chapter outlines recent developments in the electricity distribution industry particularly in terms of applications for new distribution licences.

### ***Electricity distribution***

- 2.2. Electricity distribution includes the activity of distributing electricity across the distribution network from grid supply points, generation sets connected to that network or other entry points to the points of delivery to consumers or authorised electricity operators in Great Britain.
- 2.3. Each incumbent DNO holds a distribution licence, treated as granted under the Act, to distribute electricity on its distribution system within Great Britain. Following privatisation and a number of corporate mergers and acquisitions, the licences for the fourteen distribution services areas within Great Britain are presently held by seven different companies. Each distribution licence specifies or describes the distribution services area within which the incumbent DNO is obliged to comply with the requirements of the standard conditions in Section C of the licence.
- 2.4. The statutory duties of licensed distribution companies are set out in the Act. Their duties include the duty to develop and maintain an efficient, co-ordinated and economical system of electricity distribution; and the duty to facilitate competition in the supply and generation of electricity.
- 2.5. Changes to the Act specify that distribution is a separate activity, which can only be carried out by a person who is authorised to do so by a licence granted by the Gas and Electricity Markets Authority (“the Authority”) or by an exemption granted by the Secretary of State. This presents the opportunity for new licensed distribution companies to operate networks.

### ***Independent Distribution Network Operators***

- 2.6. Since publication of the July document Ofgem has granted three distribution licences and is considering an application for a fourth licence.

2.7. The current IDNOs are set out in Table 2.1.

**Table 2.1: IDNO applicants and ownership group**

<b>Licensee</b>	<b>Ownership Group</b>	<b>Licence Issued</b>
Laing Energy Limited	Laing O'Rourke plc	26 August 2004
Independent Power Networks Limited	Inexus Group (Holdings) Limited	3 September 2004
Global Utility Connections Limited	Cannon Kirk Ltd	22 October 2004

2.8. These licensees have satisfied the statutory and Ofgem licensing criteria including meeting the alternative arrangements which are permissible under condition BA5: Credit Rating of Licensee outlined in chapter 6.

2.9. A further application from Energy Networks Limited (owned by Mowlem plc) is currently being considered.

2.10. The distribution licence for IDNOs is split into three sections:

- ◆ Section A – Interpretation, Application and Payments;
- ◆ Section B – General; and
- ◆ Section BA – Specific.

2.11. IDNO licences contain standard conditions (SLCs) identical to the SLCs in section A and B of the distribution licence for incumbent DNOs. In addition, Section BA consists of the following amended SLCs:

- ◆ BA1 – Charging Arrangements;
- ◆ BA2 – Restriction on Activity and Financial Ring Fencing;
- ◆ BA3 – Availability of Resources;
- ◆ BA4 – Undertaking from Ultimate Controller;
- ◆ BA5 – Credit Rating of Licensee; and
- ◆ BA6 – Indebtedness.

- 2.12. Condition BA1 is designed to introduce price control provisions that would create similar obligations as those applying to incumbent DNOs. IDNO licences have been granted with price control arrangements in BA1 which cap IDNO prices to domestic customers by the level of the incumbent DNO's prices. It is expected that these arrangements will be replaced by long term arrangements which will require licence modifications of BA1. The arrangements under BA1 will operate without prejudice to the requirements of amended standard condition 4 in section B of the licence.
- 2.13. Conditions BA2 – BA6 are intended to reduce the risks of financial failure by providing financial ring fencing obligations which correspond to those requirements that are set out in standard conditions 43, 44, 45, 46 and 47 in section C of the incumbent DNOs' licence.
- 2.14. Ofgem considers that a long term regulatory framework for IDNOs should be implemented as soon as practicable to improve transparency and provide greater regulatory certainty for IDNOs.
- 2.15. The long term framework will develop the interim arrangements to better:
- ◆ protect the interests of consumers;
  - ◆ promote effective competition within electricity distribution; and
  - ◆ promote efficiency and economy of electricity distribution systems.

### ***Out of Area Networks***

- 2.16. Ex-PES DNOs may establish licensed networks throughout the UK and some incumbent DNOs have now developed networks outside their distribution services area<sup>7</sup>. Proposals for the regulation of out of area networks have been taken forward as part of the Electricity Distribution Price Control Review (DPCR4) for DNOs to bring the charging arrangements into line with those currently applying to new licensees.

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<sup>7</sup> 'Out of area networks' are those networks which are neither within a DNO's defined distribution services area nor specified in Schedule A (Additional Premises) of its distribution licence.

2.17. Ofgem considers that the issues raised in this paper in respect of IDNOs generally also apply to incumbent DNOs developing out of area networks. Ofgem intends to propose similar arrangements for out of area networks as for IDNOs to provide consistent regulation across all distribution networks. Any reference to IDNOs in this document should be read to include DNOs operating out of area.

## 3. Charging Arrangements – Summary of Responses

3.1. This chapter outlines the options identified in the July document for the future regulation of IDNOs and provides a summary of responses from consultees. A list of respondents is included in Appendix 1.

### *Options*

3.2. Ofgem has proposed interim charging arrangements for IDNOs in condition BA1. This requires that IDNOs' charges do not exceed the charges in place at the relevant time that would be made by the DNO in whose distribution services area the IDNO's network is located. Ofgem is considering suitable long term charging arrangements and the July document identified five options.

3.3. The options identified were:

- ◆ keep the existing arrangements;
- ◆ RPI-X regulation based on the IDNO's costs;
- ◆ RPI-X regulation based on the incumbent DNO's charges as a starting point; and
- ◆ relative price control (RPC) regulation; and
- ◆ rate of return regulation.

### *Option A: Keep existing arrangements*

3.4. The existing arrangements are a price-led approach in which IDNO prices are capped at the incumbent DNO's prices.

3.5. This was generally the most favoured approach by DNOs with five out of the seven companies suggesting it is the best solution for smaller IDNOs.

Advantages of Option A given by respondents were that it is simple, transparent and customers are not disadvantaged.

- 3.6. It was noted by one DNO that although Option A offers a simple form of price control it is only appropriate for very small IDNOs as it is not cost reflective. Also Option A will not provide additional benefit to customers as there will be no incentive for IDNOs to charge less than the incumbent DNO.
- 3.7. One DNO suggested basing the long term charging arrangements on Option A but proposed refinements including restricting the overall use of system charge rather than each individual element and applying a floor and ceiling.
- 3.8. Another DNO commented that there is a risk of distortion of competition if IDNOs' charges are capped against the host DNO's charges as this could allow IDNOs to charge for the same asset twice, once via connection charges and once via use of system charges.
- 3.9. IDNOs were not in favour of continuing the existing arrangements. Reasons for this were: linking IDNO charges to the incumbent DNO charges leads to uncertainty, IDNO charges are not cost reflective; and the possibility of DNOs rebalancing charges. One IDNO noted that some risks could be partially mitigated through DNOs' charges being transparent, predictable and cost reflective.
- 3.10. One supplier favoured Option A because of the necessary changes to systems and processes if there were a large number of different tariffs.

