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19 September 2019

Dear Andrew,

**Northern Powergrid's response to Ofgem's open letter on 'Future Charging and Access programme - consultation on refined residual charging banding in the Targeted Charging Review'**

We welcome the opportunity to respond to Ofgem's revised proposals for reform of the 'residual' elements of use of system charges and have focused our response on the distribution network charging elements of the open letter, where we can provide more insight.

It is good to see that Ofgem has continued to evolve<sup>1</sup> its thinking. We continue to agree with Ofgem that fixed charges are appropriate for smaller (i.e. non-half hourly (NHH) settled) customers, but we believe this should apply to some smaller non-domestic customers as well. However, we strongly retain the belief that residual 'costs' for larger half-hourly (HH) metered customers should be recovered via capacity charges.

We firmly believe that Ofgem's revised proposals are fundamentally flawed for non-domestic customers. They are impractical to implement, in places, and are at odds with the Targeted Charging Review (TCR)'s guiding principles. Ofgem has failed to build on good initial engagement with industry to ensure its revised proposals will avoid undue distortions and are fair, proportionate and practical.

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<sup>1</sup> Since Ofgem's November 2018 minded to decision:

[https://www.ofgem.gov.uk/system/files/docs/2018/11/targeted\\_charging\\_review\\_minded\\_to\\_decision\\_and\\_draft\\_impact\\_assessment.pdf](https://www.ofgem.gov.uk/system/files/docs/2018/11/targeted_charging_review_minded_to_decision_and_draft_impact_assessment.pdf)

We understand that, in these revised proposals, Ofgem is attempting to better recognise the diverse range of larger HH customers. This is in line with our response to Ofgem's minded to decision<sup>2</sup>, but there is clear scope to improve the proposals significantly.

We highlight below our key points on Ofgem's latest thinking:

- We agree that, regardless of how residual costs are recovered from different customer segments, the costs should be allocated to those segments using a common approach. Whilst we believe there are better alternatives to the use of net consumption, we agree this is a reasonable approach and understand why Ofgem favours it.
- Ofgem's proposed 'banding' of non-domestic customers is overly complicated and flawed in places. The proposals introduce a number of additional segments and risk creating, rather than reducing, distortions at the boundaries of the banding within voltage levels. The bandings would require periodic review, so creating volatility, and it is not clear whether the banding would be common across all distribution network operators (DNOs). Ofgem's minded to decision, which was based on segmentation for low-voltage (LV) and high voltage (HV) customers relative to their respective Common Distribution Charging Methodology (CDCM) tariff, was much better. This approach minimises the number of segments and removes the need for periodic review to ensure the segmentation remains fit for purpose. As this is already a well understood and, consequently, well-established methodology for market segmentation, it should be retained.
- A fundamental issue with Ofgem's proposed banding is that DNOs do not have the data necessary to allocate all customers based on the proposed approach. Only energy suppliers and their agents<sup>3</sup> have the necessary data to achieve the banding for some (i.e. small non-domestic) customers. Consequently, in the absence of the DNOs receiving the necessary data, Ofgem's proposals are either unfeasible or require a non-DNO party to allocate customers to the bands before a DNO can allocate the residual.
- We disagree that a "form of revenue reconciliation" is needed. Use of system charges are calculated on an ex-ante basis and any variation in assumptions represents a revenue recovery risk, which is mitigated by the price control settlement.
- Ofgem has refined its definition of 'final demand' to include all types of generation, generally being all electricity that is not used for the purpose of export. Whilst we agree that the type of generator should not be a distortion, we are concerned that industry code modifications<sup>4</sup> have progressed to exempt storage only from paying residual charges and only for standalone sites. Implementation of Ofgem's policy intent

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<sup>2</sup> See the 'response documents' here: <https://www.ofgem.gov.uk/publications-and-updates/targeted-charging-review-minded-decision-and-draft-impact-assessment>

<sup>3</sup> Specifically: data collector and data aggregators.

