

5 May 2017

Judith Ross
Energy Systems Integration
Ofgem
9 Millbank
London
SW1P 3GE

By email to: TCR@Ofgem.gov.uk

Dear Judith

Re: Targeted Charging Review: A consultation

Please find our responses to the questions asked in your consultation in an annex to this letter.

BUUK is the parent of two IDNO licensees, The Electricity Network Company (ENC), and Independent Power Networks (IPNL). Additionally, BUUK is engaged in developing district heating through its subsidiary, Metropolitan.

Development of charging arrangements is an area of particular importance to us since changes to methodologies directly impact on our margin. For example, whilst a DNO providing cross subsidies between different customer groups may not impact on the total revenue it collects under its price control, it may do so for IDNOs that have a different customer mix. Therefore we think it is important to avoid developments that unduly distort charging methodologies.

We will be happy to take part in future development of the TCR, the CCG and further developments in charging. If you have any questions in respect of our responses please contact me.

Yours sincerely

Michael Harding
Regulation Director

Annex

Question 1: Do you agree that the potential for residual charges to fall increasingly on groups of consumers who are less able to take action than others who are connected to the system, is something we should address?

We agree this is an area that Ofgem should address and that this should be through an SCR. However, in doing so it is essential to review what types of costs are (should be) recovered through residual charges and the extent that they make up the total charge.

Question 2: If so, why do you think, or do not think, action is needed?

We think it is appropriate to review:

- What types of costs should be recovered through residual charges; particularly since residual charges comprise such a large part of the total charge levied by a network operator.
- The basis on which residual costs should be recovered; i.e. the structure and nature of the charge.
- The classes of customer that should pay residual charges and the extent that residual charges should apply to them.

We believe the above areas fall within the scope of Ofgem's proposed Significant Code Review.

GB is undergoing an energy revolution. The way energy is produced and used is being transformed. Charging frameworks need to change to reflect the costs that different classes of customer bring to the network. Customers need confidence that the charges are fair and proportionate; i.e. that they are not being overcharged. Network operators need charging arrangements in place that enable them to recover their allowed revenue in a fair and predictable way.

Ofgem, in paragraph 2.5 of their consultation, state "*Residual charges don't relate to any specific set of costs...*". We do not agree with this assertion. We think many of the costs recovered through residual charges can be attributed to specific activities and should be allocated in forward looking methodologies (for example asset replacement). Whilst we recognise that there will always need to be a residual element to balance the outputs from charging models, we think the quantum of residual charges is too high.

We do not necessarily agree that sunk costs should automatically be considered as residual charge. We note that today's sunk costs were yesterday's forward looking costs (and similarly that today's forwards looking costs are tomorrows sunk costs). Therefore we do not think it is appropriate to always divorce sunk costs from future costs. The energy industry is going through significant (revolutionary?) change and we question whether the time horizon for recovering forward looking costs should be foreshortened. This is consistent with unregulated markets where investors will seek to recover riskier investments over a shorter time frame (and/or apply a higher cost of capital). This would reduce the risk of stranded costs to be recovered in the residual component.

Question 3: We are proposing to look at residual charges in a Significant Code Review. Are there any elements of residual charges that you think should be addressed more urgently? Please say why.

We think the size of residual charges is too high and that many of the types of cost bundled in residual charges could be better allocated. We note that Ofgem indicate that they are not looking at forward looking methodologies at this stage. This exclusion restricts the extent that residual charges can be considered.

We note that Ofgem is currently considering responses to its minded to position on electricity charging arrangements for embedded generators. Making such decision before the SCR starts (let alone concludes) appears to be premature and to significantly restrict the scope and outcomes of the proposed SCR. We think a holistic approach is required under this review.

Transmission and Distribution charging methodologies have their own governance mechanisms. We would welcome clarity as to how change proposals under those governance arrangements will be considered during such an SCR. This is both in respect of changes to the residual component and to the forward looking component.

Question 4: Are there elements of the approaches in other countries that you think could be appropriate for GB residual charges?

We think that there should be a shift from volumetric use of system charges to capacity based charges (We think these should relate to kVA - as opposed to kW as suggested in the consultation). Such charges should apply to capacity reserved by consumers, and not just to the capacity used. We think there could be a temporal component too in capacity charges, but recognise that this is out of scope of the proposed TCR. For example, a customer may agree a different capacity for the time of day/week/year with different capacity charges. Such an approach could incentivise a more flexible approach to using capacity and would be more reflective of costs that a user brings.

