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Distribution use of system charging: a time-limited exemption for pre-2005 generators

Consultation

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Overview:

When distribution use of system charges were introduced for distributed generators (DGs) in 2005, those already connected to the system were granted a 5 year exemption. This blanket exemption expired in 2010 and was not renewed. Ofgem's objective is to bring all DGs onto the same use of system charging arrangements in a fair and balanced way, recognising the payments that some pre-2005 DGs made on connection to the distribution system.

This document sets out the rationale for our decision to achieve our policy objectives through granting pre-2005 DGs an optional time limited exemption from use of system charges. We are consulting on implementation arrangements for this exemption including an initial proposal that the exemption should run for 20 years from the time the generator connected to the distribution system.

Context

In 2005 the connection charging boundary was changed for generators (bringing it into line with the boundary for demand customers) and use of system (UoS) charging arrangements for generators were introduced. At that time, Ofgem granted an exemption from UoS charges for distributed generation connected under pre-April 2005 terms. This exemption was granted for the period from 1 April 2005 to 31 March 2010. Ofgem did not extend this exemption. We have been considering how best to bring all DGs onto the same charging arrangements in a fair and balanced way bearing in mind the different connection payment arrangements which have been applied to DGs connected pre and post 2005.

This document follows on from our consultation published this May. It forms part of our work to facilitate the distribution network operators' (DNO) development and application of common, more cost reflective UoS charging arrangements for all demand and DG customers (the Structure of Charges project).

Our work on pre-2005 DG charging is related to work streams identified in Ofgem's Corporate plan for 2011-2016. In particular, encouraging more efficient use of a DNO's network by DGs will contribute to the achievement of a low carbon energy sector.

Associated documents

- Distribution use of system charging: way forward on higher voltage generation charging, October 2011 (Reference number: 134/11) http://www.ofgem.gov.uk/Networks/ElecDist/Policy/DistChrgs/Pages/DistChrgs.aspx

- Use of system charges for distributed generators (DG) – update on current thinking, August 2011 http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=759&refer=Networks/ElecDist/Policy/DistChrgs

- Charges for pre-2005 distributed generators' use of DNOs' distribution systems – proposed guidance, May 2011 (Reference number: 58/11) http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=684&refer=Networks/ElecDist/Policy/DistChrgs

- Electricity Distribution Price Control Review Final Proposals – Incentives and Obligations, December 2009 (Reference number: 145/09) http://www.ofgem.gov.uk/Networks/ElecDist/PriceCntrls/DPCR5/Documents1/FP_2_Incentives%20and%20Obligations%20FINAL.pdf

- 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 sets out the rationale for our decision to grant distributed generators (DGs) connected before 1 April 2005 (pre-2005 DGs) an optional, time-limited exemption from distribution use of system (UoS) charges. We are also consulting on the duration of this exemption and on implementation arrangements more generally.

On 1 April 2005 we decided to change the way network costs are paid for by DGs. In particular, we changed the connection charging boundary for DGs so that DGs connected from that point on would pay less up front for connection, but would be required to contribute to distribution network operator (DNO) cost recovery through UoS charges. At that time we exempted pre-2005 DGs from UoS charges for five years because more cost reflective UoS charging arrangements had not yet been developed and due to the difficulty associated with unwinding their existing contractual arrangements. We decided not to extend this exemption when it expired in 2010 and set out our objective that pre-2005 DGs should face UoS charges when new common charging methodologies come into effect.

Accordingly, all DG connected to DNOs' lower voltage networks have been subject to the Common Distribution Charging Methodology (CDCM) since it was introduced on 1 April 2010. Subject to our approval, we envisage the Extra High Voltage Distribution Charging Methodology (EDCM) for DG customers will be introduced from 1 April 2013.

At the time of our DPCR5 decision we set out that, on the introduction of UoS charges, there may be circumstances in which it would be legitimate for DNOs to refund pre-2005 DGs in recognition of the payments they made on connection. In May this year we consulted on principles for determining refunds. In our consultation we proposed that DNOs would be able to refund pre-2005 DGs for unexpired payments for capitalised operations and maintenance costs and have these refunds recovered through their price controls.

Our decision to introduce a time-limited exemption

Following our May consultation we have further developed our thinking. We have decided that implementing time-limited UoS exemption arrangements for pre-2005 DGs would be a more proportionate and reasonable way forward. An exemption would avoid the complexity and potential for disputes associated with refund arrangements, particularly bearing in mind the difficulty in establishing the terms on which many pre-2005 DG connected to the distribution system. A time-limited exemption would provide certainty and transparency to DGs and would help to balance the interests of DGs and other customers (who effectively will 'pay' for any exemption). It would also ensure that our overall policy objective of introducing UoS charges for all DGs is still, eventually fulfilled.

Eligible pre-2005 DGs would have the choice to decide whether they are charged for UoS or exempt from UoS charges, noting that UoS charging methodologies may result in a DG being credited for its use of the DNO's network. Pre-2005 DGs that choose to be exempt from UoS charges would have an opportunity at any point during their exemption to opt in to UoS charging arrangements. This opportunity is

one-way and only allows a DG to choose to leave an exemption in order to be charged for UoS.

Our initial thinking on the duration of the time-limited exemption

We propose that any time-limited exemption would be calculated from the date of the DG's connection. It would also be determined in advance of the EDCM for DGs coming into effect to provide certainty and transparency to DNOs and DGs as to when an exemption would end.

In this paper we consider different options for determining the length of an exemption for pre-2005 DGs and provide an assessment of each against the extent to which they would balance the interests of DGs and other customers. Based on this analysis, our initial thinking is that an exemption based on a 20 year period from the date of a pre-2005 DG's original connection may be appropriate as the best way of balancing the interests of DGs and other customers while ensuring that charges for all DGs are introduced in a timely manner.

Implementation arrangements

This paper also sets out detailed processes and responsibilities for implementing exemption arrangements. We seek views on a variety of implementation issues, including treatment of sites with mixed demand and generation requirements and the method for formalising and recording the status of pre-2005 DGs in accordance with exemption arrangements.

The context in which we have developed our proposals

It is unusual for Ofgem to be contemplating exempting certain parties from regulatory arrangements.

However, we think our rationale and approach for implementing exemption arrangements are a proportionate response to the specific circumstances associated with pre-2005 DGs. In particular, our approach reflects our understanding of pre-2005 arrangements, which are complex and varied and have an incomplete and unclear evidence base. Having reviewed our earlier proposals, in these circumstances we consider it would be disproportionate to implement refund arrangements that would likely be complex and carry the risk of long running disputes.

We have reached our current position based on the specific circumstances, which are in many ways unique. For example, we are looking to introduce UoS charges for the first time for pre-2005 DGs. Given the specific nature of the issues relating to pre-2005 DGs, our rationale for implementing exemption arrangements is unlikely to apply in other contexts. In particular, our approach does not set a precedent for exempting certain customer types from changes to UoS charging methodologies.

Next steps

Responses to our consultation should be sent to us by 5 December 2011. Subject to these responses, we plan to publish a decision letter in early 2012 that sets out the details for implementing exemption arrangements.

1. Our decision to exempt pre-2005 DGs on a time-limited basis

Question box

Question 1.1: Do you agree with our proposal that by default CDCM generators eligible for an exemption should continue to be charged for UoS and that EDCM generators eligible for an exemption should continue be exempt from charges, unless either party chooses otherwise?

1.1. We consider that a time-limited exemption is a better alternative to refund arrangements. It would:

- Avoid the complexity and potential disputes associated with refund arrangements.
- Provide certainty and transparency.
- Help to balance the interests of pre-2005 DGs, post-2005 DGs and other customers (who effectively will 'pay' for any exemption).
- Ensure that our overall policy objective of introducing UoS charges for all DGs is still fulfilled.

1.2. This chapter outlines our original decision to require all DGs to pay UoS charges, our proposals for the payment of associated refunds where necessary, and more details on why we now believe a time-limited exemption provides the best solution to the pre-2005 DG issue. We also outline how an exemption would be applied and more information on the context in which we have developed our proposals.

Changes to connection charging arrangements for generators

Introduction of shallowish connection charges and UoS charges

1.3. Prior to 1 April 2005, distributed generators (DGs) paid a 'deep' connection charge to connect to the electricity distribution network operators' (DNOs) networks. This included the full cost of sole use assets, any reinforcement of the shared network and in most cases capitalised operation and maintenance (O&M) payments. DGs did not generally pay use of system (UoS) charges for energy they exported on to DNOs' networks.

1.4. This arrangement changed for DGs connecting from 1 April 2005 (post-2005 DGs), with the introduction of a 'shallowish' connection charge. This also covers the full cost of sole use connection assets, but typically only a proportion of any reinforcements of the shared network. The remainder, along with O&M costs, are

recovered through UoS charges levied on users of the network, including post-2005 DGs.

