

## Response to Access and Forward-Looking Charging Significant Code Review - Minded to Consultation

### Introduction

We welcome the opportunity to respond to the minded-to consultation on the Access and Forward-Looking Charges SCR. **Nothing in our response is confidential.**

Overall, we urge Ofgem to do more to place these proposals in context, helping parties understand the next phase in the reform process and the interaction with the wholesale market reform signposted in the Smart Systems and Flexibility Plan and the Alternative Energy Market project.

In summary:

1. We support the introduction of shallower connection charging boundary as a short term pragmatic step in support of Net Zero. We are concerned about the significant inefficiencies that could arise without quick action to introduce locational pricing signals. We urge Ofgem to provide clarity on the next steps in the SCR and how this relates to the wider wholesale market reform signalled in the Smart Systems and Flexibility Plan and to BEIS Alternative Energy Markets project.
2. We support the introduction of non-firm access arrangements as an interim measure only. The proposals are not suitable as an enduring arrangement and could get in the way of the flexible system Ofgem and BEIS are seeking to create. We urge Ofgem to quickly provide more clarity and vision on the future of access arrangements and their relation to dynamic system charging (or local wholesale markets) and flexibility procurement.
3. We do not support the introduction of the TNUoS charging changes for distribution connected generation. Unlike other proposals in this consultation we are concerned that these proposals could damage our progress towards Net Zero. We do not see the case for extending a sub-optimal TUoS arrangement to distributed generation nor do we see a compelling need to make these changes now. If Ofgem is to go ahead with these changes we would support transition arrangements for existing assets in order to preserve investor confidence.

Below we have answered the questions where we have opinions and relevant evidence.

## Connection Boundary Changes

Overall we support the minded-to position to move to a shallow (for demand) and more shallow (for generation) connection boundary. We agree that this will remove a barrier to the connection of low carbon technologies (LCT) like electric vehicles and heat pumps and will be particularly helpful to solar and storage developers. All of this should support the transition to Net Zero. However, we are concerned that without effective locational DUoS or wholesale signals, there will be little to direct developers to where there is spare capacity. Unless the next stage of reform is implemented quickly (or other measures are introduced) this could trigger otherwise unnecessary network investment in the RIIO ED2 period that could be in excess of the £380m Ofgem has estimated.

We therefore urge Ofgem to move quickly to start the next phase of charging reforms and to keep in mind its overall objective of reaching Net Zero as quickly and affordably as possible. We would welcome Ofgem providing clarity on the nature and timing of the next steps and how this relates to the Alternative Energy Market work which BEIS is undertaking and to the timelines for wholesale market reform discussed in the BEIS/Ofgem Smart Systems and Flexibility Plan.

**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 agree with the proposal as a pragmatic and early step in the overall reform of network charging arrangements which should bring some immediate benefits for distributed generation developers and help the adoption of low carbon technologies.

However, with the rapid take up of LCTs and growing investment in distributed generation, we are worried this could lead to considerable inefficient network investment. We note Ofgem's estimate of the likely additional cost of £380m and are concerned that this may be an underestimate of the potential inefficient investment. In particular, we ask Ofgem to double check the assumptions which have been made about the extent to which customers with LCTs will be incentivised through time of use tariffs and other means to shift their consumption away from peak use (and therefore the assumptions about the network capacity they will require). Our own experience with 50k customers on smart tariffs, is that customers respond very well to time of use price signals. However, there is relatively limited penetration of these tariffs in the market and - due to the distortions in charging and other arrangements - these tariffs are not commercially viable for retailers. Until these distortions are addressed, caution should be applied around assumptions on the demand patterns of customers with LCTs.

To address this concern about inefficient investment, the move to a shallower connection boundary must be rapidly followed by interventions that will either provide locational signals or provide stronger obligations on DNO to take steps to avoid the need to make unnecessary network reinforcements. This needs to happen in time to influence and prevent inflated investment costs in the RII-ED2 business plans.

For the reason above, we do not think that there are arguments for going further and removing reinforcement costs altogether for generation *under current DUoS arrangements*. Reducing the reinforcement costs they face should achieve some benefits and make it easier for solar and storage projects in particular, while retaining some locational signals.

