

## CUSC Direction

### **Direction issued by the Gas and Electricity Markets Authority (the Authority) to National Grid Electricity System Operator Limited (NGESO) in relation to the Significant Code Review under the Targeted Charging Review**

On 4 August 2017 the Authority published a notice pursuant to Standard Licence Condition (**SLC**) C10 of the transmission licence granted to NGESO under section 6(1)(b) of the Electricity Act 1989 and Section 8.1.4(a) of the Connection and Use of System Code (**CUSC**) that it was commencing a Significant Code Review (**SCR**) under the Targeted Charging Review (**TCR**), setting out the scope of the SCR and the reasons why it considered it to be appropriate.

On 21 November the Authority published its conclusions on the TCR SCR (the **TCR Decision**).<sup>1</sup> In that document the Authority indicated it was issuing a Direction to NGESO in relation to the TCR SCR in respect of the raising of one or more CUSC modification proposals to modify the Use of System Charging Methodology in Section 14 of the CUSC and associated provisions.

In accordance with paragraph 6C(a) of SLC C10 and Section 8.17.6(a) of the CUSC the Authority hereby directs NGESO to raise one or more code modification proposals in the terms and for the reasons set out in the Annex hereto (the **Direction**). The Authority directs that NGESO raise the necessary code modification proposal(s) in sufficient time to enable the modifications to be effective as of 1 April 2021.

This Direction<sup>2</sup>, together with the TCR Decision, constitute notice pursuant to section 49A (Reasons for decisions) of the Electricity Act 1989.

#### **Andy Burgess**

Deputy Director, Energy Systems Transition

Signed for and on behalf of the Authority

21 November 2019

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<sup>1</sup> Further background to the TCR SCR can be found in the TCR Decision.

<sup>2</sup> Unless the context otherwise requires, words or expressions in these Directions have the meaning ascribed to them in the CUSC.

## **Annex**

### **Direction issued to NGESO in relation to the TCR SCR**

The Direction to bring forward proposals to modify the CUSC is in relation to:

1. Residual Charges; and
2. Non-locational Embedded Benefits.

#### **Reasons for the Direction**

- 1) The reasons for the Direction are set out in the TCR Decision and the associated Impact Assessment and should be read in that context. Without prejudice to the generality of the reasoning set out in the TCR Decision and for ease of reference, we refer below to particular elements of that reasoning in relation to specific elements of the Direction.
- 2) In particular, the Authority considers for the reasons set out in Chapter 3 (Decision on Residual Charges) and Chapter 4 (Decision on 'non-locational' Embedded Benefits) of the TCR Decision that proposals should be developed to:
  - i) reform the residual charging provisions;
  - ii) set the Transmission Network Use of System (TNUoS) Generation Residual to zero (subject to ensuring ongoing compliance with EU Regulation 838/2010); and
  - iii) reform the basis on which balancing services charges are applied to suppliers so that they are charged on the basis of gross demand measured at the Grid Supply Point (as opposed to being charged on the basis of net demand).
- 3) These reforms are to ensure that network costs are recovered fairly from network users and to reduce harmful distortions which impact competition and the efficiency of the electricity market.

#### **Terms of the Direction**

- 4) The Authority hereby directs that NGESO must raise one or more proposals to modify the CUSC (the **Proposal(s)**) in accordance with the relevant terms specified below in sufficient time to enable the Proposal(s) to be effective as of 1 April 2021. NGESO must not withdraw such Proposal(s) unless it has first obtained the Authority's consent to do so.
- 5) Consistent with the reasons for the Direction specified in the TCR Decision, the terms are intended to enable NGESO and industry to bring forward relevant proposals to modify the CUSC under the Proposal(s) with a view to addressing the respective issues identified below.

