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RESPONSE TO OFGEM'S 2018 CONSULTATION ON GETTING MORE OUT OF OUR ELECTRICITY NETWORKS BY REFORMING ACCESS AND FORWARD-LOOKING CHARGING ARRANGEMENTS

https://www.ofgem.gov.uk/system/files/docs/2018/07/network_access_consultation_july_2018_-_final.pdf

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Please note that our responses focus primarily on the Distribution Network.

Question 1: Do you agree with the case for change as set out in chapter 2? Please give reasons for your response, and include evidence to support this where possible.

A: Yes, we agree with the case for change in the access and charging arrangements for the electricity network. These have developed over a long period to manage large centralised generation with relatively steady consumption patterns. Clearly this is no longer the case, with hopefully a rapid increase in low-carbon DG, both large and small-scale.

We particularly agree with the proposed changes to address the two examples of likely impacts in Fig3 on page 27 and in Appendix 4. Also the undefined nature of current user access rights for their connection poses a serious challenge to DNOs as LCT consumption is likely to increase in geographic and time clusters, rather than an even distribution.

There is little headroom for increased capacity (generation and consumption) in the current electricity network especially if a significant proportion of the heat and transport energy is to be decarbonised through electrification (in 2017 this accounted for over 1,200 TWh p.a.). Failure to reform the charging mechanisms would certainly stifle the government's obligation to de-carbonise the economy. In the worst case it may also result in chaotic local actions to supplement/replace the grid as energy prices rise and the grid fails to deliver the demand put on it.

You have highlighted several of the challenges and proposals to address these in the consultation document. The one that is not addressed other than tangentially is the role of the electricity network in de-carbonising the economy. In our opinion this is the 'elephant in the room'. It is unclear if this is even a requirement for Ofgem to deliver on, as no clear government strategy exists. Nevertheless we would expect Ofgem's proposed changes to support/enable low-carbon DG in a more direct way. We believe that there are further access and charging signals Ofgem could send to achieve the network/fairness related challenges even more effectively if de-carbonising was made a priority.

In our opinion, the most important principles that need to be carried through any final access and charging mechanism and policies are. Further details are provided in our responses to the remaining questions:

- User/generator charges should reflect network infrastructure and cost of operations; operator systems and cost of operations; and energy generation costs reflecting their long term environmental impact (i.e. impact of fossil fuels). Transparent cost, profit and charging mechanisms will be necessary to establish confidence in the sector, especially if this is to remain within the private sector.
- Energy generation costs should be recovered primarily through the energy unit price to users, so based on volume of consumption. While network infrastructure, systems and associated operational costs should be recovered primarily from fixed connection and annual standing charges, based on the properties/terms of the connection.
- Energy unit pricing should be progressive, encouraging lower consumption through energy saving and low-carbon self generation. Unit price thresholds or taxation (e.g. VAT) could be set, lower for low consumption and higher for high consumption. This would also help those in fuel poverty who cannot take advantage of variable half-hourly tariffs, smart meters and smart appliances. Users with special needs or those of national significance would need additional support as is currently the case.

- New and upgraded connections should pay the full costs of connection to the appropriate voltage level (e.g. LV or 33kV, etc.). UoS charges should be location and time sensitive, ideally becoming amortised over all users within the 'next' voltage level(s) and the expected life of the connection (with an upper limit for evergreen connections). This, however, would only be viable if Local Balancing is also made possible (see next principle).
- Reducing the need for significant transmission and 'next voltage level' distribution network re-enforcements by 'encouraging' co-location of new low-carbon DG and growing LTC consumption. Co-location here means primarily in the LV, but also in the 11 & 33 KV tier, of the distribution network. Storage, both short-term (daily/weekly) and long-term (monthly/seasonally,) will be an important complementary technology and therefore will also need to be 'encouraged'.
- Minimising inefficiencies whether in terms of transmission loss, financial subsidies which encourage inappropriate outcomes (e.g. turning off low-carbon generation) or volume discounts on unit energy prices.

While reducing energy costs to users is an important government policy, it must not be done at the expense of reducing safety, long-term network capability or carbon-reduction targets. Furthermore, we do not believe that location related differences for users/generators should have greater priority than network and energy generation efficiency. These differences already exist and only those with special needs should be protected, rather than attempting to force an equal level for all pricing structure.

