

Review of Quicker and More Efficient Distribution Connections,
Ofgem consultation
REA Response

We thank you for the opportunity to respond to the recent Ofgem Paper and associated industry workshop regarding Quicker and More Efficient Distribution Connections. We believe this is a fundamentally important issue for all renewable developers, of any technology, and that the issue should be prioritised by Ofgem and Government. We therefore welcome Ofgem's interest in the area and look forward to working together to progress the issue.

The REA's Grid Expert, Bob Weaver, has been associated with electricity connections, the MCCG and ECSG and have and continues to serve on national industry panels and also party to the re-write of the Common Charging Methodology Statement in 1998 and currently is engaged on work within the Charging Methodology Forum.

With regard to the Ofgem consultation we should confirm that we remain concerned that the current extracts from the CCMS were excluded from the consultation document since these actually provide something of a history as to where the existing Charging Methodology is derived. We have therefore included these extracts as an appendix to this letter.

We are also concerned that Ofgem and DECC have continued to raise concerns relating to the potential for abortive network reinforcement which, it is claimed, could lead to '**stranded assets**'. In order to attempt to clarify and quantify this concern PowerCon (UK) Ltd provided a Paper to the REA; and this document is also included as a second appendix to this letter. We hope this clarifies our position on this issue- that we consider it extremely unlikely that any extra capacity will be 'stranded' as demand for connections is such that any reinforcement is almost certain to be utilised and that **a national strategy** to identify the key areas for reinforcement would help tackle this issue.

With regard to the current situation with the electricity distribution and transmission networks we would suggest that they were developed at a time when the main concerns related to demand type connections and centralised generation. Clearly we are now witnessing a complete change in direction and the networks are becoming saturated with Distributed Generation (DG) and must now be considered to be not fit for purpose, as there remains an ongoing requirement to connect more DG to meet our legally binding climate and renewable energy commitments.

Likewise, with regard to the CCMS, Ofgem would, we would hope, agree that they were written at a time when DG was not at the forefront of our thoughts and was directed predominantly at demand type connections with appropriate 'locational' charging signals. Once again we would suggest that **the CCMS document requires a complete review** if it is the intention to continue to support the connection of increased amounts of DG – noting that DG tends to be remote from what we may consider to be the centres of high electrical demand.

It should also be pointed out that the requirement within the charging methodology and associated concerns (technical, and commercial) for any network reinforcement will potentially be different when occasioned by the requirements of demand type customers rather than DG.

With regard to the charging methodology for distributed generation type projects, it must also be emphasised that (in our view) Ofgem have taken the approach that DG projects will be financially penalised within the charging statements for any reinforcement costs associated with DG connections. We are unable to locate any reference to the High Cost Cap within the existing Standard Licence Conditions or Charging Legislation and yet these clauses were specifically introduced by Ofgem.

Likewise we have raised concerns with Ofgem relating to inconsistencies within the Charging Statement (the Voltage Rule and concerns relating to apportionment costs and Point of Connection (PoC) Charging) that remain on the 'back burner' and should be addressed urgently.

Whilst Ofgem may consider that these concerns are not relevant to this particular consultation we would suggest that any concerns financial or technical that stymie quicker and more efficient distribution connections are highly relevant and must be addressed.

With specific regard to network reinforcement and that part of the charges covered by Cost Apportionment Factors (CAFs) - it would have been useful at the outset for Ofgem to have stated that these reinforcement costs, whether occasioned by demand or generation connection work, are already socialised in order to provide some background to the consultation proposals.

Lastly it has been a serious concern, and noted at a number of industry meetings, that there is no strategy in place for accommodating the network requirements for DG. This has been brought to the forefront with the recent paper issued by WPD relating to the problems in the South West of England.

Getting Connected and Who Pays

A number of points are raised in this section that require comment.