To us it appears unreasonable that users who reduce their volumetric usage (for example through the installation of PVs) should have lower use of system charges compared to other users with higher volumes of use (because they do not have PVs), even though their reliance on the network at the time of system peak is no different (e.g.. 4.00 pm on a winter evening). This is because, even though they may have lower consumption profiles, the costs they bring to the distribution system (with the exception of reduced losses) will be the same as for those with higher consumption profiles.

For distribution, under RIIO ED1 the cost of network reinforcement, required to accommodate new DER technologies (for example, PVs), is not recovered through connection charges to those customers. Instead it is socialised across all consumers (NHH and HH). Under the CDCM, reinforcement and replacement are excluded from the 500MW model and therefore (notionally) bundled in with residual charges recovered by the scaler – which in turn are recovered through unit charges. Consumers who do not have PVs, and therefore higher volumetric consumption will provide a disproportionate cross subsidy to customers with PVs.

Question 5: Are there other approaches that you know about from other jurisdictions, that you think offer relevant lessons for GB?

Not answered

Question 6: Do you agree that our proposed principles for assessing options for residual charges are the right ones? Please suggest any specific changes, or new principles that you think should apply.

Broadly, we agree with the principles proposed by Ofgem to assess the options. However, we believe that cost reflectivity should be a headline principle. We recognise that Ofgem has proposed that it is incorporated under the principle of fairness. However, fairness has many different facets. We think consumers will be much more supportive of charges that are reflective of the costs they bring. Additionally, we make the following comments:

- The SCR should review what costs are best recovered through forward looking charges and what costs are best recover through residual charges. That residual charges comprise such a large part of total charges is cause for concern. We think there are elements of costs recovered through residual charges that should be more appropriately recovered through forward looking methodologies.
- We recognise that Ofgem has a duty to take account of how charges impact on *"...those in vulnerable situations"*. However, this should not distort nor skew the methodology for recovering residual charges. If further actions are required in respect of vulnerable activities; for example, such as discounts funded through cross subsidies, then these should be considered separately and applied in a transparent manner as a separate layer on top of the underlying methodologies.
- Under its principle of proportionality and practical considerations, Ofgem identifies one aim is reducing volatility. We agree with the aim of seeking *"...to reduce the possibility that some users' relative contributions change materially as a result of other users' decisions"*. However, we think a broader view of the factors that bring about volatility should be considered also. This goes beyond the residual charge component.

Question 7: In future, which of these parties should pay the transmission residual charges: generators (transmission- or distribution-connected), storage (transmission- or distribution-connected), and demand, and why? What proportion of these charges should be recovered from each type of user?

In general we think transmission residual costs should be recovered through use of system charges to demand customers. Suppliers who contract with generators will pay use of system charges for conveying electricity from that generator to end consumers. Provided such charges are cost reflective they should include an element that is based on the generator's location.

Distribution Connections

We do not see the logic as to why generation or storage customers connected to the distribution system should face transmission charges if they do not use the transmission

system. This is even more so the case in respect of transmission residual charges. Where generation or storage uses the transmission system then there is a case for considering if and to what extent transmission charges should apply. For example, where output from a generator is always consumed locally on the distribution system and is never exported onto the transmission system, then transmission charges, and therefore transmission residual charges should not apply. A different approach should apply where generation or storage output is reliant on the transmission system should be treated. This applies both in respect of exported 'traded' generation as well as 'untraded' generation (that spills energy onto the distribution system, which in turn spills onto the transmission system).

Care is required to ensure that residual charges are not double charged, firstly to the demand customer (or the supplier of the demand customer) in charges for the conveyance of electricity to the consumers premises or to the grid supply point, and secondly by the generator exporting on to the transmission system.

Given Ofgem's statement that "*residual charges don't relate to any specific set of costs...*" it is difficult to see what logic or justification there is for applying different proportions of residual charges to different types of user (other than the binary decision that they pay or don't pay).

Additionally, we think:

- Residual charges should be based on the capacity that users require, irrespective of whether such capacity is used. (For smaller users these could/should be recovered through the fixed charge).
- There may need to be a rebalancing between those costs recovered through the connection charge and those costs that are recovered through use of system charges.

