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Charges for pre-2005 distributed generators' use of DNOs' distribution systems - proposed guidance

Consultation

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Overview:

As part of the current electricity distribution price control arrangements (DPCR5) that came into effect in April 2010, Ofgem lifted the five year exemption on pre-2005 distributed generators (DGs) from paying use of system charges. In order that pre-2005 DGs are charged in accordance with DNOs' use of system charging methodologies, we noted that DNOs may need to renegotiate their contractual terms with pre-2005 DGs and pay compensation where it is necessary. We also said that where we assessed compensation paid was economic and efficient, the DNO would be able to recover that compensation from customers through its next price control.

This consultation document seeks views specifically on our proposals and rationale for determining whether refunds paid by DNOs to pre-2005 DGs should be funded through DNOs' price controls.

We propose that these refunds should only be paid for if they are necessary to avoid DGs paying twice for items such as the provision of operation and maintenance services. However, we also propose that where a DNO did not originally secure payment or the ability to charge for services provided to pre-2005 DGs which are now covered by use of system charges, any compensation paid by the DNO should not be recoverable through its price control. It will be necessary for the DNOs to demonstrate that any refunds paid to DGs are economically and efficiently incurred through the provision of suitable evidence in order for the costs to be recoverable through the price control.

Context

Revised generator use of system (UoS) charging arrangements were introduced in 2005, in particular by changing the connection charging boundary. At that time, Ofgem granted an exemption from charges to distributed generation connected under pre-April 2005 terms. This exemption was granted for the period from 1 April 2005 to 31 March 2010. Ofgem decided not to extend this exemption and it fell away on 1 April 2010.


Distribution network operators (DNOs) have an obligation to have in place a charging methodology that meets certain relevant objectives, including the requirement not to distort competition and to reflect developments in their businesses. Charges to customers on the higher voltage levels will be common, subject to Authority approval of DNOs' proposals, from 1 April 2012. Common charges were introduced for customers connected to the lower voltages on 1 April 2010.

This consultation document follows on from our consultation published last July. It is part of our work to facilitate the DNOs' development and application of common, more cost reflective UoS charging arrangements for all DG customers.

In addition, our work on pre-2005 DG charging is related to workstreams identified in Ofgem's Corporate plan for 2011-2016. In particular, encouraging more efficient use of DNOs' networks by DGs will contribute to the achievement of a low carbon energy sector. Facilitating the development of common, more cost reflective and transparent UoS charging arrangements is intended to promote value and quality for all consumers.

Associated documents

- Electricity Distribution Price Control Review Final Proposals – Incentives and Obligations, December 2009 (Reference number: 145/09)
http://www.ofgem.gov.uk/Networks/ElecDist/PriceCtrls/DPCR5/Documents1/FP_2_Incentives%20and%20Obligations%20FINAL.pdf
- Electricity Distribution Price Control Review Initial Proposals – Incentives and Obligations, August 2009 (Reference number: 93/09)
http://www.ofgem.gov.uk/Networks/ElecDist/PriceCtrls/DPCR5/Documents1/Initial%20Proposals_2_Incentives%20and%20Obligations.pdf
- Structure of electricity distribution charges - Initial decision document, November 2003
http://www.ofgem.gov.uk/Licensing/ElecCodes/DistCode/Mods/Archive/5150-Structure_elec_dist_charges_14nov03.pdf
- Charges for Pre-2005 Distributed Generators' use of Distribution Network Operator's (DNO) distribution systems - decision on unbundling, August 2010
<http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=607&refer=Networks/ElecDist/Policy/DistChrgs>



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- Charges for pre-2005 Distributed Generators' use of DNOs' distribution systems, July 2010 (Reference number: 88/10)
<http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=575&refer=Networks/ElecDist/Policy/DistChrgs>

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Executive Summary

This document consults on our guidance to distribution network operators (DNOs) in relation to the recovery from customers of any "compensation"¹ paid to facilitate the introduction of use of system (UoS) charges for distributed generators (DGs) connected before 1 April 2005 (pre-2005 DGs).

From 1 April 2005 to 1 April 2010, pre-2005 DGs were exempt from UoS charging. We removed the exemption to ensure that all DGs are treated on the same basis - ie that they are charged (or credited) for UoS using the same methodology and thus receive price signals about the costs (or benefits) they place on the network.

Accordingly, UoS charging was introduced from 1 April 2010 for DG customers at lower voltages covered by the Common Distribution Charging Methodology (CDCM). DG customers at the higher voltages will be subject to the Extra High Voltage Distribution Charging Methodology (EDCM) which, subject to our approval, will commence on 1 April 2012.


Depending upon the nature of the contractual arrangements between a DNO and a DG, the DNOs may need to pay "compensation" to pre-2005 DGs in order to facilitate the introduction of UoS charges. Determining the amount of compensation or the refund is a matter to be resolved between the DNO and DG. The purpose of this consultation is to set out the principles and process by which DNOs may recover refunds from customers through their price controls. This consultation is not intended to set out all circumstances where compensation or a refund may be necessary and appropriate or how such compensation or refund should be calculated and paid.

As a governing principle, we consider that DNOs should be able to recover the cost of refunds through their price controls only where refunds are made to pre-2005 DGs to address a clear case of double payment on the introduction of use of system charges. This is in line with past precedent in changes of the distribution and transmission connection charging boundaries.

We consider that double payment would occur where capitalised operations and maintenance (O&M) paid as part of a connection charge has not yet expired. This is because both the CDCM and EDCM would recover these O&M costs as well. We are not aware of any other instances of double payment, however we welcome parties to identify any they consider to fit this case.

It is possible that connection charges paid by some pre-2005 DGs provided a contractual right to UoS without further charge but we have not yet identified any such instances. The conferral of such contractual rights was not compatible with our understanding of the regulatory regime at the time. Our view is based on an

¹ Further to our rationale in the main body of this consultation document, we consider that it is more appropriate to refer to 'refunds' as opposed to 'compensation' being funded through DNOs' price controls. Therefore we will use this language in the remainder of this document where appropriate.



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assessment of past decisions made by Ofgem, DNOs' connection agreements and charging statements. We recognise that it may be that, if the DNOs have explicitly granted these, or any other contractual rights, they may need to pay compensation in order to renegotiate contracts. In some cases this may be necessary to introduce UoS charges. Our view is that compensation (beyond that for unexpired capitalised O&M payments) in these instances is not economic and efficient and therefore should not be recovered by DNOs from customers through their price controls.

Having consulted on this matter in July 2010, we do not think it is appropriate for us to allow DNOs to recover, from the generality of customers, the cost of compensation related to deeper reinforcement costs that pre-2005 DGs paid as part of their connection charge. This reinforcement has been paid for upfront, therefore the associated assets are not in the DNO RAV and the associated costs will not be recovered through use of system charges. Pre-2005 DGs will not pay twice for the same thing. The connection boundary changed in 2005, so that DGs connected after this date did not need to pay fully for deep reinforcement costs. We do not consider it appropriate to provide compensation for changes in policy.

We have set out a process for DNOs to follow for renegotiating contracts and determining compensation to be funded by their price controls. As part of this process, DGs should be given an appropriate chance to respond and set out their case to their DNO. Following this, the DNOs will need to provide robust evidence to us in order for them to recover the compensation from customers through their next price control.

The principles and processes we have set out in this paper are our view of the appropriate arrangements for the recovery of compensation through the price control. We welcome responses on these by 17 June 2011 – in particular, respondents should answer the specific questions at the beginning of chapters, comment on our proposed principles and processes and, using evidence, identify additional circumstances that may constitute a double payment by DGs. Following the consultation we plan to publish guidance in Summer 2011 setting out the process for determining and funding compensation. DNOs and DGs should as far as possible resolve the contractual and compensation issues by 1 April 2012. This will enable pre-2005 DGs covered by the EDCM to be charged (or credited) for UoS by this date, when the EDCM, subject to our approval, is introduced.

1. Introduction

Overview

1.1. Revised charging arrangements for the use by distributed generators (DGs) of the electricity distribution network operators' (DNOs) networks were introduced for DGs connecting from 1 April 2005. Prior to this date, DGs were charged under a deep connection charging policy, where the upfront connection charge included the full cost of sole-use assets, any reinforcement of the shared network and capitalised operation and maintenance (O&M). DGs did not generally pay export use of system (UoS) charges pre-2005 although there was the potential for DNOs to levy charges where a DG imposed a cost on the network. On 1 April 2005 a 'shallowish' connection charging policy was implemented, so that the connecting DG pays the full cost of sole-use connection assets and a proportion (based on requirements) of shared-use reinforcements. The remaining proportion of reinforcement costs and O&M were recovered through use of system (UoS) charges from this date.

1.2. However, the 1,200 or so DGs that connected on terms agreed prior to this date were not subject to the same requirement. These 'pre-2005' DGs were granted an exemption from UoS charges for energy they export,² until 1 April 2010. As part of our Distribution Price Control Review (DPCR5) Final Proposals³ we decided that this exemption would not be renewed. This was to ensure that all DGs are treated on the same basis, ie that they are charged (or credited) for UoS using the same methodology and thus receive price signals about the costs (or benefits) they place on the network.

1.3. We noted in our Final Proposals that because of the existing arrangements between DNOs and pre-2005 DGs, the DNOs may need to renegotiate their contractual arrangements and pay compensation to DGs before a UoS charge could be levied. We also stated that where compensation was paid, Ofgem would undertake an assessment to allow the DNOs to only recover payments through the price control that were economic and efficient. This would allow the DNOs to log up these costs and then recover this compensation from customers (rather than as a cost to the DNOs' shareholders).

1.4. This consultation document focuses on the latter point. That is, it sets out our proposed principles for this efficiency assessment and the process for determining when and how refunds can be recovered from customers through DNOs' price controls. Our principle for determining whether refunds can be recovered through the price control is whether charging for UoS would result in double payment. That is, without a refund, the DGs would be required to pay twice for the same thing: once

² References to UoS or UoS charges in the remainder of this consultation document are in relation to (charges for) exported energy only. References to UoS charges for imported energy will be clearly differentiated.

³ See Associated Documents.

through their connection charge and again through their UoS charge. In these instances of double payment, we propose that the compensation take the form of a refund of the unexpired amount that was paid upfront. The only example we have identified of this concerns O&M costs which were paid upfront as a capitalised sum and also form part of UoS charges.

1.5. It is possible that connection charges paid by some pre-2005 DGs provided a contractual right to UoS without further charge but we have not yet identified any such instances. The conferral of such rights was not compatible with our understanding of the regulatory regime at the time. Our view is based on an assessment of past decisions made by Ofgem, DNOs' connection agreements and charging statements. We recognise that it may be that if the DNOs have explicitly granted these, or any other contractual rights, they may need to pay compensation in order to renegotiate contracts, which in some cases is necessary to introduce UoS charges. We think that compensation (beyond that for unexpired capitalised O&M payments) in these instances is not economic and efficient and therefore should not be recovered by DNOs from customers through the price control.

1.6. We also set out the specific circumstance in which we think refunds should be funded by the price control and how refunds should be calculated, paid, recorded and reported. We also invite parties to identify any other circumstances that would otherwise result in double payment.


1.7. More broadly, we encourage stakeholders to respond and provide their views on whether our understanding of the issues, the principles and processes (including our rationale) we outline are reasonable and appropriate. Following this consultation we plan to publish guidance that sets out principles and process for determining compensation. DNOs will be expected to demonstrate they have complied with our guidance when applying to recover refunds from customers through their next price control.

