



Making a positive difference  
for energy consumers

Electricity generators, distributors,  
transmission licensees, electricity  
supply licence holders, code panels,  
industry bodies, consumers and  
their representatives, and other  
interested parties

Direct Dial: 020 7901 7000  
Email: tcr@ofgem.gov.uk

Date: 4 August 2017

Dear Colleague,

## **Targeted Charging Review - Significant Code Review launch statement**

### **Overview**

This letter launches the Targeted Charging Review (TCR) Significant Code Review (SCR).

The main objectives of this SCR are to:

- consider reform of residual charging for transmission and distribution, for both generation and demand, to ensure it meets the interests of consumers, both now and in future; and
- keep the other 'embedded benefits'<sup>1</sup> that may be distorting investment or dispatch decisions under review.

We are launching an SCR to address our concern that the current framework for residual charging may result in inefficient use of the networks. They may drive actions from some network users that result in adverse impacts on other network users, and hence consumers in general. As a result of changes in technology and other factors, some network users are increasingly able to adjust the timing and volume of their production and/or consumption of electricity, reducing their exposure to charges. Therefore current residual charges will increasingly fall on those network users who are not able to do this. Those who are less likely to be able to adjust their consumption are likely to include residential and small business consumers in general and more vulnerable consumers in particular.

In considering changes to network charges, we are required to have regard to the objectives of the relevant charging codes, which govern network charges, and to our statutory duties. These requirements will set the framework for any decision we make. We will take a principles-based approach to our assessment of alternative approaches to residual charges. We will complement this with quantitative analysis of the likely impact of specific options.

This document does not set out specific proposals to change the other embedded benefits currently available to smaller (below 100 MW) Embedded Generation (EG) (which is connected to the distribution system). However, we will keep these under review during this SCR. If evidence emerges that these may be leading to significant distortions and consumer disbenefits, we will consider whether action, ahead of the conclusion of the SCR, would be in consumers' interests.

---

<sup>1</sup> This includes the embedded benefits remaining following our decision on CMP 264/265.

The remainder of this letter outlines the scope of the SCR, the reasons we decided to proceed and the process that we will follow. This letter should be read in conjunction with:

- our TCR consultation<sup>2</sup>;
- 'Embedded Benefits: Impact Assessment and Decision on industry proposals (CMP264 and CMP265) to change electricity transmission charging arrangements for Embedded Generators'<sup>3</sup>;
- Upgrading our Energy System – Smart Systems and Flexibility Plan<sup>4</sup>; and
- Our Strategy for Regulating the Future Energy System<sup>5</sup> published today.

In our TCR consultation, we also sought views on setting up a group for the co-ordination of charging issues. After considering responses and discussing with stakeholders, we will be setting up a new structure to facilitate better co-ordination of changes to charging arrangements, which will be called the Charging Futures Forum (CFF). This new CFF will have the aim of bringing together the various ongoing and emerging electricity network charging reviews into a joined-up work programme, to meet Ofgem's and industry's electricity network charging reform aims and deliver better outcomes for current and future consumers. A description of the CFF arrangements has been published alongside this document.<sup>6</sup>

## Scope of the SCR

'Forward-looking' network charges are designed to incentivise the efficient use of the network, and are designed to reflect network users' impact on network costs, including current and future investment costs. Residual charges are 'top up' charges set to ensure that the network's efficient costs, as determined through price controls, can be covered, after other charges have been levied. The main residual charges are the Transmission Generation Residual (TGR), Transmission Demand Residual (TDR) and the Distribution Demand Residual (DDR, also referred to as distribution scaling charges). In addition, Balancing System Use of System (BSUoS) charges are currently a form of cost-recovery charge, so are similar to residual charges.

This SCR will mainly focus on the means of recovering residual network charges from network users. How network users respond to the residual charges can affect the development and use of the energy system. This can happen if the residual charges distort the incentives provided by the forward-looking charges or encourage other behaviour to reduce exposure to charges, which could increase overall system costs. The response of network users to the incentives created by the current charging framework also affects the distribution of charges among network users, so that those who are less able to respond in ways which reduce their residual charges may pay a greater share of network costs.

It is possible that there are some incidental benefits from network users' responses to residual network charges. As part of the SCR, we will take into account the potential for negative and positive impacts that residual charges can have on consumers' wider interests.