**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?**

We agree with Ofgem's analysis that there is relatively little value in the current locational signal to demand connections, but overall generation connections are more geographically elastic. In our experience, connection charges are rarely a deciding factor in wind development, with other constraints normally having much greater weight in decisions on where and whether to invest. However, for solar and storage developers the connection cost is often a deciding factor on whether a project gets built. It is not obvious that the price signals being sent through the current charging arrangements are the right ones for the system overall and may be limiting too tightly the total number of projects which get built.

It is not clear to us what the impact of the shallower connection boundary will be on the overall viability of solar and storage projects. We note that the cost of reinforcement at the connecting voltage level can at times rule out these projects and that in many cases, long lead times for connections also makes the project unviable. In short, while we welcome a shallower connection boundary, this move will not remove all the issues which DG faces in obtaining a connection and we urge Ofgem to continue its work to improve the connection service that is offered to developers.

**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?**

We agree that the current arrangements could be driving DNOs to take a piecemeal approach to network development and the proposals might encourage DNOs to step back and conduct more holistic network planning and development. However, with shallower connection boundaries, we are concerned that many DNOs will default to building more capacity rather than exploring other options such as flexibility procurement, or providing clear information and active engagement with major developers to encourage development where there is spare capacity. We already see a significant differential between DNOs in the creativity they apply to accommodating new connections and consider it is important that Ofgem finds ways to ensure that DNOs are more innovative and creative in the approaches they take. This is not just about keeping the costs down but commercial and informational steps can make connections available more quickly than network reinforcements.

**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 are not convinced that the uncertainty around the cost of procured flexibility rules it out as a viable alternative to reinforcing the network to accommodate new connections. We note that major projects already carry the risk associated with wider network charging (and other regulatory) reforms and the cost uncertainty this creates. Some projects we are involved with have been provided with connections on the back of active network management arrangements and are already managing the risk associated with this. In practice we have no direct experience of projects being offered a connection conditional on accepting ongoing liability for the cost of DNO flexibility procurement, but see no reason why this should not be something that could be explored.

**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?**

We agree it makes sense to retain the High Cost Cap and to keep the precedence of the voltage rule. This would mean that the DG developer would still need to pay the full cost of high cost reinforcements at the connected voltage. This should provide something of a locational signal for DG and encourage developers to avoid connecting where significant local reinforcement is required.

**Question 3f: 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?**

We do not think this change can be made independently of wider charging reforms and the need to avoid double charging and perverse incentives.

**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?**

We are concerned that a move to require securities for the reinforcement costs could cancel the benefits Ofgem is trying to achieve by reducing the cost of connections for DG developers. In general, if reinforcement is made for specific projects which then are abandoned, we would expect there to be information available to developers to encourage alternative projects to come forward. A swift move to reform DUoS charges or introduce locational wholesale market signals should be explored as an enduring solution to this rather than diluting the effect of these reforms with a requirement for securities.

**Question 3h: What are your views on whether the interactions between our connection reforms and the ECCR must be resolved before we are able to implement our proposed reforms? How do you factor in the effects of the ECCR (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 ECCR work together most efficiently?**

We have no direct experience of applying the ECCR.

## Access rights

We recognise that these access proposals have the potential to unlock the connection of more renewable generation and low carbon demand in the short term. However, the proposed arrangements are not appropriate as an enduring solution for a dynamic electricity system for the reasons we lay out below in answer to question 4a. While we support the proposed arrangements as an interim measure to stimulate connections, we urge Ofgem to quickly provide more clarity and vision on the future of access and its relation to dynamic system charging (or local wholesale markets) and flexibility procurement.

**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?**

These proposals are suitable only as an interim solution as a short term stimulus for new connections. In general, we would like to see networks moving away from long term, static, bilateral access arrangements to more real time flexibility procurement.

The non-firm access proposed is not an appropriate long term product for the below reasons:

- It locks in very long term bilateral flexibility contracts that are very difficult to compare with more dynamic flexibility markets and/or local distribution charges
- We believe that it will discourage new sites from investing in flexible technology since they are paid to be passively curtailed by the network
- We worry that the hours curtailed methodology makes a contract that is very difficult to compare against other short term flex contracts based around energy and availability
- We are concerned that on the demand side many sites may opt for these access arrangements without understanding the implications and assuming they will never be called to interrupt their supply. This could render them operationally and politically difficult for DNOs to use in practice, as happened in the past when the system needed to call upon interruptible gas contracts with large I&C customers and faced resistance.