Background to the issue

1.8. In July 2010 we published a consultation document that set out our understanding of the issues relating to the different approaches to charging for distribution UoS for DGs connected pre- and post-2005. We sought views on our proposed way forward.⁴ We recommend reading our July 2010 document in conjunction with this consultation document to fully understand the detailed background and issues associated with this area of work.

1.9. Ofgem first considered the issue of charging DGs for UoS as part of consultation and decision documents published as part of the Structure of Charges project between 2000 and 2005. As part of DPCR4 Final Proposals, in 2005 Ofgem's work on the Structure of Charges project culminated in a change to the connection

⁴ See Associated Documents.



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charging boundary for DG customers connected to DNOs' networks. The change was intended to reduce barriers to entry in the generation market, encourage more efficient use of DNOs' networks and align the connection charging boundaries for demand and DG customers.

1.10. In practice, the change from a deep connection charging boundary to a shallowish charging boundary meant that DGs connecting to DNOs' networks would pay less upfront as part of their connection charge. The shallowish boundary meant that costs for operation and maintenance (O&M) and a proportion of the costs of reinforcing the shared part of DNOs' networks would now be recovered through UoS charges in accordance with the DNOs' charging methodologies.

1.11. However, because longer term more cost reflective UoS charging arrangements had not been developed and existing contracts between DNOs and pre-2005 DGs were considered complex to resolve at the time, Ofgem decided that pre-2005 DGs should be exempt from UoS charges until 2010.

1.12. The exemption that pre-2005 DG customers had from UoS charging expired on 1 April 2010 and, after consulting on this matter as part of our work on DPCR5, we decided not to extend this exemption. We explained in our Final Proposals that the purpose of not extending the exemption was to ensure that the charging framework developed by DNOs does not have the effect of unduly discriminating against (or in favour of) pre-2005 connected DGs and that UoS charges for all DGs reflect the costs that they impose (or defer) by connecting to and using the network.⁵ The benefits from this approach were to encourage the efficient use of the distribution networks and to facilitate competition in generation.

1.13. Our Final Proposals also recognised that the introduction of UoS charges for pre-2005 DGs may require the renegotiation of contractual terms between pre-2005 DGs and DNOs and give rise to cases where there is a legitimate need for compensation to be paid to DG customers. We stated that economic and efficient compensation paid to DG customers could be logged up by DNOs until the next price control review when Ofgem would undertake an efficiency assessment to allow the DNOs to only recover payments that were economic and efficient.

1.14. We recognised that it would help discussions between DNOs and pre-2005 DGs about renegotiating contracts and/or calculating compensation if we provided guidance on what we considered to be economic and efficient compensation. Our first step towards this was our initial consultation document published in July 2010. Since then we have taken on board the responses from this consultation and have completed further analysis of the issues and the evidence available to us. In doing so, we have now arrived at a set of guidelines to facilitate the calculation and payment of compensation payments. Following consultation responses to this document, we intend to issue formal guidance to DNOs in Summer 2011.

⁵ Depending on whether DGs are considered to impose or defer the costs of using the DNO's network, the DGs may be charged or credited.

1.15. In considering the issue of compensation, we have had regard to previous boundary changes. This includes the connection charging boundary change for demand customers in 2000 and the 'Plugs' boundary change in electricity transmission in 2004.⁶ Both essentially involved moving from a deeper to a shallower connection boundary. Refunds were paid in the case of Plugs and recovered through the price control but not in the case of the demand boundary change. We consider that our guidance is consistent with these regulatory changes and provide our reasoning in Chapter 3.

Structure of this document

1.16. The remainder of this document is structured as follows:

- Chapter 2 - Our July 2010 consultation
- Chapter 3 - Principles and circumstances for refunding pre-2005 DGs
- Chapter 4 - Implementation arrangements
- Chapter 5 - Next steps
- Appendix 1 - Consultation Response and Questions
- Appendix 2 - Impact Assessment
- Appendix 3 - Glossary
- Appendix 4 - Feedback Questionnaire

⁶ A change to the transmission connection charging arrangements in England and Wales (E&W), known as 'Plugs', was implemented from 1 April 2004. This made the boundary between connection and use of system shallower. Plugs was extended to Scotland the following year under the British Electricity Trading and Transmission Arrangements (BETTA).

2. Our July 2010 consultation

Chapter Summary

Our July 2010 consultation document set out our understanding of the issues with charging pre-2005 DGs for UoS, identified the circumstances that may require compensation and proposed a way forward. This chapter summarises our July 2010 consultation and respondents' views.

Existing pre-2005 contracts

2.1. Our understanding of pre-2005 contracts is based on previous consultations and decisions we have published, information collected as part of DPCR5 and a series of information requests we made between 2006 and 2011.

2.2. In our July 2010 consultation we summarised our high-level understanding of the contractual arrangements between DNOs and pre-2005 DGs. The main points were that many connection agreements may not clearly define the extent of DGs' rights to UoS, it is not always clear the extent to which DGs paid for anything other than connection to the network, the majority of contracts allow them to be varied and the majority of contracts appear to follow a similar form.


2.3. However, we highlighted a number of concerns over the quality, clarity and consistency of the information we have. Therefore, whilst we asked respondents to confirm that our understanding is correct, we also asked respondents to provide us with further information where they could.

2.4. We also considered the differences between DG customers registered in supplier volume allocation (SVA) and central volume allocation (CVA). In respect of the commercial arrangements for using the DNOs' network, a CVA DG customer has a direct relationship with the DNO, while the relationship between an SVA DG customer and the DNO is via a supplier.⁷ Consequently, the DNO charges a supplier for SVA customers' UoS⁸ and charges CVA customers directly for their UoS.

2.5. As a consequence of this difference in arrangements, we explained that it is likely that DNOs will need to renegotiate their contracts with CVA DGs in order to charge them for UoS, whereas there might be no need to renegotiate contracts with SVA DGs as UoS provisions are set out in the Distribution Connection and Use of

⁷ The detailed terms of SVA and CVA registration are explained in the Balancing and Settlement Code.

⁸ It is then the supplier's decision how to pass on the costs of UoS.



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System Agreement (DCUSA), which is an existing agreement between the supplier and DNO.

2.6. We also considered issues raised at workshops hosted by the DNOs. In particular, some DG customers claimed that pre-2005 arrangements did not differentiate between connection and UoS. They argued that a customer paid a deep connection charge to not only cover the actual connection to the DNO's network but also, implicitly, to cover the customer's use of the system too.

2.7. In addition, there was a mixture of views on how long DG customers have rights in accordance with their contracts. In particular, some considered that their contracts gave them evergreen rights to connection and UoS, whereas others considered that contracts must be for a finite period.

Respondents' views

2.8. In general, respondents to our consultation agreed with our understanding of pre-2005 contracts. However, responses from some DGs and suppliers who are responsible for multiple pre-2005 generation plants considered that their terms varied from one to the other.


2.9. Having reviewed example contracts provided to us by DNOs, we still consider that the substance of these example contracts is generally similar and that those differences may be explained by changes in regulatory arrangements, for example, that occurred at the time the Utilities Act 2000 was introduced. Before 2000, responsibility for distribution and supply businesses were carried out by the same organisation, a Public Electricity Supplier. However from 2000 these responsibilities were separated and carried on by separate businesses, the DNO and a supplier. Consequently, contractual arrangements evolved to take account of the separation.

2.10. Most DG and supplier respondents also noted that they still considered that paying a deep connection charge either explicitly or implicitly bought them a right to UoS without further charge. Some argued that it makes no sense that a connection is provided and paid for but without a right to use the DNO's network.

2.11. A number of respondents noted that their CVA connection customer contracts would require renegotiation in order to introduce UoS charges. However, there was agreement that SVA connection contracts would require no adjustment in order to introduce UoS charges.

Compensation and UoS charges: bundled and unbundled

2.12. Our July consultation document sought views on how compensation should be returned to relevant DG customers. In particular we considered whether it was appropriate for compensation to be bundled or unbundled from UoS charges.



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2.13. The unbundled option treats all DG customers the same in the charging methodology and any compensation due is paid independently of the charging arrangements. This would help to ensure that the DNOs' charging statements are relatively simple and apply the same methodology to all DGs regardless of when they connected or under what terms.

2.14. The bundled option incorporates the payment of any compensation into the charging methodology. This could be achieved either through a discount (time-limited) to UoS charges or a continued exemption (time-limited) from UoS charges. In this case, the charging statements would be more complex with different charges (including zero charges in some cases) for different classes of customer depending on when they connected and other aspects of their connection contract.

2.15. Following our July consultation we decided that any compensation should be unbundled from UoS charging arrangements. In summary, our decision was on the basis that an unbundled approach would be simpler, would not affect the development of the EDCM or the price signals calculated by the EDCM and was compatible with how the CDCM already charges.

Respondents' views

2.16. We published a decision last August that set out that any compensation should be unbundled from UoS charging arrangements.⁹ In that decision we provided a summary of responses on this particular issue. We recommend reviewing our decision for a summary of responses on this issue.


Principles for assessing the efficiency of any compensation paid

2.17. It is the responsibility of DNOs and DGs to consider their contractual arrangements and determine whether and how much compensation is appropriate.

2.18. As part of DPCR5 Final Proposals we proposed that DNOs would be able to log up the costs of compensation for consideration as part of their next price control, ie RIIO ED1.¹⁰ Given our proposal, we recognised in our July consultation that we have a part to play in setting principles so that DNOs better understand the assessment Ofgem is likely to undertake to determine whether compensation payments are economic and efficient.

⁹ Charges for Pre-2005 Distributed Generators' use of Distribution Network Operator's (DNO) distribution systems - decision on unbundling 23 August 2010 available at: <http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=607&refer=Networks/ElecDist/Policy/DistChrgs>

¹⁰ RIIO ED1 will be the first electricity distribution price control to apply Ofgem's RIIO framework. RIIO stands for 'Revenue=Incentives+Innovation+Outputs'.



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2.19. In our July consultation we considered two broad principles for determining whether compensation is appropriate:

- Contractual rights - some pre-2005 DG customers may have contracts in place that give them explicit or implicit rights to use the network under particular terms. Altering these contracts to introduce UoS charges may require compensation to be paid. We also recognised that there may be circumstances where customers should not fund compensation where the DNO granted contractual rights in excess of standard rights at the time.
- Fairness - some parties have argued that compensation might be payable to pre-2005 DGs to recognise the change in regulatory policy. For example, it may be appropriate to refund the unexpired amount of the original connection charge or the unexpired capitalised O&M costs included within this charge so that pre-2005 DG customers do not pay twice for the same assets/service even if they are not contractually entitled to any refund.


2.20. Based on these principles we also set out potential approaches for calculating compensation:

- No compensation - under this option pre-2005 generators would be liable for UoS charges in the same way as post-2005 DGs, without receiving any compensation for deep connection charges paid. The underlying rationale for this approach was that the connection charge reflects an arrangement made in the past and that DGs (or other parties) had no inherent right to protection from subsequent changes in the industry charging arrangements unless there was an explicit contractual right in this regard.
- Connection charge compensation - this approach was aimed at ensuring as far as possible that the generator did not pay twice for any assets or services that were already a component of the deep connection charge.
- NPV of right to UoS - because some DGs argued that they had (implicit) rights to UoS without further charge, they considered that the appropriate compensation would be based on the net present value of expected future UoS charges.
- Other approaches - for example, DG customers had also proposed that they should continue to be exempt from UoS charges until reinforcement is triggered by a new connection or the existing arrangements could be allowed to endure for the remainder of the asset lives of the connection.