We also consulted on reviewing the 'other embedded benefits' that arise from the different charging arrangements applied to smaller EG, compared with other generation. These are made up of different arrangements for smaller EG in terms of TDR, TGR and BSUoS charges (which are non-locational elements), and for TNUoS locational charges. We have undertaken initial analysis of forecasts of the level of the non-locational embedded benefits

---

<sup>2</sup> Targeted Charging Review: a consultation <https://www.ofgem.gov.uk/system/files/docs/2017/03/tcr-consultation-final-13-march-2017.pdf>

<sup>3</sup> <https://www.ofgem.gov.uk/publications-and-updates/embedded-benefits-impact-assessment-and-decision-industry-proposals-cmp264-and-cmp265-change-electricity-transmission-charging-arrangements-embedded-generators>

<sup>4</sup> <https://www.ofgem.gov.uk/publications-and-updates/upgrading-our-energy-system-smart-systems-and-flexibility-plan>

<sup>5</sup> <https://www.ofgem.gov.uk/publications-and-updates/our-strategy-regulating-future-energy-system>

<sup>6</sup> <https://www.ofgem.gov.uk/publications-and-updates/charging-futures-forum>

between now and 2020/21, following the implementation of CMP 264/265 Workgroup Alternative CUSC Modification 4 (WACM4). This analysis indicates that the overall level of the non-locational elements of embedded benefits will be significantly reduced from its current level.

We do not propose to make specific changes to these arrangements at this point. We will keep them under review during the SCR. We are prepared to take further action during the SCR if evidence emerges that they may create significant distortions to competition and have negative impacts on consumers' interests.

We have also considered the different approach to TNUoS locational charges for smaller EG compared to other generation, which in some places provides a benefit to smaller EG and in other places provides a disbenefit. We consider that this different treatment is significant in only a relatively small number of locations and in most locations provides broadly consistent signals as for other generation. As we are now planning to review the forward-looking signals for both transmission and distribution networks, we do not propose any immediate changes to these arrangements and to consider them as part of this work.

In developing our scope, we carefully considered the responses we received to our March 2017 consultation.<sup>7</sup> Most stakeholders agreed that we should address the potential for current residual charges to fall increasingly on groups of customers who are less able to take action to avoid these charges.

A significant proportion of respondents asked that we widen the scope of the proposed SCR, in most cases to include forward-looking charges and/or connection charges. In our strategy for regulating the future energy system, we have announced that we will also be reviewing forward-looking signals for electricity network usage. We will ensure close links between this SCR and that review work, so that there can be a holistic view of how charging may need to evolve over these areas.

Some respondents asked that we include the code modification proposals CMP264/265 in this review. We considered these requests alongside responses to the consultation on these modifications in making our decision to approve CMP264/265 WACM4.

To summarise, the scope of the SCR includes:

- residual charging for transmission and distribution, for both generation and demand; and
- keeping the other embedded benefits under review.

The scope of the SCR excludes:

- forward-looking use of system charges<sup>8</sup>;
- connection charges; and
- charging arrangements for storage. Our current thinking is that industry is best placed to bring forward modification proposals to make changes within the current charging framework. We note that at the time of this letter, two code modifications have been raised to address BSUoS and TNUoS charging for storage.<sup>9</sup> We reserve

---

<sup>7</sup> Respondents' views are summarised in Appendix 3 to this document, which can be found here <https://www.ofgem.gov.uk/publications-and-updates/targeted-charging-review-significant-code-review-launch>

<sup>8</sup> These are the charges set by forward-looking cost models that provide signals to users about their use of the transmission and distribution networks. Residual charges 'top up' the revenues from forward-looking charges where necessary, to ensure the networks recover their allowed revenues.

<sup>9</sup> CUSC mods CMP280 'Creation of a New Generator TNUoS Demand Tariff which Removes Liability for TNUoS Demand Residual Charges from Generation and Storage Users' and CMP281 'Removal of BSUoS Charges From Energy Taken From the National Grid System by Storage Facilities' The Modification aims to remove liability from storage facilities for Balancing Services Use of System (BSUoS) charges on imports'.

the option, if necessary, of bringing storage charges back into the SCR, and issuing a direction to one or more industry parties to raise modifications.

BSUoS charges recover the cost of day to day system operation of the transmission system. Generators and suppliers are liable for these charges, which are calculated half-hourly as a rate per kWh across both demand and generation users. Although BSUoS is not a top-up charge which is applied after other charges have been levied, it is similar to a residual charge since it is not currently designed to drive forward-looking behaviour. In future, BSUoS may be changed to introduce incentives to influence forward-looking behaviour. We will consider this as part of our strategy for regulating the future energy system.

If BSUoS remains a cost-recovery charge, it would make sense to consider aligning charging for BSUoS with any reformed transmission and distribution residual charging arrangements developed as part of this SCR.

### **Changes to charges for storage**

In the TCR consultation, we set out our views on some changes that we considered could address relative disadvantages for storage, compared with generation, in providing the same or similar services. We proposed not to include these changes in the SCR, but to allow the usual industry code modification processes to be taken forward.

