Ofgem Forward-looking charging arrangements Consultation:

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# Question 1: Do you agree with the case for change as set out in this Chapter?

1. Enabling growth in demand, LCT, whilst managing constraints on the networks
2. Managing constraints on distribution networks from connected generation
3. Effective interface between TSO and DSO arrangements

Absolutely. Energy regulation should be enabling growth in LCT and decentralised generation, as these will be fundamental to the UK delivering on carbon targets.

TSO/DSO interaction is clearly necessary in light of the market changes (growth in decentralised generation), although outside of our area of expertise.

Carbon intensity of grid should be reflected in any variable pricing arrangements that arise, given their major driver and our national carbon reduction targets.

#  Question 2: Do you agree with our proposal that access rights should be reviewed, with the aim to improve their definition and choice?

Yes, absolutely. Enabling the decentralised, digitised and decarbonised grid will require industries and households at the end of the grid being able to access markets more freely (beyond our standard retail hub model), to give them choice and open up to them the benefits of investing in solar, storage and other smart enabled, DSR ready technologies.

This opening up creates complexity in managing and monitoring to avoid exploitation of the markets or the vulnerable being penalised, but careful creation of founding rules/principles, along with utilising automatic dispatch and settlement will enable these possibilities.

A tariff/connection cost review would be welcomed. It should include consideration of how vulnerable and needy are not unduly penalised, should they require peak electricity for life support, for example. On the most part though, introduction of some reflection of transmission costs into the retail tariff would be very welcome. This will need careful design to promote the right behaviour, be easily understood, and gain popular societal support.

#  Question 3: Specifically, do you have views on whether options should be developed in the following areas as part of a review?

## Establishing a clear access limit for small users, with greater choice of options (as considered under b) and c) below) above a core threshold – do you agree with our proposal in paragraphs 3.5-3.10 that this should be considered? Do you have views on how a core threshold could be set?

Understand for this that there would be two (at least) parts to the energy price consumers pay, a low-cost part up to the core threshold, and a secondary part that would be variable, in accordance with the spot price and grid demand.

The offer for larger users, to be able to get ‘better access’ in return for flexibility / reallocation of capacity, can this be offered to small domestic households as well? Mobilising the masses would help underpin grid stability and renewable generation for all. Lower rates, or greater core threshold, or even less dampening of market fluctuations, to allow flexibility service providers to pass on the variable price benefits to those participating.

Core threshold could be set based on the average consumption of that household/housetype, or based on a SAP related zero carbon standard of kWh/m2 (Although this blurs the regulated/unregulated lines). Any variability above a zero carbon standard of energy would be charged more heavily.

The Core threshold is likely to become highly political! I would advocate for a given threshold per resident, or per m2, or EPC tethered. Although, favour per resident as this would nudge households who’s children have left to have their thresholds dropped, and encourage them to free up the family home. However administering the movement and permanent address of people will be very tricky. Sqm or having it tethered to the EPC is more manageable.

It will likely be a helpful nudge towards various policy objectives, so aligning with elements we wish to cultivate would be beneficial. EPC would offer this, helping to encourage residents to upgrade their homes to get lower energy bills and a lower energy tariff.

Tariff should be linked to how much flexibility a property can offer, to encourage DG and flexibility.

Most small users won’t know how much capacity they require. Smart meters will have to be used to determine this figure for the households.

Agree a 3rd party or retailer would be required in most instances to determine which connection arrangement would be most beneficial for that user.

Agree with establishing a market where consumers can choose as per 3.8. This needs to be facilitated by education and easy access.

Behavioural response would be interesting to monitor. Analysis of smart meter data should be able to inform this, with the suitable data analytics. Shortly, as SMETS 2 meter precipitate, geo will be able to provide such a service. Industrial trials should be avoided, unless there is a clear market case. If research work is required, then allow a research organisation to undertake this work.

Shallow access to trading over the local network would be interesting.

## Firm/non-firm and time-profiled access – do you agree with our proposal outlined in paragraphs 3.15-3.21 that these options should be developed?

There’s a lot of sense outlined, but complexity of connection needs to be considered deeply from the customer point of view. Likely, most large consumers will utilise energy bureaus to find the optimum arrangement for their needs. Therefore, nudging them to use the grid when best for the grid is sensible. The impact/opportunity for households with automate ‘energy bureaus’ would also be of interest. No doubt retailers will have to bundle these arrangements into services. There is also a large education piece that is required for consumers, and many find the current arrangements to complicated. Visibility or auto-optimisation for domestic consumers would be essential. Knowledge of consumer usage must become a more valuable asset.