2.21. We noted in our July consultation that pre-2005 DG customers connected to DNOs' high and low voltage (HV/LV) networks were already included in the DNOs' charging methodology for lower voltages - ie the common distribution charging methodology (CDCM). As such we asked whether the same issues and principles for compensation apply to HV/LV DGs as well as extra high voltage (EHV) DGs.

Respondents' views

2.22. In general there was support for compensating DGs for contractual rights that might require to be changed and also to avoid double charging of DGs. However,



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views varied on the circumstances that may require compensation and the calculation of that compensation.

2.23. Most DNOs supported compensating for O&M. There were mixed views as to whether DGs should be refunded for the connection assets they paid for. One respondent considered that it would be inappropriate because charging DGs for UoS in addition to what they had paid for assets would not constitute a double payment and would not be unduly discriminatory. DNOs also did not consider that a clear case had been made that DGs have an explicit or implicit right to UoS without further charge.

2.24. On the other hand, DG and supplier respondents considered that they do have rights to UoS without further charge and therefore should either have these rights grandfathered (eg out of pragmatism) or that these rights should be compensated for in order that the DG is left financially 'whole' (ie net neutral). It was considered that the value of UoS rights could be calculated using the NPV of UoS charges to be levied or a time-limited discount of those charges, potentially in addition to a refund of the connection charge.

2.25. In general most respondents considered that any calculation of compensation is likely to be complicated and time consuming. In part, this is because it was considered that the evidence required to support a case for compensation would need to be compiled on a case by case basis and to do so would be challenging and time consuming.

2.26. Respondents were generally supportive of ensuring that any mechanism for calculating compensation was applied consistently by all DNOs to all DGs, irrespective of vintage, registration in Settlement or voltage of connection. A couple of DNO responses set out qualifications to the extent to which compensation might be appropriate. For example, that compensation should not be appropriate if the contractual arrangements provide for their variation or if the DG customer is due to receive a credit under UoS arrangements, ie because a loss cannot be demonstrated.

2.27. DNOs were generally keen that if compensation is to be paid, then it should be clear how Ofgem would decide which of those costs would be funded by their price controls.

3. Principles and circumstances for refunding pre-2005 DGs

Chapter Summary

This chapter sets out our rationale and principles for determining whether it is appropriate for DNOs to refund pre-2005 DGs and have those refunds paid for through their price controls.

In summary, having reviewed a variety of past decisions, consultations, charging statements and connection agreements, we consider that pre-2005 connection charges did not typically buy a right to UoS without further charge. Based on the evidence, we consider that connection charges and UoS charges were always considered to be separate things, such that a connection agreement without provision for UoS did not confer a UoS right.

Based on our understanding of the relationship between pre-2005 DGs and DNOs, we set out that any refund to be recovered through the price control must relate to where that refund addresses a clear case of double payment.

We welcome views from respondents on our rationale and principles for recovering the costs of refunds through DNOs' price controls. In particular, we would like respondents to identify to us whether there are other circumstances that may require refunds to be paid for by DNOs' price controls in order to avoid DGs paying for services or rights twice.

Question box

Question 1: Is our description and interpretation of historical charging arrangements (including connection and use of system agreements, charging statements, determinations, regulatory precedents) complete and accurate? If not, please provide supporting evidence setting out any issues that you identify.

Question 2: Do you agree with our rationale for only allowing refunds for instances of double payment to be funded through the price control?

Question 3: Are there any other instances (beyond that of double payment) where refunds should be funded through the price control? If yes, please explain why these instances are appropriate and compatible with the regulatory regime as it has evolved over time.

Question 4: Are there any other circumstances beyond capitalised O&M payments that may give rise to instances of double payment that should be reimbursed and funded through the price control? If yes, please explain why these instances are appropriate and compatible with the regulatory regime as it has evolved over time.

Question 5: Do you agree with our proposed approach to calculating refunds for unexpired capitalised O&M payments? Please suggest any improvements to the approach outlined and reasons for these.

Question 6: Where DNOs have entered into agreements that are/were inconsistent with regulatory practice (eg giving indefinite rights to use of system without further charge or entering into contracts that cannot be freely modified) do you agree that any compensation required by virtue of these contracts should not be funded through the price control?

Rationale for our approach

3.1. The rationale for our approach is based on our review of past consultations and decisions published by Ofgem,¹¹ examples of contracts between DNOs and pre-2005 DGs, examples of DNOs' UoS and connection charging statements and responses to consultations and general correspondence from stakeholders.

3.2. As set out in more detail below, in accordance with prevailing pre-2005 arrangements we consider that DGs paid connection charges (which may have also covered the costs of reinforcing the wider network). However, we think the connection charge paid by the DG was not intended to buy rights to UoS without any further charge.

DNOs' pre-2005 UoS and connection agreements and charging statements

3.3. DNOs' pre-2005 UoS and connection agreements and charging statements make it clear that:

- DGs had limited contractual rights to UoS.
- There was a difference between a UoS charge and a connection charge.
- The notion of levying a UoS charge in relation to exported energy by DGs did exist.
- DGs, like other users of a DNO's network, could have attracted UoS charges in addition to their connection charge. Charging statements did not allow UoS and connection charges to be substitutable.

3.4. In summary, DNOs' pre-2005 connection and UoS charging statements set out the charges and means for calculating charges for providing and maintaining a connection and for UoS. DNOs' connection charging statements typically set out:

¹¹ Including by its predecessor the Office of Electricity Regulation (OFFER)

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- the connection charge covers the upfront costs of installing sole-use assets and reinforcing shared network assets to accommodate the capacity requirements of the connecting customer
- the costs of assets required to accommodate any special requirements
- any outstanding metering costs
- a capitalised upfront payment for O&M.

3.5. DNOs' UoS charging statements typically explained that "In general, no separate charge will be made for UoS in respect of electricity which the generator exports to the system".

Determinations

3.6. In June 1995, the Director General of OFFER, considered a determination between ScottishPower Plc and Northern Electric. One of the main points considered in the determination was if Northern Electric could charge ScottishPower for UoS in relation to a generating station it had commissioned - Knapton Generating Station.

3.7. The Director General determined that Northern Electric should not levy UoS charges in relation to Knapton. This was because the Director General considered that there was a reduction in real electrical flows from the grid supply point to Knapton and that such a reduction would not increase (and could reduce) UoS costs on Northern Electric's network. However, the Director General also concluded that should circumstances change so that additional embedded generation changed the direction of real electrical flows, Northern Electric may be able to argue that the DG did impose a cost on the system and that it would be reasonable to change their charging methodology. Such a change would have allowed Northern Electric to levy a UoS charge for exported energy.

3.8. This determination is important because it makes clear that even in 1995, connection charges and UoS charges were understood to be distinct. It was clear that UoS charges levied in relation to exported electricity were conceivable should the DG be judged to be causing a cost to the network.

Sample agreements

3.9. Examples of connection agreements between DNOs and DGs that have been shared with us generally identify no or limited contractual rights to UoS. In general, connection agreements require that the DG customer agrees a separate UoS agreement with the DNO or that a UoS agreement is in place between the DG's Authorised Electricity Operator¹² (AEO; ie a supplier) and the DNO.

3.10. In some cases, the connection agreement did provide what appears to be a partial or incomplete right to UoS. For example, under some agreements the DG

¹² Please see our glossary for a definition of an AEO.

customer might have the right to export energy up to the Maximum Export Capacity, but no obvious right to have that energy conveyed to an end point or a buyer. It is likely that these agreements too were intended to be supplemented by other agreements in parallel.

3.11. In other cases, the terms of connection agreements may have extended to granting a full right to UoS.

3.12. DNOs' connection agreements also typically set out provisions relating to charges for connection and sometimes UoS. These terms may have included specific details of what was charged for and the actual charges paid, or might simply have referred to charges determined in accordance with the DNOs' licences or charging statements. DNOs' stated principle of generally not charging for exported energy may help to explain why connection agreements typically did not address exports of energy or seek to set UoS charges for exported energy at the outset. At the time of those agreements it was probably not an issue to which much regard was paid.

3.13. However, we do not consider that the fact that such matters are not referred to in a connection agreement means that a right to UoS for exports of energy was granted. This is because connection agreements typically dealt with charges relating to the connection itself; the separate issue of UoS was more likely to be the subject of a separate agreement. The majority of DGs are likely to have contracted with an AEO. Therefore, in the majority of cases, the AEO would have contracted with the DNO for UoS terms and would have been liable for any UoS charges in relation to the DG. In the minority of cases where the DG is not contracted with an AEO, the DG would have an agreement directly with the DNO for UoS. Terms for UoS could have been incorporated into the original connection agreement, although we understand common practice was to set out detailed UoS terms in a separate agreement.

3.14. Similarly, where DNOs did enter into agreements which granted UoS rights, reasonable regulatory practice would have been for them to grant those rights in return for a charge. This charge would reflect any changes to charging practice or to the regulatory landscape, or allowed for the DNO to impose any variations which such changes made necessary. Indeed it is typical of the agreements we have reviewed to refer to charges that are calculated in accordance with the DNOs' charging statements. As summarised above, charging statements existed for both connection and UoS, and in the case of UoS it is clear that charges for export as well as import had been envisaged pre-2005.

3.15. As such, if an agreement entered into by a DNO with a DG in fact had the effect of granting a permanent UoS right for no charge, this would have been out of line with reasonable regulatory practice at the time. From what we have seen we consider that such agreements will be rare.

Past consultation and decision documents

3.16. In the past, Ofgem had characterised the situation of pre-2005 DGs as having paid for a connection without the need to pay for UoS. For example in our June 2003 Initial Conclusions¹³ document we said: "Generators connecting to distribution systems, on the other hand, face full upfront charges for any costs that are incurred directly as a result of their connection, including all reinforcement costs. However, they do not pay ongoing UoS charges." Also, in our November 2003 Initial Decision¹⁴ we said: "In any event, these generators have secured rights to a connection without obligation to pay UoS charges."

3.17. That characterisation reflected the fact that DGs did not generally impose a material UoS cost on the network to trigger such a charge, such that they were not typically being so charged at the time. That is, where there was no cost, DGs were not under an obligation to pay for it.

Other potentially relevant cases

3.18. We have also considered previous connection boundary changes in both distribution and transmission. This includes the demand boundary change in 2000 and the introduction of 'Plugs' in England and Wales in 2004.¹⁵

3.19. No compensation was paid in the case of the demand boundary change. In the case of Plugs, certain connection assets were transferred to form part of the regulated asset base on which transmission use of system charges were calculated. Refunds were provided to those users that had paid upfront capital contributions towards connection charges (in lieu of the usual annualised connection charge). This prevented the former group of users from having to pay the charge upfront and then again through their use of transmission system charges. The refunds were recovered from all customers through the price control. We discuss further the differences between Plugs and pre-2005 DG refunds in paragraph 3.52 below.

3.20. We have also taken into account how these refunds were handled. This includes the process for determining the refunds, the treatment and calculation of the refund payment, the method and timeframe for payment and evidence requirements, and how the refunds were recovered through the price control.

¹³ See <http://www.ofgem.gov.uk/Networks/ElecDist/Policy/DistChrgs/Documents1/3713-elecdistributioncharges12june.pdf>

¹⁴ See http://www.ofgem.gov.uk/Networks/ElecDist/Policy/DistChrgs/Documents1/5150-Structure_elec_dist_charges_14nov03.pdf

¹⁵ Plugs was extended to Scotland through the British Electricity Trading and Transmission Arrangements (BETTA) in 2005

Circumstances we think a refund should be paid for and recovered through a DNO's price control

Overview

3.21. We set out in our DPCR5 Final Proposals that compensation may be funded through DNOs' price controls if it is economic and efficient. Generally, what we mean by this is that compensation may be funded by customers where it is reasonable for DNOs to make that payment. That is, customers should not have to fund compensation where the DNO has of its own accord entered into an arrangement – and has now incurred a cost as a result of doing so - which was not consistent with regulatory practice at the time and thus do not meet our economic and efficient test.

