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Targeted Charging Review: a consultation

Dear Judith,

SmartestEnergy welcomes the opportunity to respond to Ofgem's consultation on a Targeted Charging Review.

SmartestEnergy is an aggregator of embedded generation in the wholesale market, an aggregator of demand and frequency services and a supplier in the electricity retail market, serving large corporate and group organisations.

Please note that our response is not confidential.

Overview

We agree that network use of system charging needs to be reviewed. However, in our view more of a holistic charging review is required. It is not appropriate to consider changes to the TNUoS netting arrangements, for instance, without at the same time having a clear way forward on the "behind the meter" issue as Ofgem could be left with an unresolved discriminatory situation which is more unfair than the one they are trying to address with CMP264. Please see our response to Ofgem's minded-to letter on CMP264 and 265.



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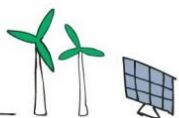
We believe that a Significant Charging review should also include further investigation into the nature of the TNUoS residual (and all other “residuals” for that matter) because the currently favoured approach changes the netting arrangements without assessing how the charges are recovered (i.e. over peak or longer periods) and does not address previously identified elements in the residual which could be attributed to those causing the costs. The consultation document states that “Residual charges are ‘top up’ charges set to ensure that the network’s efficient costs can be covered, after other charges have been levied.” The very nature of residual charges in all tariffs needs to be investigated. We are of the view that they contain elements which could be stripped out and charged in a more targeted manner. In the matter of TNUoS charging we think that Ofgem are not looking closely enough at the exact nature of the locational and residual elements, the latter being in reality a ragbag of costs which NGT do not allocate accurately because their charging approach is not sophisticated enough. The TNUoS residual would not be so high, for instance, if the costs associated exporting GSPs and offshore interconnectors were allocated properly. Also, BSUoS would not be set to increase so much in the coming years if the costs associated with the use of larger nuclear gensets are allocated properly. (See answer to Q2 for more details).

We are very concerned that Ofgem are contemplating making swift changes to the embedded benefits netting arrangements because this represents a fundamental change to the way in which the system is viewed. The concept of “negative demand” is being denied altogether and we believe that such a fundamental change should be part of a more holistic set of changes which need to be consistent with a clear new “world view.”

We note that Ofgem are consulting on specific changes for storage which they think could be taken forward relatively quickly by industry. We agree that change is required in this area and that this should be implemented as quickly as possible. We do not think that this needs to be part of a wider SCR as we do not believe the required changes represent a fundamental shift in the nature of the arrangements, unlike moving to gross charging for TNUoS. Storage is therefore an area we believe Ofgem can take, or allow, the “early action” they speak of. This is an area where fairness between participants should be the driver, not “significant costs to customers.”

We answer the questions below in the order in which they appear in the consultation document.

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?



In viewing charging in terms of residual and “forward looking” we are concerned that Ofgem are conflating two different conceptual distinctions: “standing charge vs unit charge” and “socialised vs directly attributable.” In reality, the issue is: “how should non-directly attributable costs be recovered fairly?” and the way Ofgem have presented the issue does not help to solve that problem. Indeed, the first stage should be to identify exactly what is non-directly attributable.

It is difficult to argue with Ofgem’s initial view that all users who are connected to the licensed networks should make some contribution to common costs since Ofgem say that they are not currently making any assumptions about how much users with generation behind the meter, or any other type of user, should be paying. However, the level of these costs, and whether other factors such as the level of reliance and relative proximity are taken into account, are critical. It would not be appropriate for Ofgem to point to agreement with their initial view and then introduce blanket charges in the interests of simplicity.

Ofgem state that they are concerned about the potential for higher residual charges to fall on other users who do not have the same options to reduce their payments of these charges. But this is the wrong way to look at it and this is not in and of itself an issue; people who have invested in roof-top solar should not face higher charges than is fair just because there are people who have not had the opportunity to invest. And yet, this seems to be Ofgem’s line of reasoning. A charging methodology should relate to the service provided and the aforementioned factors of comparative reliance and relative proximity are highly relevant. Flexibility to avoid the charge as if it were some kind of tax loophole is not relevant.

There is a danger that Ofgem’s preferred policy of gross charging will accelerate the tendency for people to go off-Grid. And with battery technology the way it is developing this could well be a reality for those with the money to invest. In this future scenario, those customers who do not have the options to reduce charges will be even worse off because the system will not have access to the off-grid generation/storage at all.

Having said all that, we do approve of moving away from peak charging for TNUoS and we believe that costs should be shared more on the basis of usage rather than capacity i.e. a customer with on-site/local generation should not pay as much as a customer with the same import capacity but with no on-site/local generation precisely because that generation reduces the need for greater investment on the network.