Pre-2005 exemption and compensation

1.5. At the same time we introduced shallowish charging arrangements, we granted DGs that connected to DNOs' networks before April 2005 (pre-2005 DGs) an exemption from UoS charges until 1 April 2010. This was because longer term, more cost reflective UoS charging arrangements had not yet been developed and because contractual issues were considered to be too complex to resolve at the time. As part of the last Distribution Price Control Review (DPCR5)[1] we decided not to extend this exemption. This was to ensure that all DGs were treated on the same basis, ie that they are charged (or credited) for their use of the system using the same methodology and thus receive price signals about the costs (or benefits) they place on the network.

1.6. We noted that the DNOs may need to renegotiate their contractual arrangements and pay compensation before a UoS charge could be levied. We also stated that where compensation was paid, we would allow the DNOs to recover economic and efficient payments through their price controls, ie from their customers.

Introduction of common charging arrangements

1.7. UoS charges were introduced from 1 April 2010 for all DGs at lower voltages using the Common Distribution Charging Methodology (CDCM). Common charges for DGs at the higher voltages will be calculated by the Extra High Voltage Distribution Charging Methodology (EDCM). Subject to our approval of the EDCM, we envisage export charges would commence from 1 April 2013.

May 2011 consultation on refund arrangements, responses and further analysis

1.8. In May 2011, we published a consultation on the arrangements for determining and funding efficient and economic refunds that could be recovered through the price control (our 'May consultation').[2]

1.9. We set out that, while it was clear that pre-2005 DGs had paid a connection charge, our understanding was that connection charges did not buy rights to UoS without any further charge. In particular, we noted a previous determination that

[1] See Associated Documents
[2] See Associated Documents

had found that a UoS charge could have been levied had the DNO been able to argue that the DG did impose a cost on the system.[3]

1.10. Accordingly, we explained that we considered refunds may be necessary to avoid DGs paying for assets or services twice, ie once through a connection charge and again through UoS charges. We considered that a double charge would apply in the case of unexpired capitalised O&M payments.

1.11. We also said that we did not consider that these arrangements would cover refunds for shared assets that pre-2005 DGs may have paid to have reinforced as part of their connection charge, as this would not result in a case of double payment.

1.12. DGs' responses to our May consultation were particularly critical of our interpretation of pre-2005 arrangements. Further to their previous consultation responses, DGs' reiterated concerns with our understanding of pre-2005 arrangements and our proposals for implementing refund arrangements. In particular, DGs argued that it was common belief and practice that pre-2005 connection agreements would have covered rights to UoS without the need for further charges beyond the original connection charge, even if the agreements did not reflect this explicitly. Many believed that there was an implicit understanding in the industry to this effect.

1.13. We note that in addition to DGs' responses, some DNOs now also showed support for DGs' views that they had connected with the expectation that they would not have to pay further charges.

Rationale for a time-limited exemption

1.14. We consider that a time-limited exemption may be a more reasonable and proportionate approach than refunds, in facilitating the introduction of UoS charges for all DGs. There are four major reasons for this, which we explain in turn.

Complexity

1.15. DGs and DNOs have made it clear in their responses and in views expressed at workshops that the calculation and management of refund arrangements would be complex and time consuming and would be subject to a high risk of dispute. This is predominantly because the paper-trail to support a case for a refund is typically incomplete or difficult to uncover and would therefore, in some cases, require the DNO to make assumptions which may be contentious. (We further discuss the issue of refunds in Chapter 3 of this consultation.)

[3] We explained this determination on page 18 of our May consultation.

1.16. It is likely that implementing exemption arrangements would entail fewer disputes between parties than our refund proposals. We think that avoiding the potential costs of disputes is in the interests of DNOs, DGs, Ofgem and ultimately consumers. Furthermore, determining a clear way forward, while aiming to minimise disputes, should provide greater certainty to the industry over the implementation of exemption arrangements and the eventual introduction of UoS charges for all pre-2005 DGs.

Certainty and transparency

1.17. We consider that any arrangements intended to resolve issues relating to pre-2005 DG charging arrangements should provide certainty to stakeholders and be transparent in their application. A time limit would ensure that any exemption has a clear end point at which UoS charges will be introduced. This will help to ensure that all stakeholders know what to expect of the implementation of exemption arrangements and the introduction of UoS charges, and can plan their business accordingly.

Balance of interests

1.18. In light of the findings of our re-evaluation of pre-2005 arrangements, we think a time-limited exemption reasonably balances the interests of pre-2005 DGs and all other customers connected to DNOs' networks. Despite the lack of clear evidence that DGs' deep connection charge bought them rights to UoS in perpetuity without further charge, it would go some way to recognising that some pre-2005 DGs may have connected with some expectation that they would not pay any more than their connection charge.

1.19. However, as the exemption is time-limited, it would also ensure that pre-2005 DGs eventually contribute to network costs, which they may not have paid for as part of their connection charge (or for which capitalised payments may have expired, such as for O&M). This helps to protect other customers including post-2005 DGs who will be required to pay some of these costs as long as pre-2005 DG are exempt from UoS charges.

Achieves original policy objective

1.20. Our overall policy objective was and remains to ensure that all DGs are exposed to the same cost reflective UoS pricing signals.

1.21. Therefore we consider that it is important to implement a solution for pre-2005 DGs sooner rather than later that will ensure UoS charges are eventually introduced for all pre-2005 DGs. We also think allowing pre-2005 DGs eligible for an exemption to choose to be subject to UoS will also support our policy objective. We discuss this particular proposal in the following section.

Application of exemption

1.22. We propose that:

- **EDCM DGs**[4] eligible for a time-limited exemption *will not* be charged for UoS unless they choose to be subject to UoS charging arrangements. Those not eligible for an exemption will be charged for UoS from the commencement of the EDCM for DGs.
- **CDCM DGs** eligible for a time-limited exemption *will continue to be* charged for UoS. In practice this will mean that all CDCM DGs will continue to receive net credits under the current methodology.[5] However, eligible CDCM DGs may choose to be exempt from UoS charges (they would have a limited window in which to do so).

1.23. We consider that the above proposal would be the most practical approach to implementing time-limited exemption arrangements and UoS charging arrangements for pre-2005 DGs. This is because it would reflect what we consider to be the most likely choices of the respective groups of DGs. However, should a DG decide that the default position does not suit their circumstances, they would have the opportunity to choose either to be charged if EDCM or exempted if CDCM.

1.24. We consider that these proposed arrangements would best facilitate, in a timely manner, our overall policy objective that all DGs are covered by UoS charging arrangements. Therefore all DGs will be exposed to cost signals that are intended to improve the efficient use of DNOs' networks.

1.25. We provide further information supporting our proposed application of exemption arrangements in Chapter 3.

The context in which we have developed our proposals

1.26. It is unusual for Ofgem to be contemplating exempting certain parties from regulatory arrangements.

1.27. The issue of introducing UoS charges for pre-2005 DGs is complex. The issue relates to a fundamental change in the charging arrangements for DGs that is, the introduction of UoS charges for these DGs for the first time. It is also challenging because evidence of pre-2005 arrangements is not necessarily easily available,

[4] In accordance with our pending EHV boundary change, 'EDCM DGs' will include pre-2005 DGs connected to the high voltage network at a HV:EHV substation. In the consultation accompanying this document, on 21 October, we propose that this change would take effect at the same time that the EDCM for DGs takes effect, ie 1 April 2013 (or possibly later).
[5] DGs may not always receive a credit in accordance with the CDCM. The DNOs are currently considering how to develop the CDCM to better reflect the generation dominated areas. This may result in DGs in such areas being charged for, as opposed to credited.

because it has been lost or is difficult to recover. In light of the complexity of the issue we have made a series of concerted efforts to understand the pre-2005 DG arrangements.

1.28. Based on our understanding at the time of our DPCR5 Final Proposals, we recognised that there may be a case for refunding DGs. We were keen that all DGs were treated fairly and that UoS charging arrangements were introduced sooner rather than later. Consequently we set out proposals for refund arrangements in our May consultation.

1.29. However, as we set out earlier in this chapter we have developed our thinking and now consider that the introduction of exemption arrangements would be a more reasonable and proportionate approach. As noted, we think it would avoid the complexity of refunds and potential disputes as well as provide greater certainty and transparency. We also believe it would better balance the interests of DGs and other customers, while still meeting our policy objective of introducing UoS charges for all DGs.

1.30. Our approach is specific to the particular circumstances associated with pre-2005 connection and UoS charging arrangements. We consider that the issues relating to these arrangements are in many ways unique. For example, UoS charges were being introduced in April 2005 for DGs for the first time. We think that this is a very different situation to ongoing changes to existing charging methodologies.