3.22. We consider that the circumstances where refunds may be recovered through the price control are when there is a clear case of double payment and the item being refunded was offered at the time in accordance with regulatory practice. This is because otherwise DNOs would over-recover money for the provision of items and customers will have been over-charged for those items. In this respect we consider that it is economic and efficient to fund the reimbursement so as to avoid the double payment for items.

3.23. This approach is also in line with past changes in the distribution and transmission connection boundaries as we discuss further in paragraph 3.48 onwards.

3.24. Nor do we think that it would have been consistent with regulatory practice to grant UoS rights without any further charge as part of a connection charge. Therefore, if any such rights to UoS have been granted, we do not think it is appropriate for refunds to be paid for through a DNO's price control for those rights.

3.25. More generally, we do not think it is ordinarily appropriate for compensation to be paid for changes in regulatory policy. Otherwise, the effect of the policy change becomes limited and its purpose undermined. However we note that as is the case in relation to pre-2005 DGs, a change in policy might give rise to individual circumstances where compensation is appropriate.

Refunds to avoid the double payment for services or assets

3.26. Based on our understanding of the arrangements between DNOs and pre-2005 DGs, we would propose to use the following principle to determine whether refunds should be paid to DGs and be paid for by DNOs' price controls; in particular that refunds may be necessary to avoid the double payment for rights, services or assets.

3.27. We do not think that pre-2005 DGs should pay twice for anything they have already paid for as part of their connection charge. That is, we consider it is not

appropriate for a DG customer to be charged for UoS where the UoS charge covers the costs of items the DG has already paid for (and that have not yet expired).

3.28. UoS charges are levied so that the DNO can recover its price control allowed revenue. In relation to DGs, the DNOs' allowed revenue covers the costs of reinforcing the shared network that are not paid for upfront by post-2005 DGs and all O&M costs associated with connection assets installed as a consequence of post-2005 DG connections. In accordance with the DNOs' proposed EDCM, UoS charges will also be calculated to recover revenue to cover the costs of providing O&M for pre-2005 DGs' connection assets.

3.29. We consider that some pre-2005 DGs may have paid a capitalised upfront payment for the provision of O&M for a period of time. Being charged for UoS in accordance with the CDCM and EDCM would also recover costs for O&M on the same assets. Consequently, DGs may pay twice for the provision of O&M. We are not aware of any other instances of double payment, however we invite parties to identify other circumstances they consider to fit this case.

3.30. As part of our July 2010 consultation we considered whether it may be appropriate for DGs to be compensated where they had paid for deep reinforcement so as to avoid double payment for these assets. Having considered this issue further and reviewed the available evidence, we do not think that paying a UoS charge would result in a pre-2005 DG paying twice for having had shared network assets reinforced. This is because in accordance with the CDCM and EDCM a UoS charge would recover a proportion of the costs of post-2005 DGs' reinforcement costs but none of the reinforcement costs caused by pre-2005 DGs. We consider this issue further below.

3.31. To be clear, we consider that even if the contractual arrangements for UoS are between the DNO and a supplier, there may still be a case for refunding the related DG to avoid the duplication of charges. For example, whilst the UoS arrangements are between the DNO and supplier and therefore the DNO charges the supplier for UoS, the supplier passes this cost on as part of its supply or power purchase agreement with the DG. Consequently the DG may nevertheless pay twice for items it is entitled to or paid for as part of its original connection arrangements.

Calculation of refunds

3.32. Our understanding is that generally a pre-2005 DG paid a lump sum amount that was intended to cover the costs of providing O&M for the component parts of the network used for the connection. In accordance with DPCR5 Final Proposals UoS charges would recover the ongoing costs of providing O&M for DGs' connection assets (including sole-use). We consider that both the capitalised charge and the UoS charge cover the costs associated with sole-use and shared network assets necessary for the connection and would therefore be duplicative.

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3.33. When DGs have not paid capitalised O&M or this has now expired, we do not think there is a case of double charging. Therefore we do not think it is appropriate that refunds are funded by the DNO's price control.

3.34. To calculate the value of a refund for the unexpired portion of O&M, the DNO must determine:

- the value of the original capitalised payment made by the DG
- the period, in years, over which the provision of O&M is intended to cover (ie the difference between the date that provision started and is due to expire; both of these dates should be recorded)
- the discount rate that the original capitalised payment was based on.

3.35. Using these input data and the formulae below, a value of the refund that is equal to the residual value of O&M can be calculated.

$$refund = annual\ payment \times \left(\frac{1 - (1 + discount\ rate)^{-years\ left}}{discount\ rate} \right)$$

$$annual\ payment = \frac{discount\ rate \times original\ capitalised\ payment}{1 - (1 + discount\ rate)^{-years\ paid\ for}}$$

3.36. For example, we can calculate the refund due to a DG that paid £100,000 five years ago for 10 years worth of O&M, assuming a discount rate of five per cent. In this scenario the refund due for the remaining five years worth of O&M is £56,069. That is:

$$annual\ payment = £12,950.46 = \frac{0.05 \times £100,000}{1 - (1 + 0.05)^{-10}}$$

$$refund = £56,068.71 = £12,950.46 \times \left(\frac{1 - (1 + 0.05)^{-5}}{0.05} \right)$$

3.37. If the DG is paying for O&M on a periodic basis (for example a monthly or annual charge), then no refund is necessary. Instead the DNO should simply stop charging on such a basis so that the introduction of a UoS charge does not duplicate the cost of providing O&M.

Circumstances that we do not think should be funded by DNOs' price controls

Rights to UoS without further charge

3.38. Pre-2005 DGs have contended that as part of their deep connection charge they also paid for and/or were granted rights to UoS without the need to be charged going forward. They have argued that their contracts provide either an explicit or implicit right to UoS without further charge.


3.39. On the basis of the evidence we have seen, we do not consider that a case has been made to support the view that that deep connection charges automatically bought rights to UoS without further charge or that pre-2005 DGs should not be charged for UoS beyond what they had paid at the time of connection. Accordingly, we do not think that compensation would be economic and efficient and therefore recoverable through the price control.

3.40. Our view is based on a review of pre-2005 connection and UoS agreements, pre-2005 connection and UoS charging statements and determinations made by the Director General of our predecessor, OFFER.

3.41. We consider that:

- Contracts may set out provisions for UoS, eg before distribution and supply businesses were separated by the Utilities Act 2000.
- However, generally it was not standard practice to give contractual rights to UoS as part of the connection charge. Standard industry practice as evidenced by connection and UoS agreements, charging statements and determinations was to consider that UoS charges could be levied in relation to energy exported by the DG where that activity placed a cost on the network. Since the industry believed that UoS charges could be imposed in certain circumstances where necessary, it is unlikely that a permanent right to UoS without further charge would be given away as part of an upfront connection package. Furthermore, the description of connection charges in DNOs' charging statements does not include any reference to covering the costs of UoS.
- Some agreements entered into between DNOs and DGs may nevertheless appear to have given away UoS rights without further charge, or the drafting of some agreements may have created an expectation that a UoS charge would not be levied unless the contract was amended.¹⁶ Clearly, it would be necessary for a DNO to consider carefully what the express and implied terms of any such contract were before reaching any view that UoS rights had been afforded to the DG without scope for variation in the light of regulatory change.

¹⁶ We consider that even in the rare instances that a DNO has granted rights to UoS without further charge, the DNO should set about renegotiating these terms with the DG in order for UoS charges to be introduced.



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- We have not been made aware of any circumstances where DGs paid explicitly to receive UoS for a defined period of time or in perpetuity.

3.42. We consider that cases where the DNO has given away rights to UoS for free or for some consideration without further charge were contrary to regulatory practice at the time. In order to secure the necessary variation in terms of dealing in these cases, it *may* be necessary for DNOs to compensate DGs for these rights in order to begin charging in accordance with current and planned UoS arrangements. However, we consider that it would not be appropriate for the costs of such compensation to be recovered from customers through the DNO's next price control settlement. This is because it would not be economic or efficient for DNOs to pay refunds for items they provided that were over and above what was considered appropriate or necessary in accordance with regulatory practice at the time and for consumers to fund these costs through the DNOs' price controls.

3.43. Given our overall understanding of pre-2005 arrangements and to the extent that we have not seen any examples of DGs having explicitly paid for UoS for a defined period or in perpetuity, we have not set out a method for calculating and funding compensation (through the price control) for rights to UoS. We welcome respondents sharing evidence with us if circumstances do exist where DGs have clearly paid a DNO for the provision of UoS for exported energy. If such circumstances do exist then we will also consider further whether and how they should or could be refunded.

Extending the exemption

3.44. DG respondents to our July 2010 document made it clear that they would prefer to have an exemption from UoS continue until the end of the contract or the life of their plant or connection assets. This would mean that pre-2005 DGs would not pay UoS charges (or receive credits where appropriate) until the end of their contract or for the remaining life of their plant or connection assets.

3.45. We do not consider it would be appropriate to grant such an exemption. This is because an exemption from paying UoS charges would go further than ensuring that DGs did not pay twice for O&M. In particular, it would effectively 'compensate' DGs for their unexpired O&M payment but would also exempt them from paying toward the incremental costs of using a DNOs' network that are predominantly charged for in a UoS charge. As set out above, we do not think a case has been demonstrated that, typically, DGs have already paid for or been given contractual rights to UoS without further charge simply by purchasing a connection. As such a case for paying a refund for these rights has not been made.

3.46. We also consider that continuing an exemption may be to the detriment or benefit of pre-2005 DG, compared to post-2005 DG. For example, an exemption may mean that a pre-2005 DG does not receive a credit where the DG's use of a DNO's network defers reinforcement costs.

3.47. Also, an exemption would effectively result in these customers being provided 'compensation' (via exemption from payment) that would be funded by other customers (as their charges would increase to cover this non-payment).

Deeper reinforcement

3.48. We considered whether it would be appropriate to compensate pre-2005 DGs for deeper reinforcement that they may have paid for. That is, we considered whether it may be appropriate to refund pre-2005 DGs for costs they paid so that going forward it was as though post-2005 charging arrangements had always applied.

3.49. This approach would take account of the differences in treatment of pre- and post-2005 DGs. Without refunds for deeper reinforcement, pre-2005 DGs covered by the EDCM will contribute toward the funding of deep reinforcement costs incurred by post-2005 DGs through UoS charges. This would be in addition to having fully funded deep reinforcement costs triggered by their own connection. By contrast post-2005 EDCM DGs will only contribute toward reinforcement costs triggered by their connection and all other post-2005 DGs but not toward the connection costs of pre-2005 DGs.¹⁷

3.50. On the basis of the evidence we have available to us, we consider that it would not be appropriate to provide compensation of deeper reinforcement costs. It would therefore fail our test of whether compensation is economic and efficient and therefore recoverable through the price control. This is for the following primary reasons:

- There is no real case of disadvantage for pre-2005 DGs and no double payment. The nature of recovering costs for shared assets in accordance with the DG incentive is that the cost is shared between many different users. A post-2005 DG customer may not have triggered reinforcement yet they are required to contribute to the reinforcement costs incurred by others. In the case of pre-2005 DGs, some paid deeper reinforcement and others did not. The same principle applies to demand customers.
- In general Ofgem does not compensate for changes in policy. In this instance our decision that the connection charging boundary should change has the effect of prospectively rebalancing who pays for what through connection and UoS charges.
 - This is similar to any other change to a charging methodology, the purpose of which is to implement a clear change in approach that affects all present and future customers. If compensation was paid for such changes, it would become necessary to rebalance for all future changes. This would undermine the value of making changes to charging arrangements because the compensation would have the effect of

¹⁷ Nb Because of the way the EDCM and CDCM interact, HV/LV DG do not contribute toward the recovery of the DNOs' allowed DG revenue.

neutralising the effect of the change to the methodology. By neutralising the effect of a change in policy for certain parties, it may be possible to argue that parties are treated in an inappropriate manner.

