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## Network Access Consultation

### Introduction to Octopus

Octopus is an investment group that since its establishment in 2000 has built a growing asset base around a principle of fostering innovative solutions that help renovate outdated markets and deliver superior products for consumers.

Managing smart, clean energy assets worth £2.6bn - part of the Octopus group's broader portfolio of over £8.3bn of assets under management (up from £0.6bn in 2008) - as an integrated energy investment business Octopus Energy Investments has a unique multi-dimensional view across energy supply, management and generation. We invest at scale in strategically important sources of clean energy generation. Octopus is the largest independent investor in solar PV in the UK, and has significant investments in onshore wind, anaerobic digestion, landfill gas and biomass.

Alongside our investment business, Octopus has launched Octopus Energy, a digital energy supplier that entered the market in 2016 and has already grown to more than 350,000 customers. Octopus Energy focuses on developing trusted relationships with consumers and providing fair, affordable tariffs, through a transparent and user-friendly online platform.

Octopus Energy uses technology to be highly efficient – empowering customers with a full digital experience, and then using the same systems to provide the highest standards of support to its customers by phone, email and chat. Octopus's technology allows it to challenge normal energy models, with no "tease and squeeze" pricing, offering good value to new and loyal customers, and maximising price transparency.

Finally, through our partnership with Reactive Technologies, Octopus is bringing cutting-edge cloud-based solutions to the UK energy market, empowering grid operators, renewable generators and businesses to access all available energy opportunities as part of the transition to a lower carbon future, ranging from advanced grid data measurement and analysis, enhanced power purchase agreements, access to balancing services and holistic energy optimisation.

### Summary of response

The GB energy market continues to transition from a traditional system reliant on fossil fuels and centralised generation to large-scale integration of renewable generation and the incorporation of new demand-management and energy storage technologies. Octopus supports the evolution of market structures and seeks to unlock technology agnostic innovation, in order to facilitate the transition to a more flexible energy market while keeping costs to consumers as low as possible.

We believe that these outcomes would be best achieved by carrying out as wide-ranging a review as possible. Piecemeal change increases the risk of leaving a system which has been designed with existing problems in mind rather than being fit for the energy system of the future.

In addition, the transition to the future energy system will require significant private investment in generation, flexibility provision and other infrastructure. To obtain this investment in the most cost-effective way for consumers will require careful consideration of the impact on existing investors in the energy system. Changes which are detrimental to existing investors without giving them access to increased opportunities will damage confidence in the UK legislative and regulatory framework, increasing the cost or even limiting the availability of future investments.

## Submission

**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.**

We agree that the current charging regime is not fit for purpose as the energy system transitions to a flexible, clean future. Network charging needs to facilitate this transition. We do not agree with the proposed approach to prioritising changes. Decisions made now will have a fundamental impact on whether our decarbonisation targets are achieved in the most efficient and cost-effective way, and on the success of Government's *Smart Systems and Flexibility Plan* and *Clean Growth Strategy*. We view the approach taken by Baringa to identify priorities by way of rough quantification of existing inefficiencies in broad categories as a risk to the success of these plans. The proposed approach is focussed on incremental fixes to existing problems, rather than on implementing a charging structure which is designed for the energy system of the future. The outcome of the proposed approach could be the worst of both worlds, where existing network users and investors in those users are harmed, damaging confidence in the UK investment environment, without achieving a charging structure which delivers optimum efficiency and lowest cost for consumers.

It is also unclear from the Baringa analysis released to date why the third of Baringa's three priority areas 'Aligning access and charging between transmission and distribution, and across voltage level boundaries' has been categorised as a priority area when it is not rated as being as material an inefficiency as priority areas 1 and 2.

**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.**

We agree that there is a need to review access rights, in particular to minimise barriers to the widespread uptake of low emission vehicles and to enable other disruptive, consumer-focussed technology innovation.

**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?
- 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?
- c) Duration and depth of access, discussed in paragraph 3.25-3.32 - would these options be feasible and beneficial?
- d) At transmission or distribution in particular, or are both equally important – as discussed in this chapter?

Octopus' view is that the review of network charging should be carried out in a way which considers fully the needs of the future energy system, and as such a broad range of options should be developed more fully than the largely qualitative analysis carried out to date by the Charging Futures Forum Task Forces. In respect of a) we agree that access options for small users need to be examined to ensure that the electrification of transport and heat does not lead to inefficient investment in network reinforcement where flexibility would represent a lower overall system cost. Our view is that network charging should in general be designed to reward flexibility in usage patterns. Ultimately suppliers are likely to be best placed to provide information on consumer usage patterns and behavioural responses.

In respect of d) we do not see any reason to make distinctions between transmission or distribution in setting the parameters for the review.