2. Our initial thinking on the duration of a time-limited exemption

Chapter summary

This chapter sets out our analysis of how a time-limited exemption might be calculated. It describes the different ways in which an exemption period could be calculated and sets out our thinking that an exemption should be based on a 20 year period from the time of connection.

Question box

Question 2.1: Do you agree that a time-limited exemption should be set on an ex ante basis?

Question 2.2: Should an exemption be calculated from the date of a pre-2005 DG's connection, rather than some other date, such as from the date at which EDCM DG charges are introduced? Why?

Question 2.3: Do you agree with our assessment of the options for determining the time limit for an exemption? Are there additional points of analysis we should bear in mind?

Question 2.4: Are there better alternative options to those which we set out in this chapter and what would be their rationale?

Question 2.5: Do you agree with our initial thinking that a 20 year limit is appropriate? If not, what might be a more reasonable period of time that balances the interests of pre-2005 DGs and the DNOs' other customers? Please explain the reasoning behind your answer and provide any associated evidence.

Question 2.6: We note that rather than pay a capitalised payment for O&M, some DG customers pay an annual charge for O&M. Where such a DG is eligible for an exemption, should they continue to pay their annual O&M charge?

2.1. This chapter considers how to determine the length of the time-limited exemption we discussed in Chapter 1.

2.2. We firstly consider some practical issues, including the date from which the exemption should be calculated, whether the period of exemption should be determined upfront (ex ante) or in response to particular events (ex post), and the ways of defining asset and plant lives.

2.3. We then outline four methods of calculating the length of an exemption that industry has proposed to us. Each is assessed primarily against how they balance the

interests of pre-2005 DGs and other customers. Finally, we set out our thinking that a period of 20 years would best balance these stakeholders' interests. This would mean that a pre-2005 DG's exemption ends on a date 20 years after the DG's original connection date.

Date from which a time-limited exemption will be calculated

2.4. We propose that the duration of a time-limited exemption will be calculated from the date of the pre-2005 DG's connection. For example, assuming a 20 year exemption period:

- An EDCM DG that connected in 2000 would not be charged UoS until 2020 (assuming that EDCM UoS charging arrangements are in place at that time).
- However, an EDCM DG that connected in 1990 would be charged UoS from the commencement of the EDCM. This is because the end date for the exemption (2010) occurs prior to the date on which EDCM charges are introduced for DGs (eg 1 April 2013, subject to approval).

2.5. We consider that using a DG's connection date is appropriate because any exemption should be related to the point at which the DG's contractual relationship for the use of its connection began. (Note that we further discuss how the connection date would be defined in Chapter 3.)

Should the time limit be determined ex ante or ex post?

2.6. The end date for a time limited exemption could be determined up front (ex ante), eg based on the average life of a connection asset which is set before the start of UoS charging. Alternatively, it could be triggered by some future event (eg actual replacement of the connection asset), which may happen at any time in the future (ex post).

2.7. We consider that an ex ante approach is most appropriate because it provides certainty to stakeholders about how long an exemption will last and when UoS charges will be introduced. The analysis of the different options for setting the length of the exemption is based on an ex ante approach.

2.8. The following table summarises the key arguments for and against the two approaches.

Table 2.1 – assessment of an ex ante and ex post approach

Ex ante	Ex post
Pros: • Provides up-front certainty about when an exemption is due to end. • Simple to implement. • Duration of exemption can be determined on a consistent basis. • Limits reliance on the use of discretion by DNOs and DGs. Cons: • Basis for setting exemption duration is not case specific, ie it would be set on a general/average basis.	Pros: • Tailored to individual circumstances. • The type of trigger point for ending an exemption can be agreed consistently and up front. Cons: • Creates uncertainty as to when an exemption might end. • More complex to implement. • DNOs and DGs required to use discretion when determining whether end of exemption has been triggered. • Potentially open-ended – eg if trigger is linked to the life of an asset, that asset may be effectively maintained so it is not replaced. • The end point for an exemption may, in the view of the DG, occur prematurely, which could attract disputes. Equally, the exemption may end 'too late' in terms of protecting consumers' interests.

Investment, economic and technical lives

2.9. Some of the following options consider the lives of assets, for which there are different recognised measures, eg investment, economic and technical lives. The following provides a working guide for these terms.

- **Investment lives** – are intended to reflect the period over which an investment is intended to make a return. Such a period may be set out in the DG's original business plan or could be determined based on how long it was financed for.
- **Economic lives** – this period represents the number of years over which an asset is useable. However, it may be shorter than this as it also takes into account additional factors, such as the risk of redundancy even where the asset remains 'technically' useful. The economic life typically feeds into the period over which the cost of the asset is depreciated and charged for.
- **Technical lives** – engineers base the technical life of an asset on an assessment of the number of years of use they expect to derive from that asset. This will be a factor of an asset's design life, its wearing out through use and the policy of its maintenance, including safety considerations.

Time limit option 1: Connection agreement length

Rationale

2.10. DGs consider that they paid for their connection and for UoS without further charge. They consider that their connection and prevailing regulatory agreements at the time allowed this. If this were the case, then the end of a connection agreement could provide a logical point at which an exemption would end (and hence when UoS charges would begin to apply).

2.11. An exemption based on an end date set out in the connection agreement between the DNO and DG is explicit and provides certainty as to the point at which an exemption would end. It would also be clear, auditable and relatively straightforward to implement an exemption on this basis.

Application

2.12. As the vast majority of pre-2005 DGs' connection agreements have no specific end date, those DGs might be given an open-ended exemption under this approach. However, we note that contracts may not be open-ended in practice. This is because they typically contain variation provisions and may also have termination terms which would ultimately limit the duration of any agreement. It may be possible to use these provisions to insert an end date.

2.13. Two DNOs identified some pre-2005 DGs (>5MW) with contracts with specific end dates, although these represented only about eight per cent of pre-2005 DGs (>5MW). In these cases, the exemption would end at the same time as the connection agreement ceased.

Likely periods

2.14. Contracts with a specific end date last between 19 and 40 years. The average length of these connection agreements is 30 years. As noted, the majority of connection agreements did not have a defined end point and thus an exemption period would effectively be open-ended (unless terms within the contract can be used to provide an end date).

How does this balance the interests of pre-2005 DGs and other customers?

2.15. This option would provide the best outcome for those pre-2005 DGs with no end date specified in their contract. They would not be required to contribute towards any further network costs for the life of their connection agreement, such as further payments for O&M (ie beyond the capitalised period); or network rates on their connection assets. The outcome for pre-2005 DGs with an end date specified in their contract would depend on the length of their contract. Given the periods our analysis has uncovered, it is likely that the exemption for these DGs would at least

cover typical periods over which O&M was capitalised, ensuring they do not pay twice for this item.

2.16. The DNOs' other customers would fund the network costs associated with exempted DGs as well as other shared costs, potentially for an open-ended period of time. There would be little prospect of pre-2005 DGs becoming liable for UoS and thus beginning to share these costs over time. This would particularly impact post-2005 DGs, who, under current EDCM proposals, share a generation revenue target with pre-2005 DGs (and thus must meet a portion of costs that pre-2005 DGs do not pay).[6] It may also disadvantage them competitively, as pre-2005 DGs would have an advantage in relation to the network charges they pay (or avoid).

2.17. Ultimately, we do not think it would be an appropriate balance of pre-2005 DGs' and other customers' interests to provide what would effectively be an open-ended exemption. As we have not been presented with sufficient evidence that DGs had paid for a connection and UoS without further charge and in perpetuity, it would not be justifiable to require other customers to fund the 'cost' of this exemption (in the form of unrecovered network costs from pre-2005 DGs).

2.18. We note that an open-ended exemption would also not fulfil our policy objective of exposing all DGs to UoS charges (which should ultimately benefit all users of the network) as the vast majority would remain exempt for an open-ended period.

Time limit option 2: The life of the generator

Rationale

2.19. The life of a generator may be determined by considering its investment, economic or technical life.

2.20. DGs have argued that they invested on the basis that they paid an upfront connection charge and that they would not be charged further, eg for UoS. It may therefore be appropriate to set the period of exemption based on the original period of investment. This would arguably maintain the original expectations on which the investment was based (as well as potentially also cover the period over which it was financed).

2.21. Alternatively, the exemption could be based on the economic or technical life of the generation plant. This would reflect the argument DGs have also made that they paid for UoS 'for life'. In this case, 'life' could represent the useful operating life of the generation plant.

[6] Note that the consultation published simultaneously with this document discusses reconsideration of the EDCM charging methodology

2.22. There are independent reports that set out average investment and economic lives of generation. These could provide a sound basis on which to develop a period of exemption based on investment or plant lives.