<sup>4</sup> At distribution, the relevant modifications are Distribution Connection and Use of System Agreement (DCUSA) change proposal (DCP) 341 '*Removal of residual charging for storage facilities in the CDCM*' and DCP 342 '*Removal of residual charging for storage facilities in the EDCM*'

will be a significant challenge and non-storage generators and any co-located generation sites will be unfairly affected by this until an appropriate solution is identified<sup>5</sup>. Any decision to exempt any customers from paying residual charges will also inevitably result in all other customers paying more as a result<sup>6</sup>.

We expand on the relevant points below.

### **Allocation of residual revenue to customer segments**

It is important that the mechanism by which residual revenue recovery is allocated to customer segments is consistent across all segments. This is to ensure that the contributions from different customer segments are not skewed by the use of different allocation mechanisms.

We believe that the mechanism, by which this allocation to customer segments is achieved, should aim to reflect the proportion of the existing network which exists to serve each segment. This will meet Ofgem's 'justifiability' test.

Ofgem's revised proposal is to allocate the residual to customer segments based on net consumption, regardless of how the residual is then recovered. This was not clear in Ofgem's minded to decision, other than it would be used for the fixed charge approach. This approach has the benefit of consistency with the status quo and, therefore, minimises any disturbance in the allocation of the residual to customer segments. However, it is not necessarily the most cost-reflective approach.

We remain of the view that a more appropriate mechanism would be to determine each segment's contribution to peak(s) on the system (i.e. because system peaks drive the size of the network and it costs much more than net consumption). That said, however, the proposed approach is transparent and easy to understand, whilst minimising the potential disturbance to customers.

### **Recovery of residual revenue within each segment - domestic and unmetered**

For unmetered customers, we agree that residual charges for these customers should continue to be recovered via a volumetric charge based on profiled consumption data. This is the only feasible option.

For domestic customers, we agree that the residual should be recovered on a fixed charge basis. We also note that some respondents have raised concerns about potential impacts on low consuming and vulnerable domestic customers and about the implications of charging domestic customers with Economy 7 meters more than other households. In response to this, Ofgem appears to be considering the appropriate approach to segmentation of domestic customers, including the combination of all customers into one charging band. Different treatment of domestic customers would not align to the implementation of Distribution

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<sup>5</sup> Distortions between types of generation are subject to the implementation of existing relevant code modifications (see footnote 4). Until further modifications are raised to ensure it is not only storage generators which are exempt from residual charges, and not just standalone sites, a distortion will be created if the existing code modifications are implemented.

<sup>6</sup> Where the residual represents an increase in charge, as per the vast majority of DNOs.

Connection and Use of System Agreement (DCUSA) change proposal (DCP) 268 '*DUoS Charging Using HH Settlement Data*'. DCP 268 has been approved by the Authority, will be implemented in April 2021 and removes the distinction between domestic unrestricted and two rate (Economy 7) tariffs, replacing it with a single domestic tariff with time of use pricing.

#### **Recovery of residual revenue within each segment - non-domestic**

Ofgem's minded to decision did not properly recognise the diversity of customers within some segments, particularly for larger customers. We are pleased to see that Ofgem has given this further consideration.

We note that, in Ofgem's revised proposals, it proposes that non-domestic segment boundaries ('banding') are set in terms of agreed capacity levels for users at higher voltages (HV and extra-high voltage (EHV) - where this data is widely available) and net consumption levels for LV customers. The residual charges would then be recovered on a fixed charge basis in each banding. Ofgem previously defined customer segments by line loss factor class (LLFC)<sup>7</sup>, but its intention in doing so was to define LV and HV segments by the CDCM tariff<sup>8</sup>. We think that the changes to this proposal are a significant mistake.

Ofgem's revised approach is fundamentally flawed and is a considerably more complicated means of allocating costs to facilitate cost recovery which, in principle, benefits from a simple, transparent, and predictable approach. Ofgem's revised approach is detrimental to all of these measures. Ofgem proposes to create new boundaries in addition to those that exist in the current methodologies, which are already clearly defined and well understood by industry. These types of boundaries inevitably lead to 'gaming' of the system, which will ultimately result in costs being unfairly increased for the majority of customers. This is the underlying distortion that the TCR is seeking to address.