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

The costs associated with exporting GSPs and offshore interconnectors (which are currently within the TNUoS residual) should be allocated properly to those causing the costs or those who are in a position to take account of them. For instance, if the costs associated with exporting GSPs were passed to DNOs, then the DNOs could take account of these in their own planning and charging and this would lead to greater efficiency in network investment overall. This is the kind of change which needs the regulatory intervention of an SCR because it is cross-code.

We are also aware that the costs associated with maintaining the security standard are due to increase because the size of the largest genset is set to increase. In April 2014 the Normal Infeed Loss Risk was increased to 1320MW and the Infrequent Infeed Loss Risk increased to 1800MW. These levels are upper limits and NGET does not need to procure frequency response to cover these risks until they actually exist on the transmission system. However, back in 2010 NGET estimated that the associated additional cost these changes would cause would be around £160m per annum, and in the absence of any methodological changes these costs will be rolled into BSUoS. In our view, these costs should be passed back to transmission-connected generators as they are a direct result of the planned use of larger units on the transmission system. More generally, we would say that it is not appropriate for transmission-connected generation to be at an advantage over smaller generation due to their scale and not contribute to the costs caused by their scale. We would encourage Ofgem to incorporate this principle into their thinking.

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.

Yes, any element where further cost allocation can be identified, especially those identified in our answer to Q2.

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

No comment



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

We would offer a word of caution here. The incentive for customers to go off-grid we mention in our answer to Q1 may not have manifested itself yet in other countries and it may be short-sighted to borrow elements/copy the model of some of those countries without considering the way in which pricing could lead to a race to go off-grid.

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.

We comment on Ofgem's aims below:

"We will prioritise and target changes where we think there is the greatest justification for intervention. As an example, if a problem arises mainly among non-domestic consumers, then changes to their charges should be a higher priority than changes affecting all users."

We are not entirely convinced that the example given demonstrates a greater justification for intervention. There appears to be no consideration of total impact. Ofgem probably need some more criteria in this area so that they are not accused of intervening without justification.

"Simplicity. Complexity is frequently a side-effect of seeking increased cost-reflectivity in charges. Given cost reflectivity is less directly relevant to residual cost recovery we will aim to find new charges that are easy to calculate, and to understand."

There is a danger that a determination to have simple arrangements will lead to a change which is as unfair as any previous arrangements, only different. Greater accuracy is likely to be the only way to move towards fairer charging. As we have stated above, it is important to establish that there are no elements within the residual which cannot be allocated more cost reflectively. It is also not appropriate to simplify the remit of charging in the interests of wanting to bring about change quickly. The emphasis should be on conducting a review properly. This would need to involve investigating many areas because many issues are inter-related and current assumptions about



what is in the residuals need to be challenged, even if the ultimate charging approach remains relatively simple.

"Reducing volatility. These charges should be predictable as far as possible. We will seek to reduce the possibility that some users' relative contributions change materially as a result of other users' decisions."

We disagree with this and are surprised to read it in the document. Ofgem was very keen to introduce greater volatility in the imbalance market by increasing the VoLL and reducing PAR. Where volatility exists it is economically efficient for the market to be exposed to it.

"Noting that other aspects of the system, including how forward-looking charges are set, may change in future, we will try to develop an approach that would need few if any adjustments when other aspects change."

This sounds sensible. Industry has been waiting for Ofgem to make a decision on a review of charging for some time now. With this being described as a Targeted review, the impression may have been given that this would include certain methodological tweaks. It occurs to us that Ofgem could take the view that methodological changes are the remit of the normal change process and that changes relating to the SCR/TCR are more structural. If this is the case, Ofgem should make this clear and indicate the kinds of methodological change that industry could come forward with.

"Continuity of supply and the ability of all consumers to access electricity when they need it. Short of complete disconnection from the network, we think that all consumers should make a contribution to these residual charges. This reduces the risk that any group of consumers will find themselves facing an unacceptably high network residual charge."

We do not disagree with this but the level of contribution needs to be proportionate to the reliance on the system (batteries, for instance, are less reliant) and the calculation should not be made purely on capacity, but more on energy.

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?



We would agree that in a fully competitive, homogenous and cohesive market the end-consumer might as well pay all of the residual costs. However, we are not in a situation where there is a common network, and there are conflicts and potential discriminations between transmission and distribution and therefore there is not perfect competition in generation, which we would suggest is a prerequisite before moving to 100% end-consumer charging. Given the different costs for large and small scale generation, we doubt whether this is ever achievable. Generation and net demand should therefore continue to pay transmission residual charges. It would be inappropriate to charge storage because they are not reliant on the capacity.

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?