### ***Option B: RPI-X regulation based on the IDNO's costs***

- 3.11. Under RPI-X, revenue or prices are allowed to rise by the rate of inflation (RPI) minus an efficiency factor (X). This would require setting a level of revenue that is sufficient to finance an efficient business based on an estimate of the costs IDNOs will face in running their business.
- 3.12. It was generally thought that although this option would provide a greater level of certainty and more cost reflective pricing, the complexity and regulatory burden would be likely to outweigh any benefits.

- 3.13. The majority of DNO respondents supported this option once IDNOs reach a certain size and therefore it would be appropriate to regulate them in the same way as DNOs. The suggested threshold ranged from 50,000 to 500,000 connections. The arguments given in support of Option B were that it will promote consistency across the industry and increase the number of companies Ofgem could use in its comparative analysis work for DNOs generally.
- 3.14. Two IDNOs said it was wrong to assume there are inefficiencies in an IDNO's business that could be dealt with under an RPI-X mechanism.

***Option C: RPI-X regulation based on the incumbent DNO's charges as a starting point***

- 3.15. An alternative form of RPI-X regulation could be implemented by setting the prices charged by the IDNO in year 1 equal to those charged by the incumbent DNO in whose distribution services area the IDNO's network is located. In subsequent years the IDNO's charges will be allowed to change by RPI-X.
- 3.16. One DNO agreed that using the incumbent DNO's charges as a starting point reflects the commercial reality of the competitive pressures leading to the establishment of an IDNO network. However, step changes to a DNO's input costs will affect the IDNO's costs.
- 3.17. Generally IDNOs commented that Option C would provide a greater level of certainty and more cost reflective pricing. One suggested that this option could be combined with an RPC approach as suggested in Option D.
- 3.18. One IDNO thought that the complexity and regulatory burden of implementing Option C would be likely to outweigh any benefits and would constitute a barrier to entry for IDNOs.
- 3.19. One supplier supported Option C if 'X' is capable of being described such that IDNO costs could be tracked after the first year.



### ***Option D: Relative Price Control Regulation***

- 3.20. This option could reflect the form of RPC approach adopted in the independent gas transporter (IGT) sector where IGT charges track estimates of Transco's long term charges, subject to a pre-determined floor and ceiling.
- 3.21. IDNOs supported Option D arguing that it could provide an appropriate balance between mitigating the risks faced by IDNOs and protecting customers; it focuses on price; and it has already been widely consulted on and received the support of all IGTs. It was also stated that a relative price control over a 20 year period as in the IGT sector (although subject to a review no sooner than 2014) also provides IDNOs with certainty allowing them to secure funding over the life of the assets.
- 3.22. One DNO agreed that a RPC mechanism should provide price stability for new network developers over the lifetime of the assets as has been achieved for IGTs by fixing the relative price control for 20 years.
- 3.23. There was limited response from other DNOs specifically regarding Option D.
- 3.24. One supplier did not support Option D arguing that it has resulted in increased risk and costs to suppliers in the gas market where charges are based on Annual Quantity values rather than actual consumption.

### ***Option E: Rate of return regulation***

- 3.25. Under rate of return regulation the regulator establishes an appropriate rate of return for the regulated utility based in part on the cost of capital to the utility. This rate of return is then applied to the asset base of the utility to provide a guaranteed return.
- 3.26. Only one respondent supported Option E, suggesting that rate of return regulation could be applied to IDNOs with 20,000 to 500,000 connections.

- 3.27. One respondent argued that rate of return regulation would be a retrograde step and has been rejected by Ofgem in the past when its possible use was examined for IGTs.

### ***Tiered approach***

- 3.28. The July document considered whether a combination of the above options could be applied based on a two-tiered approach where a relatively simple option (e.g. Options A or C) is adopted up to a threshold level of connected supply points and thereafter a different option may be more appropriate.
- 3.29. This was supported by the majority of respondents with many saying that as IDNOs increase connections it would seem appropriate to regulate them in the same way as DNOs. Up until that point most respondents agreed that it would be desirable to adopt relatively simple arrangements.
- 3.30. There was considerable variation in the proposed threshold level for a two tiered approach. Proposals varied between 50,000 connected supply points to 500,000 connected supply points. The argument for 500,000 connections being that this is approaching a similar size to the smallest DNO.
- 3.31. Two respondents suggested that three tiers may be more appropriate.
- 3.32. One IDNO was against adoption of a tiered approach arguing that such an approach may introduce an unnecessary distortion which may lead to a disincentive to increase the number of connections.
- 3.33. Chapter 4 outlines Ofgem's views on the options for charging arrangements, taking account of responses to the July document.

## 4. Evaluation of Options

- 4.1. This chapter outlines the criteria used by Ofgem to evaluate the options for charging arrangements. It evaluates the options and responses from consultees.

### ***Criteria for evaluating options***

- 4.2. When deciding on suitable long term charging arrangements there are a number of issues that Ofgem has considered. These include:
- ◆ the direct impact on consumers – consumers should not be disadvantaged by being connected to an IDNO network compared to the incumbent DNO network;
  - ◆ the impact on IDNOs and DNOs – for example in terms of promoting competition in distribution and having regard to the need to secure that licensees are able to finance their functions;
  - ◆ the impact on suppliers and other industry parties – for example increased complexity in pricing structures due to local variations in distribution charges;
  - ◆ objectives of charging arrangements – cost reflectivity, transparency, simplicity;
  - ◆ the costs of implementation; and
  - ◆ consistency across the industry, where appropriate.

### ***Ofgem's View***

#### ***Option A: Keep existing arrangements***

- 4.3. The advantage of Option A is that it ensures that consumers are not adversely affected by virtue of being connected to a network that is owned and operated by an IDNO rather than the incumbent DNO. However, Option A is unlikely to provide any further benefits to consumers in terms of

charges as there is little incentive for the IDNO to charge less than the incumbent DNO price cap.

- 4.4. Option A results in minimal impact on suppliers as tariffs will be similar whether an IDNO or DNO owns the network.
- 4.5. Option A provides a simple pricing regime with minimal regulatory intervention. However it does not reflect an IDNOs' costs. Potentially IDNO and DNO costs may be significantly different as IDNOs will have a very different asset base, e.g. newer assets.
- 4.6. Under the existing arrangements IDNOs face uncertainty in predicting long term revenue streams as maximum charges are determined by the incumbent DNO's charges. Although the incumbent DNO's price control sets parameters for the maximum charges the IDNO can levy for five years, maximum charges beyond that period are not known.
- 4.7. Also, the DNO's price control does not detail individual tariffs and therefore although the overall revenue allowance of the incumbent may be known, the tariffs may change due to rebalancing of charges.

### ***Option B: RPI-X regulation based on the IDNO's costs***

- 4.8. RPI-X regulation based on the IDNO's costs will promote efficiency by providing an incentive for the IDNO to increase profits by reducing its costs. These efficiency gains will be shared with consumers through the operation of the forward looking efficiency factor. Ofgem's view is that although it may be incorrect to assume that IDNOs are inefficient to begin with, efficiencies are likely over time due to other factors such as technological improvements.
- 4.9. Option B provides a clear, transparent and cost reflective arrangement for the regulation of IDNO charging. It will also lead to consistency in the way DNOs and IDNOs are regulated.
- 4.10. However it is questionable whether the scale of regulatory burden on IDNOs and Ofgem is appropriate given the relatively small size and number of IDNOs at present. IDNOs would be required to provide a range of

information on costs in markets where they currently have few or no connections.