**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?**

As with answer 4a, we support these measures in the short term to help alleviate blockers to new renewable and LCT connections. However, we believe that these kind of long term, static access arrangements are at odds with a more dynamic system where the peak constraints on the networks may vary depending on the amount of renewable generation and the flexible nature of demand. For instance, we see peak load on our Octopus Go customers overnight rather than in the traditional 4-7pm window.

**Question 4c: Can you identify any benefits to shared access rights, which would indicate we have underestimated the likely take-up?**

Shared access encourages local balancing and coordination which in certain constrained parts of the network is very beneficial. We don't believe this is best achieved through shared access but would instead encourage this kind of local balancing and cooperation through better local resolution of wholesale and network pricing signals.

**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 believe that reflecting non-firm access rights in connection charges limits their accessibility to only new connections. This could drive a dislocation in the market and also limit their uptake.

Reflecting time profiled access in DUoS charges will depend on the nature of future DUoS charging arrangements but it will be challenging to maintain price parity between flexibility delivered this way and through flexibility markets or DUoS avoidance.



## TNUoS charges for SDG Question

We do not support these changes to TNUoS. We do not see the rationale for them or for implementing them in advance of other changes at this stage. Unlike the other proposals in this consultation, they are contrary to Ofgem's objective of encouraging renewable and low carbon connections and could have a significantly negative impact on achieving Net Zero.

We are particularly concerned that Ofgem may not have considered the impact of these proposals on wind investment in Scotland and the impact on decarbonising the system if several GW of investment in the pipeline becomes unviable.

The objective of the proposal appears to centre on addressing a theoretical distortion by applying to a wider base of generators a charging methodology which Ofgem have acknowledged may not be fit for purpose. We suggest this is put on hold and urge, instead, Ofgem to take a more holistic look at transmission charging in the context of wholesale market reform and the evolution of flexibility markets. Without this wider view it is difficult to say how distribution connected generation should be treated relative to transmission connected generation, and the negative consequences of these changes are likely to far outweigh the benefits.

### **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?**

We have no evidence along the lines that Ofgem is seeking. We note however that the proposal in any case, does not seek to charge SDG on the same basis as most large generation, as transmission connected generation is not required to contribute to distribution costs, whereas under the proposed changes SDG would be liable for costs of both distribution and transmission networks.

### **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?**

We are struggling to understand the rationale for this threshold and note that it is likely to exclude a growing number of asset portfolios. That current arrangements are not able to reliably track connections below this threshold is further evidence that these changes are a deeply sub-optimal way to provide locational signals for new generation connections.

### **Question 5c: Do you have any evidence that distribution connected generation at a grid supply point has a different impact than directly connected generation?**

GSP connected generation in a zone facing high demand is unlikely to flow onto a transmission system. However, generalities cannot be made: either about the impact of a DG connected at any particular point on the system which will hold for all assets in that position, or about any asset that will hold all of the time. We suggest that the question and approach highlights the importance of reaching a dynamic approach to price signals to drive investment and operational decisions.

**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?**

We do not have a preference here.

**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?**

If Ofgem sees the need to go ahead with these changes then there are strong arguments for transitional arrangements to protect existing assets from these changes and to preserve investor confidence. Without grandfathering, assets which were built and financed well before these changes were first discussed would face the risk of defaulting on debt facilities due to the increased costs.

We suggest, however, that Ofgem considers applying grandfathering for a period defined according to the date of connection/commissioning rather than providing a fixed transition period from the date of the TNUoS change implementation. This should mean that grandfathering arrangements do not, in themselves, provide an inefficient incentive to, for example, extend asset lives rather than repower aging sites. Grandfathering in such a way would limit the damage to investor confidence without diminishing any perceived benefits of removing the distortion between SDG and larger generation assets for new connections.

We do not consider there is a strong case for extending grandfathering to projects about to bid into the next CfD round which have not already reached final investment decision, as this change has been signalled sufficiently in advance. However, we would urge Ofgem to provide clarity on this decision as soon as possible ahead of the auction, to avoid compromising the auction results by risking participants bidding on materially different assumptions on the application of TNUoS.

Finally, we note that if Ofgem intends to make further TNUoS changes, it will make sense to design transitional arrangements with an understanding of the impact of these changes rather than in a piecemeal manner.



**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?**

Ofgem should explore the introduction of locational wholesale prices as an alternative to relying on network charging reform to drive the behaviours required for an efficient and secure low carbon power system.

**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?**

Please refer to the answer in 5f above.

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