

Purpose of this note

This note is a brief guide to Ofgem's Targeted Charging Review (TCR).

Executive summary

The TCR is looking at how electricity network residual charges should be set in future, for both transmission and distribution. The principles Ofgem are proposing to use to assess potential changes are:

- > 1. reducing distortions
- > 2. fairness
- > 3. proportionality and practical considerations.

The TCR will also keep some other aspects of the current charging system under review. These are called 'embedded benefits'. They are differences in the transmission and system operation charging treatment of smaller generation connected to distribution networks, compared with the treatment of larger distribution-connected generation, and transmission-connected generation.

Ofgem have used the outputs from a series of stakeholder workshops along with their analysis to reach what is called a minded-to decision. This presents Ofgem's preferred options for changing residual charges in a consultation, allowing industry and network users to respond with their views before Ofgem reach their final decision. At the end of the Review, Ofgem may direct industry to raise code modification proposals to change residual charges.

Depending on one of the outcomes from Ofgem's Electricity Network Access project, Ofgem may decide to align the way that some or all of the current BSUoS charges are set with the way residual charges will be set in future. You can find out more about how Ofgem's current work may affect BSUoS [here](#).

What's driving change?

Ongoing network charges include forward-looking charges designed to encourage people to use the networks efficiently, and residual charges designed so that fixed and historic costs are recovered. Residual charges are not designed to provide incentives to use networks in any particular way. But if they are not well designed, they can create strong incentives which change how the networks are used, distort competition between different network users, and potentially lead to unfair outcomes.

Residual charges may affect competition because they can either strengthen or weaken the signals created by other network charges – in other words, over-rewarding or under-rewarding particular actions. Residual charges that vary significantly depending on users'

operational and locational decisions are likely to lead to more (if over-rewarding) or less (if under-rewarding) investment and/or network use than would be efficient for the overall system. As consumers overall pay for the system, this is likely to be detrimental to them.

Ofgem is also concerned that the distribution of residual charges between consumers may change in a way that leads to unfair outcomes.

Demand residual charges for non-half hourly settled customers (most domestic and smaller business customers) are currently set by reference to the volume of electricity taken from the network. 'Active' network users are increasingly able to vary the volume of their production and/or consumption of electricity, and if their residual charges vary with the time of consumption, they can also vary that. Both actions reduce their exposure to residual charges. However, the total costs to be recovered through residual charges remain the same. As a result, the charges falling on other consumers who can't vary their use in this way will increase.

This will leave those who are less able to adjust their consumption or afford any upfront investments in technology bearing more of the costs of the system. These are likely to include households and small business consumers in general, and certain more vulnerable consumers in particular.

What's happened so far?

In November 2017, Ofgem published a working paper setting out its initial thinking, and the plan for further work.

Since releasing this paper, Ofgem has held a series of stakeholder workshops to allow industry an opportunity to feed their views into the process. Ofgem have also conducted an analysis of potential changes to residual charges. This includes; an analysis against the principals of reducing distortions, fairness and proportionality & practical considerations, as well as a quantitative analysis of a changes potential impacts.

Ofgem has now reached a position on their preferred changes to residual charges, based on all these elements. Ofgem are currently going through a public consultation process, allowing network users and industry to submit their views on the proposed changes.

Following this consultation, Ofgem are looking to release their final decision in summer 2019. Part of the consultation process is looking at deciding the implementation dates for different aspects of the changes; either in 2020, 2021 or 2021 with a phased implementation to 2023.

What are the proposed options?

There are three separate dimensions to designing a residual charge:

- › **Who should pay** – generation or final demand (usually via suppliers), or both

- › **What mechanism should be used to collect charges** – for example, based on volumes used or another means such as a fixed or capacity charge
- › **How those charges should be implemented** – by voltage level or customer segment, or by ability to respond to signals, and whether a hybrid approach (either having different approaches for different users or combined approaches for the same user) would help facilitate the three principles.

Who should pay?

As part of the minded-to decision, Ofgem states their view is that residual charges should be paid by final demand users only.