Just as the transmission system gives demand access to generation so the distribution network gives generation access to demand. Transmission connected generation and net demand should therefore pay transmission residual charges for the reasons we outlined in Q7. It would be inappropriate to charge storage because they are not reliant on the capacity.

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

By and large, and for reasons given elsewhere in this response, we support Option A (a charge linked to net (kWh) consumption.) Option B (a fixed price charge) would simply not be granular enough to cater for all the different types and sizes of user without causing arbitrary discriminations at the boundaries of definitions. Option C (fixed charges set by connected capacity) and Option D (gross kWh consumption) would, as previously stated, unfairly penalise users who had less of a reliance on the network because of their own generation or storage options. Option E (a hybrid approach) would create an artificial boundary between "low users" and the others. The low user issue is solved by way of Option A.

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

No



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

No

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')?

Ofgem recognise that "as the amount of smaller EG has increased, it is increasingly affecting electricity flows on the transmission network." They should also recognise the way in which transmission connected generation affects flows on the distribution networks. Also, if it is the affecting of flows on other networks that is important, then Ofgem should be addressing exporting GSPs and offshore effects in Triad charging, rather than just increasing costs for embedded generation using the blunt instrument of removing netting.

In Chapter 7 Ofgem are asking specifically for views about the fact that smaller EG currently does not face the TGR charge. We think that Ofgem should be considering the costs Transmission generation should be paying towards the distribution costs. Ideally it would be all one network. If it were, and assuming we are not ready to transfer all charging to end-consumers, transmission connected generation would pay more.

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

The most important thing is that the areas for change are signalled early and that they are all in line with a consistent view of the world. It is not appropriate to start making changes to individual embedded benefits without having established these two things.

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

We have no issue with Ofgem investigating these issues as part of a holistic SCR, but we think that Ofgem should be mindful of our comment in answer to Q13.



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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?

Yes. Please see our answer to Q2.

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

The document states that Ofgem's view is that "storage would continue to pay forward-looking charges in respect of both its demand and generation at both transmission and distribution levels, but only pay the generation residual charge at transmission level, and not pay the demand residual charge at distribution level." We believe that it is important to understand first what is meant by storage; storage technology will either be importing or exporting and appropriate charging for these modes needs to be considered. Also, "storage" could be sited alongside generation, demand or be standalone and these scenarios need to be considered, too.

Clearly, environmental charges on energy which is temporarily stored should not ordinarily be charged to the storage operator but to the end-consumer. However, in implementing arrangements that ensure stored electricity is not charged twice it is important to ensure that the stored power is exported and cannot be used on site (with the effect that behind the meter storage could be used to avoid charges.) In other words, at the moment charges are triggered each time energy passes through a settlement meter and a loophole could be created if there is a blanket exemption for storage imports because the power could equally be used on site as exported to another consumer (via another settlements meter). A solution to this could be that the charges for the import to storage is charged on a net basis (i.e. export is netted off.)

In the scenario of power being imported twice (once by the battery and once by the end consumer) it is not unreasonable that DUoS charges should be charged on both as the distribution system will have been used twice.

Storage should not have to pay TNUoS charges as it is not reliant on the network

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



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Yes. However, it is important to ensure that any change in this area is consistent with any potential changes to the embedded benefit regime. To ensure fairness with other embedded generation it would make sense to us for BSUoS to be charged on import and for the embedded benefit/netting arrangements to remain in place on export.

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

Please see our response to Q17. The approaches outlined are not the only options.

Approach 1: Balancing Mechanism Unit (BMU) Definition: define storage BMUs as either importing or exporting, irrespective of their actions in any particular settlement period. This strikes us as difficult to implement. Much storage will be connected to the distribution network and will have MPANs within a supplier's base BMU.

Approach 2: Gross Charging: charge BSUoS to storage on the basis of either its gross imports or gross exports, rather than the net position, irrespective of its actions in any particular settlement period. We maintain that there is merit in the netting arrangements.

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?

Yes, the changes to the way in which storage is treated should be dealt with ahead of any embedded benefit changes which, as we have said above, should be presented as a package.

However, we believe that nothing can be done until the definition of storage changes as per BEIS's consultation on a Smart Flexible Energy System.

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.

The CCG is a good idea as long as its membership is wide enough to adequately reflect the concerns and needs of all interested stakeholders. Previous issue groups have been too closed and have produced inefficient recommendations as a result.





In practice this means opening the CCG up to consumer representatives and smaller industry parties, beyond the usual established participants.

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

Given the circumstances, we are not against Ofgem directing licensee(s) to raise modification proposal(s).

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?

Yes

Should you require further clarification on this matter, please do not hesitate to contact me.

Yours sincerely,

Colin Prestwich

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