

## **Structure of electricity distribution charges**

### **Approval of Scottish Power's charging methodologies: Decision document**

February 2005

## Summary

This document provides the Gas and Electricity Markets Authority's (the Authority) decision concerning approval of Scottish Power's (SP) use of system (UoS) and connection charging methodologies and approval of the form of the statement of use of system charges. Distribution network operators (DNOs) are required by their licences to determine these and for them to be approved by the Authority by 1 April 2005.

The document sets out that the Authority:

1. Approves SP's UoS charging methodologies, pursuant to standard licence condition (SLC) 4(1a), subject to the following condition:
  - ◆ Provision of more detailed policy on the recovery of NGC charges and business rates.
2. Approves SP's connection charging methodologies in accordance with SLC4B(1a).
3. Defers the decision on the approval of the form of SP's statements of UoS charges in accordance with SLC4A(1) until populated statements are provided.

Notice of the Authority's proposed decision was provided to SP on 16 December 2004, and SP has had 28 days to make representations on issues pertaining to the charging methodologies where conditional approval was proposed. The Authority has considered SP's representations, and this document constitutes its decision. Where conditional approval is granted the Authority will consider enforcement action where the condition of that approval is not met.

The following chapters provide further details on the nature and contents of these decisions.

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# 1. Introduction

- 1.1. This document sets out the Authority's decision concerning approval of Scottish Power's (SP) charging methodology statements following the modification to standard licence condition (SLC) 4 of the distribution network operators' (DNOs') electricity distribution licence (the licence, as amended in July 2004<sup>1</sup>) and following consideration of responses to the October consultation<sup>2</sup> on this matter.
- 1.2. Notice of the Authority's proposed decision was provided to SP on 16 December 2004, and 28 days allowed for SP to make a representation. SP submitted redrafted connection and use of system (UoS) methodology statements for both SP Distribution and SP Manweb on 13 January 2005. This representation was considered by the Authority in accordance with SLC4(10) and 4B(20), and the decisions in this document are based on those statements, and not earlier versions.
- 1.3. This constitutes formal publication of the Authority's decision and explains the basis of the Authority's decisions, setting out responses to the October 2004 consultation paper, Authority views and the Authority's conclusion on each matter.
- 1.4. The licence requires the DNOs to determine UoS and connection charging methodologies for approval by the Authority by 1 April 2005. In addition, a statement of use of system charges is required which is subject to Authority approval of the form of the document.
- 1.5. Separate methodologies and charging statements are required for each licensed distribution area. In accordance with this, SP has submitted documents for the SP Distribution and SP Manweb distribution services areas. This decision document covers both licensed areas, and references to SP refer to both areas.

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<sup>1</sup> See Section 11A notice, document reference 150/04 (6 July 2004), available on the Ofgem website at [www.ofgem.gov.uk](http://www.ofgem.gov.uk) under the Licensing (modifications) area of work. This sets out the modification of all distribution licences, to come into effect on 7 July 2004.

<sup>2</sup> "Structure of electricity distribution charges – Proposed DNO charging methodology statements: Consultation document" October 2004 235/04.

## ***Purpose of this document***

- 1.6. The purpose of this document is to set out the Authority's decision on approval of SP's charging methodologies and charging statement. The Authority's conclusions are set out in chapters 4, 5 and 6.

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

- 1.7. The structure of this document is as follows:

◆ Chapter 2

This chapter sets out the interim charging arrangements and implications for the approval of the methodologies.

◆ Chapter 3

This chapter sets out the approvals process, and includes the relevant objectives set out in the licence.

◆ Chapter 4

Chapter 4 details UoS issues that have been considered and outlines the Authority's reasoning for approval or non-approval.

◆ Chapter 5

Sets out connection charging issues that have been considered and outlines the Authority's reasoning for approval or non-approval.

◆ Chapter 6

This chapter explains the deferral of the decision on the approval of the form of the statement of UoS charges.