In its open letter, Ofgem states that it thinks that "*boundaries should be designed to avoid undue discrimination as far as possible between similar users*" and that "*Setting a low number of segments ... should help reduce incentives to change behaviour further*". In addition to the domestic and unmetered segments, Ofgem's revised proposals include five LV non-domestic segments and a further five HV and EHV segments combined resulting in 15 non-domestic charges in total when HV and EHV are separated (i.e. 17 proposed segments overall, as a minimum). This is significantly more than the status quo<sup>9</sup> of five non-domestic segments in total (including EDCM as a single segment), plus one for domestic<sup>10</sup> and one for unmetered (i.e. seven segments overall). Ofgem's latest thinking is clearly contradictory and at odds with the

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<sup>7</sup> Ofgem has since (elsewhere) recognised that not all DNOs have a one-to-one mapping of LLFCs to customer tariffs in the CDCM like we do.

<sup>8</sup> EHV Distribution Charging Methodology (EDCM) customers were considered by Ofgem to represent a single segment.

<sup>9</sup> Based on the DCP 268 tariff structure.

<sup>10</sup> Includes the 'related MPAN' tariff, which is identical other than no fixed charge is applied. Likewise for the non-domestic segments, the status quo is based on a single non-domestic aggregated tariff, which includes the related MPAN equivalent to count as one segment.

TCR guiding principles, in particular to reduce harmful distortions and to be proportionate and practical.

This increase in the number of charges may be further exacerbated depending on the outcome of the Access and Forward Looking Charges Significant Code Review, specifically the potential to introduce more locational use of system charges.

Additionally, a mechanism would be required for reviewing and updating the charging bands to ensure that they remain fit for purpose and are representative of the latest market developments. This has the potential to introduce further harmful distortions, should parties decide to 'game' into which band customers fall. It would also introduce the potential risk that customers may request the maximum capacity in a particular band rather than requesting the capacity they actually require<sup>11</sup>.

Maintaining segmentation in line with Ofgem's minded to decision would avoid the need to update the banding, where customers are (relatively) dynamically allocated by LLFC to the segment to which they should belong, and customers will transition from NHH to HH settlement naturally where, eventually, no residual charge would be allocated to NHH segments, even if the segments remain.

It is not clear from Ofgem's revised proposals whether or not the banding would apply consistently to all DNOs. Any approach which is not common to all DNOs represents a step backwards. It would introduce unnecessary complexity beyond that which the proposals already represent. If Ofgem pursues its revised proposals, which we believe it should not, banding should be considered based on all DNO data, and not just one.

#### **Allocating customers to the proposed non-domestic bands**

Ofgem proposes to use capacity data, where it is widely available, and net consumption data, where it is not. For small non-domestic customers, where net consumption is required to determine the band, DNOs do not have access to individual data in order to achieve this. DNOs only receive aggregated data. Consequently, the only industry parties who would be able to allocate such customers to bands would be the suppliers and their agents. Hence, such an approach is unfeasible and does not better achieve any of the TCR guiding principles.

#### **Use of capacity charges to recover the residual**

We remain of the view that customer segments for larger users are naturally sub-segmented into customers of different sizes based on the agreed capacity each customer has with the DNO. A capacity charge recovery mechanism naturally differentiates between sizes of customer within those segments and could be easily implemented within the current charging structure.

Additionally, adopting an approach whereby the residual is recovered on an agreed capacity basis is highly-unlikely to introduce any harmful distortions and is reflective of the actual use of the network without averaging across charging bands. It would not necessarily be a bad

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<sup>11</sup> Albeit customers would face higher agreed capacity charges as a result, despite the same residual charge.

outcome, if customers did try to reduce their agreed capacity to avoid residual charges. In fact, it would be a good thing for the network as a whole as it would free up capacity to be used by other customers. However, it would be unfair that, in reducing its agreed capacity, a customer is later moved into a different (more expensive) charging band following a periodic review of the banding.