- 4.11. Obtaining and interpreting detailed industry data will be difficult given the small number of IDNOs that have been granted licences to date. IDNOs could also be benchmarked against incumbent DNOs but this assumes that an efficient IDNO's costs are similar to an incumbent DNO's costs. Obtaining and analysing detailed industry data (if possible) will involve significant regulatory and company resources compared to the benefit to consumers.
- 4.12. An additional disadvantage is that option B will result in IDNO charges varying from DNO charges which will impact on consumers and suppliers.

***Option C: RPI-X regulation based on the incumbent DNO's charges as a starting point***

- 4.13. As a form of RPI-X regulation, this option promotes efficiency by providing an incentive for the IDNO to increase profits by reducing its costs.
- 4.14. De-linking the path of the IDNO's revenue from future movements in the incumbent DNO charges would give IDNOs greater regulatory certainty, particularly if longer review periods are used.
- 4.15. Like option B, option C will also result in IDNO charges varying from DNO charges which will impact on consumers and suppliers. The scale of impact depends on the efficiency factor applied and the degree of divergence between the path of DNO and IDNO charges. However RPI-X provides a clear and transparent arrangement which can be used to predict charges over the long term.
- 4.16. Option C would not result in a substantial regulatory burden at least in comparison to Option B. However IDNO and Ofgem resources will be required to determine an appropriate efficiency factor to apply.

### ***Option D: Relative Price Control Regulation***

- 4.17. A relative price control would encourage IDNOs to improve efficiency by capping charges and provides some protection for the IDNO against unanticipated changes as charges will only fluctuate within the pre-determined floor and ceiling.
- 4.18. RPC has an existing precedent as it is currently used for the regulation of IGT charging using Transco as price comparator. Implementation of Option D would therefore lead to consistency between arrangements for IDNOs and IGTs.
- 4.19. Due to the different contractual arrangements in electricity compared to gas (as discussed in chapter 7), RPC arrangements may be more complex to implement. The relative price control applied to IGTs is based on estimates of Transco's long term charges. Estimation of long term charges in electricity is likely to be more resource intensive and time consuming, principally because there are fourteen comparators in electricity compared to one in gas.
- 4.20. The form of RPC applied to IGTs is likely to require modification to apply it to IDNOs.

### ***Option E: Rate of return regulation***

- 4.21. Ofgem agrees that there are a number of weaknesses with this approach, as identified by the respondent to the consultation who considered rate of return regulation a retrograde step.
- 4.22. The principal concern is the failure to promote efficiency as any reduction of costs would produce a downward adjustment in prices charged in order to earn the same rate of return.

### ***Tiered Approach***

- 4.23. Ofgem agrees with respondents that it would seem appropriate to regulate IDNOs in the same way as DNOs once they reach a comparable size. However it seems that the choice of threshold level is difficult to specify at

this stage. This is supported by the wide ranging threshold levels suggested by respondents, i.e. 50,000 connected supply points to 500,000 connected supply points.

- 4.24. Justification of an appropriate level could be based on a similar number of connected supply points as the smallest DNO. However the nature of connections for an IDNO and DNO are likely to be very different. For example, IDNO connections could be spread throughout the country rather than in one geographic area. An alternative system of tiering could be based on the number of IDNO connections within a region. However this is likely to lead to a complex system to implement.

## ***Conclusions***

- 4.25. RPI-X regulation based on the IDNO's costs has the benefits of sharing efficiency gains with consumers, cost reflectivity, transparency and consistency in arrangements. However, at present these benefits are likely to be outweighed by the regulatory burden this approach would place on IDNOs and on Ofgem. In addition there may be a detrimental impact on consumers and supply competition if IDNO and DNO charges diverge significantly.
- 4.26. Therefore a simpler approach seems more appropriate. This approach could be based on either a RPI-X model, such as option C, or RPC model, such as option A or option D. This is discussed further in chapter 5.
- 4.27. As discussed above a combination of the options could be applied based on a tiered approach. However it is proposed that a tiered approach should not be introduced due to the difficulty in setting and justifying an appropriate threshold level. Instead the charging arrangements should be monitored and reviewed after a suitable period to evaluate whether they remain the most suitable arrangements as IDNOs develop.

## 5. Proposals for IDNO charging arrangements

- 5.1. Chapter 4 sets out the basis for the arguments for adopting either a form of relative price control or simple RPI-X regulation as the basis for the longer term arrangements for IDNO charging. Nevertheless, there is considerable flexibility as to the precise form of the charging arrangements. As discussed the form of RPC applied to IGTs cannot be directly applied to IDNOs without modification. Also a full RPI-X model based on the IDNOs costs would result in a large regulatory burden to determine the appropriate starting point so any RPI-X model should be based on the incumbent DNO's charge as a starting point.
- 5.2. This chapter firstly outlines generic options for the form and scope of a price control for IDNOs. It then presents and compares two alternative approaches either of which may be appropriate for regulating IDNO charging. It finally discusses additional detailed issues which apply to both approaches.

### ***Form and scope of price control***

- 5.3. This section outlines three key elements of a price control and considers the different generic options for determining the form and scope of a price control.

### ***Starting Point of Control***

- 5.4. It is proposed that the starting point of the control should set the IDNO's initial charge at the time of connection equal to the incumbent DNO's charge to equivalent domestic customers. The rationale for this being if the IDNO did not extend the network it would be the incumbent DNO which does so.

### ***Path over Control***

- 5.5. Ofgem has considered two options for the path of charges over the control period:



- ◆ continually follow the DNO's charge to equivalent customers; or
  - ◆ increase / decrease in real terms following an RPI-X path until the next review.
- 5.6. The first case is the approach currently applied to IDNOs under the existing arrangements. The advantages and disadvantages have already been discussed in chapter 4 but these are principally that the customer is not disadvantaged but that IDNOs face uncertainty.
- 5.7. To address this uncertainty IDNO charges could follow the DNO's charges within a fixed floor and ceiling. This would provide IDNOs with certainty on the minimum level of charges over the period until the next review.
- 5.8. The second case of charges increasing or decreasing in real terms would provide IDNOs with a high degree of certainty with regard to charges and, depending on the X factor, could allow customers to share in any efficiency gains made by IDNOs during the period. However it would also result in divergence between IDNO and DNO charges.

### ***Period of Control***

- 5.9. Two options have been considered to establish the period of control of the relative price control:
- ◆ set periods, for example every 5 or 10 years; and
  - ◆ rolling review.
- 5.10. In the first case all charges are reviewed across all IDNOs' portfolio of sites at a fixed point in time. Typically network businesses are reviewed every 5 years. The period between reviews would be determined by considering the degree of certainty required by IDNOs to develop their business, the expected rate of growth of IDNOs and the timely delivery of benefits to consumers, through efficiency gains. The advantages of this approach include certainty for IDNOs and customers as to when the existing regulatory approach will be reviewed. Disadvantages arise from the

possible uncertainty for IDNOs developing sites near the end of a review period.

- 5.11. In the second case, rolling review, specific sites would be reviewed after a set period of operation such as 5 or 10 years. In effect, there would be an on-going review of at least some of an IDNO's sites and respective charges each year. This approach would address the uncertainty that may face IDNOs developing sites near the end of a fixed period of review, however, it would require a continuing process of review for some of the IDNOs' sites.
- 5.12. Either case is appropriate for both RPC and RPI-X regulation. A set period of 10 years would offer a reasonable period of certainty to IDNOs and would also be easier to monitor.