3.51. In addition to our primary concerns above, we understand that it would not be a straightforward exercise to calculate compensation for deep reinforcement. In particular, we understand that in a number of cases, the evidence necessary to support a case in this circumstance may be unclear or non-existent, eg it may be difficult to determine whether any deeper reinforcement occurred or how much was paid for it. Even where it is clear, we also understand that the calculation of compensation would be complex and time consuming - ie to recreate the apportionment of costs would require running power flow analysis based on the network's configuration at the time.

Other relevant cases

3.52. It should be noted that we did not allow for compensation when we made the connection charging boundary shallower for demand customers in 2000. The comparison with Plugs is more complex.


3.53. In Plugs, the shallowing of the boundary meant that some assets previously deemed connection assets were reclassified as infrastructure (shared) assets. Instead of paying for these through connection charges, new customers would share the cost of these assets through use of system charges.

3.54. The policy change in this case also applied to assets that had already been connected to the network. This is because the assets were added to the regulatory asset value (RAV) against which use of system charges were calculated. This did not have a large impact on the majority of existing customers as they were paying connection charges on an annual, rather than upfront basis. This meant that part of their annual connection charge simply ceased and was replaced by an increased use of system charge.

3.55. However, in a minority of cases this created an issue for those customers that had paid an upfront capitalised connection charge for these assets. In these cases, there would have been a clear double payment - the customer would have paid once through their capitalised connection charge, and then again, for the same assets as part of the prospective UoS charge. Accordingly, a refund was provided for the unexpired portion of the capitalised charge.

3.56. We believe there are two crucial and interlinked differences between Plugs and the introduction of UoS for pre-2005 DGs that mean compensation for deeper reinforcement is not warranted in the latter:

- In the case of Plugs, the explicit policy was to bring certain shared assets into the RAV. This was not the case in relation to the DG connection boundary in distribution. Instead, the costs of reinforced distribution assets were paid for



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entirely by the customer and the 2005 decision was that these costs should remain outside the price control (i.e. not be included in the network RAV).

- We do not propose to revisit the decision that we made in 2005. This is because we consider it is important to maintain the integrity of the current price control settlement. It would also be impractical at this point to review our original decision to change the connection boundary (which at the time was unchallenged) or to re-open the price control.
- UoS charges were already being levied for generators connected to the transmission system when Plugs was implemented. Because the essence of Plugs was to rebalance the recovery of costs from connection charges to UoS charges and the majority of customers were already paying annualised connection charges, it was a relatively straightforward transition.

4. Implementation arrangements

Chapter Summary

This chapter sets out our proposals for implementing refund arrangements.

In particular we set out responsibilities for DNOs and DGs, the level of evidence required by DNOs to support recovering the cost of refunds, due process, how refunds should be paid, how refunds should be recovered through DNOs' price controls and what should happen if DNOs and DGs continue to dispute their terms.

We welcome views from respondents as to whether our proposed implementation arrangements are appropriate in the circumstances. In this respect we invite respondents to share reasoned alternatives to our proposals.

Question box

Question 1: In general are our proposals for implementing the refund arrangements considered by this consultation appropriate? Is the level of detail we have provided sufficient to make our proposals clear and workable? Please outline any areas where you think more clarity/detail is required.

Question 2: In the section on "Consistent application of principles", have we appropriately identified who is eligible for a refund? Do we need to provide any further areas of clarification? Which of the two options outlined for mixed sites (demand and generation) are appropriate?

Question 3: Are the evidence requirements set out in the chapter as necessary to support a case for refunding appropriate? Are they sufficiently robust to prevent ineligible claims for compensation being recovered through the price control? Are there additional or alternative assumptions that could be used for supporting a case for a refund?

Question 4: Is our approach to due process appropriate? Are there additional or alternative steps that should be incorporated?

Question 5: We welcome views on how refunds should be paid and the details of implementation. In particular, should it be a one-off payment, a phased payment or a hybrid of the two? If a refund is not a one off-payment, over what time period should it be paid? Do you agree with our proposals for refunds that are not agreed by 1 April 2012?

Question 6: Do you agree with the mechanics for allowing DNOs to recover refunds through the price control?

Question 7: Do you agree with our proposals for dispute resolution where DNOs and DGs cannot reach a settlement by 1 April 2012? How can we encourage DNOs and DGs to reach a timely settlement? In particular, should use of system charges in

respect of the DG be logged up and back-billed once a refund has been settled on? If these DGs do not have these charges back-billed, how should these charges be recovered by the DNO from other customers?

Responsibilities

4.1. The following paragraphs set out responsibilities for different parties involved in the consideration and calculation of refunds to be paid for through DNOs' price controls.

4.2. The following would be the responsibility of both the DNO and pre-2005 DGs:

- Considering whether a valid case for refunding exists and compiling sufficient evidence to support that case.
- Using their best endeavours to share relevant information and effectively collaborate to determine whether a refund is appropriate, how much should be paid and that appropriate records are maintained.

4.3. The following would be the sole responsibility of the DNO, in particular so that refunds paid by the DNO can be considered for recovery as part of its next price control:

- Satisfying themselves that any principles and guidance published by the Authority are complied with.
- Ensuring that all of their pre-2005 DG customers are treated consistently in applying this guidance.
- Where the DNO considers that they have (or continue to have) insufficient evidence to support a case for refunding, informing the relevant pre-2005 DG and providing a clear and full explanation of why a case cannot be made. In these cases the DNO should invite the DG to review their own records and provide information to the DNO that may support a case for refunding.
- Keeping full, site-specific records of the rationale for refunding, the calculation and value of any refund, the terms over which refunds are paid and all evidence that supports the case for a refund.
- As part of the next price control review process, sending Ofgem a single report setting out and justifying all instances where they have paid refunds in accordance with any guidance we publish. This report should set out the rationale for each case of refunding and the evidence held by the DNO to support each case. This report should be independently audited before being submitted to Ofgem.

Consistent application of principles

4.4. We consider that DNOs should treat all DG customers equally and consistently when considering whether or not a refund is appropriate. We have set out below particular instances that DNOs should bear in mind.

Pre-2005 demand customers with on-site generation

4.5. We are aware that some customers who connected pre-2005 may have done so with a mix of demand and generation requirements. Because of the configuration of the customer's connection assets, connection costs may have been driven totally or partially by whether those assets were sized for the import or export requirements of the customer. Consequently any connection charge may have been paid wholly or partially to cover import and/or export requirements.

4.6. Knowing whether the connection charge totally or partially covered import and/or export requirements is important to determine how much of the original connection charge should be refunded in accordance with Chapter 3. For example, a customer may have paid £100,000 for capitalised O&M, where its import requirement is 10MW and its export requirement is 1MW. If we consider that the O&M payment was calculated to cover the cost of the predominant requirement (ie import), then there is no duplication of charges for O&M between the customer's original connection charge and its prospective export UoS charge. This is because the customer didn't originally pay for O&M to cover its export requirement. On the other hand, if the capitalised O&M payment was calculated to cover both import and export requirements then there may be a case of duplication with the prospective export UoS charge but it is necessary to work out to what extent.

4.7. Bearing these points in mind, we consider that there are two options for determining the proportion of a refund (to be funded through the DNO's price control) a customer should be paid.

4.8. Option 1 - A refund is paid depending on whether the connection assets installed at the time of the original connection were sized for the import or export requirement of the site. For example, in cases where connection costs were not dependent on the generation component of the site, ie where the assets were sized for the demand requirement, a refund would not be paid. This is because the connection fee would have been paid irrespective of DG at the site.

4.9. Option 2 - The amount of refund paid is dependent on the relative sizes of the maximum import and export capacities. That is, if a customer's import:export capacity ratio is 2:1, then the customer only receives a third of the refund calculated in accordance with our formulae in Chapter 3. This approach is intended to reflect the treatment of sole-use costs in the DNOs' proposed EDCM.

4.10. We welcome views as to which of these options is most appropriate or whether there are alternatives we should consider.

Contractual terms relating to variations

4.11. We are aware that the contractual arrangements between DNOs and DGs are governed by a variety of variation provisions. Contracts in some cases provide for

variations to be made (in some cases unilaterally and in others bilaterally) and in other cases do not provide variation provisions.

4.12. As our principles currently stand refunds would be funded by DNOs' price controls where they are paid to DGs for unexpired O&M only, regardless of whether the contractual arrangement allows for variation or not. This is because whether or not a contract allows for variation it has no bearing on whether the amount DG originally paid for would be duplicated by any prospective UoS charge.

4.13. We welcome views from respondents on our proposed approach in relation to variation provisions. For example, should a DG be refunded for rights it knew could change (potentially unilaterally) when it agreed to the contractual terms with the DNO?

Implications for DGs already being charged under CDCM

4.14. We consider that our proposals should apply to DG customers already being charged (or credited) under the CDCM. This is because our principles are mutually exclusive of whether the customer is already being charged or credited.

4.15. Customers who may be credited under the EDCM would be treated in the same way.

4.16. However, because pre-2005 DGs are already being charged under the CDCM it would be appropriate that any refunds paid and funded through the price control are back dated to 1 April 2010, when these DGs began to be charged in accordance with the CDCM.

4.17. Any backdated refund should take account of any interest accrued between 1 April 2010 and the date the refund is paid.

Implications for DGs registered in CVA and SVA

4.18. In the majority of cases, DG customers do not have a direct contractual relationship with the DNO for UoS or the payment of UoS charges. This is because the majority of DG customers are registered in SVA. In this circumstance, the DG customer contracts with a supplier for its generation output, the DNO contracts with the DG for connection terms and the DNO contracts with the supplier who has purchased the DG's output for the UoS terms. Therefore, the DNO charges the supplier for UoS in relation to the DG's output. Charges between suppliers and DGs are set by competition in the supply market.

4.19. Further to paragraph 3.30, whilst the contractual relationship between the DNO, supplier and customer for UoS may vary, we consider that our proposals should apply equally to DG customers irrespective of whether they are registered in CVA or SVA.

Evidence required to support the recovery of refunds through the price control

4.20. The DNOs must record clear evidence for each instance that the DNO pays a refund it seeks to recover through its price control.

4.21. Whenever possible, explicit, specific evidence should be used to support such a case for paying a refund. It is important to ensure a strong case because any refunds paid for through a DNO's price control are ultimately recovered through charging end customers connected to the DNO's network. As such, it is in the interests of those customers that refunds funded through the price control are economic and efficient and supported by a strong case.

4.22. We consider that the following forms of evidence should be recorded to support a case for a refund:

- copies of actual bills or receipts
- contracts - eg connection or UoS agreements
- evidence of policy/arrangements in place at the time of the connection – eg charging methodology statement or charging statement, agreed/approved procedures
- Connection Works Agreements or network plans that identify work associated with the connection.

4.23. We recognise that a complete evidence base may not always be available. Therefore we think it may be reasonable for a DNO to make certain assumptions about costs, durations or rates (eg discount rates). However, assumptions should accord with the DNO's standard practice at the time of the connection and the DNO or DG should provide suitable supporting evidence of such practice and how the assumption is extrapolated.