Application

2.23. The length of exemption under this option could be set on a site-specific basis, a period for each main generation technology, or a single period based on an average of technology types.

2.24. A site-specific period would be based on evidence of the original period of investment by the DG, or their estimate at the time of the economic or usable life of their plant. Basing an exemption on the investment or economic life of a project may be difficult if a site-specific approach were to be used. This is because it could be complex and time consuming to conclusively establish the expected lives at the time of connection.

2.25. A technology-specific period would take into account the different periods over which either investments were made or actual plant was likely to remain operational, depending on the type of generation employed.

2.26. Alternatively, a period based on an average of the various technologies' investment or plant lives could be used as a more straightforward and uniform method.

Likely periods

2.27. According to Redpoint Energy and Mott Macdonald, the average investment and economic lives of different technology types are as follows:[7]

[7] See Redpoint Energy, "Dynamics of GB Electricity Generation Investment: Prices, Security of Supply, CO2 Emissions and Policy Options" (May 2007) and Mott Macdonald, "UK Electricity Generation Costs Update" (June 2010). Neither study provided specific figure for hydro.

Table 2.3 – average investment and economic lives by technology type

Technology type	Redpoint Energy: investment life (years)	Mott Macdonald: economic life (years)
CCGT	20	35
Coal (ASC)	25	45
Coal (IGCC)	25	35
Coal (ASC) + CCS	25	40
Coal (IGCC) + CCS	25	n/a
Onshore wind	20	25
Offshore wind	20	25
Biomass	20	30
CHP	20	n/a
Marine	25	n/a
OCGT	20	30
Gas engines	n/a	20

2.28. A time limit based on an average of the various technologies' investment or plant lives would result in a period of 22 years (investment life) or 32 years (economic life). We expect that a time limit based on technical life would last longer than an economic life.

How does this balance the interests of pre-2005 DGs and other customers?

2.29. An exemption based on investment lives would reflect pre-2005 DGs' initial investment expectations which would have taken into account the expected costs and revenues for the period over which they expected to make a return. This could be interpreted as being consistent with the argument that some DGs have made, that they *invested* on the basis that they had paid for their connection upfront without expectation of further charge.

2.30. However, DGs may consider that basing an exemption on the investment life of the plant may not reflect the reality of their likely use of the network, which a period based on the economic or technical life might more appropriately reflect.

2.31. An exemption based on economic or technical lives would likely provide a longer period of exemption than one based on investment lives. Depending on the method used to select the period, this may effectively provide an exemption beyond the point at which they might reasonably be expected to contribute to network costs they did not pay for as part of their original connection, such as the costs of maintaining, replacing or reinforcing network assets (eg once their capitalised O&M payments expire). In this case, pre-2005 DGs and consumers would be required to fund these items.

2.32. We think that basing an exemption on the estimated investment lives of pre-2005 DGs has merit in balancing the expectations of DGs with the interests of other customers. It would go some way to acknowledging the expectations DGs argue they had at the time of connection and could minimise the impact on their original investment.

2.33. It could also reduce the impact on consumers that a longer exemption period based on the economic or technical plant life would have, whereby consumers would be liable for network costs that exempted pre-2005 DGs would not pay. We do not think it would be justifiable to require other customers to continue to fund items the DG did not pay for as part of their original connection charge (even if on a per customer basis this might be small). Given this, and because we have not been presented with sufficient evidence that DGs had paid for a connection and UoS without further charge and in perpetuity, setting an exemption on the basis of economic or technical lives would thus not appear to appropriately balance pre-2005 DGs' and customers' interests.

2.34. Additionally, where plant lives are very long, the policy objective of exposing all DGs to UoS charges and thus appropriate pricing signals (which benefits all customers of the network), may not be achieved in practice. This is more likely to be achieved in a timely manner if investment lives were used to calculate the period of exemption.

Time limit option 3: Network asset lives

Rationale

2.35. Network assets are the assets that a DNO uses to distribute electricity across their network. These consist of assets that are solely used by a particular customer and other assets that are shared.

2.36. The life of network assets could provide a basis for setting the duration of an exemption, as DGs' connection charges were primarily paid to cover the cost of assets necessary to connect the DG.

2.37. Furthermore, it is not apparent from our understanding of pre-2005 contractual arrangements that, in general, DGs paid for the replacement of network assets (although there may be some rare exceptions). Basing the length of exemption on the basis of asset lives could mean that at the expiry of the exemption (when assets would also need to be replaced), the DG would begin to contribute to network costs.

Application

2.38. In applying an exemption based on network asset lives the first thing to consider is which assets the exemption should be based on. The option most tailored to a DG's circumstances would be to set an exemption based on the life of the

specific assets used to connect the DG. However, relating assumed asset lives to specific assets could be complex and time consuming.

2.39. An alternative and more straightforward solution may be to set an exemption based on the life of typical assets used to connect a typical DG.

2.40. In both circumstances a DG's connection will comprise a variety of assets with different lives. The period of an exemption could be based on the life of the asset with the shortest life, the longest life, or an average of all assets used for the DG's connection.

2.41. Using the asset with the shortest life would indicate the point in time when the DG reasonably begins to be liable for further costs to remain connected. Whereas using the asset with the longest life would indicate the point at which the DG's original payment for assets has fully expired, ie all assets it originally paid for have been replaced and require re-funding. It is unclear which of these would be most appropriate. Therefore as an alternative it may be more reasonable to use an average life of assets.

Likely periods

2.42. The following options could be used for calculating the life of network assets:

- Economic life – for example this could use the assumptions used in DNOs' price controls:
    - Current assumption – at present DNOs' price controls use a life of network assets of 20 years. Accordingly, it could be appropriate to use this, as it may have been the assumption at the time pre-2005 DGs connected. However, we note that the 20 year period used at present is more likely to reflect the period over which costs are depreciated than the 'economic' life in accordance with our definition above.
    - Future price control economic life – we note that, from April 2015, the economic life of network assets will be 45 years.[8] This change has been made to better reflect the useful life of network assets. Therefore it may be more reasonable to base an exemption on this period.
- Technical life - an alternative approach may be to use the technical life of network assets. Analysis presented to Ofgem has found that the weighted average technical life of network assets is 60-75 years.[9]

[8] Our decision can be found on our website: http://www.ofgem.gov.uk/Networks/Policy/Documents1/assetlivedecision.pdf

[9] Cambridge Economic Policy Associates (CEPA), Sinclair Knights Merz (SKM) and GL Noble Denton "The Economic Lives of the Energy Network Assets – A Report for Ofgem" (December 2010)

How does this balance the interests of pre-2005 DGs and other customers?

2.43. This option most closely relates to what we understand DGs typically paid for as part of their connection charge, ie the assets installed to service the customer and a capitalised payment for O&M on those assets. A period based on the life of those connection assets could be used to set the length of the exemption.

2.44. However, we note that there are other network costs that pre-2005 DGs might reasonably be expected to contribute towards. For example, O&M beyond the capitalised period, other direct costs and network rates . Therefore, it may not appropriately balance the interests of pre-2005 DGs and other customers to provide an exemption for the full life of network assets, particularly the higher end of the assumptions, eg technical life. This is because, ultimately, other customers will be required to fund the items which did not form part of the original payment.

2.45. Additionally, where network asset lives are very long, the policy objective of exposing all DGs to UoS charges and thus appropriate pricing signals, may not be achieved in practice.

Time limit option 4: Operations and maintenance

Rationale

2.46. Based on our review of contractual arrangements, DGs contracts generally included terms for operations and maintenance (O&M). These typically included an explicit period over which O&M would be capitalised. This payment was intended to cover the provision of O&M for a period of time by the DNO in relation to the connection assets the DG paid for.

2.47. The rationale for basing an exemption on the period over which O&M was capitalised is that once the capitalised period expires, the DG should become liable for the cost of ongoing O&M of connection assets, ie it would be unreasonable to expect other customers to pay these particular costs.

Application

2.48. The provision of O&M is a clear and identifiable service paid for by the majority of DGs. The periods over which O&M was capitalised are relatively well known by DNOs. This is because the periods are either identified in connection agreements or were set out in DNOs' charging methodologies. Therefore, to the extent that DGs' contracts do not specify a period, DNOs should be able to assume with a fair degree of confidence the period over which O&M would have been capitalised. The end date for an exemption would thus be set based on a specific period for O&M set out in the contractual arrangements between the DNO and DG, or on the typical period over which DNOs capitalised O&M payments.

2.49. Some customers did not pay a capitalised payment for O&M, instead choosing an annualised payment. In this case, it may be appropriate for the annualised O&M payments under the connection agreement to cease at the time the exemption expires and the customer starts to pay UoS (which includes an O&M component).