### ***Approaches***

- 5.13. This section presents two different approaches for the regulation of IDNO charging arrangements. The first is based on an RPC model and the second is based on an RPI-X model starting from the incumbent DNO's charges.

### ***Proposal 1: RPC Based on Incumbent DNO's Charges***

- 5.14. Under Proposal 1, IDNO charges will be set relative to the DNO's charge and continually follow the DNO's charges subject to a floor and ceiling. The period of control will be a set period of 10 years.
- 5.15. There are different options for the starting date of the set control period. These include: April 2005; September 2005 or April 2006.
- 5.16. April 2005 coincides with the start date of the next price control review for DNOs. This may result in some distortion in charges and the level of the floor and ceiling due to the impact of DNO revenue adjustments in the first year of DPCR4.
- 5.17. An alternate would be to start the review period in April 2006 when DNO charges may be more representative of long run average charges. This also avoids applying the start of the review period retrospectively. Continuing

the interim charging arrangements until April 2006 will however result in a longer period of uncertainty for IDNOs.

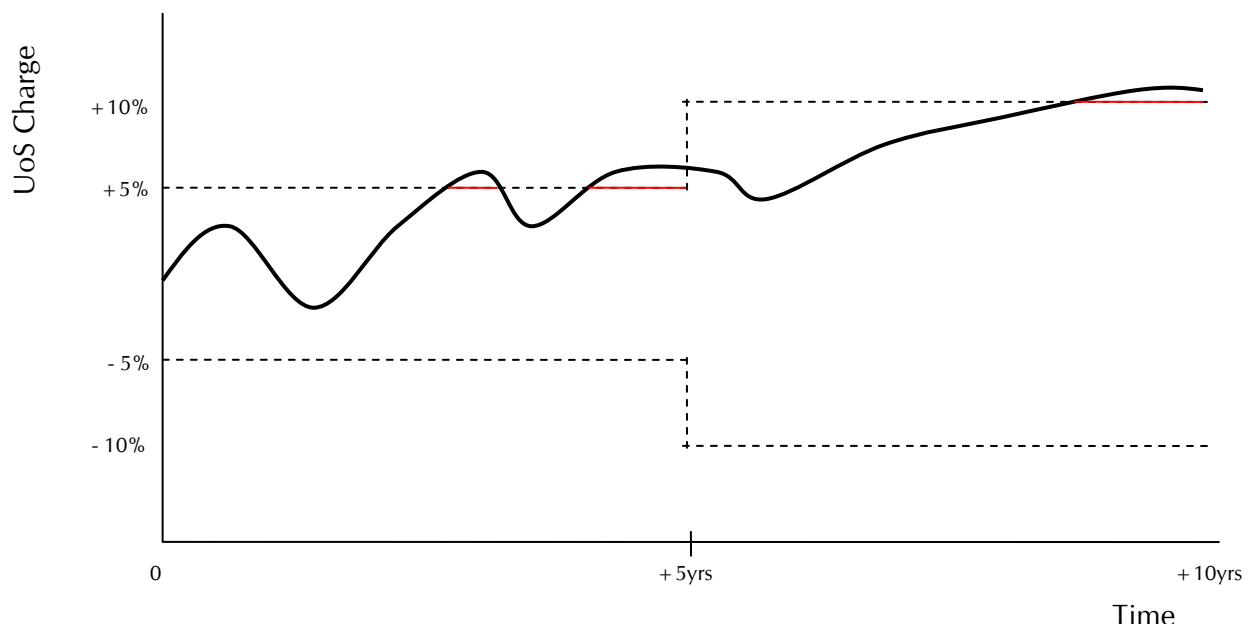
5.18. Commencing the review period in, say, September 2005, when the final arrangements and required licence modifications could be in place, would reduce the period of uncertainty for IDNOs. However there may still be some distortion in charges resulting from DPCR4 revenue adjustments.

5.19. Ofgem welcomes views on the start date of the review period.

5.20. The floor and ceiling would be set at a certain percentage around the incumbent DNO's charge to equivalent domestic customers at the start of the review period. The percentage is proposed at plus and minus five percent for the first five years, moving to plus or minus ten percent thereafter for the next five years. The long term path of the floor and ceiling will be determined by applying RPI-X, where X is proposed to be set at zero, i.e. the path of the floor and ceiling will follow RPI.

5.21. The proposed arrangements are illustrated in figure 5.1.

**Figure 5.1. Illustrative example of proposal 1**



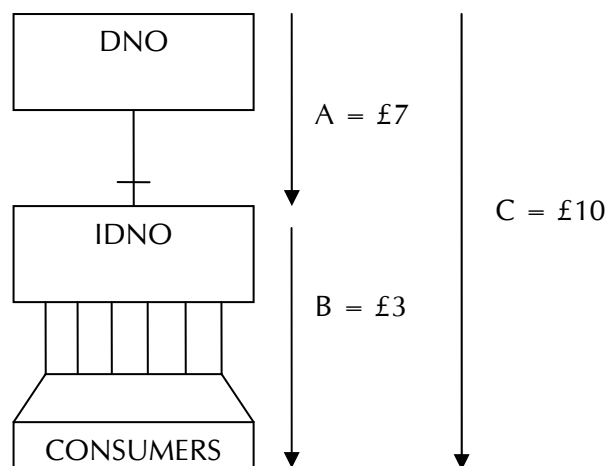
- 5.22. In the above example (purely for illustrative purposes) the IDNO's charge would follow the DNO's charge shown by the bold line until it hits the ceiling, at which point it would follow the dashed line.
- 5.23. It is further proposed that Ofgem would review the arrangements no sooner than year six, i.e. 2011. If at this time it is appropriate to modify the arrangements then any modifications would only apply to new sites connected following the review. Modifications would not be applied retrospectively and any sites connected prior to the review would continue to follow the proposed arrangements until the end of the 10 year review period.
- 5.24. The arrangements would be reviewed before the end of the control period to provide transparency and certainty of the charging arrangements going forwards.

### ***Proposal 2: RPI-X Applied to IDNO's Differential Charge***

- 5.25. Under Proposal 2, IDNO charges will be set relative to the DNO's charge but will follow an independent path over the period of the control, determined by RPI-X. The period of control will be a set period of 10 years. As under Proposal 1, the options for the start of the control period are April 2005, September 2005 and April 2006
- 5.26. It is proposed that the IDNO's initial charge at the time of connection should be set equal to the incumbent DNO's charge to equivalent domestic customers as under Proposal 1. However, going forward only the IDNO's differential charge, i.e. the differential between the incumbent DNO's charge to equivalent domestic customers and the upstream use of system charge, will be subject to regulation. The upstream use of system charge will be passed through as this element will already have been subject to regulation through the DNO's price control.
- 5.27. Therefore if:
- ◆ A is the DNO charge made to the IDNO for use of the DNO's network to the point of connection; and

- ◆ C is the DNO's charge to equivalent domestic customers had it extended the network; then
  - ◆ the differential is  $B = C - A$  and is the IDNO's initial charge for use of its network.
- 5.28. The total charge levied by the IDNO on the supplier would be the charge for the use of its network plus the upstream use of system charge from the DNO, i.e. on day 1, C.
- 5.29. An example of how proposal 2 would be applied is illustrated in Figure 5.2 below.