## Issues: Residual Charges

- 6) The issues that are to be resolved with the reform of the residual charges as they relate to consumers subject to TNUoS residual charges are explained in Chapter 3 of the TCR Decision (Decision on Residual Charges) in particular, paragraphs 3.3 to 3.5.
- 7) Residual charges are levied once forward-looking charges have been applied, to recover the remaining allowed revenue for network companies set under the Authority's price controls. Under the current charging system, there are incentives to reduce exposure to residual charges. One of the actions that a network user can take to reduce exposure is through installing and usage of on-site generation. Residual network charges can distort investment and operational decisions and in so doing increase system and consumer costs. There is also an adverse effect on consumers when charges fall increasingly on users who are least able to change their energy usage, for example those who do not have on-site generation.
- 8) In summary, the issue is to ensure that network costs are recovered fairly from network users, in a way which reduces harmful distortions.
- 9) These issues relate to the furtherance of the Applicable CUSC Objectives, as provided in paragraph 5 of SLC C5 and paragraph 6 of SLC C10.
- 10) Transmission-connected sites are likely to have a relatively narrow percentage range in size compared to other voltage levels, so the term of the Direction is for a single transmission band. It is acknowledged that there may be small numbers of substantially smaller sites connected, for example as part of complex sites or private networks. Therefore, the Authority considers it desirable that consideration is given to whether alternative options, for example as regards transmission banding are considered preferable.
- 11) There may be circumstances in which there is merit in consumers being reallocated to a different residual charging band. For example, where there has been a significant change in use. Therefore, the Authority considers it desirable that consideration is given to the need for an exceptions process to enable consumers to apply for reallocation to a different charging band.
- 12) Currently, there is no distinct TNUoS residual charge calculated for those demand consumers charged on a non-half hourly basis, as distinct from a forward looking component of the charge. In order for the applicable residual charges to be apportioned between half hourly and non-half hourly consumers under these reforms, a new approach will require to be devised. The Authority is willing to consider an alternative approach under which the TNUoS charge for half hourly consumers would continue to be calculated as per the applicable charging methodology and for that charge to be treated in its entirety as the residual charge.

## Terms: Residual charges

13) The Proposal(s) must set out:

### Final demand

14) that applicable TNUoS residual charges must be applied to final demand consumers only.

15) the definition of 'final demand' is as follows, "*Final Demand means electricity which is consumed other than for the purposes of generation or export onto the electricity network*". Therefore, generation only and storage only sites will not pay residual charges.

### Single site

16) that the fixed residual charge is to be levied on a single site basis;

17) the definition of 'site', having regard to paragraph 3.54(10) of the TCR Decision.

### Fixed charge – transmission-connected consumers

18) that there will be a single fixed TNUoS residual charge for transmission-connected consumers.

### Fixed charge – distribution-connected consumers

19) that there will be a single fixed TNUoS residual charge for domestic LV-connected consumers; and

20) that there will be a set of single fixed TNUoS residual charges for distribution-connected consumers for each of the following distribution-connected groups (except unmetered supplies):

- a. EHV-connected consumers;
- b. HV-connected consumers;
- c. Non-domestic LV-connected consumers with an agreed capacity as the basis for their current charge; and
- d. Non-domestic LV-connected consumers without an agreed capacity.

21) the fixed TNUoS residual charge that will apply to consumers within each of the above groups will be determined by reference to the charging band to which they are allocated as set out in paragraph 22 below.

### Charging bands – non-domestic distribution-connected consumers

22)

- a. that there will be four charging bands for each of the non-domestic distribution-connected consumer groups (set out in paragraph 20 a to d above), the boundaries for which will be set at the 40th, 70th and 85th percentiles; and
- b. that the percentiles for each band boundary will be determined by consumer numbers on a GB-wide basis on the basis of:

- i. increasing agreed capacity levels for consumers connected to the EHV and HV distribution networks and LV-connected consumers with an agreed import capacity; or
- ii. increasing net consumption volumes for LV-connected consumers without an agreed capacity.

23) that the band boundaries for distribution-connected consumers will be established on a GB-wide basis and consumers will be allocated to bands based on industry agreed capacity where available, or final consumption data, as applicable. In setting and allocating users to charging bands, regard must be had to paragraph 3.54(9) of the TCR Decision relating to redundant connection capacity.

24) that the data to be used for consumer allocation will relate to and be averaged over a period of no less than 24 months prior to the setting of the applicable residual charges, or longer if the requisite data can be made readily available at proportionate cost.<sup>3</sup> For any consumers for whom data is not available for a period of 24 months, the process for new consumers in paragraph 25 below is to be followed.

25) that a process must be established to allocate 'new' consumers and consumers for whom the appropriate data is not available to the relevant charging band, based on an assessment of their agreed capacity or consumption, as applicable. The process shall make use of such information as is available to best estimate the expected usage of the consumer, for example, by taking an average of all of the data that is available, or based on an understanding from such sources as are considered appropriate of the typical profile of a similar consumer.

#### Unmetered

26) that TNUoS residual charges for unmetered consumers will be derived considering their net consumption volume or agreed capacity, on the basis of their 'profiled' demand and the applicable charging methodology.

#### Allocation of TNUoS residual charges

27) that applicable residual charges for consumers are allocated to the different voltage levels, according to the total net consumption volumes of all consumers at each voltage level.

