

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 we have proposed 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 has held a series of workshops since the launch of this Review,. 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.

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 user group, 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.

Ofgem covered the first two questions in the November working paper. A shortlist of options for potential change are now being assessed and compared with the current arrangements.

What are the proposed options?

Who should pay?

Ofgem has 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, which is included in the working paper and in the TCR presentation to the first Charging Futures Forum, indicates that there are considerable benefits to levying residual charges on final demand only. This is Ofgem's current thinking, to be assessed through the next stages of the project.

What mechanism should be used to collect charges?

Ofgem has undertaken an initial principles-driven assessment of these mechanisms for setting residual charges:

- › net volumetric demand charges
- › fixed charges (per user)
- › ex ante capacity demand charges
- › ex post capacity demand charges
- › gross consumption charges
- › net volumetric import and export charges
- › max import or export capacity charges

Each of these mechanisms, and an assessment of each against the principles, are explained in the working paper, and in the TCR presentation to the first Charging Futures Forum, available [here](#).

Following its principles-driven assessment, Ofgem is now assessing a smaller number of options in-depth. This will include quantitative analysis of likely impacts, including how these might vary depending on how fast and how widely electricity users adopt new technology.

Ofgem is assessing the second, third, fourth and fifth of the options above, along with the effects of the net volumetric, time-varying residual charges in place today. The options that will be assessed in this stage are:

- › fixed charges
- › capacity demand charges – both on used (ex post) capacity, and on available (ex ante) capacity
- › gross consumption charges (most likely for business consumers only)
- › hybrid options which include a combination of some of these approaches
- › baseline arrangements for transmission and distribution residual charges.

What are the next steps?

Ofgem are planning to set out their minded to decision on potential changes to the TCR arrangements in the autumn and currently intend for any changes to come into effect from 2020. We intend to present the next stage of analysis at the Charging Futures Forum (CFF) on 23 May 2018.

How can you get involved or find out more?

Contribute

- › Progress on the TCR will be discussed at Charging Futures Forum events
- › If Ofgem proposes any changes, these will be subject to consultation.

Learn

- › Further detail on the background to the TCR is in Ofgem's launch letter [here](#).
- › More detail on the options set out above, and Ofgem's thinking on them, are in the recent working paper [here](#).
- › You can also view Ofgem's presentation to the first Charging Futures Forum, on 9 November, [here](#).
- › You can also view a summary of the TCR workshop held in late 2017 [here](#).
- › All other TCR documents are published on our TCR webpage [here](#).

Ask

- › If you have a query on the TCR, please contact Ofgem at TCR@ofgem.gov.uk