Likely periods

2.50. Most DNOs have reported that, O&M was capitalised over a 20 year period (where it is known). Some differ from this period, with the range of these between 10 and 25 years.

How does this balance the interests of pre-2005 DGs and other customers?

2.51. Of all the options, this option is the most consistent with our previous proposals for providing refunds for O&M, while being much simpler to implement. The option would avoid double payment for O&M, ie once through any capitalised payment made at the time of connection and again through UoS charges. It would not, however, recognise to any great extent the expectation that DGs say they had paid for their connection (and UoS) without any further charge in perpetuity (ie for a period longer than the capitalised O&M period).

2.52. It would provide some additional benefit for pre-2005 DGs in terms of avoiding other network costs (such as direct costs and network rates on their sole use assets, which we understand did not form part of their capitalised O&M payments). While these costs would continue to be met by other customers, the trade off in terms of reduced complexity and greater certainty (ie compared to refunds) around the resolution of the pre-2005 issue may be a reasonable one. The proposed period would also ensure that DGs share the costs with other customers of other items, such as replacement of connection assets.

2.53. This option would also ensure that our policy objective of exposing all DGs to the same UoS charging signals would be achieved in a reasonably timely manner.

Our thinking: a 20 year time limit

Rationale

2.54. As we set out above, we consider that a time-limited exemption would be a more proportionate and reasonable way of recognising pre-2005 DG charging arrangements and introducing UoS charges for these DGs.

2.55. The options set out earlier in this chapter are based on proposals by industry. Each of them provides a possible option for setting the duration of a time-limited exemption. However, the periods produced by the options vary from as little as 10 years in the case of O&M payments right through to 65-75 years for connection assets or even potentially open-ended if connection agreements were used.

2.56. However, whilst each has its advantages and disadvantages, we do not think that any one of them provides a clear and justifiable basis for setting the duration of an exemption.

2.57. Our thinking is therefore that a standard 20 year exemption should be applied to all pre-2005 DGs to determine how long they remain exempt from UoS charges. This would also help achieve our policy objective of exposing all DGs to the same UoS charging signals, in a reasonably timely manner.

Application and likely time period

2.58. The time-limited exemption would be applied to all DGs with a single and uniform period. The exemption would cease 20 years after the date of the DGs' original connection.

2.59. We estimated that such a time period would, based on the preliminary data provided by DNOs, result in 75 per cent of pre-2005 DGs being exempt from UoS charges in the 2013-14 charging year.

How does this balance the interests of pre-2005 DGs and other customers?

2.60. We consider that a 20 year exemption would appropriately balance the interests of customers and pre-2005 DGs. This is because on the one hand, for as long as pre-2005 DGs do not pay UoS charges, other customers will pay to cover the costs that pre-2005 DGs might reasonably be expected to contribute toward. A 20 year exemption aims to limit other customers' exposure to these costs. On the other hand it would take into account to an extent, the expectations DGs' had of what their contractual arrangements provided them with.

2.61. Taking into account our analysis of the different options, our initial thinking is that a shorter period of those we have outlined is appropriate. As we set out above, some of the options considered above with longer periods of time are based on DGs having certain rights (eg to UoS in perpetuity) which we do not think have been demonstrated. We think that a 20 year exemption is likely to avoid the risk of double payment in relation to capitalised O&M payments. Even where O&M was capitalised over a longer period, we think that the cost of this double charge will be outweighed by the other costs avoided over the duration of an exemption. It may also help to reduce any impact on the original investment decision the DG made, given that the investment lives we have reviewed are roughly in line with the suggested exemption period.

2.62. We think it would achieve the above (ie by aiming to avoid double payment and limit any impact on original investments) while ensuring that pre-2005 DGs do eventually contribute to wider network costs, such as the costs of maintaining, replacing or reinforcing network assets, which they did not necessarily pay for as part of their connection charge. This helps to reduce the impact on the DNOs' other

customers, who would otherwise have to solely fund these costs, which could in some circumstances be directly caused by the pre-2005 DG.

2.63. A 20 year exemption would ensure that all DGs are exposed to the same UoS charging signals in a reasonably timely manner, which should facilitate more efficient use of the networks, which is in the interests of all users.

3. Implementation arrangements

Question box

Question 3.1: In general are our proposals for implementing the exemption arrangements considered by this consultation appropriate? Is the level of detail we have provided sufficiently clear to make implementation workable? Please outline any areas where you think more clarity/detail is required and set out your suggestions for what might fill these gaps.

Question 3.2: Is our approach to due process appropriate? Are there additional or alternative steps that should be incorporated? What is a reasonable period of time in which to complete the due process we propose?

Question 3.3: Do you agree with our proposals for dispute resolution where DNOs and DGs cannot reach a settlement by 1 April 2012?

Question 3.4: Do you agree that the connection date should be the date from which the exemption is calculated, with the energisation date used if the connection date is not available? Or, would it be more straightforward simply to use the energisation date for all eligible DGs?

Question 3.5: Similarly, should a pre-2005 customer with a mix of demand and generation requirements be eligible for an exemption from UoS charges?

Question 3.6: Do you agree with our proposal that the introduction of UoS charges should happen from the beginning of the next charging year after the date on which an exemption ends?

3.1. This chapter sets out how we consider exemption arrangements would be implemented and considers some of the issues in relation to implementation.

Due process

3.2. To ensure that DGs are treated consistently, and subject to responses to this consultation, we propose that DNOs use best endeavours to engage with DGs. We propose the following standard process:

1. Following publication of a final decision on implementing exemption arrangements, the DNOs write to all of their pre-2005 DGs:[10]
   a. making them aware of Ofgem's decision
   b. setting out the default position that will apply to them[11]

[10] Either directly, or in liaison with suppliers.
[11] This is based on our thinking for how groups of DG would be treated, as set out in Chapter 1

   i. CDCM – UoS charges continue to be levied
   ii. EDCM & eligible for exemption – exemption from UoS
   iii. EDCM & ineligible for exemption – UoS will begin to be levied from the commencement of the EDCM
   c. setting out the options (if any) available to the DG and the timeframe in which they can exercise those options[12]
   d. where a DG is eligible for an exemption, setting out the date on which the exemption will end and how this was determined
   e. inviting the DG to submit any further evidence or to correct any inaccuracies that may affect their eligibility for the exemption or the date on which the exemption would end.

2. DG responds to the DNOs to either:
   a. confirm that they understand that they will either be charged (or continue to be charged) for UoS from a specified date or exempt from UoS charges until a specified date
   b. confirm which option they have chosen, ie to be exempt from UoS charges until a specified date or to begin/continue being charged for UoS, or
   c. respond with any further information not identified by the DNO which is relevant to the case.

3. DNOs consider further evidence put forward by the DG and respond to DG on whether they propose to change their earlier advice 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.

3.3. We welcome views from stakeholders on the above process and what a practical timeframe might be for implementation (including the period in which options around any choice to be charged for, or exempt from, UoS could be exercised in).

3.4. 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. It would also provide certainty that at the end of the time-limited exemption, UoS charges would be introduced without the need for any further contractual amendments.

Responsibilities

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

- Considering whether a valid case for exemption exists and compiling sufficient evidence to support that case.

[12] As proposed in Chapter 1, eligible DG could choose to either be exempt from, or to be charged for, UoS.

- Using their best endeavours to make contact with one another, share relevant information and effectively collaborate to determine whether an exemption is appropriate, how long it would last and that appropriate supporting records are maintained.

3.6. The following would be the sole responsibility of the DNO:

- 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.
- Ensuring that all pre-2005 DG customers are contacted directly or with the assistance of relevant suppliers to notify them of the implementation of exemption arrangements, including any options the customer might have (eg to choose to be exempt or become subject to UoS). The DNO should make multiple attempts to make contact with their DG customers and where necessary vary their approach to contacting their DGs.
- Where the DNO considers that they have (or continue to have) insufficient evidence to support a case for an exemption, 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 exemption.
- Keeping full, site-specific records of the rationale for whether a DG customer is exempt from UoS charges or remains/begins to be charged for UoS.

Evidence requirements

3.7. We consider that it would be proportionate that the level of evidence required to determine the commencement of an exemption period is kept simple.

3.8. In light of our initial thinking, ie an exemption based on a 20 year period, we propose that DNOs and DGs collect and maintain records that either clearly demonstrate a specific date or regulatory year in which the DG was connected and began to use the DNO's network.[13] We expect that DGs' connection agreements should be sufficient.

3.9. Alternative forms of evidence may be necessary if an exemption was based on one of the other options considered in Chapter 2. For example, Connection Works Agreements, network plans or copies of actual bills or receipts may be necessary to determine specific network assets installed. Alternatively, business plans may be necessary to support an exemption based on a DG's specific investment life.