A majority of respondents agreed that network charges for storage should be reviewed. However, views on our specific recommended changes were mixed, with only a small majority agreeing the changes we set out are the right ones to make.

Of those respondents expressing views on the process, a majority was in favour of taking any changes to current network charges for storage forward outside of the SCR.

Having considered the views expressed, we remain of the view that storage may be at a disadvantage in comparison with generation in providing the same or similar services to other parties. We think that, in order to deliver changes as quickly as possible, changes to network charges for storage should proceed through the usual code modification process, which will allow consideration of other approaches to address these issues. Two code modifications have been raised since the publication of our consultation to make changes to address BSUoS and TNUoS charging for storage.

### **Reasons for launching an SCR**

The SCR process provides a vehicle for us to initiate wide-ranging and strategic change in this area. SCRs can provide holistic solutions for cross-code issues such as those affecting both transmission and distribution residual charges. Potential changes to residual charges (including BSUoS charges) and other embedded benefits for smaller EG could have a significant impact on electricity consumers and require cross-code changes.

We have considered relying on the ongoing industry-led reviews to deliver change through the code modification process. However, based on our own analysis and responses from stakeholders, we believe that the complexity and need for coordination on residual charges and other embedded benefits make these questions less suited to an industry-led modification process.

Most respondents agreed with our view that the potential for current residual charges to fall increasingly on groups of customers who are less able to take action is something that we should address, and that an SCR is the best way to do it. This SCR will allow us to address our concerns above, and to undertake a coordinated and holistic review of these aspects of network charging with active stakeholder involvement.

## Our principles-based approach

In setting charges, we have a statutory duty to protect the interests of current and future consumers. Our understanding of the consumer interest is guided by the five consumer outcomes in our corporate strategy.<sup>10</sup>

In assessing changes to charges, we are required to have regard to the objectives of the relevant charging codes governing network charges, and to our statutory duties. These two requirements will set the framework for any decision we make. In considering the appropriate principles to guide this proposed review, we have considered the relevant code objectives, our wider statutory duties, our regulatory stances<sup>11</sup> and relevant economic theory. To be clear, our statutory duties have informed the development of the principles and do not override them. The principles provide the framework for developing policy in this area.

In seeking a better approach to residual charging, we will have regard to the potential impacts on network users and hence consumers, particularly those on consumers in vulnerable situations.

We consulted on three core principles for assessing options for residual charging:

- reducing distortions;
- fairness; and
- proportionality and practical considerations.

Respondents generally welcomed these principles, but sought additional information on how we will apply them. Some suggested additional principles. We have decided to keep the principles we consulted on. We explain how we will apply these, taking into account comments from respondents, below.

### Reducing distortions

Distortions caused by the recovery of residual charges cannot be eliminated entirely, but we think they can be reduced. In addition, some distortions can have more harmful effects on consumers than others, and some may align better than others with the development of the future energy system.

In applying this principle, we think any changes to residual charges should seek to reduce:

- the harm caused by distortions arising from residual cost recovery and in particular distortions to the signals created by the forward-looking charges. These may affect decisions on where to connect generation and demand<sup>12</sup> to the electricity networks and how the networks are used. In assessing the potential impact of distortions, we will consider both the responses that a new system of residual charges could drive, and whether the effect of users' response is likely to be harmful or beneficial to consumers' interests; and
- distortions to competition between network users. These also have the potential to increase the overall system costs borne by consumers.

In considering the effects of likely responses by users to new residual charges, we will have in mind our overall aims for an electricity system that delivers benefits for consumers, in particular sustainability, affordability and security of supply. We consider that in doing so, we should take reasonable account of the system benefits, or wider benefits, that could arise from users responding to signals from residual charges. These could include benefits

<sup>10</sup> Ofgem Forward Work Programme 2017-18

[https://www.ofgem.gov.uk/system/files/docs/2017/03/ofgem\\_forward\\_work\\_programme\\_2017-18.pdf](https://www.ofgem.gov.uk/system/files/docs/2017/03/ofgem_forward_work_programme_2017-18.pdf)

<sup>11</sup> As detailed here: <https://www.ofgem.gov.uk/publications-and-updates/ofgems-regulatory-stances>

<sup>12</sup> This includes storage and interconnectors.

from new forms of flexibility that can reduce network and system costs, energy efficiency and carbon benefits. We think that our overriding duty to promote the interests of current and future consumers requires us to do this. We do not propose to add additional principles to the SCR to include aims related to any specific technologies or business models.