4.24. It is our understanding that the majority of pre-2005 DGs paid upfront for O&M as part of their connection charge. These payments are likely to have been calculated by DNOs in a standard manner and thus may assist in calculating a refund. For example:

- Where the O&M charge was typically calculated as a set proportion of the total cost of the connection, this proportion could be used where it is unclear specifically how much the DG paid.
- If O&M was typically provided for a standard period of time, this can be used where specific details for the DG are unclear.
- DNOs should aim to use the specific discount rate used for calculating the capitalised O&M payment. Where this is not available they may use the discount rate that was common practice to use at the time. If neither the specific or standard rate is known, the DNO should use the prevailing Cost of Capital as prescribed by the DNO's price control at the time.

Due process

4.25. To ensure that DGs are treated consistently, and subject to responses to this consultation, we propose that DNOs use the following standard process for engaging with DGs over the issue of refunds:

1. Following publication of final guidance on this issue, the DNOs write to all of their pre-2005 DGs:
 - a. making them aware of our guidance
 - b. setting out whether they are eligible for a refund based on the information held by the DNO and the information used to reach their decision
 - c. where they are eligible, setting out the workings that detail the level of any refund
 - d. inviting the DGs to submit any further evidence or to correct any inaccuracies that may affect their eligibility for and the level of any refund.
2. DGs respond to the DNOs with any further information not identified by the DNO which is relevant to the case.
3. DNOs consider further evidence put forward by the DGs and respond to DGs on whether they propose to change the earlier proposed level of the refund and the reasons for this.
4. If the DNO and DG cannot agree, then either of the parties may consider legitimate alternative dispute resolution, eg by seeking a determination from Ofgem.


4.26. We welcome views from stakeholders on the above process and what a practical timeframe might be for implementation.

4.27. As a separate exercise the DNOs would need to identify where contracts with DGs need to be modified in order to give effect to the introduction of UoS charges. These contracts would need to be renegotiated in good time so as not to delay the introduction of charges.

How should compensation be paid?

4.28. As part of our July 2010 consultation we sought views on how any compensation should be paid to DG customers. We considered that compensation could be incorporated into the calculation of a UoS charge (bundled) or calculated and paid separately from the calculation of a UoS charge (unbundled).

4.29. Following our consultation, we decided that any compensation paid by DNOs should be unbundled from UoS charges. In summary, our decision was on the basis that an unbundled approach would be simpler, would not affect the development of the EDCM or the price signals calculated by the EDCM and was compatible with how the CDCM already charges.



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4.30. Notwithstanding our decision to unbundle, we consider that there are still options for how the payment of refunds should be made. Whichever option is decided on, we consider that the same approach to payment should be used by all DNOs.

4.31. We have set out three options below and welcome views on these. Our preferred approach is a one-off payment. However, if DNOs can demonstrate this not practical we would consider other options.

One-off payment

4.32. Once the DNO and DG have agreed the value of any refund, the DNO should make a one-off payment to the DG on 1 April 2012.

4.33. A one-off payment would mean that DNOs experience a temporary impact on cash-flow between paying the refund and being able to recover costs as part of their next price control.

4.34. However, it would mean that DGs are refunded in full upfront without any delay.

Phased payment

4.35. Under this option phased payments would be made in equal amounts on a regular basis. For example, a refund could be paid in quarterly instalments between April 2012 and April 2015 (ie the start of the next price control).


4.36. As with a one-off payment, this option would result in a temporary cash flow impact. However, because the payment is phased, it should help to reduce this impact, particularly if the amount of the refund it needs to pay is significant.

4.37. However, this option would mean that DGs would have to wait, potentially for several years, before they receive the entire sum of the refund they are owed. Furthermore, we note that a DG that closes its business during the payment period may not receive all of the refund due to it.

4.38. We welcome views on the number and frequency of payments that should be made if a phased approach is chosen.

Hybrid payment

4.39. A hybrid approach could be used so that any significantly sized refunds are paid over a phased schedule, whereas less significant values could be paid as a one-off payment.



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4.40. This option would allow the DNO to better manage the cash flow impact but would also mean that DGs are treated differently depending on how much refund they are paid.

4.41. We are keen for views as to what the threshold should be.

Refunds calculated and paid after 1 April 2012

4.42. The value of any refund should be set as though it had been calculated and paid on or from the date that UoS charges took effect or were intended to take effect. In the case of HV/LV customers this was the 1 April 2010 and for EHV customers this is intended to be the 1 April 2012. If a refund is not agreed until after these dates, the DNO should pay or begin to pay the refund as soon as possible after that date.

4.43. Any interest accrued on the refund because it is paid after the date UoS charges were or are intended to be introduced will be funded by the DNO's price control to ensure parties are neutral in net present value terms using the DNOs' allowed cost of capital.

How refunds will be recovered through DNOs' price controls

4.44. As considered in Chapter 3, we consider that refunds for unexpired capitalised O&M will be recovered through the price control where it meets the requirements set out in our guidelines.

4.45. Where a robust case is made for refunding DGs, DNOs will be able to fund that payment as part of the DNOs' next price control. We will also consider any costs that were accrued by the DNO in order to finance refunds paid because of the delay between payment and recovery during their next price control.

4.46. The economic and efficient costs of O&M refunds would be added to the DNO's regulatory asset value (RAV), and would therefore be recovered through the DNO's total allowed revenue over the depreciation period. If the total cost of O&M refunds is very low, it may simply be recovered in the first year of the price control, rather than through a RAV addition.

Dispute resolution

4.47. In accordance with the Electricity Act 1989 and DNOs' licences, the Authority would usually be able to consider disputes between a DNO and another party over the proposed terms of a new or amended connection or UoS agreement.¹⁸

4.48. Therefore, should a DNO and a DG party fail to renegotiate their contractual terms and agree any necessary compensation, the DNO and DG party may have their dispute resolved by seeking a determination from Ofgem.

Implications of continuing disagreement

4.49. It is intended that from 1 April 2012, all pre-2005 DGs covered by the proposed EDCM will be charged for UoS in accordance with DNOs' charging methodologies. In some cases, DNOs and DGs may need to resolve contractual issues before a UoS charge can be levied. We want to encourage DNOs and DGs to resolve these disputes by 1 April 2012 when we expect the EDCM to come into effect, and to avoid delays. We welcome views from stakeholders on how this could best be achieved.

4.50. An option that we have considered is that if by 1 April 2012 DNOs have not resolved issues that allow them to start charging pre-2005 DGs, we propose that they should log up the value of those charges that they would bill pre-2005 DGs from 1 April 2012. If the dispute is then resolved so that the DG becomes liable for UoS charges, the logged up charges could then be back-billed. However, if a dispute is resolved so that the DG continues to not be liable for UoS charges, then any logged up UoS charges for that DG are not recovered from that customer.

4.51. Another option may be to seek to change DNOs and DGs' licences to place an obligation on them to ensure that UoS charges can be levied from 1 April 2012.

4.52. We welcome views on our proposal to log up charges and back bill UoS charges once disputes are resolved.

¹⁸ Such disputes are likely to come within the range of disputes which Ofgem may determine under section 44C Electricity Act 1989 and/ or under standard licence condition SLC 7.10.

5. Next steps

5.1. This consultation seeks views on our principle and guidance for determining the circumstances in which DNOs should refund pre-2005 DGs through their price controls.

5.2. Our proposals are intended to cover the majority of cases that we are aware of and that warrant refunds being funded by DNOs' price controls. We are keen to know whether our principles and guidance are therefore appropriate in the majority of cases and whether our rationale is robust.

5.3. Responses to our consultation should be submitted to us by 17 June 2011. All non-confidential response will be published on our website.

5.4. Following our consultation we plan to publish a decision document that sets out our final guidance. This is likely to be in early Summer 2011.

5.5. Once published, we expect DNOs and DGs to use our guidance to help them resolve contractual and refund related issues. This is so that as far as possible, and pending the approval and implementation of the EDCM, all pre-2005 DGs are charged in accordance with DNOs' UoS charging arrangements from 1 April 2012.

Appendices

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Appendix 1 - Consultation Response and Questions

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

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

1.3. Responses should be received by 17 June 2011 and should be sent to:

Nicholas Rubin

Local Grids – Distribution Policy

Ofgem,

9 Millbank,

London, SW1P 3GE

020 7901 7176

distributionpolicy@ofgem.gov.uk

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

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

1.6. Next steps: Having considered the responses to this consultation, Ofgem intends to publish guidance on the circumstances that DNOs should pay compensation to pre-2005 DGs. We plan to publish this guidance at the beginning of Summer 2011.

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

Nicholas Rubin

Local Grids – Distribution Policy

Ofgem,

9 Millbank,

London, SW1P 3GE

020 7901 7176

nicholas.rubin@ofgem.gov.uk

CHAPTER: One

There are no questions for this chapter

CHAPTER: Two

There are no questions for this chapter

CHAPTER: Three

Question 1: Is our description and interpretation of historical charging arrangements (including connection and use of system agreements, charging statements, determinations, regulatory precedents) complete and accurate? If not, please provide supporting evidence setting out any issues that you identify.

Question 2: Do you agree with our rationale for only allowing refunds for instances of double payment to be funded through the price control?

Question 3: Are there any other instances (beyond that of double payment) where refunds should be funded through the price control? If yes, please explain why these instances are appropriate and compatible with the regulatory regime as it has evolved over time.

Question 4: Are there any other circumstances beyond capitalised O&M payments that may give rise to instances of double payment that should be reimbursed and funded through the price control? If yes, please explain why these instances are appropriate and compatible with the regulatory regime as it has evolved over time.

Question 5: Do you agree with our proposed approach to calculating refunds for unexpired capitalised O&M payments? Please suggest any improvements to the approach outlined and reasons for these.

Question 6: Where DNOs have entered into agreements that are/were inconsistent with regulatory practice (eg giving indefinite rights to use of system without further charge or entering into contracts that cannot be freely modified) do you agree that any compensation required by virtue of these contracts should not be funded through the price control?

CHAPTER: Four

Question 1: In general are our proposals for implementing the refund arrangements considered by this consultation appropriate? Is the level of detail we have provided sufficient to make our proposals clear and workable? Please outline any areas where you think more clarity/detail is required.

Question 2: In the section on "Consistent application of principles", have we appropriately identified who is eligible for a refund? Do we need to provide any

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further areas of clarification? Which of the two options outlined for mixed sites (demand and generation) are appropriate?

Question 3: Are the evidence requirements set out in the chapter as necessary to support a case for refunding appropriate? Are they sufficiently robust to prevent ineligible claims for compensation being recovered through the price control? Are there additional or alternative assumptions that could be used for supporting a case for a refund?

Question 4: Is our approach to due process appropriate? Are there additional or alternative steps that should be incorporated?

Question 5: We welcome views on how refunds should be paid and the details of implementation. In particular, should it be a one-off payment, a phased payment or a hybrid of the two? If a refund is not a one off-payment, over what time period should it be paid? Do you agree with our proposals for refunds that are not agreed by 1 April 2012?

Question 6: Do you agree with the mechanics for allowing DNOs to recover refunds through the price control?

Question 7: Do you agree with our proposals for dispute resolution where DNOs and DGs cannot reach a settlement by 1 April 2012? How can we encourage DNOs and DGs to reach a timely settlement? In particular, should use of system charges in respect of the DG be logged up and back-billed once a refund has been settled on? If these DGs do not have these charges back-billed, how should these charges be recovered by the DNO from other customers?

