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By email: [TCR@ofgem.gov.uk](mailto:TCR@ofgem.gov.uk)

Dear Andrew

**TARGETED CHARGING REVIEW: MINDED TO DECISION AND DRAFT IMPACT  
ASSESSMENT**

Thank you for the opportunity to respond to the consultation on changes to the way Ofgem recover the costs of the networks used to transport electricity to homes, public organisations and businesses.

Appendix 1 contains our responses to the specific questions raised in the consultation. We hope you find our comments helpful. Please contact us if you would like further detail.

Yours sincerely

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**Question 1**

*Do you agree that residual charges should be levied on final demand only?*

SWW agrees that residual charges should be levied on final demand unless the localised grid is dominated by generation that imposes additional reinforcement charges that are placed entirely on consumers.

Where consumers have more than one grid access point that is used for resilience they should not be double charged as the sum total of the demand at connection points will remain the same at any given time. This is one of our primary concerns as regulation of the water industry penalises water utilities for lack of water supply although energy supply is a critical part of the ability to supply and treat water. As an effort to mitigate the potential for energy loss on processes secondary supplies form part of the water industries business resilience.

Furthermore, where demand and generation MPANs share the same hardware, charges should only be levied on the maximum of the demand and generation kVA.

With regard to 4.77 in the consultation, as part of SWWs hydro generation where a generator is a **net** exporter, dispensation should be given to the grid connection as reinforcement further up the distribution system has not taken place by virtue of this existing embedded generation being available at peak grid demand points. These sites need to have a grid connection in order to generate and synchronise to the grid and therefore must have a grid connection. Additional charging where generation assists the local grid conditions should not be implemented.

**Question 2**

*Do you agree with how we have assessed the impacts of the changes we have considered against the principles? If you disagree with our assessment, please provide evidence for your reasoning.*

Heavy industry that can move operations outside of the UK are potentially going to be given special treatment or they may elect to leave and residential consumers will not see significant increases in cost. This then puts the majority of residual on to medium to large business. Broadly across all commercial sectors additional business cost from products and services are then ultimately likely to be passed on to residential consumers moving fuel poverty to other areas of poverty for those on the lowest of incomes.

**Question 3**

*For each user, residual charges are currently based on the costs of the voltage level of the network to which a user is connected and the higher voltage levels of the network, but not from lower voltage levels below the user's connection. At this stage, we are not proposing changes to this aspect of the current arrangements. Are there other approaches that would better meet our TCR principles reducing harmful distortions, fairness and proportionality and practical considerations?*

SWW support the consultations recommendations that reinforcement should be limited to the same and higher voltage level.

**Question 4**

*As explained in paragraphs 4.41, 4.43, 4.46, 4.49, 4.80, we think we should prioritise equality within charging segments and equity across all segments. Do you agree that it is fair for all users in the same segment to pay the same charge, and the manner in which we have set the segments? If not, do you know of another approach with available data which would address this issue? Please provide evidence to support your answer.*

Resilience should not be penalised, where a demand consumer has two separate connections on to the grid for resilience they will only ever utilise the same volume of electricity as if they only had one grid connection. Double charging would be unfair. There needs to be a greater level of granularity and proportional charging to demand within charging segments and seasonal peak/base load from generation and demand should be considered in the setting of charges.

4.49 - for those able to manage consumption the impact of these changes without a suitable plan to incentivise peak lopping may be to stress existing networks beyond their capacity. Where a generator or consumer sit at the same level within distribution and reduce the cost for reinforcement at higher voltage levels they should receive an appropriate residual that is based on location within a DNOs area.

### **Question 5**

*Do you agree that similar customers with and without on-site generation should pay the same residual charges? Should both types of users face the same residual charge for their Line Loss Factor Class (LLFC)?*

No. Consumers that can reduce the overall demand on the system particularly at peak demand should be able to benefit from a reduced grid connection as they assist in reducing reinforcement at higher grid voltages.

Review and clear guidance to DNOs of intermittent Vs Non-Intermittent generation could be considered. Currently applied classifications have the impact of rewarding Carbon based generation such as diesel generation assets. A seasonal approach may well be an area that can help the UK growth of cleaner generation and work toward 2050 government targets. From SWWs perspective hydro could be treated as non-intermittent in winter seasons where the likelihood will be that generators will be able to assist in the overall demand at peak periods.

### **Question 6**

*Do you know of any reasons why the expected consumer benefits from our leading options might not materialise?*

Without pricing signals in one form or another present in the market there will be reduced incentive in altering demand. Further reinforcement may impact consumers and increase residual which is the opposite of this reviews intention if changes take place without considered overall implementation.

### **Question 7**

*Do you agree that our leading options will be more practical to implement than other options?*

The leading options look practical in that they are looking at user types within distribution levels. There needs to be a greater level of granularity and proportional charging to demand/generation within charging segments.

#### **Question 8**

*Do you agree with the approaches set out for banding (either LLFC or demanding for agreed capacity)? If not please provide evidence as why different approaches to banding would better facilitate the TCR principles.*

The approaches look practical and potentially blending of the two leading approaches may give an accurate apportionment of network cost to serve those connected.

#### **Question 9**

*Do you agree that LLFCs are a sensible way to segment residual charges? If not, are there other existing classifications that should be considered in more detail?*

LLFCs are a broad approach to segmentation and as an industry water companies significantly assist localised grids in peak conditions. To remove all pricing signals from the residual may have negative impacts on grid levels. Removing this incentive to responding to pricing signals may impact overall grid reinforcement.

Where consumers have more than one grid access point that is used for resilience they should not be double charged as this grid access will only take the same volume of electricity from the grid at any given time. An option in regard to resilience network connections could be to use existing HMRC guidance for what constitutes premises “a building or collection of buildings in close geographical proximity, owned or occupied by one customer within a defined curtilage on one site, where each building serves the other in some necessary or reasonably useful way.”