28) that residual charges for each voltage level are allocated further to charging bands according to the total net consumption volumes for all consumers in each charging band.

29) that the allocated proportion of the residual charges for each charging band is divided equally among all consumers in that band with all consumers in a charging band paying the same level of fixed charge.

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<sup>3</sup> Based on data aggregation needs currently outlined in the Balancing and Settlement Code.

30) that allocation to unmetered supply will be by net volumes.

31) a suitable allocation of TNUoS residual charges between consumers charged on a half hourly basis and non-half hourly basis. The total residual is to be recovered from demand consumers, apportioned between half-hourly charged and non-half-hourly charged demand consumers in proportion to their respective contributions to net consumption volumes.

### Disputes

32) an appropriate process to manage any disputes in relation to consumers' residual charges, using and building upon (as necessary) any disputes processes already in place in the relevant industry code(s) and ensuring that the process should be efficient and proportionate. In developing the process, NGENSO must consider any data which may be needed to support this process and ensure the process has clear interfaces with such other processes as may be relevant.

### Further arrangements

33) appropriate arrangements to develop the following:

- a. the frequency and relevant units of the fixed charge, considering a proposal of a pence/site/day structure;
- b. the mechanism to identify which sites should be classified as final demand for the purposes of determining residual charges. In doing so, NGENSO must have regard to paragraph 3.55(2) of the TCR Decision;
- c. any consequential changes that may be required in relation to residual charges for Independent Distribution Network Operators (IDNOs), consumers connected to private wire and complex sites, noting that the Authority expects that the IDNO charging (which operates via a Relative Price Control) to continue to function as it does today; and
- d. the systems and processes to implement the Proposal(s). In doing so NGENSO must have regard to paragraph 3.55(4) of the TCR Decision.

### Reviewing charging bands

34) appropriate arrangements to review the charging bands to ensure they remain fit for purpose, reflecting the requirements set out in paragraphs 3.54(11) and 3.57 to 3.58 of the TCR Decision.

### Specific issues for NGENSO to consider

35) such alternative modification proposals as it considers necessary following an assessment of whether there should be more than one band for TNUoS residual charges for transmission-connected consumers for example on account of issues arising with very small users being connected at higher voltage (see paragraph 3.56(1) of the TCR Decision), having regard to:

- a. whether there should be a similar approach to banding as for extra-high voltage (EHV) distribution-connected consumers; or
- b. an exceptions mechanism for very small or complex sites.

36) such alternative modification proposals as it considers necessary following consideration of whether there should be mechanisms available for dealing with situations where there have been changes in use or ownership of a site. This should include an exceptions process to apply for reclassification of a user to another band in tightly defined circumstances, where substantial changes in usage occur, resulting in significant changes in the level of agreed capacity required (having regard to paragraph 3.56(3) of the TCR Decision).

37) such alternative modification proposals as it considers appropriate as regards the calculation of the TNUoS residual charges for non-half hourly consumers, in particular whether the TNUoS charge should continue to be calculated as per the applicable charging methodology and treated as the residual charge in its entirety (without a distinct forward looking component of the TNUoS charge for those consumers as directed above).

### General requirements

38) In preparing the Proposal(s), NGESO must:

- a. work and cooperate with the DNOs (who are subject to a similar direction to bring forward a proposal to modify the Distribution Connection and Use of System Agreement (DCUSA) to give effect to the TCR Decision (the DCUSA Direction)) to ensure that a consistent approach is taken to issues or matters common to both directions and to facilitate the timely progression of their respective code modifications proposals. Issues or matters common to both directions include, but are not limited to i) final demand; ii) single site; and iii) the review of charging bands. Such co-operation might include (but would not be limited to) participation in the working groups for the modification proposals being developed under the respective directions;
- b. include such modifications to Section 11 (Interpretation and Definitions) of CUSC and any other associated provisions as required as a result of the Proposal(s); and
- c. have regard to (and to the fullest extent practicable comply with) the SCR Decision Principles as defined in paragraphs 3.50 of the TCR Decision.

39) In order to ensure that the Proposal(s) is capable of implementation by 1 April 2021, the Authority directs NGESO to present a detailed plan, no later than 21 December 2019 or such later date with the approval of the Authority, setting out how it intends to work with DNOs and other relevant industry stakeholders to ensure that the Proposal(s) is /are submitted to the Authority (for decision) in good time to allow for implementation of the relevant code modifications by 1 April 2021.