- 1) "...no difference between types of projects" We would suggest that there is a definite difference in the way that demand and generation reinforcement is funded... There is no High Cost Cap associated with demand type projects.
- 2) "...a price signal that that should encourage them to go where there's spare capacity on the network" . Whilst traditionally this approach has satisfied the demand type customers – it is not appropriate for distributed generation in the more remote areas, farming and community schemes.
- 3) We note that Ofgem is, rightly, concerned with DNOs arranging reinforcement in a timely and efficient manner. We would encourage more action in this area.

High level principles

We also support the principle of reinforcement ahead of need, as suggested in Scenario 2, as experience shows that any capacity is bound to be used rather than risk becoming 'stranded'.

Better connections queue management is essential to free up unused capacity and provide greater transparency.

Finally, Ofgem and the DNOs should fully consider how storage could be better incentivised to support constrained and saturated networks and avoid expensive infrastructure upgrades. Reports show that 2GW of energy storage could avoid £2 billion worth of grid reinforcement.

Consultation Questions

Our responses below are predominantly in relation to the DG type connections, where appropriate we have made comment on demand type connections. With regard to the main consultation we would therefore respond as follows:

Scenario 1 – DNO invests and costs then recovered from energy bills (socialised)

Q1. Would a DNO be sufficiently confident about future connections demand and the benefits to DUoS customers to justify this approach? If so, in which circumstances?

We would suggest that both developers and the DNOs would gain confidence and certainty if a suitable and defined national capacity and locational strategy and charging methodology were to be set in place. Additionally, certainty with regard to the CfD process may assist and may also reduce any capacity being 'locked out' for prolonged periods.

Q2. What other barriers are there to DNOs taking this approach? How might these be overcome?

See above

Scenario 2 – DNO investigates future demand, gets approval from Ofgem to invest ahead of need and then recovers from subsequent connections with small premium charged.

Q3. What are your views on this type of approach and the RAV Buyback Model? Are there any elements which are essential, not required or should be changed – and why?

We are broadly supportive of the RAV buy back model. We may however have concerns should normal connection regimes within a defined area be suspended without due consultation. We would also question as to whether the existing rules on HCC would remain in force?

Q4. Please give details of any projects or schemes this type of arrangement could have helped progress which would have not otherwise gone ahead?

We believe that similar arrangement may have existed in the past with the creation of 'Power Zones'. It should be accepted that Power Zones did provide a level of certainty as to where it was the intention to reinforce networks and thus where (and when) there was the intention to 'create' capacity.

Q5. What would justify requiring subsequent connection customers to only be able to connect to the new, enhanced part of the network?

We are concerned that customers may not gain the cheapest and minimum scheme if they are excluded from doing so by the creation of this type of arrangement.

Q6. What would justify a DNO charging a premium to subsequent connection customers to reimburse DUoS customers for the risk they bear in funding this work? What might be the impact of this? How should the premium be calculated?

We question:

- 1) How any premium “might lessen the risk to them (DUoS customers) of funding stranded assets”?
- 2) Could this not lead to over funding?
- 3) Are we sure that assets for DG connections are ever likely to become stranded in the first instance?

Please see the accompanying paper on stranded assets (Annex C) for more information

In short we would suggest that a premium to subsequent connections is an administrative burden that would require a level of transparency and that is likely to be required.

Q7. Over what time period would it be reasonable to expect DUoS customers to be reimbursed for their initial funding?

We would expect DUoS customers to be refunded over the existing and established time frame unless this is proved to be unacceptable and unreasonable. The question then arises as to how the existing time frame was originally formulated and derived.

Q8. When might it be appropriate for a DNO to have an upfront revenue adjustment to cover this type of scheme? Or should existing mechanisms be used?

We are of the opinion that an up-front revenue adjustment may be appropriate if the requisite criteria can be established and justified but would favour adjustments within the existing period.

Q9. Do you consider that this approach would have any implications on competition in connections?

This approach may have implications for competitive connections (noting that reinforcement may become a contestable element). This would therefore require full consultation as part of the ECSG arrangements for competitive connections work.

