Swanbarton response to the Targeted Charging Review: minded to decision

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1. Do you agree that residual charges should be levied on final demand only?

Not entirely. The proposed approach benefits from being a simple approach and any charges levied on generation will simply be passed onto final demand.

However, just because costs recovered through residual charges are not easily associated with location or user behaviour, it does not follow that they should not be used to amplify price signals for desirable behaviour.

Further, levying a component of residual charges on generation would allow amplification of the price signal for the value of the location of generation (avoidance of network reinforcement).

If residual charging mechanisms are being changed, I'd prefer to see a more holistic assessment, which includes outcomes from the forward-looking charges consultation and assesses whether the costs allocated to forward-looking charges are sufficient to influence user behaviour.

2. Do you agree with how we have assessed the impacts of the changes we have considered against the principles? If you disagree with our assessment, please provide evidence for your reasoning.

No. The consultation documents have not convinced me that these changes will result in lower costs for energy users or a fairer system of levying charges.

Savings will only be realised if the new charging regime reduces system costs.

The proposed changes to residual charging simply changes the apportionment of costs.

The proposed changes to embedded benefits can only create a network benefit associated the construction of new generation assets: which assumes that the locational price signals for remaining embedded generation do correctly reflect its value and that the benefit of renewable generation (typically embedded) is reflected through some other pricing mechanism. Embedded generation assets associated with peaking applications may prove commercially disadvantaged, leading to centralisation and increased network reinforcement.

Removing the remaining embedded benefits from existing embedded generators is undesirable:

- This will reduce revenues for investors in embedded generation (particularly renewables). I see no clear analysis of the impact on Community Energy Groups or the wider investment community. Many of these projects were justified based on government incentives.
- Community investment in renewables has driven widespread engagement in carbon reduction and energy efficiency – TCR changes may reduce the viability of existing projects, harming the perception of government commitment to carbon reduction and the environment.
- The embedded benefits recommendations seem to focus on removing 'harmful distortions' from the wholesale market. This does not consider wider issues, particularly Carbon reduction.
- Any existing generation assets that are made commercially redundant through this regulatory change would require the construction of duplicate plant. This will increase carbon emissions in the short term (construction carbon). The study is not explicit on what existing assets are forecast to become redundant and the financial impact on their owners.
- Most energy users do not distinguish between the roles of Ofgem and BEIS. The TCR changes seem to work against BEIS policies on renewables, smart local systems and support for small business. Removing embedded benefits may be perceived as a government policy U turn.
- CCGT is not suited for peaking applications, and so may not prove so advantageous for the system.

I would have welcomed an approach that assessed the value of amplifying the price signals for embedded generation in the distribution network where it avoids reinforcement.

It is impossible to have any faith that the residual charging arrangements are appropriate when the forward-looking arrangements are yet to be defined. The residual charges are a significant proportion of total network charges, and an energy bill, they should be used to influence behaviour (other than total avoidance by going off-grid).

3. For each user, residual charges are currently based on the costs of the voltage level of the network to which a user is connected and the higher voltage levels of the network, but not from lower voltage levels below the user's connection. At this stage, we are not proposing changes to this aspect of the current arrangements. Are there other approaches that would better meet our TCR principles reducing harmful distortions, fairness and proportionality and practical considerations?

I would like to have seen an assessment of the overall value of having Embedded generation and Behind-the-Meter generation in the distribution network for network reinforcement avoidance. This would require the forward-looking consultation to be completed and a wider set of issues to be considered.

The current scheme of charging by voltage levels is a very central view of the network i.e. that power comes entirely from the transmission level. Charging based on this view is very discouraging, and commercially limiting, for the local and smart initiatives which are currently being encouraged by government. I believe it is technically feasible to consider energy flows that do not conform to this archaic view of the GB network.

4. As explained in paragraphs 4.41, 4.43, 4.46, 4.49, 4.80, we think we should prioritise equality within charging segments and equity across all segments. Do you agree that it is fair for all users in the same segment to pay the same charge, and the manner in which we have set the segments? If not, do you know of another approach with available data which would address this issue? Please provide evidence to support your answer.

Equity across all segments – yes.

Equality within charging segments - no. These segments will contain users that consume energy at different scales, unrelated to whether they have behind-the-meter generation (which I do not perceive as 'gaming' the system).

Charging a small flat the same residual charge as a large detached home seems wrong.

While the existing system for residual charging may have needed reform, I am dismayed that the consultation has discounted volumetric approaches so early in the evaluation. This seems to be based heavily on the TNEI and CEPA report regarding approaches in other countries. I would like to see GB regulation leading the way in finding charging mechanisms that protect network charging, while avoiding punishing carbon reduction and energy efficiency.

A fixed charge dissuades users from investing in energy saving measures, as it reduces their marginal cost of energy. Domestic customers with low energy consumption (due to efficiency measures or an inability to pay) will pay more. High energy users will pay less.