[13] Note that we discuss the issue of how connection dates are defined below.

Dispute resolution

3.10. In accordance with the Electricity Act 1989 and DNOs' licences, the Authority would be able to consider disputes between a DNO and another party over the proposed terms of a new or amended connection or UoS agreement.[14]

3.11. In the event that a DNO and a DG continue to disagree a way forward after the EDCM DG charges are introduced, we proposed in our May consultation a method for back-billing UoS charges once the dispute is resolved. Responses to our consultation were broadly supportive of this proposal, and we propose that a similar approach would apply in the case of a time-limited exemption.

3.12. Where pre-2005 DGs should be charged for UoS (because they are not eligible for an exemption or when their exemption expires), we suggest that if by a certain date DNOs had not resolved issues that allow them to start charging these DGs, they should log up the value of charges they would have levied. If the dispute is then resolved so that the DG may be charged 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.

Refunds for generators who choose to pay UoS

3.13. The purpose of the arrangements for refunds we described in our May consultation was to allow DNOs to fund payments they may need to make to pre-2005 DGs so that UoS charges could be introduced. At the time we considered that economic and efficient refunds were appropriate to avoid pre-2005 DGs being double charged. In practice we set out that such refunds would only apply to capitalised payments for O&M.

3.14. We consider that the time-limited exemption replaces the proposed refund arrangements. Therefore, we consider that any pre-2005 generator eligible for an exemption, that chooses to pay (or continue to pay) UoS charges, would not be eligible for a refund for unexpired O&M payments (and with that refund recovered through the price control).

3.15. Pragmatically, we would expect that most generators eligible for ongoing credits will choose to be subject to UoS arrangements, while those facing an ongoing charge would choose an exemption. (This will of course depend on the individual circumstances of generators.)

[14] 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.

3.16. We do not think it is fair on consumers and the other users of the DNOs network to fund these credits and provide compensation on top. We do not think that this approach would compromise any 'rights' of generators, as these are being addressed by the time-limited exemption – which remains an option to all generators eligible for a time-limited exemption.

Special circumstances

3.17. As part of our review of pre-2005 DG charging arrangements, we have made concerted efforts to understand how the regulatory and contractual framework worked pre-2005.

3.18. Based on this analysis we consider that the implementation of exemption arrangements similar to those proposed in this consultation would be applicable to the vast majority of pre-2005 DGs.

3.19. However, we recognise that there may be contractual arrangements that considerably differ from the norm (eg if they also contributed towards replacement costs) and that may have represented reasonable regulatory practice at the time. We expect the number of such cases to be very small. These contracts may require special treatment to ensure that the DG's, the DNO's and customers' interests are properly considered and appropriately protected.

3.20. We are keen to hear from stakeholders who consider they connected under different contractual or regulatory arrangements to those we describe in this consultation and our May consultation. We would also like to know how stakeholders think such arrangements should be dealt with.

Specific implementation issues

Connection date

3.21. The connection date is critical as it determines the point from which an exemption would be calculated. However, the meaning of a 'connection date' may vary depending on the circumstance. For example, a 'connection date' might be interpreted as meaning the date on which the connection agreement was signed, the date on which the connection agreement commences from, the date on which a customer's connection is 'energised' therefore allowing electricity to flow to and from the customer's premises.

3.22. Our thinking is that for the purposes of setting a time-limited exemption, the connection date should mean the date on which the connection agreement commences from. However, if after best efforts by both the DNO and DG this cannot be established, then the date the DG's connection was energised could be used instead.

3.23. We welcome views on our proposal, particularly the practicalities of determining the connection date, and if there are more appropriate alternatives we should consider in setting the date on which the exemption is calculated from.

Date that exemptions expire on and UoS charges are introduced

3.24. It is intended that a time-limited exemption would last for a period of time measured in years from a commencement date. This would mean that exemptions that are set for a number of years would end on a specific date in the future.

3.25. This could mean that as soon as an exemption ends the DNO begins to levy a UoS charge from the DG.

3.26. We think it is likely to be impractical for the DNO to start levying charges part way through a regulatory year.[15] Among other things, this may require changes to its UoS charges (particularly at the EDCM level) and UoS Charging Statement.

3.27. Consequently we propose that the date UoS charges are introduced is determined by rounding up to the beginning of the next regulatory year after the exemption end date (unless the end date falls at the start of a regulatory year). For example, if an exemption is due to end on 30 September 2015, then UoS charges should be introduced from 1 April 2016.

Practicalities of the choice to choose an exemption or UoS charges

3.28. We discussed in Chapter 1 that generators would be able to choose to be subject to UoS charges or receive an exemption (if eligible).

3.29. Eligible DGs would be able to choose an exemption only during the initial due process with the DNO described above. After this point, only an exempted DG would be able to choose to be subject to UoS charges. For the purposes of clarity, once a generator has decided to be subject to UoS charges, it would not be able to revert back to an exemption.

3.30. If a DG decides to opt-out of an exemption, as noted above, we do not propose that the DG would be eligible for any refund for UoS credits they would have received if they had always been charged for UoS. This is in the same way that we do not think it would be appropriate for the DG to pay for UoS charges it would have paid if it had always been charged for UoS.

[15] Ie 1 April to the following 31 March.

Pre-2005 demand customers with on-site generation

3.31. We are aware that some customers who connected pre-2005 may have done so with a mix of demand and generation requirements. Or, that an existing demand customer may have installed generation plant at its premises pre-2005.

3.32. In our May consultation we considered whether a customer whose connection predominantly serves its demand requirements should be eligible for a refund. A similar issue applies as to whether a pre-2005 customer with a mix of demand and generation requirements would be eligible for an exemption from UoS charges.

3.33. We consider that any customer with on-site generation connected pre-2005 should be allowed to be covered by an exemption (for their export only) if they are eligible. This is because a demand customer with on-site generation would ordinarily be charged for UoS for the electricity it imports and exports, irrespective of the customer's predominant use of its connection and the DNO's network.

4. Next steps

4.1. We encourage stakeholders to respond and provide their views on whether our rationale and proposals for implementing a time-limited exemption are reasonable.

4.2. Responses should be addressed to Guy Donald and should ideally be sent to distributionpolicy@ofgem.gov.uk. Responses may also be sent to Ofgem, 9 Millbank, London, SW1P 3GE. All responses must be received by 5 December 2011

4.3. Subject to responses to this consultation, we plan to publish a decision letter in early 2012 that sets out how a time-limited exemption would apply for pre-2005 DGs. We may seek to discuss these arrangements further with DNOs, DGs and other stakeholders before we publish a decision.

4.4. We expect that DNOs and pre-2005 DGs will need to have determined whether an exemption is applicable before EDCM DG charges are introduced from 1 April 2013 (at the earliest).

Appendices

Index

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 5 December 2011 and should be sent to:

- Guy Donald
- Ofgem, 9 Millbank, London, SW1P 3GE
- distributionpolicy@ofgem.gov.uk
- 020 7901 7430

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: Subject to responses to this consultation, we plan to publish a decision letter in early 2012 that sets out how a time-limited exemption would apply for pre-2005 DGs.. Any questions on this document should, in the first instance, be directed to:

- Guy Donald
- Ofgem, 9 Millbank, London, SW1P 3GE
- distributionpolicy@ofgem.gov.uk
- 020 7901 7430

CHAPTER: One

Question 1.1: Do you agree with our proposal that by default eligible CDCM generators should continue to be charged for UoS and that eligible EDCM generators should continue be exempt from charges, unless either party chooses otherwise?

CHAPTER: Two

Question 2.1: Do you agree that a time-limited exemption should be set on an ex ante basis?

Question 2.2: Should an exemption be calculated from the date of a pre-2005 DG's connection, rather than some other date, such as from the date at which EDCM DG charges are introduced? Why?

Question 2.3: Do you agree with our assessment of the options for determining the time limit for an exemption? Are there additional points of analysis we should bear in mind?

Question 2.4: Are there better alternative options to those which we set out in this chapter and what would be their rationale?

Question 2.5: Do you agree with our initial thinking that a 20 year limit is appropriate? If not, what might be a more reasonable period of time that balances the interests of pre-2005 DGs and the DNOs' other customers? Please explain the reasoning behind your answer and provide any associated evidence.

Question 2.6: We note that rather than pay a capitalised payment for O&M, some DG customers pay an annual charge for O&M. Where such a DG is eligible for an exemption, should they continue to pay their annual O&M charge?

CHAPTER: Three

Question 3.1: 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 and set out your suggestions for what might fill these gaps.

Question 3.2: Is our approach to due process appropriate? Are there additional or alternative steps that should be incorporated? What is a reasonable period of time in which to complete the due process we propose?