<https://www.gov.uk/hmrc-internal-manuals/vat-fuel-and-power/vfup3100>

#### **Question 10**

*Do you agree with the conclusions we have drawn from our assessment of the following? a) distributional modelling b) the distributional impacts of the options c) our wider system modelling d) how we have interpreted the wider system modelling? Please be specific which assessment you agree/disagree with.*

a) As in Q6 without pricing signals in one form or another present in the market there will be reduced incentive in altering demand. Further reinforcement may impact consumers and increase residual which is the opposite of this reviews intention if changes take place without considered overall implementation. Long term investment incentives will be required that can give long term certainty for replacing existing or additional distributed generation.

b,c,d) The consultation identifies a Capacity market as a factor in modelling and it may be appropriate to factor recent changes in this area into impact assessment . Again the transition of residual will very likely need to be phased in against forward charging (or probably after) to maintain system equilibrium.

#### **Question 11**

*Do you agree with our proposed approach to the reform of the remaining non-locational Embedded Benefits?*

SWW have no comment on this area at present.

### Question 12

*Do you agree with our proposal not to address any other remaining Embedded Benefits at this stage? Which of the embedded benefits do you think should be removed as outlined in xx? Please state your reasoning and provide evidence to support your answer.*

SWW agree with Ofgem's proposal not to address remaining embedded benefits at this stage.

### Question 13

*Are there any reasons we have not included that mean that the remaining Embedded Benefits should be maintained?*

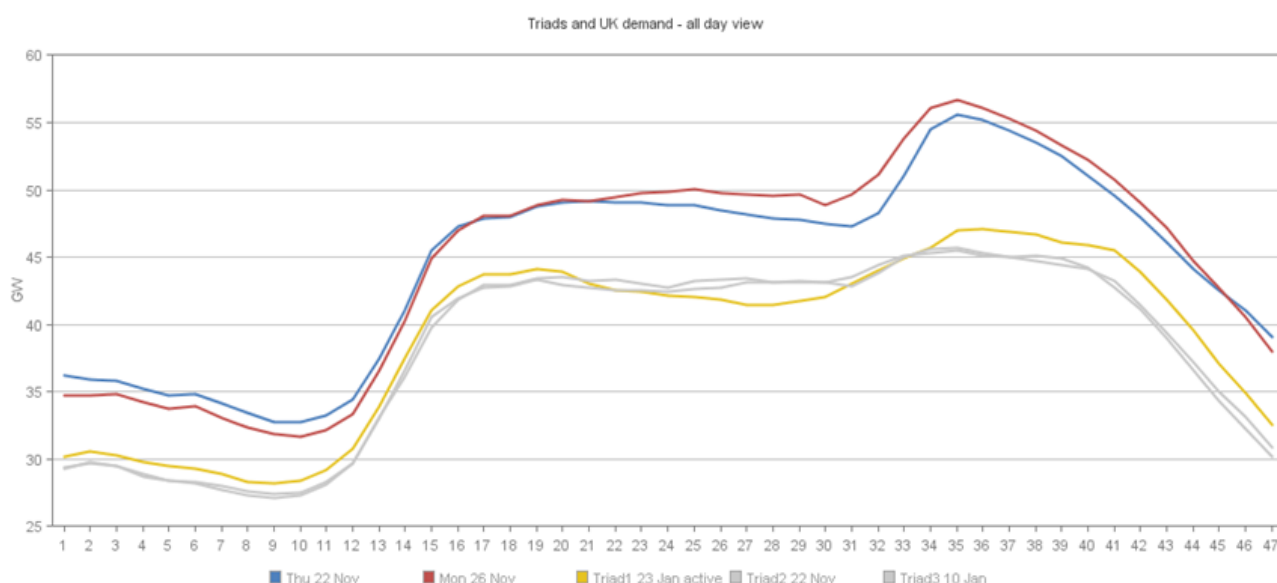
SWW consider the approach proposed by Ofgem to remaining embedded benefits is suitable.

### Question 14

*Do you agree with our proposed approach to transitional arrangements for reforms to: a) transmission and distribution residual charges b) non-locational Embedded Benefits? Please provide evidence to indicate why different arrangements would be more appropriate.*

Without the pricing signals there will be no incentive to reduce demand during peak periods. Forward charging or peak demand signals need to be implemented prior to residual changes or unintended additional reinforcement cost may result.

Triads have worked well in the system to such an extent that load flattening will occur at potentially peak conditions. To develop more dynamic localised signals will take time to understand and invest in for large organisations. The chart below shows how an increased awareness of triads on the demand side has contributed to a flattened afternoon peak in 2018/19 (grey and yellow lines) when compared to typical demand patterns 10 years earlier.



### **Question 15**

*Do you agree with our minded to decision set out? If not please state your reasoning and provide evidence to support your answer.*

Removal of pricing signals from the residual will need to be carefully managed to ensure organisations are in a position to respond. Charging for resilience of operations should not be adversely affected as part of this charging review.

### **Question 16**

*For our preferred option do you think there are practical consideration or difficulties that we have not taken account of? Please provide evidence to support your answer.*

Review looks to apportion cost of connection based on how the grid is affected by those connected as either a consumer or generator. The ability to realise benefits from grid interaction need to be considered when residual is set for all consumers. Additional granularity in the impact a demand or generator has on the localised grid should be factored into residual charging. Net exporting generation is likely to assist grid conditions particularly at peak network demand in demand dominated grids. Where generation dominated networks have constraints imposed from renewable generation the ability to interact to reduce the impacts at higher voltage levels should be considered as part of a fair charging approach.