



To generators, distribution  
network operators, suppliers and  
other interested parties

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Dear Colleague

## **Distribution use of system charging – decision and further guidance on higher voltage generation charging**

### *Introduction*

The distribution network operators (DNOs) are due to complete their development of the charging methodology for generators connected at higher voltages in time for implementation by 1 April 2013. This letter sets out our decision that the DNOs are no longer required to use Long Run Incremental Cost (LRIC) and Forward Cost Pricing (FCP) methodologies, used to estimate the cost of generation-led reinforcement, to calculate a locational charge in the Extra High Voltage generation charging methodology. It also contains further guidance on other aspects of the charging methodology.

### *Background*

On 21 October 2011 Ofgem published a consultation document - Distribution use of system charging: way forward on higher voltage generation charging (ref 134/11).<sup>1</sup> Our document outlined a series of options on how export charges under the DNOs' proposed Extra High Voltage Distribution Charging Methodology (EDCM) might be modified. Reconsideration of the EDCM for distributed generation (DG) was appropriate in light of Ofgem's decision to provide an exemption from use of system charges for DGs that were connected prior to 2005, and also in response to feedback received from our EDCM consultation of May 2011.<sup>2</sup>

This letter sets out a decision and further guidance on the principles and assumptions that we expect the DNOs to use for EDCM export charging. In addition, we provide relevant feedback on responses to the issues raised in our May 2011 EDCM consultation and any additional issues. The decision and views we express below are expected to assist the DNOs in conducting a timely and streamlined consultation process that will ultimately result in the implementation of EDCM generation charging by 1 April 2013.

In reaching our decision and views, we have taken into account the responses to both our May and October 2011 consultations<sup>1,2</sup> as well as other additional relevant feedback received.

### *Our decision*

Overall, and as noted in our October consultation, we do not believe it is necessary to fundamentally revisit the entire common methodology for charging generators. The process for developing the EDCM proposals has been long and thorough, and a fundamental review

<sup>1</sup><http://www.ofgem.gov.uk/Networks/ElecDist/Policy/DistChrgs/Documents1/Consultation%20on%20way%20forw%20on%20EDCM%20DG%20charging.pdf>

<sup>2</sup> [http://www.ofgem.gov.uk/Networks/ElecDist/Policy/DistChrgs/Documents1/Ofgem\\_EDCM\\_consultation.pdf](http://www.ofgem.gov.uk/Networks/ElecDist/Policy/DistChrgs/Documents1/Ofgem_EDCM_consultation.pdf)

of the methodology could be disruptive and may increase regulatory uncertainty and negatively impact on investor confidence.

We do however consider that it is appropriate to make some changes to the methodology submitted to us last year. To give effect to this, we think that some of the principles and assumptions set out in our common charging methodology document of July 2009<sup>3</sup> should be changed to take account of feedback from industry. In particular, we no longer think it should be a requirement that the DNOs' charging methodology for export charges be based around LRIC and FCP. This change will require a modification to the licence. We will consult on and aim for the amended licence to be in place from 1 June when the DNOs have to submit their tariff proposals. The change will likely remove the references to FCP/LRIC and the July 2009 document from the licence. This will leave the relevant charging objectives currently set out in the licence<sup>4</sup> to provide the framework for the new charging methodology which we see as sufficient.

We consider that this is appropriate given the concerns that have been raised over the cost reflectivity of the LRIC/FCP charge for generators in certain circumstances and the potential volatility of the charge itself which could be impacted by other generators' behaviour. Additional reasoning is set out in the section "The locational element of the charge" in Appendix 1 to this letter. We still think that locational cost signals are important and recognise these would still be preserved in other parts of the methodology, i.e. sole use asset charges, credits for eligible generators that provide network benefits, and through the connection charges themselves.

#### *Our views*

In addition to our decision, we consider that it would be worthwhile for DNOs to further consider the generation revenue target - how it is derived and how it is allocated between different DGs. The inclusion of the £1/kW incentive component of the DG incentive may not be appropriate. Customers benefit from the connection of DG and hence it could be appropriate for some of this revenue to be covered by demand charges. Our guidance is that removing the £1/kW incentive element and altering the revenue target to recover 100% of the reinforcement costs (instead of the current 80%) seems a reasonable approach.