**Figure 5.2 Illustration of starting point of control under proposal 2**



- 5.30. The path of the IDNO's total charge over the price control period would consist of two elements, i.e. the pass through element and the differential charge.
- 5.31. The pass through element (i.e. A) would increase or decrease as per the DNO's charge to the point of connection of the IDNO network. Therefore if the DNO's charge increases by 5% then A would increase by 5%.
- 5.32. The path of the IDNO's differential charge could follow an RPI-X path over the control, where X is initially proposed to be set at zero. This would provide IDNOs with a high degree of certainty with regard to charges and

would allow customers to share in any efficiency gains made by IDNOs during the period. However it would also result in divergence between IDNO and DNO charges.

5.33. One difficulty with this approach is that the structure of the tariff under which charge A is made may differ from that for charge C. It is therefore not necessarily straightforward either to derive a value for B that is applicable to a class of customers or to monitor compliance with this type of price control.

5.34. As under Proposal 1, it is proposed that Ofgem would review the arrangements no sooner than year six, i.e. 2011. If at this time it is appropriate to modify the arrangements then any modifications would only apply to new sites connected following the review. Modifications would not be applied retrospectively and any sites connected prior to the review would continue to follow the proposed arrangements until the end of the 10 year review period

### ***Comparison of Approaches***

5.35. The advantages and disadvantages of each approach are summarised in table 5.2 below.

**Table 5.2 Summary of approaches**

	<b>Advantages</b>	<b>Disadvantages</b>
<b>Based on incumbent DNO's charges</b>	<ul style="list-style-type: none"> <li>◆ Consumers are not disadvantaged as IDNO and DNO charges will be broadly consistent unless the DNO's charges vary outside the floor or ceiling.</li> <li>◆ Use of floor and ceiling provides certainty to IDNOs.</li> <li>◆ Relatively straightforward to implement and based on present arrangements.</li> <li>◆ Broadly consistent with RPC model in gas sector.</li> <li>◆ Benefits supply competition by keeping IDNO and DNO charges in line in most circumstances</li> </ul>	<ul style="list-style-type: none"> <li>◆ Not reflective of IDNO's costs.</li> <li>◆ May result in divergence of charges in longer term.</li> <li>◆ May result in IDNOs 'cherry picking' sites where they will make highest profits.</li> </ul>

<p><b>Based on IDNO's differential charge</b></p>	<ul style="list-style-type: none"> <li>◆ Only regulates element of total charge that IDNO can control.</li> <li>◆ Provides certainty as path of differential charge over the control period is known.</li> <li>◆ Allows efficiency gains to be shared with customers.</li> <li>◆ Reduces impact of changes in DNO tariff mix.</li> <li>◆ Provides basis for price regulation using RPI-X, if appropriate in long term.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Complex to implement, monitor and administer.</li> <li>◆ Not reflective of IDNO's costs.</li> <li>◆ Will result in divergence of IDNO and DNO charges.</li> <li>◆ May result in IDNOs 'cherry picking' sites where they will make highest profits.</li> </ul>
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### ***Ofgem's Initial View***

5.36. Proposal 2 has certain advantages over Proposal 1 such as only regulating the element of the total charge that is controllable by the IDNO and providing certainty by de-linking the IDNO's charge from the DNO's charge. However, at present, the potential complexity of implementing Proposal 2 both in terms of the regulatory burden, particularly in the absence of industry data on IDNOs, and in terms of the potential impact on suppliers and supply competition would appear to outweigh the benefits.

5.37. It is therefore Ofgem's initial view that Proposal 1 should be implemented to regulate IDNO charges.

### ***Additional issues***

#### ***Non-domestic customers***

5.38. Regulation of IDNO charging arrangements is necessary to protect customers, especially those who are not responsible for choosing the IDNO network to which they are connected. Some respondents to the July consultation argued that charging arrangements should equally apply to non-domestic customers.

5.39. It has been considered whether BA1 should be extended to non-domestic customers. It is Ofgem's view that non-domestic customers are protected

via the non-discrimination provision in SLC 4C<sup>8</sup> of the distribution licence. Paragraph 3 says, “...the licensee shall not make charges for the provision of use of system to any person or class or classes of persons which differ from the charges for such provisions to any other person or to any class or classes of persons, except insofar as such differences reasonably reflect differences in the costs associated with such provision.”

- 5.40. Therefore unless different charges are necessary to reflect differences in costs associated with provision to non-domestic customers, IDNOs will be expected to apply the charging arrangements for domestic customers to non-domestic customers.
- 5.41. In addition, most non-domestic customers should be in a position to engage in connection agreements themselves, as opposed to domestic customers in new housing developments. Therefore Ofgem is not minded to extend BA1 to non-domestic customers at this point.

### ***Nested networks***

- 5.42. Further consideration is required on how nested networks, i.e. embedded networks connected to other embedded networks, will be regulated. In the gas sector any intermediary embedded network does not receive use of system charges for use of its system to transport gas to end customers on a nested network.

### ***Views invited***

- 5.43. Views are invited on:
- ◆ whether Proposal 1 is the most appropriate approach to the regulation of IDNO charging arrangements;
  - ◆ the details of each proposal as set out in this chapter and any suggested modifications, in particular the path of charges over the control and the period of the control;

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<sup>8</sup> SLC 4C. Non-Discrimination in the Provision of Use of System and Connection to the System



- ◆ whether the non-discrimination provision provides adequate protection to non-domestic customers or, alternatively, whether charging arrangements should be extended to non-domestic customers; and
- ◆ the treatment of nested networks.

## 6. Financial Ring-Fencing of IDNOs

6.1. Financial ring-fencing provisions apply to licensed electricity distribution companies, electricity transmission companies and Transco. They provide important safeguards for the financial stability of these licensed companies and protect the licensee against financial pressures that might arise elsewhere in its group. There are two advantages for consumers in these arrangements:

- ◆ they provide protection against certain events that might otherwise lead to the insolvency of the licensee and so protect consumers from the associated uncertainty and possible disruption; and
- ◆ they should allow the licensee to retain access to financial markets on reasonable terms and so facilitate the funding of future investment programmes.

6.2. At present, standard conditions in Section C of the distribution licence which include, amongst others, standard conditions on financial ring fencing, only apply to incumbent DNOs within their distribution services area. Ofgem has proposed modifications under section 8A (3) of the Act to the licences of IDNO applicants to add a new section BA. Standard conditions BA2 to BA6 relate to financial ring fencing:

- ◆ BA2 – Restriction on Activity and Financial Ring Fencing;
- ◆ BA3 – Availability of Resources;
- ◆ BA4 – Undertaking from Ultimate Controller;
- ◆ BA5 – Credit Rating of Licensee; and
- ◆ BA6 – Indebtedness.

6.3. Taken together conditions BA2-BA6 provide important safeguards for the financial stability of the licensed company and so for the protection of the interests of consumers.

- 6.4. Ofgem has previously consulted on the appropriateness of financial ring fencing conditions for the regulation of IDNOs<sup>9</sup>. Given the importance of ensuring that consumers retain access to electricity distribution services it is intended to retain the financial ring fencing conditions in section BA.