Question 8: In future, which of these parties should pay the distribution residual charges: generators (transmission- or distribution-connected.), storage (transmission- or distribution-connected), and demand, and why? What proportion of these charges should be recovered from each type of user?

Our response to this question is similar to that of Question 7.

Distribution residual charges should only apply to those users who use the distribution system. For example, we think different treatment may be required in respect of a behind the meter generator who does not export onto the distribution system i.e. the output is consumed locally on the private network and a behind the meter generator that will export onto the distribution system.

Care is required to ensure that residual charges are not, in effect double charged, firstly to the demand customer (or the supplier of the demand customer) in charges for the conveyance of electricity to the consumers premises, and secondly to the generator exporting on to the distribution system.

In general we think residual costs should be recovered through use of system charges to demand customers. Suppliers who contract with generators will pay use of system charges for conveying electricity from that generator. Provided such charges are cost reflective they should include an element that is based on the generator's location.

Given Ofgem's statement that "*residual charges don't relate to any specific set of costs...*" it is difficult to see what logic or justification there is for applying different proportions of residual charges to different types of user (other than the binary decision that they pay or don't pay).

Additionally, we think:

- residual charges should be based on the capacity that users require, irrespective of whether such capacity is used. (for smaller users these could/should be recovered through the fixed charge)
- there may need to be a rebalancing between those costs recovered through the connection charge and those costs that are recovered through use of system charges

We think consideration is required in respect of how charges should apply to private networks (including ESCOs) that rely on distribution systems for support, either in a top-up or standby mode.

Question 9: Do you support any of the five options we have set out for residual charges below, and why?

We think **option C** offers the best balance of all the approaches and is the option that best reflects the reliance that customers have, and the costs that they bring on the network. Cost reflectivity is something we think is an essential component of fairness. We think more needs to be done to reduce the amount of revenue recovered through residual charges; we think that a large proportion of these costs can be allocated to customer classes.

We think that customers with smaller consumption profiles the capacity charge could be incorporated into the fixed charge component of the tariff – as opposed to introducing a further tier into the tariff.

We **do not** support **Option A**. Whilst relatively simple, we think it distorts the pricing message to consumers. Under this option, consumers who have the same reliance on the distribution or transmission system will pay different charges based on their volumetric use. This means customers who do not have DER solutions to reduce imported energy volumes will be subsidised by customers who do not. Customers who do not have DER solution are more likely to be vulnerable customers. Therefore, the option fails to meet two of Ofgem's proposed principles.

We **do not** support **Option B**. Ofgem suggest that there are a number of ways that a fixed residual charge could be derived. Our thoughts are:

- The direction of travel in settlement is to move away from profile classes to HH settlement. This does not appear to be an enduring option
- Recovering residual charges through property taxes or based on property sizes (a window tax?) would appear to create its own subset of significant issues; for example. The MIT report referred to by Ofgem puts forward these options as a proxy for a wealth tax and as part of a Ramsey pricing approach to recover residuals. Such an approach appears to muddle economic regulation with social/political policy.
 - Who and how would such arrangements be administered? – how would TNOs and DNOs gain access to and assess such information
 - It appears to add complexity.

- It adds societal distortions to charging methodologies which would appear to lie more with government than with the regulator.

We do not think that skewing charging methodologies away from an economic cost reflective approach is a positive step forward.

We **do not** support **Option D**. Generation that is behind the meter operates under licence exemption. It is not clear to us how TNOs or DNOs (or supplier) would have access to such information in order to assess charges. Further, it is not clear to us why this would be perceived as a fair and proportionate way of recovering residual charges – particularly if the generation places no burden on the upstream system (it is more likely to reduce burden).

Whilst our preference at this time is for option C, we have an open mind on option E. A hybrid approach could take many forms some which we may support more than others. Therefore we would need to see specific proposals before providing a view.

Question 10: Are there other options for residual charges that you think we should consider, and why?

We think more could be done to reduce the size of residual costs through better allocation of costs. We recognise that whilst there will always be some costs that will need to be treated as a 'residual' cost, there are many other types of costs that can and should be allocated on a forward looking basis.

Today's forward looking costs are tomorrow's sunk costs. In a period where the energy landscape is undergoing significant change consideration needs to be given as to what time horizon should be applied in forward looking methodologies for cost recovery. A shorter time horizon in the methodology would mean that costs recovered by the forward looking model increase, and as a consequence costs recovered through residual charges reduce.