## 2. Interim arrangements

- 2.1. In November 2003 Ofgem proposed that the implementation of revised arrangements for the structure of electricity distribution charges be achieved in two stages. In making this decision Ofgem recognised the comments of interested parties that any attempt to introduce wholesale changes to charging arrangements from 1 April 2005 was extremely challenging.
- 2.2. From 1 April 2005 a new charging regime, 'interim arrangements', will be established predominantly addressing a common connection charging boundary for demand and generation, removing deep charging of generators, and introducing the requirement for DNOs to determine connection and use of system charging methodologies.
- 2.3. In parallel with this further consideration needs to be given to the most suitable longer term methodology. It is still Ofgem's view that the demand and generation regimes should be fully aligned with use of system charges established via charging models based on forward looking long run incremental costs (LRIC). Ofgem expects these models to be developed by DNOs in 2005, with consultation and the resolution of any outstanding issues by 2006. The longer term arrangements will be developed within the charging methodology framework introduced and effective from 1 April 2005.
- 2.4. In making the decisions on the methodologies effective from 1 April 2005 the Authority has recognised this two stage implementation and that some issues are not practicable to rectify by 1 April 2005. Therefore, the charging methodologies approved for 1 April 2005 form a baseline for the interim arrangements, from which the longer term arrangements will be developed during 2005.
- 2.5. In addition to the items that require further time to rectify, the DNOs are obliged to review their methodologies at least once a year for the purpose of ensuring that they continue to achieve the relevant objectives as although the methodologies may achieve the relevant objectives at day one, circumstances may change over time and it is important to continually assess that the charging arrangements are still appropriate. The DNO is also obliged to make modifications to their charging methodologies where improvements can be

identified. This document, in addition to the principles outlined above, identifies some areas where the DNO methodologies could be bettered. Ofgem is keen for the longer term arrangements to be progressed and expects DNOs to actively develop longer term charging arrangements over the coming year.

- 2.6. As detailed above the obligation to develop charging arrangements for the longer term is with the DNO but it is proposed that the Implementation Steering Group (ISG) continues as an industry discussion group to facilitate this process, along with Ofgem led wider consultations with the industry, academia and other interested parties as appropriate.

## 3. Approvals process

### *Licence conditions*

- 3.1. SLC 4 of the licence requires each DNO, by 1 April 2005, to determine and prepare charging methodologies and statements approved by the Authority that achieve the relevant licence objectives. In considering whether to approve the charging methodologies to take effect from 1 April 2005 the Authority has considered the relevant objectives and its wider statutory duties<sup>3</sup>.
- 3.2. These obligations, the relevant objectives, are contained within SLC4 and SLC4B of each DNO's electricity distribution licence as amended on 7 July 2004<sup>4</sup>:
- ◆ that compliance with the charging methodology facilitates the discharge by the licensee of the obligations imposed upon it under the Electricity Act 1989 (the Act) and by its licence;
  - ◆ that compliance with the charging methodology facilitates competition in the generation and supply of electricity, and does not restrict, distort or prevent competition in the transmission or distribution of electricity;
  - ◆ that compliance with the methodology results in charges which reflect, as far as reasonably practicable (taking account of implementation costs), the costs incurred by the licensee in its distribution business; and
  - ◆ that so far as consistent with the above objectives, the methodology, as far as reasonably practicable, will take account of developments in the licensee's distribution business.
- 3.3. The licence specifies that a reader of the methodology should be able to make a reasonable estimate of charges (SLC4A, para 1 and SLC4B, para 4(b)) using the methodology and charging statement.

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<sup>3</sup> Ofgem's statutory duties are wider than the matters considered by the relevant objectives and include amongst other things having regard to social and environmental guidance provided to Ofgem by the government.

<sup>4</sup> As set out in document reference 150/04, available on the Ofgem website at [www.ofgem.gov.uk](http://www.ofgem.gov.uk).

## ***Consultation process***

- 3.4. Ofgem ran a month long consultation on the draft charging methodologies submitted by DNOs on 30 September in its October 2004 consultation document. Prior to this, initial draft methodologies were consulted on by Ofgem for a month in July 2004 in an open letter which anonymously set out the DNOs' first draft proposed statements and requested comments on issues raised therein.
- 3.5. Prior to these two consultations focussing on the new DNO methodologies, consultations progressing ideas regarding charging structures were published between December 2000 and April 2004.
- 3.6. The October document invited views on the matters raised in this consultation document and asked for comments on whether the DNOs' draft methodology statements achieve the relevant licence objectives.
- 3.7. Views were invited on the detail of the methodologies, specifically:
- ◆ areas where the methodologies may not achieve the relevant objectives;
  - ◆ whether enough information has been provided to enable users to make a reasonable estimate of charges that they may become liable for; and
  - ◆ areas where the methodology statements could be improved.
- 3.8. Twenty responses were received to the October document<sup>5</sup>. Respondent's views on specific policy areas are included in sections 4, 5 and 6 as appropriate.
- 3.9. Ofgem consulted separately on the transition of EHV demand charges in December 2004 to ensure that industry views were captured on the issue where the method used to calculate charges has been altered by certain DNOs. A decision on this matter is being published separately.

