3. Connection boundary
Question 3a: Do you agree with our proposals to remove the contribution to reinforcement for demand connections and reduce it for generation? Do you think there are any arguments for going further for generation under the current DUoS arrangements? Please explain why.

We consider that this proposal merits half a cheer. If there is real commitment in Ofgem to net-zero carbon electricity supply then a) demand has to be reduced and b) renewable generation has to be increased at all scales. These proposals reward the opposite behaviour.
This proposal does not consider the market distortion of large generation systems being able to connect to the transmission network and have their connection costs amortised by all electricity consumers and a smaller-scale generation connecting to a DNO, where there is no mechanism for such a cost distribution. This, again, is a distortion of the market using the wholly artificial distinction of size of generation to decide if the connection is to transmission or to a DNO.

DNOs must be able to de-couple reinforcement investment from the need to demonstrate proven need; a much wider and more imaginative approach is needed.

Question 3b: What evidence do you have on the effectiveness of the current connection charging arrangements in being able to send a signal to users and what do you think will be the effect of our proposed changes? How does this vary between demand and generation connections?

At present, the connection charging arrangement sends a signal to local generators that they are not welcome and regarded as a nuisance to the operation of a market that is based on an obsolete electricity network architecture.

Question 3c: What are your views on the effectiveness of the current arrangements in facilitating the efficient development and investment in distribution networks? How might this change under our proposals where network companies are required to fund more of this work?

The current arrangements do not encourage investment, due to the high front-loaded costs and the inability to adjust cash flow and investment over a reasonable period. At a larger scale, this front-loading discourages attracting investment in the UK system at all by creating an impression that the ways in which inward investment can be made are too proscribed.

Question 3d: Do you agree whether the need to provide connection customers with certainty of price reduces the potential for capacity to be provided through other means such as flexibility procurement? How might this change under our proposals?

We do not agree that certainty of connection costs is a need; merely an upper bound per annum. Flexibility is undoubtedly a more appropriate model, but it needs to be usable at much smaller scale and allow for aggregation of small-scale providers.

Question 3e: What are your views on whether we should retain the High Cost Cap? Is there a case for reviewing its interaction with the voltage rule if customers no longer contribute to reinforcement at the voltage level above the point of connection?

It is our view that generating customers should not pay for connection to a DNO infrastructure using this model. Therefore, the code dealing with voltage levels and HCC should be redundant. Using voltage levels to asses infrastructure impact reinforces the view that the grid architecture is not fit for purpose going forward into a zero-carbon supply industry.

Question3f: What are your views on the recovery of the costs associated with transmission that are triggered by a distribution connection? Does this need to be considered alongside wider charging reforms or could a change be made independently?

Much wider consideration of charging is required.

Question 3g: What are your views on the likelihood of inefficient investment under our proposals (e.g., an increase in project cancellations after some investment has been made)? Are there good arguments for further considering introducing liabilities and securities to mitigate this risk?

There are no good arguments. Investment risks should (in any market) be managed by the investor. If they wish to make their own arrangements to de-risk their investment, that is a separate matter for them. Any form of mitigation outside this distorts the market and risks rewarding perverse investment behaviour.

Question 3h: What are your views on whether the interactions between our connection reforms and the ECCRs must be resolved before we are able to implement our proposed reforms? How do you factor in the effects of the ECCRs (if at all) into decision making, given the levels of uncertainty around subsequent connectee(s)? What suggestions do you have to make our policy and the ECCRs work together most efficiently?

If the fixed up-front connection charges are removed, then the ECCRs in their present form are not needed. Rather, there should be a regime whereby second and subsequent connectors pay a pro-rate proportion of the connection cost amortised over a long period (say 30 years) according to the amount of use based on MWhr .

4. Access rights

Question 4a: Do you agree with our proposal to introduce better defined non-firm access choices at distribution? Do you have comments on their proposed design?

Curtailment of generation could be useful, but more thought needs to be given to why priority should not be given to local generation used to meet local demand (e.g. within a DNO or even a sub-DNO area). For instance, why should not curtailment first be applied to generation connected to the national transmission network instead? Large-scale wind systems are ideally suited to rapid changes in output.

Question 4b: Do you agree with our proposal to introduce new time-profiled access choices at distribution? Do you have any comments on their proposed design?