Question 11: Are there any options that you think we should rule out now? Please say why.

Please see our response to Question 9

Question 12: Do you think we should do further work to analyse the potential effects of the charging arrangements for smaller EG (called 'embedded benefits')?

We note that Ofgem's question is targeted towards transmission charging rather than DUOS charging. We think a further, broader review on embedded generation is required which is inclusive of DUoS charging. Different approaches to transmission and distribution charging may conflict with each other, distorting the pricing signals to EG

In respect of transmission charging, we do not follow the logic (or fairness) that embedded generators who do not use the transmission system should pay for it (through residual charges). However, where a distribution connected party (generator, supplier or consumer) can take actions to reduce their reliance on the transmission system at time of system peak (for example, a supplier through a contract with an embedded generator or a contract with a consumer for demand response), and thereby reduce the costs of operating the transmission system, it seems appropriate that they should share in the benefit.

Charging arrangements include connection charges as well as ongoing use of system charges. One element of charging should not be considered in isolation from the other. One of the areas that is often considered is locational pricing signals. We think that these can only be given through connection charges since this is at the time that the investment decision is made.

Question 13: Do you think changes are needed to the current charging arrangements for smaller EG, and when should any such changes be implemented?

Ofgem's focus in section 7 of the consultation focuses on transmission charging. We think further analysis is required on current DUoS charging arrangements (both EDCM and CDCM) in respect of embedded generation. Consideration needs to be given as to whether parts of the distribution system that are generation dominant should have different charges from those parts of the distribution system that are demand dominant. (For example, should there be zonal charging?)

If changes are to be made to transmission charging then they should be harmonised with distribution charging to mitigate solutions with perverse outcomes.

Question 14: Of the embedded benefits listed in our table, do you think that any should be a higher or lower priority?

Not answered.

Question 15: Do you think there are other aspects of transmission or distribution network charging which put smaller EG, or any other forms of generation or demand, at a material disadvantage?

On distribution systems the settlement presumption is that embedded generation output is transported to the grid supply point and then from the grid supply point to the end customer. However, the output from generation may be consumed locally, with the result that the demand and generation customers do not utilise much of the network – but nonetheless have to pay for it. This is often a reason why such generation often connects to customers behind the meter via a private network – so as to avoid upstream costs.

Further work is required to assess whether changes to the settlement regime are required to enable the output / demand from two (or more) MPANs to be aggregated locally. Such consideration would also support the move to a more flexible distribution system.

Question 16: Do you agree with our view that storage should not pay the current demand residual charge, at either transmission or distribution level?

In principle we agree. However, we believe further work is required to reduce the size of the residual component.

Question 17: Do you agree with our view that storage should not pay BSUoS on both demand and generation?

We agree that storage should not pay twice for BSUoS (once for import then again for export). We also agree that there should be a level playing field. However, we remain to be convinced that this means that neither import nor export should pay such charges

Question 18: Which of the BSUoS approaches describe is more likely to achieve a level playing field for storage?

Not answered.

Question 19: Do you think the changes in this chapter should be made ahead of any wider changes to residual charging that may happen in future? Do you agree with our view that these changes should be implemented by industry through the standard code change process?

We are concerned that this will result in a fragmented approach that could result in perverse outcomes. In considering specific aspects of charging it is important that attest on the wider impacts on charging methodologies is considered too. Therefore we believe there should be some overall coordination.

Where (and once) principles are agreed, we believe they should be implemented through the standard governance process

Question 20: We would welcome your thoughts on the potential make-up of a CCG. Please refer to the potential role, structure, prioritisation criteria and assessment criteria.

We believe that should be representation from all constituencies

Question 21: Do you agree with our proposed delivery model, including its scope?

We agree in part, we believe the TCR should also focus on what elements are recovered through residual charges and what elements are recovered through the forward looking charge – with the focus being on reducing the residual component.

Question 22: Do you agree that our proposed SCR process is most appropriate for taking forward the residual charging and other arrangements for smaller EG discussed in this document?

We are supportive of the SCR approach provided that the scope of the work is clearly defined along with setting out how the SCR/ CCG will interface with other relevant work streams. It is essential that all relevant stakeholders are offered a voice on the CCG, either directly or on a constituency basis.