Ofgem initially considered the options of generation, final demand, or both paying residual charges against its key principles of reducing distortion, fairness, and proportionality. Ofgem's assessment indicates that there are considerable benefits to levying residual charges on final demand only.

What mechanism should be used to collect charges?

Ofgem are currently considering two options in their minded-to decision. These are:

- › **Fixed Charges** – In this instance each consumer would pay an unavoidable fixed charge.
- › **Agreed Capacity Charges** – In this instance each user pays a charge based on the amount of energy they can demand at any one given time. This capacity of a user for taking energy from the system is set out in agreements with the operators of the electricity networks.

Ofgem currently states that the Fixed Charges mechanism is their preferred option.

These options have come from an in-depth assessment of first 7 and then 5 options, using both an analysis of each options impact against Ofgem's principals for the TCR and a quantitative analysis of the economic impacts.

Each of the mechanisms considered, and the assessment of each mechanism, is explained in minded-to consultation, which can be found [here](#).

How those charges should be implemented?

Fixed Charges

For Ofgem's preferred mechanism of Fixed Charges, they are proposing to segment consumers into groups of similar characteristics. For instance, domestic users would be split into segments of those on Economy 7 and those on single-rate tariffs. The total charge for a segment as a whole would be based on the amount of energy consumed by that segment, as a proportion of the total energy consumed by all segments. This would then be shared between consumers within the segment as an equal fixed cost.

Agreed Capacity Charges

The proposed Agreed Capacity mechanism applies the charge in two ways. Large users establish a capacity agreement when connecting to the network, which outlines the maximum energy they can draw from the system at a given time. For these users the charge would vary linearly based on this agreement. For example, a 200MW connection would pay 10 times the amount as a 20MW connection.

For smaller users who don't have these agreements, such as domestic consumers, they will be split into a number of bands based on their energy consumption. Each band will then represent an approximate, or deemed, capacity.

Non-Locational Embedded Benefits

There are a further two proposals from Ofgem which seek to remove embedded benefits which their analysis shows to either add costs on to the consumer or cause unfair conditions for generators in the market. Each option considers changes to a charge called BSUoS. You can find out more about BSUoS in our summary note [here](#).

Option 1 – TGR and Partial BSUoS Reform

This option seeks to remove two embedded benefits:

- › **Transmission Generation Residual** – Generators connected to the transmission network currently are currently paid a residual by the ESO to comply with EU law. This reform will remove this payment while maintaining compliance with this law.
- › **BSUoS Payments** – Embedded generators can currently receive payments from their supplier for reducing that suppliers BSUoS costs under current arrangements. This reform would seek to remove these payments.

Option 2 – TGR and Full BSUoS Reform

This option seeks to remove the two embedded benefits in option 1, as well as the following embedded benefit:

- › **BSUoS Charges** – Smaller embedded generators currently do not pay generation BSUoS which other generators connected to the network do. This reform would require embedded generation to also pay these charges.

What are the next steps?

Ofgem are currently consulting on their 'minded-to' decision. During this consultation members of industry can answer questions Ofgem are asking about their proposals. These answers are then considered before Ofgem make their full and final decision. This gives members of industry the opportunity influence this decision. The window for submitting responses closes on **4th February**. If you are interested in responding you can find the consultation [here](#).

How can you get involved or find out more?

Contribute

- › You can respond to Ofgem's 'minded-to' decision consultation [here](#).
- › Attendees at the 15th January Charging Futures Forum will have the opportunity to contribute their views. For those who can't make it we will release a summary podcast of the forum, which will be found [here](#).

Learn

- › You can hear Ofgem explain their 'minded-to' position in the recent webinar [here](#).

- › Further detail on the background context to the TCR is in Ofgem's launch letter [here](#).
- › You can also view the material from and summary of the two TCR workshops held in late 2017 [here](#), as well as the workshops held in April 2018 [here](#).
- › You can keep up to date with developments in TCR, as well as find other supporting materials on our [website](#).

Ask

- › If you have a query on the TCR, please contact Ofgem at TCR@ofgem.gov.uk
- › For general queries on Charging Futures and how you can get involved, email the SO, Lead Secretariat for Charging Futures at chargingfutures@nationalgrid.com or visit www.chargingfutures.com