Raising the variability of transmission costs, based on peak usage should definitely be explored.

Agree with value for the consumer being a key driving metric. Also believe carbon intensity of grid should be a major influencer on the variable cost element. This is the key driver that’s brought this about. The changes considered should ensure they properly value the environmental impact but raising energy costs when carbon intense electricity is in production. Additional profits made during this time should subsidise ECO or equivalent initiatives.

Like the option for a non-firm connection, where consumers give greater information on their system and in return benefit from much lower cost standing charges and usage rates.

Need good definitions to help educate and communicate with consumers, but would propose that these definitions shouldn’t restrict future innovation as our grid mix and demands change.

Would network access rights be different for connection to export and import independently, because generators exporting at peak times would help balance the network. Removing these users entirely at this time would not be beneficial. Users with storage systems who can shift when they charge and discharge should be able to access in a single direction at different times.

## Duration and depth of access, discussed in paragraph 3.25-3.32 - would these options be feasible and beneficial?

‘ever-green’ access rights are not favoured, as these stagnate the industry. Whilst these future charging reforms should be addressing changed required up to 2050, maximising renewable generation incorporation and necessary flexibility arrangements for all levels of customers, they should not be setting up a fixed system, as innovation will undoubtedly find new methods, mechanisms and structures over coming generations.

Long term contracts are helpful for investors, therefore there is value in 5,10 or 20yr contracts, on a known/delivered performance basis

Providing longterm fixed demand profiles, in exchange for significant low cost energy arrangements could be very interesting, particularly for large housing developments that are looking to gain connection to the grid. Invariably, to make these work, they’ll require a level of community energy management behind the connection, which may add cost to the consumer, unless this is decentralised and automated between local properties.

In favour of short term connections and/or long term connections with secondary trading. So long as the secondary trading is accessible.

Absolutely, local access rights should be considered, as constraints generally happen more frequently on isolated ends of the network. Local management from active systems in the locality readily alleviate such problems, so long as there is appropriate value exchanged.

Understand the localised energy price, however there are already localised energy tariffs currently, Octopus Agile’s tariff has different rates depending on the different area/region of the country. This is not uncommon in Nordic countries. It rewards those who live more efficiently, in locations with better efficiency or more balanced grids. Alternatively, regulation could set a nationwide market for the retail price of grid electricity, but also enable regional DUoS charges, and/or the ability to have use of the system (either firm, non-firm, or time bounded) and subsequently trade locally in a peer2peer method.

## At transmission or distribution in particular, or are both equally important – as discussed in this chapter?

#  Question 4: Do you agree with the key links between access and charging we have identified in table 1? Why or why not? Do you think there are other key links we have not identified?

Agree with making the charging reflective of flexibility offered, that is beneficial for renewable generation and grid balancing, however energy is so cheap, is there sufficient variability in acceptable levels of energy pricing to sufficiently nudge the population?

Is the current split of consumer energy bills, between kWh and standing charge, reflective of the costs to obtain that energy? Say each is 50% of a consumers bill, are the costs in supplying that energy 50% for the kW and 50% for maintenance of the network and delivery of it?

 Question 5: Do you agree with our proposal that targeted areas of allocation of access should be reviewed?Please give any specific views on the areas below, together with reasons for your response. Where possible, please provide evidence to support your views:

## Improved queue management as the priority area for improving initial allocation of access, as outlined in paragraphs 3.41-3.44?

Agree with view points put forward. Initial actions need to be taken to stimulate sufficient liquidity.

## Not to consider the potential role of auctions for initial allocation of access as part of a review at this time, as discussed in paragraph 3.44?

However, when the liquidity is there, why not use micro-auctions?, with fall back positions for supply where needed. Sufficient liquidity can be/will be generated if there is enough financial return available. Following a similar automated auction, such as online advertising, happens within a second and would result in a highly decentralised, digitised energy industry.

## To review the areas outlined in paragraphs 3.45-3.48 to support re-allocation of access?

They should also consider access for ‘auditable consumption’ where curtailment can be avoided by ramp-up of ‘necessary’/’efficient’ consumption that can be audited, and those people can be paid for doing so, in return for stabilising the grid.