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<sup>5</sup> Responses to the October consultation document are published on the Ofgem website, [www.ofgem.gov.uk](http://www.ofgem.gov.uk) under the Electricity Distribution Charges area of work.

## 4. Use of system charging methodology

- 4.1. This section sets out issues concerning SP's UoS methodology and the Authority's approval of it. The decision of whether to approve the methodology as a whole is based on the consideration detailed below and is provided at the end of this chapter.

### ***DUoS general commentary***

- 4.2. The Authority notes SP's suggestion (from its 13 January representation) that these comments do not form part of the approval notice, and that SP is not obliged to take action on them. According to SLC4(2), SP is required to review its methodology at least once a year to ensure that it continues to meet the relevant objectives, and make such modifications as would help it better meet the relevant objectives. The Authority will continue to monitor this process to assess SP's compliance with the licence obligation to carry out regular review of the methodologies.
- 4.3. The methodologies for April 2005 form a baseline from which it is expected that the documents will evolve and improve, and these comments are provided as indications of areas where this development might usefully focus after April.

### **Demand models – general**

- 4.4. The Authority notes respondents to the October consultation who suggest that in order for users to be able to estimate their future charges, full details were needed on the inputs to the model.
- 4.5. Such inputs include operation and maintenance (O&M) costs and calculations, the derivation of modern equivalent asset values, the calculation of yardsticks, line loss factors (LLF) and diversity factors, and the treatment of NGC exit charges and rates. One respondent suggested publishing the models in full, and also noted that the publication of tariff classes and LLFs in a common electronic format would be useful.
- 4.6. SP's January representation noted this matter, but suggested that it did not support publication of the charging models at this time, since the scope of

Authority approvals should be limited to principles and methods only, unless that scope was increased by collective licence modification. SP also committed to address this issue further as part of the development of longer term arrangements.

- 4.7. The Authority notes these concerns, and considers that the relevant objectives could be better met by increasing the level of detail in the methodology statements. The Authority believes that this issue should be addressed during ongoing review of the methodologies by DNOs, Ofgem and the industry along with consideration over the publication of models/other information.

### **Tariff structures**

- 4.8. The methodologies need to set out the basis for the determination of different tariff groups and indicate the methodology for charging different customers. Tariff structures are integral to producing transparent methodologies that better meet the relevant licence objectives.

### ***DNO representation***

- 4.9. SP's January representation stated that tariff structures are not part of the charging methodology scope, and that tariff structures are an output of the methodology, rather than a part of it, simply used to recover the costs determined by the methodology. SP consider that tariff structures are within the scope of the SLC4A charging statement, and incorporation in the methodology would require modification of SLC4 and 4A.

### ***Conclusion***

- 4.10. Clarity over tariff structures is required to demonstrate that costs are being recovered across customers that cause the cost, to the greatest extent possible, and to ensure efficient and economic use and development of the network.
- 4.11. The methodology determines the method of charging tariffs. The Authority considers tariff structures to be an integral part of the charging methodology, and any changes in structure would constitute a change in the methodology which would need to follow the change modification process.

- 4.12. Charges can only be levied on items set out in the charging methodology. Hence, the basis of all charges must be explained in the methodology.
- 4.13. Issues over appropriate tariff structures will be considered further in development of a longer term framework, taking other developments on the system and metering constraints into account.