Question 3.3: Do you agree with our proposals for dispute resolution where DNOs and DGs cannot reach a settlement by 1 April 2012?

Question 3.4: Do you agree that the connection date should be the date from which the exemption is calculated, with the energisation date used if the connection date is

not available? Or, would it be more straightforward simply to use the energisation date for all eligible DGs?

Question 3.5: Similarly, should a pre-2005 customer with a mix of demand and generation requirements be eligible for an exemption from UoS charges?

Question 3.6: Do you agree with our proposal that the introduction of UoS charges should happen from the beginning of the next charging year after the date on which an exemption ends?

Appendix 2 – Impact assessment of time-limited exemption arrangements

1.1. This Impact Assessment updates the Impact Assessment we provided in our May consultation on pre-2005 arrangements.[16]

Key issues and objectives

1.2. The purpose of this consultation is to seek views on our rationale for applying a time-limited exemption from use of system (UoS) charges for pre-2005 connected DGs and how such an exemption would be determined.

1.3. Chapter 1 set out our rationale that a time-limited exemption would be a better way of resolving the pre-2005 issue than providing refunds to avoid instances of double payment. We explained that an exemption would avoid the complexity and potential disputes associated with refund arrangements. It would provide certainty and transparency and would help to balance the interests of DGs and other customers (who effectively must 'pay' for any exemption). It would also ensure that our overall policy objective of introducing UoS charges for all DGs is still fulfilled. This is consistent with Ofgem's goals of protecting current and future consumers and promoting competition.

1.4. We have considered a number of factors in determining that a time-limited exemption provides the most appropriate way of addressing how to transition pre-2005 DGs into use of system (UoS) arrangements that cover all generators. These include our re-evaluation of pre-2005 charging arrangements, recognition of the complexity of implementing refund arrangements and the fact that a time-limited exemption would still ensure that all generators would eventually be exposed to the same UoS charging arrangements.

Options

1.5. In Chapter 2, we consider that there are several options on which to base the duration of an exemption. However, we conclude that none of these options provide a definitive solution to setting a particular period. Instead we set out that it may be appropriate to provide an exemption at the lower period of this range, ie 20 years.

1.6. We said that we thought a 20 year exemption would appropriately balance the interests of customers and pre-2005 DGs. This is because on the one hand, for as long as pre-2005 DGs do not pay UoS charges, other customers must pay to cover the costs that pre-2005 DGs might reasonably be expected to contribute toward. We

[16] See Associated Documents

noted that a 20 year period minimises the period over which this occurs. On the other hand it would take into account to an extent, the expectations DGs' had of what their contractual arrangements provided them with.

1.7. For the purposes of this Impact Assessment we have therefore chosen two periods in order to illustrate the likely effects on an exemption. In both cases the time limit would apply from the date of DGs' connection.

1.8. We also assume that all eligible EDCM pre-2005 generators will take up the time-limited exemption, while all eligible CDCM pre-2005 generators would choose to remain subject to UoS charges (on the basis they currently receive net credits). This is because in general, these options are likely to be the most beneficial for these groups.

1.9. For the purposes of comparison, we include the option preferred in our previous consultation and Impact Assessment,[17] ie the refund of unexpired capitalised operations and maintenance payments only.

Option 1 – exemption from UoS charges based on 20 year time limit

1.10. This option would mean that a pre-2005 DG would be exempt from UoS charges until 20 years after the date of connection.[18] It could be described as a 'shorter' exemption period. It would be most likely to apply if the typical period over which DGs set their investment plans or O&M payments were capitalised were used to calculate the exemption. It might also apply to some types of generation that have a shorter life than the average usable plant life (eg if technology-specific plant life period were used).

Option 2 – exemption from UoS charges based on 40+ year time limit

1.11. This option would mean that a pre-2005 DG would be exempt from UoS charges until 40+ years after the date of connection.[19] This would be a 'longer' exemption period. It is likely to be more applicable if economic or particularly technical asset life or plant life were used. We recognise that there may be circumstances where the life of assets or of plant far exceeds forty years. Furthermore, an exemption could be open-ended based on connection agreements, given that the majority do not have termination dates.

1.12. We consider only one longer exemption period for the purposes of this Impact Assessment because generally the overall impacts of a 40 year, 60 year or open-ended exemption are not likely to be significantly different, at least in present value

[17] See Associated Documents.
[18] If the end date of the exemption occurs before 1 April 2013, then the exemption will not take effect.
[19] See footnote 18.

terms (only 12 per cent of generators would be ineligible for a 40 year exemption as at 1 April 2013, almost all of which are in the Scottish Hydro area). This does not discount that in some cases there could be a material difference between such periods for individual generators.

Option 3 – refund payable for operations and maintenance (O&M) only

1.13. This option represents the previous proposed approach to pre-2005 arrangements. Distribution Network Operators (DNOs) would refund pre-2005 DGs for the unexpired portion of any capitalised O&M payments. This was intended to avoid DGs paying for O&M twice, ie through their connection charge and subsequently through their UoS charge.

Impact on consumers

1.14. Current and future consumers include households, business and industrial demand customers. There are two main impacts on consumers from the options described. These are the impacts from the exemption from (or application of) use of system charges for generators, and the longer term benefits for consumers from increased network efficiency.

Impact of exemption

1.15. Under Options 1 and 2, EDCM and CDCM demand customers (along with non-exempted EDCM generators) would partly 'fund' the exemption, ie the UoS charges some generators are exempted from. However, as this is spread across a very large customer based, the impact per customer would be small or negligible.

1.16. Under Option 3, where refunds are provided, there would not be an immediate impact on consumers as the price control is fixed until 2015. Any refunds would not begin to be recovered through the price control (and therefore from consumers) until at least this time. In our previous Impact Assessment we found that the payment of refunds for O&M (and their recovery through the price control) would have a negligible impact on customers. Further analysis of this issue can be found in our previous Impact Assessment.[20]

Impact of increased network efficiency

1.17. Both the CDCM, and the EDCM proposed by DNOs, allow for credits to be paid to DGs where it is considered they defer the need for network reinforcement. In the

[20] On page 44 of the Impact Assessment, see Associated Documents.

proposed EDCM, the signal is site specific. This allows credits where the generator provides a net benefit and charges where they may bring forward reinforcement.[21]

1.18. These price signals can encourage DGs to locate in areas of high demand and avoid areas of low demand where their connection may drive reinforcement. Once connected, pricing signals may indicate the best time to export to the network so that it offsets demand, thereby potentially also deferring reinforcement. Pricing signals can also encourage efficient decisions about capacity requirements and whether generators can agree to temporarily amend their capacity requirements (such as through a Generation Side Management agreement).

1.19. Under Option 3, charges would apply to all generators at the commencement of EDCM DG charges. Accordingly, the effects of the price signals would be felt earlier and would be greater than where the number of generators covered by the EDCM grows slowly over time, as in Option 1 and 2. Option 2 would defer the implementation of price signals further into the future than Option 1, and hence the benefits that price signals may encourage.

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 receive equivalent pricing signals.

1.21. Option 3 would go a significant way to delivering this objective by applying the same UoS charging signals regardless of when the DG connected. It would also ensure that pre-2005 DGs do not 'pay twice' for O&M so that they pay on the same basis as their post-2005 counterparts.

1.22. Options 1 and 2 will ultimately deliver this goal, once any time-limited exemptions end or DGs voluntarily choose to leave an exemption in favour of UoS arrangements. Under Option 1, this will be realised relatively soon, as the last exemption would run out in around 15 years time from now. Under Option 2, these benefits would take significantly longer to realise due to the greater exemption period.

Impact on sustainable development

1.23. Exposure to a cost reflective charging methodology helps ensure more efficient use of the system and hence can limit the need for network reinforcement. This

[21] Note that we discuss the options for EDCM DG charging in 'Distribution use of system charging: way forward on higher voltage generation charging'. Available at: http://www.ofgem.gov.uk/Networks/ElecDist/Policy/DistChrgs/Pages/DistChrgs.aspx

reduces the environmental impact of the distribution networks. For example, UoS charges may reduce electricity losses by driving more efficient decisions on the use of and connection to the network.

1.24. By delaying the introduction of UoS charges under the EDCM, these benefits would not be realised as quickly under Option 1 and 2, as exempted generators would not receive these signals. Under Option 3, these signals would be provided from the start of EDCM DG charging, helping to ensure that decisions which ultimately reduce environmental impact, begin to be made.

Impacts on health and safety

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

Risks and unintended consequences

1.26. The key risks under Option 3 relate to the resolution of compensation for pre-2005 DGs. This would rely on evidence from connection agreements or similar to ascertain the extent of payments towards O&M. Some of these contracts may be old, unclear or unavailable. This creates the risk of unintended consequences between generators that operate in otherwise similar circumstances.