### ***Alternative Arrangements***

- 6.5. Ofgem recognises that the ring fencing conditions in the DNO licences were designed bearing in mind the circumstances of incumbent DNOs which are relatively large companies. The July document consulted on proposed alternative arrangements to the requirement for an investment grade credit rating under BA5.
- 6.6. These arrangements take a two-tiered approach with one set of arrangements for IDNOs with less than 500,000 connected supply points and another when this threshold is reached. This limit is below the lowest number of connected supply points for an incumbent DNO.
- 6.7. The alternative arrangements are summarised below:

◆ **For licensees with less than 500,000 connected supply points**

- i. A keep well agreement with the parent company of the licensee with an investment grade credit rating, OR
- ii. A keep well agreement with the parent company of the licensee and, if the parent company does not have an investment grade credit rating, cash in escrow or an on-demand bond issued from a third party with an investment grade credit rating of a value of no less than six months operating costs and six months asset replacement expenditure.

◆ **For licensees with more than 500,000 connected supply points**

- i. An investment grade credit rating, OR

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<sup>9</sup> Ofgem open letters on the regulation of new electricity distribution licence holders, 31May 2002 and 16 April 2003.

- ii. A keep well agreement with an entity with an investment grade credit rating.
- 6.8. It was proposed that operating costs secured under the alternative arrangements should include upstream use of system charges.

### ***Summary of Responses***

- 6.9. Some DNOs commented that there should be consistency in ring fencing arrangements across all network operators and therefore IDNOs should be subject to the same minimum credit rating requirement.
- 6.10. One IDNO argued that upstream DNO use of system charges do not constitute an operating cost of the IDNO. Therefore the current alternative arrangements are inconsistent with the principle that they should protect customers from supply disruptions resulting from financial distress experienced by an IDNO.
- 6.11. Another suggested that operating costs be restricted to significant internal and external costs required to “keep the lights on”.
- 6.12. It was also commented that as IDNOs expand the probability of financial distress is less likely so maintaining a level of financial reserves at a fixed proportion may be uneconomic.
- 6.13. One IDNO suggested that there should be the option of providing cash in escrow, a bond or investment grade credit rating at all levels of connection.
- 6.14. Some respondents commented on the impact of the Energy Bill and special administration powers on the need for alternative arrangements.
- 6.15. Another respondent argued that there is some ambiguity as to whether the alternative arrangements proposed under condition BA5 meet the credit rating required by CUSC in the event that an IDNO connects to the transmission system.
- 6.16. IDNOs suggested various proposals for other arrangements such as demonstrating an appropriate level of financial protection via other

measures (minimum net asset values, minimum share capital, appropriate gearing ratios) and the monitoring movement of credit ratings rather than the absolute rating.

## ***Ofgem's View***

- 6.17. Ofgem has previously recognised that as the financial ring fencing conditions in the DNO licences were designed bearing in mind the circumstances of incumbent DNOs, it is appropriate to develop arrangements that will allow a financially stable smaller company to comply with the ring fencing obligations. Therefore alternative arrangements to the requirement for an investment grade credit rating will be maintained.
- 6.18. Although other arrangements have been suggested by respondents, Ofgem does not consider that these provide the same level of security as cash in escrow or an on-demand bond. Therefore Ofgem proposes to continue the present alternative arrangements. IDNOs may want the option of providing cash in escrow or an on-demand bond at any level of connections. However, when IDNOs approach 500,000 connections maintaining cash in escrow or an on-demand bond may be prohibitive and it may be more economic to pursue an investment grade credit rating or a keepwell agreement from an entity with an investment grade credit rating.
- 6.19. There is flexibility in condition BA5 for an IDNO to apply for the Authority's permission to apply for different alternative arrangements. If these are considered appropriate then different alternative arrangements may be applied.
- 6.20. Ofgem considers that upstream use of system charges constitute an operating cost as under the current contractual arrangements in the electricity sector, IDNOs are liable for upstream use of system charges and these charges are necessary to ensure delivery of electricity to the end customer.

## ***Ring Fencing Licence Modifications***

- 6.21. As part of the final proposals for the Distribution Price Control Review (DPCR4)<sup>10</sup> for DNOs, Ofgem has proposed collective licence modifications of the financial ring fencing conditions in section C of the distribution licence. The proposed collective licence modifications will not affect the ring fencing conditions in section BA of the IDNO licence. Ofgem is considering whether analogous modifications are appropriate for IDNOs.
- 6.22. The modifications include some changes to the definitions and the inclusion of an issuer rating by Fitch Ratings Ltd or any of its subsidiaries for the purposes of paragraph 2 (a) of standard condition 46 (BA5 of the IDNO licence).
- 6.23. In addition the DPCR4 licence modifications propose to change standard condition 47 Indebtedness (condition BA6 of the IDNO licence) to include a 'cash lock up'. This is explained below.

### ***SLC 47: Indebtedness***

- 6.24. Standard condition 47(1)(b) and amended standard condition BA6 (1)(b) prohibit the licensee, without the prior written consent of the Authority, from transferring, leasing or lending any sum or sums, right or benefit to any affiliate or related undertaking otherwise than by way of certain types of transaction, and subject to certain conditions, set out in sub-paragraphs (i) to (vii) inclusive. These transactions include payment of dividends and other distributions, certain transfers of money or other valuable assets on deferred payment or repayment terms, payments of principal and interest on certain loans, fair value payments for goods, services and tax losses, and acquisitions of certain investments.
- 6.25. As part of DPCR4, Ofgem is proposing to allow such transactions to be made without the need for prior written approval of the Authority unless, a

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<sup>10</sup> Electricity Distribution Price Control Review Final Proposals, November 2004 (265/04)

trigger event has occurred and has activated a so-called 'cash lock up'. This trigger event is based on the lowest rating held by the licensee and could either be that:

- (a) the licensee does not hold an investment grade issuer credit rating within the meaning in standard condition 46 (Credit Rating of Licensee); or
- (b) the licensee's issuer credit rating is BBB- by Standard & Poor's Ratings Group or Fitch Ratings Ltd or Baa3 by Moody's Investors Service, Inc. or such issuer credit rating as may be specified by any of these credit rating agencies from time to time as the lowest investment grade credit rating and is on:
  - (i) review for possible downgrade; or
  - (ii) CreditWatch or Rating Watch with a negative designation; orwhere neither (i) nor (ii) applies:
  - (iii) the rating outlook of the licensee as specified by any credit rating agency referred to in sub-paragraph (b) has been changed from stable or positive to negative.

6.26. It may be appropriate to further modify condition BA6 in line with the proposed amendments to standard condition 47. The reasoning for this modification is to provide further protections to the licensee so that the parent company cannot take funds out of the licensee if either the licensee or the parent (or both) is in financial distress.

6.27. Where IDNOs do not have an investment grade credit rating a trigger event relating to the alternative arrangements is required. The most logical trigger event is the failure of the parent company to meet a call under the keepwell agreement. Activating the 'cash lock up' would prevent funds from the escrow account or guarantee being diverted to any purpose other than to continue operation of the licensee's business.