### **Standing charge level**

- 4.14. One specific tariff structure issue is the level of standing charges to variable unit charges.
- 4.15. The Authority notes the difference in treatment between the DNOs, with Western Power Distribution levying zero standing charges and a range of figures between the other companies.
- 4.16. Respondents to the October consultation noted that the split between standing and usage charges affected different users differently and possibly adversely. One respondent was concerned by the rebalancing of SP's demand UoS charges towards increased standing charges: it was felt that this could affect the benefit of installing domestic microgeneration to reduce usage, and went against energy efficiency principles.
- 4.17. The suggestion of reassessing tariffs and charges based on actual demand (downstream costs) was also raised in a July open letter consultation response.
- 4.18. This issue will be considered further in development of a longer term framework along with wider tariff structures, as set out above and agreed to in SP's January representation.

### ***GDUoS issues***

#### **NGC exit charges and business rates**

- 4.19. Under the price control, business rates on network assets will be treated as a pass through item for demand. NGC charges will be treated as a pass through item payable by either demand or generation.

- 4.20. SP have clarified that business rates will be recovered from demand customers only, and that exit charges will be recovered in all use of system charges (for both demand and generation).
- 4.21. However, the statement is still not clear on how these costs will be determined for generators, merely stating that long run marginal costs may include the forecast costs of any generation spilling onto the transmission system.
- 4.22. The Authority considers that the policy on NGC charges and business rates for generators is still insufficiently clear to allow generators to assess overall what charges they may be liable for. Approval is conditional upon SP describing this policy in greater detail, to be completed by 1 April 2005.

#### **GDUoS EHV charges**

- 4.23. SP has set out a methodology for charging new generators for use of system on a tariff basis at EHV for generators. Tariffs are dependent on location.

#### ***Comments received***

- 4.24. Four respondents noted the benefits of publishing tariffs for GDUoS charges at EHV, namely that these aided generators at the development stage, and avoided non-transparent bilateral negotiations between DNOs and customers. The majority were in favour of site specific charges at this time for a variety of reasons including uncertainty over year on year tariff movement and consistency with DUoS charges at EHV. One noted that transparency was still a concern with site specific charges, and it would be important that the methodology was clear, to allow future charges to be estimated, if these were to be adopted. One response supported the move to tariffs in the future but thought that a site specific charge at this time would be preferable to an area wide tariff.

#### ***Authority position***

- 4.25. The Authority envisaged that the DNOs would deliver UoS charges on a tariff basis varying by location and voltage where appropriate.
- 4.26. SP's tariff methodology appears to match the Authority's view of GDUoS tariffs in that it is locationally varying and forward looking. In discussing this issue with

the DNOs it is apparent that some DNOs believe that cost reflectivity at this time is better met using site specific charges rather than a tariff.

### ***Conclusion***

- 4.27. The Authority approves the GDUoS charging methodology as presented by SP but would expect that this will develop with time and experience, such as the greater transparency in the criteria for the establishment of the locational zones. It is also important that the boundaries between zones are clear to prospective users.

## ***GDUoS general commentary***

### **Microgeneration**

- 4.28. The methodology includes the capability for GDUoS charges to be collected from microgenerators or small scale embedded generators.
- 4.29. Responses to the consultation noted the need for any microgeneration charges to reflect actual costs on the system. It was also felt that benefits to the system should be taken into account, but the difficulty of identifying such benefits was noted, given that take up is still low. In general, respondents stressed the need to avoid disincentivising or prohibiting microgeneration connections in the next few years. One respondent also raised the concern that tariff structures (where standing charges are high and variable charges are low) can offset the benefits of installing microgeneration.
- 4.30. The Authority considers that charges should reflect the cost and benefits a user imposes on the system and where DNOs have identified costs associated with LV connected generators these should be reflected through in charges. DNOs should continue to monitor costs incurred associated with microgeneration connections and adjust charges as necessary. SP has stated that it supports this view.

## **Other GDUoS issues**

- 4.31. The Authority also notes that there are further issues to consider on the structure of generator charges, and that enduring solutions for some issues may be different from the interim approved methods. DNOs' GDUoS charging methodologies should increase in sophistication and cost reflectivity as knowledge of actual costs increases.
- 4.32. These issues include the use of restrictions on volatility, appropriate tariff structures, contractual issues and the reflection of deferred costs on the system. These will be addressed for the longer term framework during 2005. SP has stated that it will support this development.

## **GDUoS – O&M**

- 4.33. SP suggest that O&M charges and other business costs will be calculated as a percentage of the gross asset value. It is unclear what basis these percentages will be calculated, although this is captured further in 3.1.4. of the methodology statement. SP should consider how more detail could be added here during future review of the methodology statement. SP have stated that this will be addressed in the ongoing review of their methodology.