Key to these suggestions will be keeping the proposition to the consumer simple enough. In favour of opening up the access options, and of those suggested, but how they’re presented as part of a service offer or energy lifestyle need to be deeply considered.

Question 6: Do you agree that a comprehensive review of forward-looking DUoS charging methodologies, as outlined in paragraphs 4.3-4.7, should be undertaken? Please provide reasons for your response and, where possible, evidence to support your position.

Yes, this would be worthwhile in light of increased DG and flexibility.

 Question 7: Do you agree that the distribution connection charging boundary should be reviewed, but not the transmission connection boundary? Please provide reasons for your response and, where possible, evidence to support your position.

Happy to support this, although consideration of the implications of increased DG on the transmission network and their need to access centralised generation should be considered, with clarity over how these contracts can bring parity to DG contracts, and allow flexibility assets to provide security of supply.

 Question 8: Do you agree that the basis of forward-looking TNUoS charging should be reviewed in targeted areas?

## Do you agree that forward-looking TNUoS charges for small distributed generation (DG) should be reviewed, as outlined in paragraphs 4.19-4.23?

Fixed time periods would not allow for flexibility in weather patterns or occasional events, therefore there should remain time flexibility within the new regime. Agreed a review and new proposals would be beneficial.

## b) Do you consider that forward-looking TNUoS charges for demand should be reviewed, as outlined in paragraphs 4.24-4.27?

Yes. Review to better align with regional variations and fit against DG peaks/troughs and grid constraints would be advisable.

 Question 9: Do you agree that a broader review of forward-looking TNUoS charges, or the socialisation of Connect and Manage costs through BSUoS at this time, should not be prioritised for review?

OK.

# Question 10: Do you agree that there would be value in further work in assessing options to make BSUoS more cost-reflective, and if so, that an ESO-led industry taskforce would be the best way to take this forward?

Happy to support an ESO-led industry taskforce, although also appreciating the growing role of the DSO. Potentially a balancing service organisation such as Elexon would be better placed to look objectively at the options and provide a code of practice to go forwards with.

 Question 11: What are your views on whether Ofgem or the industry should lead the review of different areas? Please specify which of SCR scope options A-C you favour, or describe your alternative proposal if applicable. Please give reasons for your view.

Code review should ensure it’s not just being led to meet the major drivers for ESO/DSO functions, and driving down the carbon intensity of system is a fundamental output from any future Code that is established.

Depending on implications, A would be favourable for our customer base.

 Question 12: Do you agree with our proposal to launch an ‘Option 1’ SCR for areas of review that we lead on? Please give reasons for your view.

In favour of Option 3, as this removes the administrative burden from those outside the Ofgem fold. Ofgem are well placed at facilitating working groups and getting the buy-in of a cross stakeholder group.

#  Question 13: Do you agree with the introduction of a licence condition on the basis described in paragraphs 5.11 and 5.12 and Appendix 5? Why or why not?

# Do you have any comments on the key elements set out in table 7 of Appendix 5a, or consider there are any other key elements which should be included? Please give reasons for your view.

 Question 14: Do you have any comments on the draft wording of the outline licence condition included at Appendix 5b? Please give reasons for your view.

#  Question 15: What are your views on our indicative timelines? Do you foresee any potential challenges to, or implications of, the proposed timelines and how could these be mitigated?

We would favour a more rapid implementation of initial elements of the code review, such as access rights for small consumers. To this end, we favour a narrow scope of investigation as this will bring forward decarbonisation in the swiftest timeframe, something our natural environment is great need of. If target for first implications can be 2021 this would be highly advantageous. If implementing holistically in this time frame is too drastic, then we would be in strong support of derogated sand-pits where these future code reforms can be demonstrated at scale, under the proviso that should they demonstrate cost-effectiveness for consumers, then the derogated space is allowed to continue and expand.

Waiting until 2023 to implement such changes, whilst there is a strong likelihood of solid planning, before then we will have 20% EV on the roads, already disrupting our energy networks. If there is not sufficient market mechanism to provide suitable balancing the market will fall over. Further, without reform, substandard solutions will emerge and become the norm, which may take more time to unpick.

#  Question 16: What are your views on our proposals for coordinating and engaging stakeholders in this work?

Acceptable, however, I believe the 2019/2020 tasks can be streamlined for the most needed elements of reform outlined.