CHAPTER: Five

There are no questions for this chapter

Appendix 2 – Impact assessment

Key issues and objectives

1.1. The purpose of the consultation is to seek views on our proposed guidance on what price control funded reimbursements DNOs may need to pay to pre-2005 DGs. As set out in more detail in Chapter 3, our principle is that refunds may be paid and funded through the DNOs' price control in circumstances that would otherwise lead to pre-2005 DGs paying twice for an item, ie as a result of being required to pay UoS charges. This is consistent with Ofgem's goals of protecting current and future consumers and promoting competition.

1.2. Currently, a substantial portion (10.4GW) of pre-2005 DGs are not charged UoS (ie those that would be covered by the DNOs' proposed EDCM).¹⁹ These DGs do not receive the price signals that help to drive overall network efficiency. The intention is to rectify this by introducing UoS charges for these generators.

1.3. The main principle we have considered in determining the appropriate refund arrangements is that the transition to introducing UoS charges is achieved in a non-discriminatory way for pre- and post-2005 DGs, DNOs and consumers.

1.4. The refunds we consider in this document are limited to that which could be recovered from customers through the next price control. Any other compensation DNOs may need to pay DGs (for example because of specific contractual arrangements or otherwise) would not be funded by the price control and is not covered by this consultation and impact assessment.


Options

1.5. We have considered four main options to address whether and how refunds are payable.

Option 1 - no refund payable to DGs

1.6. Ofgem decides that there are no circumstances where DNOs should have to provide a refund (funded through the price control) for the introduction of UoS

¹⁹ This refers to the Extra High Voltage Distribution Charging Methodology the DNOs submitted to Ofgem on 1 April 2011. This is available at:
<http://2010.energynetworks.org/edcm-file-storage/7-edcm-deliverables/1-edcm-submission-1st-april-2011/>



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charges to pre-2005 DGs. Accordingly, DNOs would not recover any refunds through the price control.

Option 2 - refund payable for operations and maintenance (O&M) only

1.7. DNOs would refund pre-2005 DGs for the unexpired portion of any capitalised payment for O&M. This is intended to avoid DGs paying for O&M twice, ie through their connection charge and now through their UoS charge. This is the option we support. (Note that we are consulting on whether and how far a variation clause in the DNO and DG's contract could have an impact on whether a refund should be payable).

Option 3 - refund payable for O&M and deeper reinforcement

1.8. DNOs would refund unexpired O&M as with Option 2. DNOs would also refund DGs for non-depreciated costs paid for reinforcing the DNO's shared network. This payment would be limited to costs over and above what that DG customer would have paid under current apportionment rules for reinforcing shared network assets only. This would approximate the same outcome as if they had connected post-2005.

Option 4 - reintroduce exemption until the end of individual contract or asset life

1.9. Under this option the exemption from UoS charges would be reintroduced for pre-2005 DGs. The 'grandfathering' would apply until the end of the individual contract between DNO and DG. Where contracts are open ended, the exemption would apply until the assumed end of the asset life.

Impact on consumers

1.10. Current and future consumers include households, business and industrial demand customers. We do not expect they would experience an immediate impact under any of the options, as the price control is fixed until 2015, meaning any refunds would not be recovered until then. In the longer term, we expect a positive impact from the increased network efficiency that can be accomplished by exposing generators to UoS price signals.

Impact from refunds

1.11. Under Option 1, there is no impact on consumers from refunds as there are none paid.

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1.12. The payment of refunds for O&M under Options 2 and 3 has a negligible impact on customers. The O&M refunds would be added to the Regulatory Asset Value (RAV),²⁰ which is in turn recovered through allowed revenue over the depreciation period. In itself, this would mean the refunds would be solely paid by EDCM demand and all CDCM customers (due to the calculation of the generation revenue target²¹). We estimate these refunds to be a total across all DNOs of around £2.2 million per year over the 15 years from 2015 (or eight pence per customer per year).²² We note that this would start at a higher amount and then decrease over the period due to depreciation.

1.13. However, this amount would be more than offset due to the £1/kW (in 2008-09 prices) for pre-2005 O&M included in the EDCM generation revenue target. This £1/kW is not part of the RAV nor does it increase allowed revenue. This results in revenue being reallocated towards EDCM DGs, thereby reducing the amount that EDCM demand customers and all CDCM customers pay. We estimate this annual reallocation to be around £12.7 million per year across all DNOs. This therefore more than offsets the £2.2 million per year impact described above.

1.14. Under Option 3, refunds for deeper reinforcement would be added to the DG incentive RAV which will increase DG incentive revenue. Consumers would fund a minority²³ of these refunds in line with the calculation of the generation revenue target. We do not have sufficient data to estimate the level of refunds, although we estimate the frequency of these cases to be low (albeit potentially material). We note, however that this would be spread between 28 million customers and over the 15 year depreciation period.

1.15. The UoS charges not paid by some pre-2005 DGs under Option 4 would flow on to consumers in the same way as described in the above paragraph. That is, consumers would fund a proportion²³ of the charge that pre-2005 DGs are exempted from paying.

²⁰ As outlined in DPCR5 Final proposals - Incentives and Obligations 7 December 2009 <http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=348&refer=NETWORKS/ELECDIST/PRICECTRLS/DPCR5>

²¹ The generation revenue target in the EDCM is calculated by taking the DG incentive revenue and adding £1/kW (in 2008-09 prices) for pre-2005 O&M. This is then multiplied by the proportion of EDCM DG capacity to all DG capacity. The remainder is allocated to EDCM demand and all CDCM customers.

²² We estimate a total O&M refund payment of £20.6 million based on data provided by the DNOs in September 2010. This sums the estimated amount payable in all the cases where DNOs found evidence of unexpired O&M for generators with >5MW capacity. It then uplifts this by 50 per cent on the assumption that DNOs and DG may find further evidence. No data was provided on generators with <5MW, so an assumption is made that payments would be 20 per cent of the value of >5MW (due to their smaller size). The amount is then inflated to take into account the larger number of <5MW generators.

²³ Averaged across DNOs, this proportion is 74 per cent. Between DNOs it ranges from 6-44 per cent. This represents the proportion of CDCM DG capacity to all DG capacity (ie the "remainder" as described in footnote 18).

Impact from network efficiency

1.16. Under Options 1-3, consumers benefit much sooner from any improvements in network efficiency and thus ultimately lower cost that results from pre-2005 generators being exposed to UoS price signals.

1.17. In both the CDCM and EDCM, credits are provided to DGs for their output as it generally offsets demand and therefore defers the need for reinforcement. In the EDCM, the signal is site specific. This allows credits where the generator provides a net benefit and charges where they may bring forward reinforcement.

1.18. This has the potential to influence a range of decisions. The first is encouraging DGs to locate in areas of high demand and discouraging location in areas of low demand where their connection may drive reinforcement. It can also encourage efficient decisions about the amount of capacity they require in connecting to the network. Once sited, the EDCM provides pricing signals about the best time of day to export to the network. This encourages generators to export their maximum capacity at system peak where it offsets demand. It also encourages DGs to negotiate generation side management where possible, to minimise any additional investment required to serve it.

1.19. Under Option 4, there would be fewer gains from increased network efficiency. This is because no price signals are given to the pre-2005 DGs that have their arrangements grandfathered.


Impact on competition

1.20. Cost-reflective UoS charges should facilitate competition as they fairly reflect the different costs imposed by different types of users. Competition is also best served when all DGs face a common charging framework. This ensures all DGs are charged on the same basis and therefore receives equivalent pricing signals.

1.21. Options 1-3 go a significant way to delivering this objective by applying the same UoS charging signals whether the DG connected before or after 2005. Option 4 does not fulfil the objective to the same extent because it exempts certain users of the network from the common arrangements - for potentially many years.²⁴

1.22. There is also a potential impact on competition depending on how the compensation issue is resolved. Under Option 1, (ie no refund), those generators

²⁴ We understand that pre-2005 DG are likely to have connected with the intention of operating for about 15 years.



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with unexpired capitalised O&M would effectively pay for O&M 'twice'. This would place them at a competitive disadvantage compared to their post-2005 counterparts.

1.23. The disadvantage is likely to be greater the closer they connected to 2005 as such DGs may have significant amounts of unexpired O&M left that they effectively 'lose'. We note that the further back in time the generator connected, the less disadvantage they would experience. This is because their capitalised O&M payment will have been almost or fully expired.

1.24. Option 2 would address this disadvantage by refunding unexpired capitalised O&M payments.

1.25. Option 3 could be seen as beneficial for competition. Providing compensation for deeper reinforcement would approximate the situation for pre-2005 DGs as if they had connected post-2005. This could be seen as levelling the playing field between pre- and post-2005 DGs.

1.26. Our view, however, is that competition is best served by exposing all DGs to the same UoS charging arrangements and compensating in clear case of double payment. We do not believe that our objective of supporting competition extends to levelling the playing field between different 'generations' of users. To do could potentially mean compensating many different users for many changes over a long period, which may be impractical.

1.27. Under Option 4, some pre-2005 DGs may receive a competitive advantage. Not being exposed to any distribution charging price signals may mean they can operate at no additional cost in areas where other 2005 DGs would be charged. We note that this competitive advantage would cease as each DG is exposed to UoS charges at the end of their contract or asset life.

Impact on sustainable development

1.28. Options 1-3 both result in pre-2005 DGs paying UoS charges. Exposure to a cost reflective charging methodology helps ensure the most efficient use of the system and hence can limit the need for network reinforcement. This minimises the environmental impact of the distribution networks. UoS charges may also reduce electricity losses by driving efficient decisions for the use of and location of (siting and decommissioning) the network.

1.29. We note that pre-2005 DGs mostly use non-renewable sources. Based on illustrative prices in the DNOs' EDCM proposal, we estimate that pre-2005 intermittent generators²⁵ covered by the EDCM would pay on average around half of

²⁵ Recognising that intermittent generation and renewable sources do not always equate.

one per cent of their estimated revenue from output. We recognise however that this varies widely between generators.²⁶

1.30. Option 4 would delay some of the advantages experienced under Options 1-3, as grandfathered pre-2005 EDCM DGs would not receive the price signals that promote efficient use of the system until the end of the grandfathering period.

Impacts on health and safety

1.31. We have not identified any impacts on health and safety from this proposal.

Risks and unintended consequences

1.32. There are some risks specific to the resolution of the compensation issue for pre-2005 DGs. Under Option 1, there is a possibility of ongoing uncertainty if pre-2005 DGs challenged the decision to pay no compensation, and the challenge took a significant amount of time to resolve.

1.33. Guidance issued under Option 2 or 3 may not be, or may not be able to be, detailed enough. This could result in DNOs overcompensating, knowing that if their refunds fit the guidelines and evidence is provided, the money would be recovered from customers over the next price control period. This would have consequences in the form of higher prices to those parties identified in this impact assessment as contributing to the funding of refunds. In the opposite case, pre-2005 DGs may be unfairly disadvantaged from under-compensation.

1.34. We intend to manage this risk through this consultation process, by identifying and encouraging respondents to raise any issues about the guidance. We will also ensure that the evidence DNOs have to provide to claim back refunds through the price control is clear and robust.

1.35. Options 2 and 3 partly rely on evidence from connection agreements or similar to ascertain the extent of payments towards O&M and deeper reinforcement. Some of these contracts may be old, unclear or non-existent. This creates the risk of inconsistent outcomes between generators in otherwise similar circumstances. It may also result in deadlock and drawn out resolutions processes if the DNO and DG cannot come to an agreement because of unclear evidence.

1.36. Our evidence requirements are designed to mitigate this. That is, where a complete evidence base is not available, the DNO may apply certain assumptions about costs, durations or rates, based on standard practice at the time.