Question 2: Do you agree with our proposal that access rights should be reviewed, with the aim to improve their definition and choice? Please provide reasons for your response and, where possible, evidence to support your views.

A: Yes, we believe it is essential to review access rights as soon as possible, especially given the likely impact of LCT clustering on some substations. We would also urge a greater shift in pricing the consumption of electricity from unit charges to standing charges, please refer to our response to question 1.

For small users: A significant proportion of users would be in a position to select the appropriate access level for their needs and abilities to be 'flexible', provided these are not overly complex. This approach would encourage others to become better informed about their energy consumption and, if the right pricing signals are given, would be motivated to reduce/shift consumption and increase self/export generation. Those unable to take advantage, e.g. the more vulnerable, those with special needs or in fuel poverty should continue to receive support through ECO and other measures.

We do not think that the alternative approach of placing principle-based obligations on suppliers will achieve the objectives set out. This is inevitable as commercial pressures will drive suppliers to maximise their profits and deliver generic solutions. This can be evidenced by the dysfunctional pricing structures, despite more recent Ofgem directives on pricing and now price capping.

For large users: More complex arrangements as outlined for access level options, compared to small users, would be appropriate. In particular we would encourage developing a model for a local depth of access connection charging structure. We believe this area has the greatest potential to deliver an effective and efficient solution to the challenge of increased LCT consumption and low-carbon DG.

Several models for Local Supply exist, we have developed a particular model which we believe may be of interest in this case. The model would be particularly useful within LV & up to 33kV substation areas with constraints, enabling new LCT and low-carbon DG to be delivered in a effective and fair way. Please see: <http://teignenergycommunities.co.uk/wp-content/uploads/2018/05/TECs-Local-Supply-Model-Options-v1.1.pdf> . Setting clear and appropriate access rights as part of this model would be critical.

Question 3: Specifically, do you have views on whether options should be developed in the following areas as part of a review? Please give reasons for your response, and where possible, please provide evidence to support your views:

a) 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?

A: Yes, agree with setting limits on maximum power (probably a core threshold based on most existing connections, so ~10-15kW for small users), but develop a more structured set of options for new connections thresholds to reflect maximum power limits above that (probably in steps of 2.5kW per phase). This will be essential to ensure fair access to all users.

In addition there will also be a UoS charge for connections (as well as for point b below) based on contracted total energy consumption per period (potentially at a granularity from HH to seasonally). However, this is more complicated to set, monitor and ultimately charge as part of the connection charge. It may therefore be pragmatic to initially charge for higher/excess consumption through unit price thresholds as set out in our response to question 1.

b) 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?

A: Yes, these options should be explored further and options developed for the distribution network connections. No comment for transmission connections on either firm/timed access or on short term access, although the latter is not unreasonable.

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

A: Both short and long-term access rights should be available for consumption and generation users. Appropriate compensation for not meeting the terms should be set in advance, on both sides. Users need choice, but also certainty. Without such certainty, it would be a major disincentive to greater investment in generation. This disincentive is intensified given the government's track record on changing policy signals and retrospective taxation in this market.

We agree that local access rights, based on arbitrary boundaries (e.g. post code or geographic), would be complex to develop and divisive. However developing these based on LV to 33kV substation boundaries is no different to the current arrangements and proposals outlined in your consultation for connections to individual consumption/export meters in the distribution network. It is simply moving the boundary a little further, in effect it is your 'shallow' connection charging proposals.

An important aspect of enabling/promoting the shallow connection option, would be to initially limit this to new consumption/generation. This is a practical and pragmatic choice to allow the new model to be tested so that some of the concerns raised (e.g. reduced funding for the network and unfairness) can be monitored.

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

A: We believe the above applies particularly to the distribution network as we expect (hope!) the vast majority of new capacity will remain within distribution.

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? Where possible, please provide evidence to support your views.

A: Yes, agree but additional links are needed to reflect the principles we outlined in our response to question 1.

Specifically we would encourage the review to consider including the following:

- Connection charges should have two elements, the initial new/upgrade costs to connect to the network at the appropriate voltage (paid for entirely by the user) and annual UoS charges (calculated in line with many of your proposals and our comments).
- Shift the recovery of those connection charges to the 'standing' price element for a connection and away from the unit price for energy. Ideally in a gradual manner, but ultimately a complete separation. The latter becomes more feasible if a wide selection of access/connection charges are available and these are well defined.
- Although not part of this consultation, it is essential to ensure progressive regulation around a pricing structure for units of energy generated/delivered, one which also supports the de-carbonising objective.