### Fairness

In line with our primary duty to electricity consumers, we are considering 'fairness' as it applies to, and between, end-consumers. However, as network charges are not currently directly levied on most end-consumers, we think that fairness of network charges to suppliers can be seen as a proxy for fairness to consumers. These network charges are either levied directly on suppliers or borne by suppliers through transactions with other network users.

Some respondents to the consultation suggested we should have a principle of fairness to industry parties. We think that reasonable treatment of industry parties is appropriately covered under our 'reducing distortions' principle, and under proportionality and practical considerations, which will include consideration of the potential effects of material changes to charges. We are therefore focusing under this principle on fairness to, and between, end-consumers of electricity.

We will give specific consideration to fairness in respect of residential and microbusiness consumers in general and consumers in vulnerable situations in particular. Electricity networks are natural monopolies, which provide an essential service. This makes it crucial that we have regard to distributional effects when considering changes to our network charging framework. Given that overall residual charges are broadly fixed (in the near term), any changes may reduce bills for some network users and increase bills for others. We will give careful consideration to the impacts on consumers in vulnerable situations.

### Proportionality and practical considerations

We will aim to be proportionate in considering changes to residual charges. Implementing changes has intrinsic costs, as well as potentially increasing some users' charges and reducing others. We will consider whether these costs are justified by the estimated value to consumers of reducing distortions, and by achieving a distribution of charges that is considered fairer, in deciding whether to make changes. This consideration will include the question of whether to make changes for some users, but not others.

In principle, it is preferable for network charges to be predictable as far as possible. We intend to reduce the extent to which some users' relative contributions change materially as a result of other users' decisions.

In addition to the principle of proportionality, we will also have regard to practical considerations. Different options for residual charging may require different metering arrangements, for example. We will take account of the availability of metering information, along with wider implementation costs, and the desirability of simplicity in tariff structures.

### **Process and timeline**

Changes resulting from the Code Governance Review (Phase 3) give us three process options for an SCR (and the ability to move between certain options):

- i. **Ofgem directs licensee(s) to raise modification proposal(s).** At the end of the SCR phase of the process we would issue a direction to the relevant licensee(s). Our direction may set out high-level principles (with the detail to be developed by industry) or more specific, detailed conclusions to be given

effect through code change(s). The modification(s) would follow the standard industry code modification processes.

- ii. **Ofgem raises modification proposal(s).** At the end of the SCR phase of the process we would raise a modification(s) under the relevant code(s), and the modification(s) would follow the standard industry code modification processes.
- iii. **Ofgem leads an end-to-end process to develop code modification(s).** The standard industry process for modification proposals would not apply; Ofgem would lead consultation and engagement needed to develop the appropriate code change(s). We would expect close involvement of the industry; for example, we may establish and lead workgroups similar to the approach under the standard industry code modification processes (but led by us).

Of the three process options, we have selected the first option: (i) Ofgem directs licensee(s) to raise modification proposal(s). We think this offers the right balance between Ofgem leadership on these important charges, and industry expertise in developing and drafting modifications. We also note that there is scope to review this approach during the SCR, if it appears that another approach would better deliver benefits for consumers.

Now that we have launched an SCR, new modification proposals that cover similar ground to the SCR may not proceed through the standard industry modification process. Only urgent proposals or those specifically exempted by us will be allowed to proceed through the code modification process. The progress of current modifications that overlap with areas covered by our SCR will be considered by the relevant workgroups, Code Panels and Ofgem as appropriate under the provisions of the relevant code, and under the new CFF.

Below we outline the timeline we expect to the SCR process to follow. We would seek to progress the work as quickly as possible, consistent with running a good process.

1. Publish residual charges working paper - **Q4 2017** (calendar year)
2. Publish draft Impact Assessment and minded to decision on any proposed new residual charging arrangements - **Q2 2018**
3. Publish decision and final Impact Assessment on any new residual charging arrangements - **Q3 2018**

If we think that changes to residual charges would be in consumers' interests, we expect to consult on those, with a draft Impact Assessment, in Q2 2018. Following consultation, if we conclude that our proposed changes or others should be made, we expect to implement this decision by directing one or more licensees to raise one or more modifications. We would aim to do this in Q3 2018.

We believe that the final phase of the TCR should be led by industry through working groups and code panel meetings. We would expect to be in a position to make a final decision on the resulting modifications by **early 2019** in order for new arrangements to come into effect from the **2020/2021 charging year**<sup>13</sup>.

**Frances Warburton**

**Partner, Energy Systems**

---

<sup>13</sup> We recognise that there are different notice periods for making changes to transmission and distribution charges and we will consider whether changes can be brought in at the same time, for example by considering a derogation to the 15 month notice period for changes to distribution charges.