## ***Decision on the use of system charging methodology***

- 4.34. Based on the issues outlined above, the Authority approves SP's UoS charging methodology, subject to the following condition, to be completed by 1 April 2005:
- ◆ Provision of a more detailed policy on recovery of NGC charges and business rates which also conforms to the price control revenue restrictions.
- 4.35. As set out above, SP should also note that further work to improve the methodology will be required on certain areas as the methodology evolves over time, including alterations on the items set out above, to ensure compliance with the licence obligation to develop the methodology to better meet the relevant objectives.

## 5. Connection charging methodology

- 5.1. This section sets out some general comments concerning SP's connection charging methodology and a decision on its approval.
- 5.2. As for UoS above, the Authority notes SP's suggestion (from its 13 January representation) that these comments do not form part of the approval notice, and SP is not obliged to take action on them. According to SLC4B(2), SP is required to review its methodology at least once a year to ensure that it continues to meet the relevant objectives, and make such modifications as would help it better meet the relevant objectives. The Authority will continue to monitor this process to assess SP's compliance with the licence obligation to carry out regular review of the methodologies.
- 5.3. The methodologies for April 2005 form a baseline from which it is expected that the documents will evolve and improve, and these comments are provided as indications of areas where this development might usefully focus after April.

### *Connections general commentary*

#### **Application of special terms**

- 5.4. The connection charging methodology described applies to almost all possible connection scenarios but SP has reserved the right to decide terms in cases where normal criteria do not apply or where the standard of security of the system is reduced. It is not clear to parties what these criteria are, or what the offered terms might be.
- 5.5. To ensure transparency of charge application the basis of all charges should be set out in the methodology to the extent that this is possible. Where other terms may apply it would be useful for the methodology to list what charges may apply and the basis of the charges in such cases. SP has stated that this will be addressed during ongoing review of the methodology.

## **Metering charges**

- 5.6. SLC4B(5) states that any charges for the provision of special metering or telemetry or data processing equipment which are not covered by the charges in the SLC36 statement of Metering and Data Services charges should be included in the connections statement. If any charges are to be levied for these items as connection charges, details would need to be included in the statement. SP has confirmed that it is not aware of any such charges that are not included in the SLC36 statement.

## **Worked examples**

- 5.7. In general SP connection examples provided to inform the reader of the statement covered a wide range of examples. They also appeared to be clearly set out. Ofgem has suggested there are benefits to commonality between the statements on examples and format used, since this would aid clarity for users assessing likely connection charges. The Authority considers this to be a matter to be considered during periodic review of the statements.
- 5.8. The Authority notes that SP state that new transformer capacity will be treated as a connection asset unless spare capacity is used to reinforce the existing network. This statement seems to adequately describe the boundary between connection and reinforcement assets but for the avoidance of doubt SP need to provide examples to provide greater clarity to this statement to ensure that its effect is understood by prospective customers.
- 5.9. SP has stated that the worked examples will be considered further as part of the ongoing review of its methodology.

## ***Decision on connection methodology statement***

- 5.10. Based on the issues outlined above, the Authority approves SP's connection charging methodology.
- 5.11. SP should also note that further work to improve the methodology is required now, and will be required on certain areas as the methodology evolves over time, including alterations on the items set out above, to ensure compliance with

the licence obligation to develop the methodology to better meet the relevant objectives.

## 6. Statement of UoS charges

- 6.1. SP submitted template charging statements for April 2005 in November 2004, but the schedules to these were blank. It is not possible to provide form approval of the statements until these are populated, since only then will it be possible to determine whether they enable reasonable estimates of charge to be made.
- 6.2. Indicative charges were submitted in December 2004, but only in the form of a notice. A decision on form approval of the statements will be issued in February 2005 when final charges are sent to the Authority.
- 6.3. In the meantime, SP should note the point below relating to approval of the UoS methodology statement.

### **Network unavailability rebates**

- 6.4. The Authority notes that SP's full policy on rebates is included only in the charging statement. This is accepted, but SP should note that the continuance of the price control incentive at the current rate assumes that rebates are being given at the rate proposed by Ofgem.