In addition, in relation to exempted generators, there was some support among consultation respondents for including exempted generators in the calculation and allocation of charges even though they would not actually be charged - this would mean that there would be no charging volatility when DG's exemptions expired. However, we consider that in this case consideration should be given to who pays the shortfall as EDCM generator charges would not fully recover the revenue target. Our guidance is that we do not think it is reasonable for demand customers to cover this and hence question the inclusion of exempted generators in the allocation of the generation revenue target.

The October 2011 consultation also questioned whether 1 April 2013 was an appropriate date from which EDCM charges for non-exempt generators should apply. Our firm view is that the EDCM should apply from 1 April 2013, as per the sentiment expressed by the majority of respondents. In combination with the further guidance we have expressed here, we consider this deadline allows sufficient time for outstanding issues to be resolved and the DNO methodology to be agreed.

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<sup>3</sup><http://www.ofgem.gov.uk/Networks/ElecDist/Policy/DistChrgs/Documents1/July%20decision%20EHV%20charging%20and%20governance.pdf>

<sup>4</sup> The Relevant Charging Objectives in relation to the Charging Methodology are:

- a) that compliance with the methodology facilitates the discharge by the licensee of the obligations imposed on it under the Act and by this licence;
- b) that compliance with the methodology facilitates competition in the generation and supply of electricity, and does not restrict, distort, or prevent competition in the transmission or distribution of electricity;
- c) that compliance with the methodology results in charges which reflect, as far as is reasonably practicable (taking account of implementation costs), the costs incurred by the licensee in its Distribution Business;
- d) that, so far as is consistent with sub-paragraphs (a), (b), and (c), the methodology, as far as is reasonably practicable, properly takes account of developments in the licensee's Distribution Business; and
- e) compliance with the Regulation and any relevant legally binding decisions of the European Commission and/or the Agency for the Co-operation of Energy Regulators.

We also agree with a majority of respondents and have notified our decision<sup>5</sup> to defer the date on which the CDCM:EDCM boundary will change for DG so that it coincides with the introduction of EDCM DG charges (i.e. 1 April 2013).

There were a number of residual issues raised in our May 2011 consultation on which we have not yet set out our views. These include:

- credits for intermittent generation; and
- application of generation credits to units exported during the super-red time band.

We encourage DNOs to keep the issue of credits for intermittent generation and Engineering Recommendations P2/6 under review and support the aim of ensuring that cost reflective credits are given to all generators that provide network benefits.

We confirm our initial view, set out in the May 2011 consultation, that the proposal to apply generation credits to units exported during the super-red time band is appropriate. This would be consistent with the CDCM and applying a higher credit for generation during system peak will provide an appropriate signal to generate when the system is most highly loaded.

Additional detail on the issues above is contained in Appendix 1.

#### *Next steps*

Following this letter we would expect the DNOs to prepare and consult on a revised EDCM in relation to DG, which must be resubmitted to Ofgem by 1 June 2012. Upon receipt of the revised EDCM, Ofgem will aim to undertake a further consultation in July and issue a decision on the final EDCM in late October / early November 2012. If we approve the methodology, export charges under the EDCM would then apply from 1 April 2013. We think this timetable gives stakeholders sufficient notice of the changes to the charging methodology.

Ofgem will also progress a license modification in relation to our decision to remove the requirement that the DNOs' charging methodology for export charges to be based around LRIC and FCP.

If you would like discuss any particular issues in relation to this letter please contact Dena Barasi at [dena.barasi@ofgem.gov.uk](mailto:dena.barasi@ofgem.gov.uk) or on 0207 901 7343.

Yours faithfully,



Rachel Fletcher  
Acting Senior Partner: Smarter Grids & Governance – Distribution

**For and on behalf of the Authority**

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<sup>5</sup> <http://www.ofgem.gov.uk/Networks/ElecDist/Policy/DistChrgs/Documents1/Decision%20Letter.pdf>

## Appendix 1: Additional information

Relevant themes from the May and October 2011 consultations:

### *Fundamental review of the methodology*

Option 5 in the October 2011 consultation proposed a fundamental review of the methodology. We consider that the process for the current EDCM proposals has been long and thorough, and a fundamental review of the methodology could be disruptive and may increase regulatory uncertainty and negatively impact on investor confidence. As a result, we agree with the majority of respondents that fundamentally revisiting the entire methodology is inappropriate. As such, implementation of the new EDCM charging methodology on 1 April 2013 should be feasible and hence we propose that the new charges for generators should apply from this date<sup>6</sup>.