### **Non-location Embedded Benefits**

#### **Issues: Embedded Benefits**

- 40) The issues that are to be resolved in relation to the reform of the Embedded Benefits are explained in Chapter 4 of the TCR Decision (Decision on 'non-locational' Embedded Benefits), in particular at paragraphs 4.1 to 4.4.
- 41) The current arrangements are causing a number of distortions, most obviously to competition between smaller distributed generators (those under 100MW connected to the distribution network) and larger generators (those over 100MW and connected to the transmission or distribution network). The two distortions (referred to as 'Embedded Benefits') that are to be addressed as part of the Proposal(s) are summarised in paragraphs 42 and 43 below.
- 42) Smaller distributed generators are not liable for TNUoS Generation Residual charges. The current interpretation of EU Regulation 838/2010 means that the TNUoS generation residual (**TGR**) is now a credit or tariff reduction. Such credits are received by transmission-connected generators and larger distribution connected generators only.
- 43) Suppliers' balancing services charges are currently levied on a 'net' demand basis at the point the transmission network meets the distribution network. In some cases, suppliers effectively receive a discount on their balancing services charges for contracting with smaller distributed generators as this has the effect of reducing their net demand. The majority of these discounts are passed onto smaller distributed generators in the form of payments from suppliers.
- 44) These 'Embedded Benefits' distort competition (most obviously between generators) and do not reflect any difference in the value provided or the cost imposed on the electricity network system.

### **Terms: Embedded Benefits**

- 45) The Proposal(s) must set out proposals to modify the Use of System Charging Methodology, Section 14 of CUSC to set the TGR to £0, subject to ensuring ongoing compliance with EU Regulation No 838/2010 (in particular, the requirement that average transmission charges paid by producers in each Member State must be within prescribed ranges – which for Ireland, Great Britain and Northern Ireland is 0 to 2.50 EUR/MWh). This should be achieved by charging generators all applicable charges (having factored in the correct interpretation of the connection exclusion as set out in EU Regulation 838/2010), and adjusted if needed to ensure compliance with the 0 to 2.50 EUR/MWh range.
- 46) NGESO must work in conjunction with the relevant industry workgroup(s) in place for CMP317<sup>4</sup> (and provide such input as appropriate) to seek to ensure that any impact on

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<sup>4</sup> CMP317 is CUSC Modification Proposal 317: 'Identification and exclusion of Assets Required for Connection when setting Generator Transmission Network Use of System (TNUoS) charges'.

that modification proposal by the TCR Decision is addressed in a manner that does not undermine NGESO's ability to comply with its obligations under this Direction. In doing so, the Proposal(s) must set out proposals for an appropriate adjustment charge to ensure compliance with the EU Regulation 838/2010, if NGESO considers it necessary (see paragraphs 4.76 to 4.78 of the TCR Decision).

- 47) The Proposal(s) must set out proposals to modify the Use of System Charging Methodology, Section 14 of CUSC regarding the basis on which suppliers' balancing services charges are applied. In particular, such charges are to be applied using gross demand measured at the Grid Supply Point, having the effect of removing the Embedded Benefit that enables the offsetting of Suppliers' net demand and in turn, a reduction of liability for balancing services charges. This will remove payments from suppliers to smaller distributed generators for this service.
- 48) The Proposal(s) must set out proposals to modify Section 11 (Interpretation and Definitions) of CUSC to introduce and/or adjust any terms and definitions and any other associated provisions as required as a result of the Proposal(s).

### **Miscellaneous Terms**

- 49) For the avoidance of doubt, the Proposal(s) put forward by NGESO pursuant to this Direction are intended to facilitate and not preclude (a) any further consideration of the relevant issues; and / or (b) development of the Proposal(s) under the CUSC Modification Process so that it addresses the issues identified above in a way that better achieves the purposes and objectives of the Proposal(s) as set out in these directions.
- 50) In addition to the Proposal(s) NGESO must raise any such consequential proposals for modification to the CUSC or other industry codes (to the extent NGESO is able to raise modifications to such codes), as are required for the purpose of giving effect to the proposals specified above.
- 51) Modification proposals developed pursuant to this Direction must serve the TCR SCR objectives and relate to the specific issues the TCR SCR seeks to address.
- 52) In order to keep the Authority apprised of progress under this Direction (in particular, but not limited to progress against the detailed plan referred to in paragraph 39 above), the Authority directs NGESO to advise it (in a timely manner) of potential issues arising which could prevent the Proposal(s) being effective as of 1 April 2021 along with information as to its proposed steps to address any such issues.