Time-profiled access is a must. However, it is not clear how consumer behaviour using smart homes (i.e. internet-enabled houses/appliances etc) interacts with this. Also, it does not make sense to consider time-profiling without reference to storage systems to provide very local balancing. For this reason, the relationship between DNO licences and their ability to operate storage needs to be reviewed.

Question 4c: Can you identify any benefits to shared access rights, which would indicate we have underestimated the likely take-up?
Shared access approaches are an obvious part of changing the architecture of the transmission system and as such should be encouraged. Again, a party to such a scheme could be a storage operator – see our response to 4b.

Question 4d: Do you have any comment on our proposed choice about how to reflect access rights in charges (i.e. connection and/or distribution use of system charges)?
We have responded to the issue of reinforcement charges earlier. Our response here is the same.

Question 4e: Do you agree with our proposal to not prioritise the introduction of new transmission access choices as part of this Significant Code Review?
No. This is an urgent item.

Question 4f: Do you have views on how access rights should be standardised across DNOs?

Standardisation (other than for engineering, public and plant safety reasons) should not be attempted. This, again, distorts the market, discourages innovation and encourages perverse behaviour.

Question 4g: Do you have any views on our proposed timescale of 1 April 2023 implementation?
No.

5. TNUoS charges for SDG
Question 5a: Do you have any evidence that SDG does not contribute to flows in the same way as large generation and, therefore, should not be charged on a consistent basis?
It is difficult to provide evidence when the market does not operate in this way and therefore there is no experience. The point of SDG is that it should be accompanied by SDC (SD consumption) and that the local networks and market operation should encourage this. Storage systems should also be regarded as generation devices for this purpose.

Question 5b: Do you agree with our threshold for applying TNUoS generation charges of 1MW? If not, what would be a better threshold and why?
It is too high. A better threshold would around 50kW . This will encourage factory and public buildings to use their roofs for solar systems.

Question 5c: Do you have any evidence that distribution connected generation at a grid supply point has a different impact than directly connected generation?
This question is meaningless: a) the definitions of ‘distribution connected’ and ‘directly connected’ are not well-defined and based on the current architecture b) what does ‘impact’ mean? Financial? Carbon emissions? Stability of local supply?

Question 5d: Do you have a preference for one of our options for addressing the local charging distortion? If so, please indicate which option and provide your reasons. Are there any options we have missed?

The local charging distortion is a consequence of treating generation of different levels of output as different types of generation. One charging scheme should be applied for all generation, based solely on output. In this way the market will find the appropriate scale and partnership arrangements – this cannot be regulated for.

Question 5e: Do you support our position that we should consider transitional arrangements? If so, do you have a preferred option and evidence to support the benefits or risks associated with each option?
We have no views on these proposals.

Question 5f: Have we identified all the options for administering TNUoS generation charges for SDG? If not, what options have we missed, and why would they be preferable to those we have identified? Can you provide any evidence regarding the implications of the different administrative options for your business?

The key subject that is not considered here is storage systems. It is not sensible to think about encouraging renewable generation without a system-wide view that includes storage, who operats it and how it can be encouraged.

Question 5g: Are there any specific issues you think we need to consider, as part of our work on the future role of network charges? Why are these important to consider?

See comments on storage above.

7. General question
Question 7: Do you have any other information relevant to the subject matter of this consultation that we should consider in developing our proposals?

a) The overall impression that arises from this consultation is timidity. There is a considerable emphasis on detail and the implicit protection of the present technical architecture and market operation. A much more imaginative a wider vision is needed to overcome over a century of practice that is increasing obsolete.

b) There is a very poor consideration of what is the 'lowest cost'. This needs to be redefined as 'lowest cost to the UK economy', including the downside costs of climate change, if there is to be a proper debate about how the UK consumer pays for energy services.

c) Finally, we want to state this in our view, this market is made increasingly non-functional by creating significant barriers to comprehension (e.g. by opacity of descriptions of system structure, vocabulary of codes, terminology in consultation documents) by any group seeking to innovate. All consultation papers should be reviewed and re-written by the Campaign for Plain English if the findings are to be truly useful and from a wide audience.

d) It seems fairly clear from this paper and other Ofgem documents that a narrow 'economists' view of value for money, cost and utility is being used, rather than one of benefit to the UK.