We set out below further thoughts on specific aspects of the EDCM.

### *The locational element of the charge*

A change to the generation led reinforcement charge was proposed by option 2 in the October 2011 consultation. This proposed removing the locational element of the charge (LRIC/FCP charges also known as Charge 2 within the methodology)<sup>7</sup> which reflects the future costs of reinforcing the network assets used by the generator. The proposal was that the generation revenue target would instead be split wholly between non-exempted generation customers based on their capacity (£/kW), thus scaling charges to meet the generation revenue target.

Even after removing the locational charge element, three locational signals would remain:

- Connection charges – generators that trigger reinforcement of the wider network will pay a proportion of that cost.
- Locational credits – credits provide a locational signal at the time of connection as well as for generation during peak times.
- Sole use asset charge – the direct costs and network rates paid by generators are proportionate to the distance they are located from the shared network.

A majority of consultation respondents supported removing LRIC/FCP charges from the EDCM. Several of these respondents qualified their supportive position given they also objected to scaling, the different methods used to calculate the charge and the way plant that supports the system is charged.

Those that did not support removing LRIC/FCP charges considered that scaling is not appropriate therefore the charge should be retained. Removing the charge both increases the scaling and reduces the cost reflectivity. These respondents considered that the locational charging was the point behind the EDCM. Parties also noted that they had already analysed the current methodology and currently know where they stand in terms of charging, hence in these cases removing LRIC/FCP would create some uncertainty.

Our view is in accordance with the majority of consultation respondents. We consider LRIC/FCP charges may not be appropriately cost reflective and as such it may not currently provide an accurate locational signal. The lack of cost reflectivity is due to unsuitable growth assumptions used in both LRIC and FCP methodologies. In LRIC this is the one per cent assumption of DG growth across all areas. In FCP this is the use of a “test sized generator” (and the size of that generator) to determine the amount of reinforcement that will be required in that area. There is also some doubt as to the cost reflectivity due to the size of the increment, particularly for LRIC. Further, removal of LRIC/FCP charges is likely to help mitigate potential volatility of charges since it would reduce the EDCM charge

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<sup>6</sup> The boundary change for generators should be deferred to coincide with the implementation of EDCM generator charging

<sup>7</sup> See page 17 of the DNO's EDCM submission of April 2011, <http://www.ofgem.gov.uk/Networks/ElecDist/Policy/DistChrgs/Documents1/EDCM%20report%201April2011.pdf>

sensitivity to the behaviour of other generators. Removal of these charges would still leave other locational signals in place as described above. Whilst we recognise that removing LRIC/ FCP charges would potentially create uncertainty for DGs familiar with the EDCM as it has been presented, we consider that this needs to be balanced against the uncertainty created from the current volatility of the charge. This volatility, coupled with the fact that it may not be an accurate locational signal in the first place, justifies such a change.

We do not have the same concerns for the growth assumptions used in relation to the demand methodologies. The growth assumptions for LRIC and FCP are more appropriate for demand.

#### *Impact of the exemption of pre-2005 DG on the EDCM*

Options 1 and 3 in the October 2011 consultation considered how to reflect the decision to provide a time limited exemption from use of system charges for pre-2005 DGs in the EDCM. Option 1 was to leave the EDCM as is but exclude any exempted generators from both the calculation of the revenue target and the scaling of charges to that target. Option 3 was to continue to calculate the charges as if exempted generators are charged.

A majority of consultation respondents supported option 3. Reasons given were that this would reduce the expected volatility created by the entry and exit of new generators and the entry of pre-2005 generators once their exemption expires. Some respondents considered that the remainder should be allocated to all customers rather than just CDCM and EDCM demand customers. Reasons against this option focussed on the fact that demand customers should not have to cross subsidise unrecovered revenue from the generation revenue target. Another respondent considered that it is counter-intuitive to include exempted generators in the EDCM calculation.