The fixed charge approach will reduce the Time of Use signal (the spread between the peak and off-peak cost of electricity). This will likely increase peak energy consumption. National Grid reported 2GW of response during Triad periods in 2017/18. Did the study model the need for further network reinforcement or the cost (and carbon) of additional peaking plant and demand-side response to replicate this?

The forward-looking consultation may conclude that the costs apportioned to forward-looking are insufficient to provide a price signal that will incentivise desired behaviour. If so, additional DSR costs will be incurred, where network charges alone might have been sufficient.

5. Do you agree that similar customers with and without on-site generation should pay the same residual charges? Should both types of users face the same residual charge for their Line Loss Factor Class (LLFC)?

No. This seems to be the fundamental objective of the changes to the residual charges. The consultation documents have not convinced me that this change is either necessary or fair.

Renewable on-site generation has been installed based on government directed subsidies, not charge avoidance. Users with existing on-site generation will rightly feel they have been misled. They have invested in on-site generation because they were encouraged to do so.

On-site generation may underpin the financial viability of businesses.

If Ofgem believes that on-site or embedded generation is harming the system it should:

- Explicitly say so and identify preventing the growth of future on-site as an intended outcome
- Implement mechanisms to achieve this without harming the viability of existing assets

The existing volumetric mechanism may require review, but a fixed charge is unhelpful as it:

- Discriminates against small users, efficient users and poor users in an LLFC
- Reduces the marginal cost of electricity, reducing the incentive for insultation and other energy saving measures
- Reduces the Time of Use signal
    - Which is democratic, as any HH user can respond
    - Smart meters were promised to bring this to domestic users, but the signal needs to be an incentive
    - The system will need to replace this 'signal' with more generation capacity and balancing
- The residual should be used to amplify the forward-looking signal (even if the recovered costs cannot be easily associated with network cost increases).

6. Do you know of any reasons why the expected consumer benefits from our leading options might not materialise?

Yes:

- Cost savings from embedded benefits on ROC generation will simply be passed on to wholesale market – there will be no saving
- Cost savings from embedded benefits on FIT generation will hit investors and community groups
- The promise of savings from CCGT may not materialise:
    - Technically not suited to peaking
    - Baseload Transmission connected CCGT would probably be built anyway – remaining embedded benefits unlikely to have compensated for scale
- Redistribution of residual will cause a significant cost increase to some users
    - Low income retired with solar panels
    - Manufacturer that is the lowest volume consumer in their LLFC group – a significant change to residual charge could impact profitability and job security
- Less energy efficiency due to a reduced marginal cost of electricity
- Increased costs due to reduced Time of Use signal:
    - Increased need for network reinforcement, due to loss of the 2GW response to Triads and scheduling of energy used to avoid Redband, or
    - National Grid need to pay for the equivalent service from balancing to fund a response from peaking plant and DSR
- Reduced engagement in future energy efficiency initiatives resulting from disillusionment with renewable projects run by community energy schemes, if the shareholders or bond holders do not receive the returns forecast

7. Do you agree that our leading options will be more practical to implement than other options?

Only more practical than the limited other options that have been considered. Leaving the existing system in place until a new residual charging regime can be developed with a holistic view (including forward-looking recommendations) seems more practical.

I am concerned that 'more practical' means easier for regulatory change and administration, rather than better for the GB system and all of its energy users. It is easy to modify as system to give a marginal improvement to costs for 80% of users by charging 20% of users more - it can be seen as 'democratic', but not necessarily just.

8. Do you agree with the approaches set out for banding (either LLFC or demanding for agreed capacity)? If not please provide evidence as why different approaches to banding would better facilitate the TCR principles.

No. The consultation documents have not convinced me that this is a fairer approach.

The report suggests low and medium consumption domestic users will pay the same fixed charge, but high consumption domestic users will pay more. It is unclear how high-use domestic customers would be identified for this higher fixed charge, other than based on historic volumetric data.

LLFC seems to have been chosen because it ensures that a user reducing its energy import will have negligible impact on the LLFC group demand and therefore the residual charge provides no incentive to install behind-the-meter generation. However, it also reduces the incentive for energy saving measures.

I believe behind-the-meter generation falls into 3 categories:

- Renewables: incentivise by Feed in Tariffs etc and carbon reduction, not tariff avoidance
- CHP or large industrial gas generation
- Backup generation: only exports under DSR schemes or Triads (the volumetric payment could have been reduced, but this does not seem to have been considered)

I do not see how reducing the commercial viability of this existing behind-the-meter generation helps bill payers or the system. Capacity market & CfD seem a better way of picking new winners.

9. Do you agree that LLFCs are a sensible way to segment residual charges? If not, are there other existing classifications that should be considered in more detail?

No. The consultation report has not convinced me that fixed charges based on LLFCs are a fair way to recover residual charges.

I do not see any fair mechanism that is not related to metered volume or capacity. If Ofgem is determined to increase costs for behind-the-meter generation, this should be introduced openly as an additional tariff, and potentially only on new build so that investors can choose whether to commit capital.