We are concerned that Ofgem's proposed banding of non-domestic customers and use of fixed charges will create, rather than reduce, harmful distortions. Ofgem proposes to introduce thresholds which will incentivise customers to reduce capacities/consumption marginally, while being of substantial benefit to them from a lower annual charge. This introduction of selective distortion is clearly evident within the proposed bands for each voltage where a movement of  $\pm 1\text{kWh}$  or  $\pm 1\text{kVA}$ , at the outliers, attracts the potential for charges to swing by approximately  $\pm 230\%$  on average<sup>12</sup>. At the extreme, an EHV customer with a capacity of 12,001kVA compared to 12,000kVA will see an increase in charge of approximately £670k (c.390%) per annum. A change of  $\pm 1\text{kWh}$  or  $\pm 1\text{kVA}$  in the mid-range of a band will have no impact. Recovering the residual via capacity charges for larger users would provide an opportunity for a customer to amend its agreed capacity, as is the case now, but it would not, in isolation, result in that customer moving into a different segment.

### Revenue reconciliations

Ofgem expects that a form of revenue reconciliation will likely be needed. We disagree, certainly for DNOs. DNOs set use of system charges based on various assumptions, including (but not limited to) forecast allowed distribution network revenue and forecast volumes (consumption and customer numbers) and capacities per segment. DNOs have a licence obligation<sup>13</sup> to change use of system charges with effect from 1 April only and an obligation under the DCUSA to provide 15 months' notice of changes to such charges. DNOs are held to assumptions made well in advance of when charges are actually applied.

Consequently, DNOs are exposed to risk of the assumptions, which includes the forecast of net consumption over two winter periods, and forecasts of customer numbers and, where relevant, agreed capacities being inaccurate. These risks are not always in absolute terms but may also appear due to failure to anticipate when customers transition between segments<sup>14</sup>.

This risk ultimately determines a DNO's regulated distribution network revenue. Such risk is mitigated by the price control settlement and, specifically, the annual correction mechanism, which operates in perpetuity and ensures that DNOs have an appropriate mechanism to recover any revenue, which is allowed but was not recovered and vice versa. We do not believe a further mechanism is required, which would introduce confusion and risk to consumers unnecessarily.

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<sup>12</sup> For non-domestic bands the average change is c.330% LV, c.170% for HV, and c.185% for EHV.

<sup>13</sup> Standard licence condition 14 '*Charges for Use of System and connection*' (SLC14), paragraph 12 part (c).

<sup>14</sup> For example, Balancing and Settlement Code (BSC) change P272 '*Mandatory Half Hourly Settlement for Profile Classes 5-8*', and associated other code changes, presented a significant challenge, not least in forecasting when customers would be migrated to HH settlement.

## Definition of final demand

Whilst we believe it is appropriate to treat all generation the same, exempting all final demand from residual charges presents practical challenges, which will no longer be addressed by existing code modifications, following changes in scope.

The most significant challenge, which again the existing code modifications do not address, is the treatment of co-located generation. To exempt co-located generation final demand from residual charges, it will be necessary to disaggregate demand consumption from behind the same meter. This presents metering challenges to avoid double-counting demand. This remains an unpractical option.

However, recovering residual charges on a capacity basis, for larger users, mitigates this issue. Generators would be subject to residual charges for only a very small import capacity. Different treatment is likely to be required for storage sites, where there will typically be a more significant import capacity requirement. Whilst our view remains that different types of generators should be treated consistently, this aligns neither to Ofgem's policy intent and nor to the code modifications which have been raised by industry to implement it (in part).

I hope that this response is helpful and please do not hesitate to contact me should you have any queries on any of the points raised.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Lee Wells', with a horizontal line underneath.

Lee Wells

Commercial Manager - Regulated Revenue