A minority of respondents supported option 1, who considered that removing the exempted generators seemed appropriate given they were no longer being charged. Reasons against were that it did not resolve issues of volatility associated with the expiry of exemptions provided to pre-2005 DGs.

We do not think it is reasonable for demand customers to cover costs where EDCM generator charges do not fully recover the revenue target. For this reason, we question the inclusion of exempted generators in the allocation of the generation revenue target. Our view is that non exempted generators themselves should pay for the costs they impose on the network and the revenue target should be set on this basis.

#### *Generation revenue target*

Issue 8 in the May 2011 consultation considered the composition of the generation revenue target. Option 4 in the October 2011 consultation proposed amending the current generation revenue target to more closely reflect the reinforcement costs imposed on the network by generators. Several respondents supported this since they did not believe the target should include the £1/kW incentive payments and that, since demand customers benefit from the connection of DGs, it is appropriate for these customers to face the additional costs. However, those against considered that generators should recover the incentive revenue and that if they did not, this would mean demand would again face the additional costs. Some considered that extra work was required on the generation revenue target.

We agree that there should be additional consideration of the composition of the generation revenue target. Our initial view is that removing the £1/kW incentive element and altering the revenue target to recover 100% of the reinforcement costs (instead of the current 80%) seems reasonable. We ask the DNOs to consider this issue and cover it as part of their consultation.

Scaling was also considered in the May 2011 consultation document. The main focus in May 2011 was whether a fixed adder based on capacity was more appropriate for generation than the demand method for allocating the majority of the residual (i.e. based on the values of assets deemed to be used by the customer). We recognise there might be difficulties in allocating costs based on the assets used by DGs as the distribution networks

are primarily designed to serve demand. Our current view is that we are comfortable with a fixed adder approach as we are not aware of a better alternative that would more appropriately allocate costs – this is despite extensive industry discussion on the topic. We note that removing LRIC/FCP charges would increase the amount of charges picked up by scaling.

Several consultation respondents did not support scaling at all since they consider it does not reflect the actual costs the generator imposes on the DNO and is instead an arbitrary uplift. Some suggested removing the fixed generation revenue target altogether.

We continue to support the existence of a generation revenue target in so far as it is necessary to ensure that the costs attributable to DGs should be recovered from these customers.

#### *Application of generation credits to units exported during super-red*

We confirm our initial view expressed in the May 2011 consultation that the proposal to apply generation credits to units exported during the super-red time band is appropriate. This would be consistent with the CDCM and will provide an appropriate signal to generate when the system is most highly loaded.

#### *Credit for intermittent generation*

In the May 2011 consultation we proposed that it was worth considering whether intermittent generators could receive credits.

A majority of respondents considered that it was appropriate to allow some credit to intermittent generators.

We understand that DNOs have considered these issues and their initial view was that under Engineering Recommendations P2/6 there were no network benefits from intermittent generation and hence no receipt of credits. We acknowledge their reasoning but we encourage the DNOs to keep Engineering Recommendations P2/6 under review and support the aim of ensuring that cost reflective credits are given to all generators that provide network benefits.

#### *Timing*

We agree with the majority of respondents who considered that 1 April 2013 was an appropriate date from which EDCM charges for non-exempt generators should apply. We think this will give time for outstanding issues to be resolved and the DNOs' methodology to be agreed.

Some respondents considered that 2015 was a more suitable date since they favour a fundamental review of the methodology.

When we previously delayed the introduction of the EDCM from 1 April 2011 to 1 April 2012, we also delayed the boundary change<sup>8</sup>. This boundary change amends the boundary for high voltage (HV) generators metered at the HV side of substations with a primary voltage level of 22 kilovolts.

We also agree with a majority of respondents and have notified our decision<sup>9</sup> to defer the date on which the CDCM:EDCM boundary will change for DG so that it coincides with the introduction of EDCM DG charges (i.e. 1 April 2013).

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<sup>8</sup> Decision on revised submission and implementation dates for the EHV Distribution Charging Methodology (EDCM) - (Reference number: 120/10), 22 September 2010

<http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=651&refer=Networks/ElecDist/Policy/DistChrgs>

<sup>9</sup> <http://www.ofgem.gov.uk/Networks/ElecDist/Policy/DistChrgs/Documents1/Decision%20Letter.pdf>