1.27. The evidence requirements that we had previously proposed were designed to mitigate this risk, by allowing the application of certain assumptions based on standard practice at the time, if information was incomplete or unclear. However, this may not entirely address the risk, because it could still result in ongoing challenge and complexity in trying to resolve the correct level of compensation.

1.28. Options 1 and 2 should reduce the complexity of the arrangements put in place to resolve the issue by applying a clear and upfront exemption. Each DG will be likely to know at the beginning when they will be subject to use of system charges and can plan accordingly. A time-limited exemption should also help to minimise the risk of protracted conflict over the arrangements for resolving the pre-2005 issue.

Other impacts, costs and benefits

Impact on pre-2005 DGs from proposed arrangements

1.29. 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,[22] which started on 1 April 2010 and as

[22] HV customers metered at the HV side of substations with a primary voltage level of 22 kilovolts or more are covered by the EDCM.

previously noted, provides net credits to DGs. The former are largely covered by the proposed EDCM which, subject to our approval, is expected to start from 1 April 2013.

1.30. Options 1 and 2 would provide an exemption for eligible DGs in lieu of the refund of any capitalised O&M payments that Option 3 would provide. Options 1 and 2 are therefore likely to place eligible DGs in a better position than Option 3, as Options 1 and 2 exempts them from the full UoS charge. Under the EDCM proposed by the DNOs, this would mean they are effectively exempt from the sole use asset charge, the locational charge, and the fixed adder that matches to a generation revenue target. It would also benefit those DGs that did not pay any upfront capitalised O&M at the time of connection.

1.31. It should also be noted that the EDCM includes credits for eligible generators that defer reinforcement and that Options 1 and 2 would exempt DGs from receiving credits. We note that under our proposals exempt DGs may be able to choose to be subject to UoS charges. We also note that it is unlikely that pre-2005 DGs not eligible for an exemption would still have unexpired capitalised O&M given that the typical O&M period across the DNOs was 20 years. They would therefore not be charged twice for O&M and not due a refund.

1.32. Option 3 would provide refunds for any unexpired O&M to ensure that there was no 'double payment'. It would provide no further exemption or compensation in relation to use of system charges. The impacts of this are further described in the previous Impact Assessment.[23]

Impact on pre-2005 DGs from UoS charges

1.33. Option 1 would mean that 75 per cent of EDCM pre-2005 generators would receive an exemption for at least the 2013-14 charging year. Option 2 would result in 88 per cent EDCM pre-2005 generators being eligible for the exemption for at least the 2013-14 charging year.[24] In both cases, the remainder would have connected too long ago to receive the extension and would therefore pay charges immediately from 1 April 2013, were the EDCM for DGs to commence on that date. (As previously noted, we have assumed that all CDCM DGs will choose to remain subject to UoS charges for the purposes of this IA.)

1.34. There is no impact on exempted DGs from UoS charges as they are not liable for those charges under Options 1 and 2.

[23] See Associated Documents.

[24] Note: this analysis is based on preliminary data prepared by the DNOs around the actual or estimated dates of connection. Connection dates were not available for eight per cent of generators. Should an exemption be granted, further work would need to be undertaken, if necessary in consultation with the DG, to determine the exact date at which the exemption would apply from for each generator. Accordingly, these numbers may change, although we would not expect substantially so.

1.35. Under Options 1 and 2, generators ineligible for an exemption from the commencement of charging, or where a generator's exemption ceases, will become subject to UoS charges. The level of those charges is yet to be determined. We have not yet approved a method for charging DGs that would be covered by the exemption. We are currently considering the options for EDCM DG charging in light of a possible time-limited exemption and the feedback we received on our EDCM consultation.[25]

1.36. These decisions (including the length of exemption itself) could result in charges higher than those proposed by the DNOs on 1 April 2011 as part of their original EDCM submission. This is primarily because pre-2005 DGs as a group paid more out of the generation revenue target (which provides an upper limit on part of the DG charge) than they contributed to it.

1.37. However, as noted above, in light of the impact of the time-limited exemption we are considering potentially different options for EDCM DG charging. Further information on these scenarios and the effect of charges on non-exempt generators can be found in our consultation entitled 'Electricity Distribution Charging: way forward on higher voltage generation charging', which was also published today.

1.38. Option 3 would subject all EDCM pre-2005 generators to UoS charges from the commencement of the EDCM for generators (pre-2005 CDCM generators are already subject to UoS charges). The charges under this option would be broadly the same as those provided by the DNOs on 1 April 2011 as part of their EDCM submission, were we to approve the methodology submitted by the DNOs.

1.39. We also provided commentary on the likely impacts of the introduction of use of system charges for DGs in our previous Impact Assessment.[26] We noted that EDCM charges are significantly driven by export capacity, meaning that those that do not utilise their full capacity (which could be for a variety of reasons) may pay higher charges as a proportion of their revenue than those that do utilise their full capacity. Further information can also be found on page 19 of our Impact Assessment that formed part of our consultation on the EDCM.[27]

Impact on post-2005 DGs

1.40. The impact on post-2005 EDCM DGs from Options 1 and 2 is similar to the impact on non-exempted generators, as their charges would be calculated in the same way. (This analysis is based on the EDCM proposed by the DNOs on 1 April 2011, we note that the consultation published at the same time as this proposes options for amending this methodology.) Further description of the effects are

[25] See Associated Documents.
[26] See Associated Documents.
[27] Electricity distribution charging methodologies: distribution network operators' (DNOs') proposals for the higher voltages - (Reference number: 67/11), 20 May 2011, http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=687&refer=Networks/ElecDist/Policy/DistChrgs

provided at paragraphs 1.35-1.36 above. There would be little or no impact on post-2005 DGs covered by the CDCM.

1.41. We assessed the impact of Option 3 on post-2005 DGs in our previous Impact Assessment. Under the EDCM proposed by DNOs on 1 April 2011 (assuming we were to approve it), there would be no impact from refunds as these would be recovered from EDCM and CDCM demand customers.

Impact on suppliers

1.42. This Impact Assessment is conducted on the basis that the generator (ultimately) receives the full charge calculated by the methodology (or no charge where they are exempt). They will *directly* receive the charge where the generator has a direct relationship with their DNO, ie without going through a supplier, or where the supplier simply passes through the UoS charge to the customer.

1.43. In circumstances where that charge is not passed directly to the generator, such as if they are on a fixed price contract, the supplier may not necessarily pass on any changes in charge. Under all the Options this could mean that charges levied on any pre-2005 DGs may not (initially at least) be able to be recovered by the supplier from the customer.

Impact on DNOs

1.44. Options 1 and 2 are likely to have significantly less impact on the DNOs than on Option 3. Options 1 and 2 would result in the DNO having to monitor (either manually or automatically) when time-limited exemptions cease and then apply use of system charges to them. There may also be some upfront work involved in determining the appropriate date to apply the exemption from, where this is unclear or subject to dispute.

1.45. Option 3 would require the DNOs to negotiate refunds with DGs. This could potentially be time consuming and open to dispute, particularly where original agreements are unclear or if disputes resulted in legal challenge (we recognise this could also be an issue for pre-2005 DGs).

Post-implementation review

1.46. We do not intend to undertake a formal review following our decision on the time-limited exemption. However, we will monitor the implementation of any solution to the issue. We expect under Option 1 and 2 that, the implementation of the time-limited exemption would be more straight forward than Option 3. Option 3 would require more monitoring to ensure that refund arrangements are being consistently implemented.

Conclusion

1.47. Our thinking is to apply a time-limited exemption of 20 years (Option 1), rather than allow DNOs to refund unexpired capitalised O&M payments through their price controls (Option 3). We consider that a time-limited exemption is a better alternative to refund arrangements as it would:

- avoid the complexity and potential disputes associated with refund arrangements
- provide certainty and transparency
- help to balance the interests of DGs and other customers (who effectively must 'pay' for any exemption), and
- ensure that our overall policy objective of introducing UoS charges for all DGs is still fulfilled.

1.48. However, we recognise that non-exempted generators may be particularly affected by such an exemption. Accordingly, we are reassessing the EDCM submitted by the DNOs in light of a potential exemption.

1.49. We also note that the fact that the exemption is time-limited ensures that all DGs are eventually subject to UoS charges, which is beneficial for the objectives of competition and sustainable development. These benefits would be realised more quickly under Option 1 than under Option 2.

Appendix 3 - Glossary

A

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

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.

D

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 Great Britain.

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.

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.

P

Pre-2005 DG
DG whose contractual terms were agreed before 1 April 2005.

Post-2005 DG
DG whose contractual terms were agreed on or after 1 April 2005.

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.

U

UoS Charges – Use of System 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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