The LLFC group is effectively aggregating and averaging its collective volume, but individual users within those groups will win or lose depending on their volume!

Consider a small user that has a demand volume that is only 20% of the average volume in its LLFC. That user's residual charge would be disproportionately high. If the average LLFC user were paying 15p /kWh, the small user would pay 25p /kWh. That really will encourage grid defection.

The scope for fixed charges significantly increasing the cost of energy for small users within an LLFC group is highlighter in the consultation report, but no solution to this distortion is proposed.

The LLFC mechanism has been selected for ease of regulatory implementation and administration (and possibly ideological fairness) over outcome fairness. The LLFC approach impedes energy industry and societal issues, such as carbon reduction.

10. Do you agree with the conclusions we have drawn from our assessment of the following?
a) distributional modelling
b) the distributional impacts of the options
c) our wider system modelling
d) how we have interpreted the wider system modelling?
Please be specific which assessment you agree/disagree with.

No. The materials provided with the consultation do not evidence a thorough assessment of all the consequences of making the proposed changes.

- I disagree that it is not worth modelling the impact of this charging regime on Solar.
- On-site generation – propose to model the impact – when?
- Load disconnection – this conclusion seems very vague, but seems to acknowledge that some adversely affected users may choose to leave the system (worryingly, this only seems to consider the impact on the system, not the cost impact on those users of being driven off the system by disproportionately high charges).
- Energy efficiency – issues are much wider than Triad avoidance behaviours.
- Not modelling network cost impact due to complexity and assuming it will be neutral is flawed.

Analysis seems excessively influenced by reports on general approaches being adopted by other countries:

- Subtle differences in generation mix, network tiers etc will impact how appropriate those mechanisms were in the studied country and how effectively the approach can be mapped onto the GB system
- Decision on a fixed charge has focused on solving perceived problems with the existing system, rather than designing a more effective system with a holistic system view – it has not identified the distortions it will introduce.
- LLFC is very questionable as a way of grouping users – it was never intended for recovering residual charges or such a significant part of a user's energy costs.

Study focuses average users in groupings: examples of how the proposed fixed charges will impact a real user that is most disadvantaged by these changes would be useful.

11.Do you agree with our proposed approach to the reform of the remaining non-locational Embedded Benefits?

No. The consultation materials are unconvincing that these changes will reduce future costs.

Short-term costs may be reduced if generators benefits are removed and their contracts do not permit them to re-price accordingly. Some small distribution connected generators will be subject to contractual PPAs that may have years to run, so they will not be able to recover the lost £4.50 (median) change in their BSUoS through increasing prices.

A transmission connected generator would need to be only 6% utilised for the £2.34/kW loss of TDR to be equivalent to £4.50/MWh (the median loss of a distribution connected generator from BSUoS changes). Contrary to some statements in the consultation materials, these changes seem to benefit transmission connected generation.

12.Do you agree with our proposal not to address any other remaining Embedded Benefits at this stage? Which of the embedded benefits do you think should be removed as outlined in xx? Please state your reasoning and provide evidence to support your answer.

NA

13.Are there any reasons we have not included that mean that the remaining Embedded Benefits should be maintained?

Avoid damaging investor confidence, including Community Energy Groups.

Avoid change for the sake of change. Desirable behaviour is encouraged by providing incentives (price signals) and providing consistency, so that energy users have confidence to invest.

There seems to be a significant risk of unintended consequences resulting from the proposed changes.

Are small Licensed Suppliers more exposed to the fortunes of renewable generation? Is there a risk that these changes will precipitate more small Licensed Suppliers closing?

14.Do you agree with our proposed approach to transitional arrangements for reforms to: a) transmission and distribution residual charges b) non-locational Embedded Benefits? Please provide evidence to indicate why different arrangements would be more appropriate.

No. I am unconvinced by the consultation that the analysis is thorough and correct. I do not believe Ofgem should proceed with this new charging regime until the forward-looking consultation is completed and a more holistic view has been taken. Ofgem should not make change for the sake of change: the proposed new charging regime is unconvincing in providing improvement, fairness or savings.

15.Do you agree with our minded to decision set out? If not please state your reasoning and provide evidence to support your answer.

No. The scope of the consultation has been too narrowly defined. It has led outcomes that will not help our energy system meet carbon targets or function in a smart way.

16.For our preferred option do you think there are practical consideration or difficulties that we have not taken account of? Please provide evidence to support your answer.

Yes.

- The materials suggest that some energy users are going to be unfairly disadvantaged by the new residual charging mechanism, with a significant increase in their kWh price.
- Renewables are going to be disadvantage by the removal of embedded benefits
- The cost savings are not convincing
- The proposed change is in conflict with government policies and objectives
- The consultation materials suggest that some energy users will suffer significant financial disadvantage from the proposed changes. This is a very technical and obscure area for many energy users, and the general public, so many users will be unaware of the proposed change. However, they are likely to respond if their energy bills increase dramatically. It is not worth implementing this change if there is a risk of public outcry and the change being repealed.