²⁶ See analysis at paragraph 1.46

1.37. A similar issue could arise under Option 4 where contract or asset lives cannot be easily established. Similar flexibility would likely be required under this option in order to minimise this issue.

Other impacts, costs and benefits

Impact on pre-2005 DGs from arrangements for refund

1.38. Based on information provided by DNOs, as at September 2010, there were 1,161 pre-2005 DGs. Of these, 19 per cent were EHV and the rest HV/LV. Almost all of the latter group are covered by the CDCM,²⁷ which started on 1 April 2010 and as previously noted, provides credits to DGs. The former are largely covered by the proposed EDCM which, subject to Ofgem's approval, will start on 1 April 2012. The EDCM provides charges or credits depending on the DG's profile. We discuss the impact of charges on DGs further below.


1.39. Option 1 could result in some pre-2005 DGs paying 'twice' for a service. For example, they may have paid a capitalised O&M charge upfront, but have to pay again for this service through UoS charging. Options 2 and 3 would largely neutralise this impact by providing a refund to prevent double charging.

1.40. Additionally, while not a clear case of double payment, pre-2005 DGs may be placed on an uneven playing field compared with post-2005 DGs. This can occur as the latter only contributes to a portion of the reinforcement costs triggered by their connection (under the current apportionment rules). By contrast, pre-2005 DGs contributed to the full costs of reinforcement, even where it may subsequently be shared with other users. Options 1 and 2 require them to share the cost of others' reinforcement without any recognition of this in the form of compensation. Option 3 would neutralise this impact by refunding reinforcement costs that under today's apportionment rules would be shared with others.

1.41. There is also an impact on those pre-2005 DGs that paid for deeper reinforcement as part of their connection charge. They did not have the benefit of others sharing this cost. Yet, they are now required to contribute to the cost of others' deeper reinforcement through their UoS charge. However this is not a case of double payment, as they are not being asked to pay for the deeper reinforcement assets again.

1.42. The exemption provided to some pre-2005 DGs under Option 4 would effectively refund these DGs to redress the above two issues. It may also provide additional (and perhaps unwarranted) compensation above refunding unexpired O&M

²⁷ HV customers with their metering point at the substation are covered by the EDCM.



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and shared reinforcement costs. This includes where the DG paid capitalised O&M payments for, say 15 years, but the asset or contract life is 40 years, meaning they avoid O&M payments for 25 years.

1.43. Options 2 and 3 may also impose a cost on pre-2005 DGs in negotiating and resolving the refund arrangements with the DNO. This cost might be higher if the evidence is not clear or difficult to find, particularly under Option 3 as evidence surrounding deeper reinforcement costs appears to be scarce. This might also apply in the case of Option 4 if the DG or the DNO cannot easily establish the contract or asset life.

Impact on pre-2005 DGs from UoS charges

1.44. A separate but related issue to the compensation is the impact of the introduction of UoS charges themselves. For pre-2005 DGs covered by the CDCM, this started on 1 April 2010. We note that under this methodology, credits are paid to DGs. Subject to our approval, charging of EDCM DGs would start on 1 April 2012. An exception to these arrangements would apply under Option 4 for those DGs that have their arrangements grandfathered.

1.45. EDCM charges are significantly driven by export capacity. A generator's revenue is driven by units exported, which in turn, reflect the use of this capacity. Therefore, the impact, in terms of UoS charges relative to turnover, will be larger for generators that utilise less of their capacity (although the availability of Renewable Obligation Certificates (ROCs) for renewable generation helps to mitigate this impact). Our analysis shows a very large impact for some generators that export a very small amount relative to their capacity.²⁸


1.46. However, our analysis also shows that if these generators were to generate closer to their potential (as suggested by the application of conservative load factors²⁹) then the UoS charge as a proportion of their estimated revenue from generation is likely to be small. Ninety per cent of generators would pay less than 3.0 per cent of their estimated revenue in UoS charges. Ninety-nine per cent would pay less than 7.4 per cent of revenue in UoS charges, with the highest at 15.0 per cent (primarily because it has a significant future reinforcement cost relative to its capacity).

1.47. We recognise that simply increasing output may not be an option. In these cases, to reduce their charge, the DGs could investigate re-negotiating their agreed export capacity or negotiating a generation side management agreement with the DNO.

Impact on suppliers

²⁸ Based on data submitted by the DNOs as part of their EDCM proposals.

²⁹ We have assumed 20 per cent for intermittent and 60 per cent for non-intermittent.



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1.48. The comments in relation to Options 2 and 3 in the above section assume that pre-2005 DGs receive the UoS charge in full. This is the case where the generator has a direct relationship with their supplier, ie a CVA (Customer Volume Allocation) customer.

1.49. The majority of pre-2005 DGs' contracts are SVA. We note that this may impact suppliers if, for whatever reason (such as a fixed price contract), they are unable to pass through the UoS charge. We also note that it is the DG, rather than the supplier that would receive the compensation. This is because connection agreements are between the DNO and the DG, not between the DNO and the supplier.

Impact on post-2005 DGs

1.50. Post-2005 DGs would see no impact from the recovery of refunds under Option 1 as there is no compensation to pay.

1.51. Under Option 2 and 3, there would be no impact for post-2005 EDCM DGs from the O&M refunds, while post-2005 CDCM DGs would share the cost of refunds with EDCM and CDCM demand customers. This is because the refunds for O&M would be recovered only from EDCM demand customers and CDCM demand/generation customers only (see paragraph 1.12).


1.52. Under Option 3, post-2005 EDCM DGs would contribute to the cost of refunds for deeper reinforcement in line with the calculation of the generation revenue target. Based on current ratios of capacity they would pay 16 per cent of the compensation for deeper reinforcement as this represents their share of the generation revenue target. Post-2005 DGs covered by the CDCM would share with EDCM and CDCM demand customers a minority of the refund cost (see paragraph 1.14).

1.53. More broadly, post-2005 DGs benefit from the fact that under all the options, they will now share the generation target revenue 'pot' with all or most pre-2005 DGs. Post-2005 DGs would largely share the same benefits as consumers from increased network efficiency (see paragraphs 1.16-1.19). These benefits are reduced under Option 4 as DGs with grandfathered arrangements do not receive the price signals that encourage efficient use of the network.

1.54. Under Option 4, were the 'notional' £1/kW for pre-2005 O&M to remain part of the generation revenue target, post-2005 DGs would be required to pay the majority of this amount, effectively providing a cross-subsidy to pre-2005 DGs.

Impact on DNOs

1.55. Option 1 would have the least impact on DNOs. There would be no refunds to determine, pay or recover.



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1.56. The main impact from Options 2 and 3 is a cash flow one, arising from the time lag between the payment and recovery of refunds. Without compensation for this time lag, DNOs would have to start paying refunds in 2012 but would not be able to start to recover it until 2015.

1.57. DNOs would largely share the same benefits as consumers from increased network efficiency (see paragraphs 1.16-1.19) under Options 1-3. These benefits are reduced Under Option 4 as DGs with grandfathered arrangements do not receive the price signals that encourage efficient use of the network.

1.58. DNOs may face a cost under Options 2 and 3 from negotiating refunds. Under Option 4 they may face a cost in determining asset or contract lives. There may also be a cost from any changes required to the charging model to take into account the introduction of UoS charges for individual DGs over time.

Post-implementation review

1.59. We do not intend to undertake a formal review following the publication of our guidance. However, we will monitor the arrangements that are made between DGs and DNOs. If required, we may revise the guidance in light of this experience, particularly if there are lessons that may assist more than one party. We note that the extent of the compensation amounts themselves will be decided as part of the next price control, RII0-ED1.

Conclusion

1.60. We are minded to choose Option 2. Refunding unexpired O&M ensures that pre-2005 DGs do not pay twice for this item. This helps to prevent uneven outcomes between pre- and post-2005 DGs.

1.61. More broadly, both consumers and the objective of sustainable development benefit from the exposure to UoS charges resulting from Option 2. These objectives are best served when all users are charged on a cost reflective basis.

Appendix 3 - Glossary

A

Authorised Electricity Operator

Any person who is Authorised to generate, participate in the transmission of, distribute, or supply electricity or participate in the operation of an Interconnector, and includes any person who has made an application to be so Authorised which has not been refused and any person who transfers electricity to or from or across an Interconnector or has made an application for use of an Interconnector that has not been refused.

Authority

The Authority is the governing body for Ofgem, consisting of non-executive and executive members.

B

Balancing and Settlement Code

A multi-party agreement that sets out the obligations and responsibilities on parties that are participating in the electricity market in Great Britain.

C

CDCM – Common Distribution Charging Methodology

The CDCM is the name given to the common methodology for calculating use of system charges for customers connected to HV/LV distribution systems. It was developed by the DNOs under standard licence condition 50 and was implemented on 1 April 2010.

CVA - Central Volume Allocation

For the purposes of the Balancing and Settlement Code, the method by which energy is apportioned between individual parties connected to either the transmission or distribution systems. Any person may be registered in CVA but BSC Section K 2.1 sets out specific requirements.

D

DCMF – Distribution Charging Methodologies Forum


The DCMF is an industry group run by the ENA that discusses charging developments on the electricity distribution networks. See <http://2010.energynetworks.org/distribution-charging-methodol/>

DCUSA – Distribution Connection and Use of System Agreement

The DCUSA is an industry code which governs connection and use of system arrangements between DNOs, suppliers and some generators on the distribution networks.

DG - Distributed Generator/Generation

A generator or generation which is connected directly to a distribution network as opposed to the transmission network. The electricity generated by such schemes is typically used in the local distribution system rather than being transmitted for use across the UK.



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DNOs - Distribution Network Operators

A licensed distributor which operates electricity distribution networks in its designated distribution service areas.

DPCR - Distribution Price Control Review

DNOs operate under a price control regime, which is intended to ensure DNOs can, through efficient operation, earn a fair return after capital and operating costs while limiting costs passed onto customers. Each price control typically lasts five years at a time. DPCR5 is the current price control for DNOs, which commenced 1 April 2010.

E

EDCM – Extra High Voltage Distribution Charging Methodology

The EDCM is the collective name given to each of the two common methodologies for EHV charging to be developed and submitted by the DNOs on or before 1 September 2010 for approval by the Authority under standard licence condition 50A.

Electricity Act 1989

Electricity Act 1989 c.29 as amended. Also referred to as 'The Act'.

EHV - Extra High Voltage

Term used to describe the parts of distribution networks that are extra high voltage typically consisting of a voltage level of 22kV or more.

ENA - Energy Networks Association

The ENA is a trade association for UK energy transmission and distribution licence holders and operators. Its working groups are developing the charging methodologies. See <http://2010.energynetworks.org>

H

HV/LV – High/Low Voltage

Term used to describe the parts of the distribution networks typically at a voltage level of less than 22kV.

I

IDNOs - Independent Distribution Network Operators

A licensed distributor which does not have a distribution services area and competes to operate electricity distribution networks anywhere within the UK.

M


Maximum Export Capacity

The maximum amount of electricity, as agreed with the DNO and expressed in kilowatts or kilovoltamperes, which may be exported onto the DNO's network.

S

SLC - Standard Licence Condition

These are conditions that licensees must comply with as part of their licences. SLCs can only be modified in accordance with Section 11A of the Electricity Act. Failure to comply with SLCs can result in financial penalties and/or enforcement orders to ensure compliance.



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SVA - Supplier Volume Allocation

The method by which energy is apportioned between Suppliers for the purposes of the Balancing and Settlement Code.

U

UoS Charges

Charges paid by generators and suppliers for the use of the distribution network.

Appendix 4 - Feedback Questionnaire

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

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

1.2. Please send your comments to:

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