## ***Views invited***

6.28. Views are invited on:

- ◆ whether the licence modifications proposed as part of DPCR4 should be applied to the financial ring fencing conditions of IDNOs, particularly modifications to condition BA6;
- ◆ if modifications to condition BA6 are appropriate, what the trigger event for the cash lock up should be.



## 7. Commercial Issues

- 7.1. The July document considered the existing contractual arrangements in the electricity industry and the impact of these arrangements on the regulatory framework for IDNOs. In addition boundary metering and quality of service issues were considered.
- 7.2. This chapter develops thinking and outlines Ofgem's present views on the commercial framework for IDNOs. Ofgem also intends to host a workshop, in parallel to this consultation, on Tuesday 15<sup>th</sup> February 2005 to discuss the commercial issues arising from the initial proposals in this document. For further information please contact Sean O'Hara on 020 7901 7037.

### ***Current contractual arrangements***

- 7.3. Electricity suppliers supply customers nationwide using DNOs' distribution networks and pay DNOs for the use of these networks. The contractual arrangements between electricity suppliers and DNOs for use of the network are governed by a distribution use of system agreement (DUoSA). Suppliers pay use of system charges for electricity that leaves the distribution system and the charge levied is for use of the distribution network from the entry point to the exit point.
- 7.4. In the situation where an IDNO operates an embedded network there will be a DUoSA between the IDNO and the supplier with the supplier paying use of system charges to the IDNO for use of both distribution networks. There will be a separate connection and use of system agreement between the IDNO and the DNO for use of the DNO's distribution network. There would be no direct contractual link between the supplier and the DNO in respect of the customers on the IDNO network.
- 7.5. In comparison, in the gas sector shippers arrange for the transfer of gas over transportation networks to exit points for the purpose of supply of gas to final consumers by a supplier. Gas transporters (GTs) own and operate these networks, with Transco being the largest GT operating the national transmission system and local distribution networks and IGTs operating

relatively small local distribution networks. Shippers have direct contractual relationships with both IGTs and Transco and transportation charges are levied on the shipper by Transco and the IGTs for use of each respective part of the transportation network.

### ***Aligning gas and electricity structures***

- 7.6. Under the present structure, where an IDNO operates the network at the exit point the IDNO will collect use of system charges on behalf of all distribution businesses whose networks are used to convey electricity to the end consumer and will then pay use of system charges to the upstream DNO for use of the upstream distribution network. Therefore the IDNO will be liable for upstream use of system charges.
- 7.7. In comparison, in the gas sector shippers pay transportation charges to Transco for use of the network to the connection system exit point (CSEP) and pay the IGT for use of the network from the CSEP to the end consumer. Therefore the IGT is not liable for upstream use of system charges.
- 7.8. The July document sought views on whether it would be beneficial to apply similar contractual arrangements as those that exist in the gas sector to the electricity sector so that one party, eg. the supplier, has direct contractual relationships with each of the other parties.

### ***Summary of Responses***

- 7.9. DNO respondents generally thought that existing arrangements should be maintained as far as possible, arguing that changes will lead to substantial costs for changes to core industry systems; that there are differences in charging structures between electricity and gas; and that there are much simpler infrastructure levels in gas. It was likewise argued that contractual arrangements in place for the gas sector are inappropriate for the current electricity trading arrangements.
- 7.10. One DNO suggested that governance of inter-distributor arrangements should be maintained through a single bilateral agreement covering both connection and use of system aspects.

- 7.11. Another DNO highlighted that electricity suppliers have previously requested that they should only receive one invoice, which industry parties have expended considerable monies to support.
- 7.12. IDNOs commented that contracts similar to the gas sector will provide benefits such as clearer definition of charges, reduction of administrative burden, and removal of liability for upstream DUoS charges.
- 7.13. However one IDNO recognised that because of the costs of changing arrangements it could be more appropriate to address the risks and burdens under current arrangements.

### ***Ofgem's View***

- 7.14. Ofgem recognises that any changes to the contractual arrangements in electricity will require changes to industry systems which will impact on industry parties. However there will also be benefits such as reducing IDNOs' liability for upstream DUoS and such benefits may become increasingly important as the industry becomes more complex, e.g. nested networks, distributed generation.
- 7.15. It is proposed that to develop thinking on the issues further evidence on costs and benefits is required. Arguments made to the July consultation were not supported with quantitative evidence, therefore further views are invited specifically quantifying the costs and benefits and the practical issues involved in changing the contractual arrangements in electricity.

### ***Boundary Equipment***

- 7.16. At present there is no requirement for settlement or boundary metering between DNOs' networks and embedded networks within the same GSP group<sup>11</sup>. The July document sought views on whether or not metering is required for IDNO embedded networks.

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<sup>11</sup> A GSP Group is a distinct electrical system consisting of the distribution system(s) which are connected to the transmission system and any distribution system which is connected to it but not connected to the transmission system at the grid supply point. The Balancing and Settlement Code, Annex 1 General

## ***Summary of Responses***

- 7.17. DNOs commented that in most cases the use of boundary metering is essential as it increases transparency of charging for use of system and removes complexities of establishing suitable alternative means of calculating use of system charges. It was also argued that metering is necessary for measuring distribution losses and providing a benchmark in the event of a dispute.
- 7.18. However, some DNOs suggested that there could be a de-minimis value where metering is not required.
- 7.19. All IDNO respondents were against a requirement for boundary metering. One respondent argued that there is no technical, safety or commercial justification for boundary metering and that a requirement for metering would place an IDNO at a disadvantage. This is because the cost of the metering equipment and the land required for the meter increases the capital cost of a network extension and would not be required if the DNO had extended the network.
- 7.20. Two respondents were principally concerned about the cost of metering. One suggested that if the benefits of metering outweigh the costs then a meter should be installed and the costs shared between all beneficiaries. Another argued that the party requiring metering should provide it without cost to the end customer.
- 7.21. Issues concerning other requisite boundary equipment, such as point of isolation equipment, were also raised. Some respondents argued that installation of suitable boundary equipment including metering and point of isolation equipment is a prerequisite to the provision of a network connection.

## ***Ofgem's View***

- 7.22. Following responses to the July document, Ofgem has considered issues relating to both equipment at the DNO/IDNO interface and boundary metering.

### **Equipment at DNO/IDNO interface**

- 7.23. In order to satisfy Regulation 6 of the Electricity Safety, Quality and Continuity Regulations<sup>12</sup> (ESQCRs) distributors have to fit protective devices to their networks. Consequently fuses or a circuit breaker will have to be fitted at each point of connection. This will normally also provide an isolation facility that will have operational benefits for both distributors. Discussions with the DTI Engineering Inspectorate suggest that this obligation may be met by ensuring that there is a single protective device at a link point between a DNO and IDNO network supported by appropriate operating/access arrangements between the relevant licensees. Nevertheless it is for each licensee to satisfy itself that it is compliant with the ESQCRs.
- 7.24. Ofgem expects all licensees to cooperate in order to adopt the lowest cost solution to meet statutory requirements. Ofgem is aware of agreements currently in place between licensees enabling them to deal, in a cost effective manner, with various issues including shared access arrangements and operating procedures at various points of the network.
- 7.25. Ofgem considers, in the light of the advice from the DTI and the requirement for licensees to identify minimum cost connection arrangements, that in many circumstances only one set of isolation equipment, supported by appropriate shared operating procedures, may be necessary. There may be exceptional circumstances where licensees can justify the requirement for duplicate sets of protection.
- 7.26. It is proposed that the party requiring the connection (i.e. the IDNO) should pay for protection/isolation equipment at the interface. However, the IDNO should only be expected to pay for one set of equipment.