We believe that with these additional links, Ofgem's and wider government's objectives can be achieved without subsidy or risk to fairness and protecting certain users. It would for example enable true peer-peer trading with no impact on the network, either in terms of balancing/re-enforcement or cost recovery as these would have been resolved as part of the access settlement.

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:

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

b) 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?

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

A: The primary driver for allocating access should be balancing the network and the long-term target of decarbonising the economy. So, we do not consider an auction process appropriate as this is driven only by financial considerations. As in many large scale contracts, cost/price become the only criteria resulting in poor/late implementation as bidders undercut their costs to win the business.

We do fully agree with the proposals for re-allocating access rights and the justification for these. These would also tackle the practice of 'connection banking', but most importantly start matching generation to consumption over the shortest network distance possible and at the time required.

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.

A: Our response to questions 6-10 is summarised here.

We are in general agreement with the proposals and thinking behind the UoS charging review. We have outlined some principles in our response to question 1 on charging and later to questions 2-5 on connections. Our principles largely reflect the thinking presented in your consultation, but this needs greater emphasis on the objectives of de-carbonising heat and transport and ensuring a more transparent and fairer connection and charging arrangement.

In particular we are not convinced that Ofgem or the government fully appreciate the scale and urgency of the challenge of decarbonising through electrification. While it is appropriate to consider these changes carefully, there is a danger that fear of disruption will result in extremely weak signals to the market and users to change.

There seems to be too much reliance on mechanisms such as DSR, more granular time-of-day unit pricing and V2G technology. While these are important as are connection access and UoS charging reforms, they cannot in themselves stimulate growth in the desired increase in low-carbon energy carried by the electricity network. They will also not be adequate to spread peaks in generation/consumption when both of these are unpredictable (i.e. because they are weather and human behaviour dependent). While short-term battery technology is becoming more viable, large scale seasonal storage remains in its infancy.

It is probably a question of what the UK's energy policy is in terms of how to decarbonise. Is the expected modest growth in the capacity of the electricity network a target (from 60 to 85 GW)? Or is it low because there are plans to decarbonise the majority of heat and transport through other technologies such as hydrogen?

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.

Question 8: Do you agree that the basis of forward-looking TNUoS charging should be reviewed in targeted areas? If you have views on whether we should review the following specific areas please also provide these:

Getting more out of our electricity networks by reforming access and forward-looking charging arrangements

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

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

Please provide reasons for your response and, where possible, evidence to support your position.

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? Please provide reasons for your response and, where possible, evidence to support your position.

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?

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.

A: Our view is that Ofgem should lead in all areas, so scope option C.

The risk with an industry lead review is that it would be dominated by existing players and their interests. New and smaller stakeholders are less likely to have the time/resources to make themselves heard (the ICE mechanism normally does not encompass this). Conversely they are less bound by current practices and can bring new ideas. Stakeholders that have non-commercial and longer term views would need the impartial appraisal of their proposals that Ofgem would provide.

We do, however, see the merits in encouraging ESO/DSO to lead on discussions and trials in the interim. The best options resulting from these could either be implemented if they are within their current remit or form an input to the SCR.

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.

A: We believe that Option 3 would work better for the same reasons given in our response to question 11. Indeed your reasoning in 5.28 suggests that at least the overall co-ordination role should remain with Ofgem.

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.

A: Although we have suggested scope option C, we recognise that Ofgem is likely to conclude that option A or B are more appropriate. The key elements in table 7 appear to be appropriate.

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.

A: No further comments.

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?

A: We are not in a position to comment on this, but urge a speedy review as challenges outlined are likely to come sooner than expected, unless there is a dramatic downturn in the economy.

Meaningful reforms to access and charging will need to be socialised and introduced gradually, something the SCR process should consider and make full use of to address the most pressing challenges.

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

A: We agree with the approach outlines, but are unable to comment on its effectiveness. While there are complexities in the access and charging mechanisms, engagement of new and smaller stakeholders should be actively encouraged and made more accessible as early as possible.