**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.**

We agree that the areas identified are important links. In addition we consider it important to consider the interaction of historic payments by existing users for access with future arrangements for charging. Where connection payments have been made for wider grid reinforcement, the impact of any changes to charging boundaries on future charges for those users needs consideration to avoid retroactively harming existing investors in generation, flexibility and demand assets connected to the network. Retroactive change will damage confidence in the regulatory stability of the UK energy system and lead to increased costs to consumers and taxpayers in the long run.

**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?

It is not clear what is meant by incremental improvements to queue management, but we have no objection to these being included within the scope of the review. We do not see a need to explicitly exclude other possible arrangements such as auctions, but agree that the level of complexity associated with this approach makes it less likely that this should be the first area of focus in reviewing allocation of access.

**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 comprehensive review of forward-looking DUoS charging methodologies is consistent with our preference for considering the system as a whole, and as such we agree with this approach. However we do not understand based on the evidence presented to date the preference expressed for capacity based charging rather than time of use charging, given the desire for these charges to be cost reflective and the benefit to whole system costs in sending signals which optimise the use of 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.**

In general we would support as comprehensive a review as possible. However if a prioritisation approach is being taken, it is not clear why a review of the distribution connection boundary is needed urgently to remove barriers, given that the changes to access allocation being discussed in connection with Question 5 above are in the context of a significant queue waiting to connect at distribution level. Furthermore, the proposal to reduce up-front costs but increase long-term commitment to contribute to network charges would not in fact be removing any kind of barrier. As noted in our response to Question 4 above, any changes in this area should be considered in the context of the impact on existing network users, to ensure those who have paid amounts for access related to wider network reinforcement are protected from increases in network costs related to a change in the charging boundary.

**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:**

- 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.**

As noted elsewhere in our response we favour a broad approach to the proposed review. But given the prioritisation approach being suggested it is not clear to us why TNUoS charges for DG would be prioritised given the changes already made in this area by CMP 264/265. Further changes to this area will inflict more damage to investors in DG who have already been negatively impacted by previous changes. Maintaining investor confidence in the UK legislative and regulatory framework is critical to ensuring that essential private investment in the energy system and other UK infrastructure is available without increasing costs to consumers. We have a number of other concerns with the areas proposed to be targeted in relation to TNUoS:

- We have not seen any evidence of the magnitude of the transmission costs theoretically contributed to by DG, or a comparison of these costs with the benefits given by peak reduction under the existing triad-based system.
- We agree that if the cap on DG TNUoS charges at zero were removed the triad system would not be an appropriate method of allocating charges given the generation disincentive this would give in certain areas. However moving to a capacity based system would not necessarily be cost reflective, particularly for flexible generation located in areas which only export from the distribution to the transmission network at times of peak solar output, where that flexible generation would not be contributing towards the export onto the transmission network.
- Changes to TNUoS charging for DG which lead to DG paying for the costs of the transmission network would in itself give rise to new distortions unless transmission connected generation is also contributing towards the costs of the distribution network.

We note that if TNUoS charging for DG were reviewed as part of a prioritised scope, it would make sense to also review TNUoS charges for demand, given the relative interchangeability of behind-the-meter and separately metered generation in terms of impact on networks.

**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.**

We favour a review which considers all aspects of network charging in order to ensure an outcome which is fit-for-purpose and future-proof.

**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?**

We agree that further work on BSUoS charging would be valuable, whether within the SCR process or otherwise. Any taskforce should include a wide range of participants from across the industry, including those representing the interests of existing investors in generation assets. Octopus would welcome the opportunity to participate in such a taskforce.

Whilst this taskforce is considering BSUoS holistically, it does not make sense to implement piecemeal changes via the TCR SCR process.

**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 broader SCR scope will ensure consistency of timelines and approach, and maximise the opportunities for smaller or less sophisticated users of the networks. We agree however that some areas with less far-reaching consequences may be progressed by industry in parallel. As such we favour option B, the moderate scope.

**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.**

We agree with this approach.

**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.**

We do not have any strong views on this area.

**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.**

We do not have any strong views on this area.

**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?**

This area is hugely complex, and the review proposed represents a unique opportunity to 'future-proof' network charging for generations to come. As such the timescales proposed are challenging. Key to meeting these challenges will be to ensure that the options assessment process is efficient and kicked-off rapidly following Ofgem's decision on the scope and objectives of the review. Industry should be updated frequently on the progress of any third-party consultancy work being carried out, and given an opportunity to input via Charging Futures Forum on the design of that options assessment process.

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

We would support including as broad as possible a range of voices from industry via the Charging Futures Forum, and updating on progress and direction of travel as frequently as possible.

We would be very happy to meet with Ofgem to discuss the issues raised in this response. If we can be of any further assistance please contact David Bird on 020 7131 3210 or [DBird@octopusinvestments.com](mailto:DBird@octopusinvestments.com)

Yours sincerely

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