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<sup>12</sup> Statutory Instrument No. 2002/2665. Note the DTI will be consulting on the ESQCRs in the near future.

- 7.27. Where one set of isolation equipment is used then this equipment must be provided in a manner which enables both licensees to have reasonable access. Ofgem expects licensees to co-operate to reach reasonable commercial arrangements to provide access and assign responsibility for repair and maintenance, etc.

### **Boundary Metering**

- 7.28. It is Ofgem's view that there are a number of benefits associated with boundary metering. These include more accurate information that will aid in the calculation of use of system charges and losses. The benefits of accurate information are particularly important when considering the future development of the network in relation to issues such as embedded generation connecting to DNO or IDNO networks.
- 7.29. Metering may also help to achieve the objectives of cost reflectivity and transparency.
- 7.30. For an IDNO, boundary metering provides the certainty that it is charged for use of system based on actual consumption rather than potentially arbitrary profiling. This may reduce the potential for disputes between DNOs and IDNOs.
- 7.31. Ofgem recognises that there are costs associated with provision of metering, including the cost of the actual meter itself and the housing for the meter, which would not be incurred if a DNO extended the network instead of an IDNO. However, the metering costs will generally be relatively small compared with the unavoidable cost of providing the protection/isolation equipment that is required. The sum of these costs is likely to be a larger proportion of total costs for smaller networks connected to low voltage (LV) distribution cable rather than high voltage (HV).
- 7.32. Ofgem has considered whether it would be appropriate to apply a 'one size fits all' approach to metering, i.e. to require metering for all boundary connections. However to assess this, further quantitative information is required from DNOs and IDNOs on the arguments for and against metering.

- 7.33. For HV connections, and also LV connections at a substation, Ofgem is minded to support a requirement for boundary metering. In such situations metering can more readily be accommodated and the marginal cost of installing metering is relatively small.
- 7.34. For connections to an existing LV line or cable a requirement for boundary metering may be more of an issue. Accommodating a meter could be more difficult in such cases, where network extensions are on a smaller scale. Therefore, Ofgem may consider that a de-minimis level of connections, up to which metering will not be required because the costs outweigh the benefits, should be identified. Ofgem welcomes views on this approach.

### ***Quality of service***

- 7.35. The July consultation considered which guaranteed standards of performance and which elements of the Information and Incentives Performance (IIP) reporting requirements should apply to IDNOs. Views were also invited on the extent to which DNOs reporting arrangements would need to be modified to reflect the existence of IDNOs.

### ***Summary of Responses***

- 7.36. The majority of respondents who addressed quality of service issues considered that the Standards of Performance and IIP reporting requirements should be applied equally to all network operators. This would ensure that customers on IDNO networks would have the same quality of service protection as customers on all other DNO networks.
- 7.37. Two DNOs argued that a connected IDNO network should be treated by the DNO as a single customer regardless of how many customers are connected to the IDNO's network.
- 7.38. IDNOs commented that incidents arising on an IDNO's network as a result of incidents on the upstream network should be reported separately and excluded from the IDNO's performance measures.

- 7.39. One IDNO argued that the burden of reporting will be greater for IDNOs and so requirements for IIP reporting should be proportional to the extent to which Ofgem intends to use an IIP structure to determine an IDNO's charging allowance.

### ***Ofgem's View***

- 7.40. It is proposed that the same Guaranteed Standards of Performance will apply to DNOs and IDNOs. This has been consulted upon as part of the DPCR4 process, final proposals for which were published in November 2004<sup>13</sup>. Ofgem has recently published a consultation on the draft Statutory Instrument<sup>14</sup>.
- 7.41. Under section B of SLC 5, IDNOs are required to submit a statement to the Authority setting out the criteria they will use to measure security and availability of supply and quality of service, and then provide that report to the Authority within 2 months after the end of each financial year.
- 7.42. Ofgem would expect IDNOs to set out in the SLC5 statements that they will measure these outputs in accordance with the definitions in the Regulatory Instructions and Guidance (RIGs)<sup>15</sup>. In particular, Ofgem would expect IDNOs to measure:
- ◆ the total number of customers connected to their network;
  - ◆ the number of customers interrupted per 100 customers per year (CIs) (where an interruption last for three minutes or longer);
  - ◆ the average customer minutes lost per customer per year (where an interruption lasts for three minutes or longer) (CMLs); and

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<sup>13</sup> See Ofgem publication 265/04 'Electricity Distribution Price Control Review – Final Proposals'; November 2004

<sup>14</sup> See Ofgem publication 03/05 'Revised Standards of Performance arrangements for electricity distributors – consultation on draft SI'; January 2005. The closing date for responses is 7 February 2005.

<sup>15</sup> The RIGs are currently out for consultation, see Ofgem publication 'Information and Incentives Project. Fifth Draft of Regulatory Instructions and Guidance Version 5'; November 2004.



- ◆ the number of customers interrupted by short interruptions (i.e. interruptions less than three minutes) per 100 customers per year (SIs)

7.43. It is proposed that IDNOs report the data to Ofgem in accordance with SLC5 in a modified IIP reporting template, with the data separately identifying CIs and CMLs arising from:

- ◆ unplanned incidents on their own network by voltage;
- ◆ pre-arranged incidents on their own network;
- ◆ incidents on connected networks; and
- ◆ incidents on distributed generation connected to their network.

### ***Views invited***

7.44. Views are invited on:

- ◆ the appropriateness of aligning contractual arrangements in the electricity and gas industries, specifically quantifying the costs and benefits and the practical issues involved in changing the contractual arrangements in electricity;
- ◆ quantitative information on the arguments for and against metering;
- ◆ whether metering is required for HV and LV connections;
- ◆ whether there should be a de-minimis level of connections before a meter is required; and
- ◆ how DNOs should count customers connected to downstream networks for the purposes of RIGs reporting and the IIP incentive scheme.

## 8. Next Steps

- 8.1. This document has set out Ofgem's initial proposals on the development of the long term regulatory regime for IDNOs, with respect to:
- ◆ charging arrangements;
  - ◆ financial ring fencing conditions; and
  - ◆ commercial issues.
- 8.2. Ofgem welcomes views on the proposals outlined in this document. Responses to this consultation should be received by 18<sup>th</sup> March 2005.
- 8.3. Ofgem's Connections team intends to host a workshop, in parallel to this consultation, on Tuesday 15<sup>th</sup> February 2005 at 10.30am to discuss the commercial issues arising from the initial proposals in this document. For further information please contact Sean O'Hara on 020 7901 7037.
- 8.4. Ofgem will consider responses to this consultation and intends to publish a final decision document in May or June 2005.

# Appendix 1 : List of Respondents

CE Electric UK

Central Networks

CoCal

EDF Energy

Electricity Networks Association

Energy Networks Limited

Independent Power Networks Limited

Laing Energy Limited (LEL)

National Grid Transco

RWE npower

ScottishPower

Scottish & Southern Energy

SP Transmission & Distribution

United Utilities

Western Power Distribution