Scenario 3 Connection customers alone or in consortium invest in reinforcement ahead of need and recoup costs through second comers (with possibility of charging premium)

Q10. What are your views on the DevCo model and process set out in Appendix 2? Are there any elements which are essential, not required or should be changed – and why?

Whilst we can see clear advantages for the DevCo model for specific and demand type projects we also have severe reservations as to their use in the context of DG projects. This observation is based on the inherent uncertainty of forming the DevCo consortia in anything resembling a timeline to suit grid capacity availability. We also believe it may not suit all types of DG developers and funders.

Q11. Please give details of any projects or schemes this type of arrangement could have helped progress which would not have otherwise gone ahead?

‘Strategic’ connections may well benefit from this type of arrangement.

Q12. What would justify requiring subsequent connection customers to only be able to connect to the new, enhanced part of the network?

We would suggest that customers (under the current legislation) would connect to the connection arrangement that offered the minimum scheme and from a coordinated and efficient network. We are aware that the Regulator has so far declined to determine on the difference between these 2 sets of criteria.

Q13. What would justify a DNO charging a premium to second-comers to reimburse the customer? What might be the impact of this? How should the premium be calculated?

We believe that under the current legislation a DNO should only seek to recover costs as defined under the second comer rule. We would see no reason to change these arrangements.

Q14. Over what time period would it be reasonable to expect the customer to be reimbursed for their initial funding?

We would expect DUoS customers to be refunded over the existing and established time frame unless this is proved to be unacceptable and unreasonable. The question then arises as to how the existing time frame was originally formulated and derived? Should it subsequently be considered that a longer timeframe would allow a more acceptable period for reimbursement then we would support this stance.

Q15. What would justify the initial investor being permitted to restrict the type of schemes that would connect using the infrastructure it has paid for? For which type of schemes might this be appropriate?

We believe that this would be a significant departure from existing practices and may require a change in legislation. Currently any connecting customer can expect a connection from the network that provides the minimum connection scheme and, to an extent, the minimum costs for connection. Clearly if a party other than the DNO has control over any particular part of the network then these principles may not be achievable. We would suggest that any change in the current arrangements would require significant and in depth discussion and consultation to resolve all concerns.

Q16. Do you have any comments on the recommendations proposed in Appendix 3 to enhance consortium arrangements? What would justify these recommendations? Are there any other changes which would support consortium arrangements?

See response to Q10

Scenario 4 – Other ways of making it easier to connect (including i) reducing need for reinforcement through network management plus managing connection offers, ii) flexible terms for the recovery of connection charges

Q17. What role, if any, could changes to engineering standards play in helping to accelerate the connections process without damaging reliability levels? In what circumstances would this be appropriate?

We would not support any reduction in network security standards to accelerate the connections process. However we are aware that there may be ongoing trials to establish optimum working criteria for network circuits and switchgear. The results of these trial should be extended and adopted as business as usual and across all DNO areas.

Q18. Which particular standards might most benefit the connections process if changed?

See above

Q19. What benefits might the introduction of assessment and design fees bring?

We do not currently believe that the introduction of *standard* up-front assessment and design (A&D) fees will bring significant benefits, but we are supportive of innovative approaches such as 'Quote Plus', whereby developers are given more guidance and assistance on where to connect- which should reduce unnecessary 'scoping' applications at numerous sites. We believe that the scale and reason for the numbers of abortive projects should be quantified and examined in some detail. We further believe that it may be shown that excessive connection costs, delays in connection times and planning delays and so on are more likely to be a

reason for abortive projects, but are unable to substantiate this position.

Q20. Could more flexibility in the way assumed available capacity is calculated help accelerate the connections process? Are there any other improvements to be made in how DNOs manage interactivity between schemes looking to connect to the same part of the network?

We are of the opinion that the way that assumed capacity is calculated and is subsequently being made available is far from ideal however the question remains as to whether we are intending to reinforce networks ad infinitum or whether developers are to be advised that export capacity is no longer to be made available (at what may be considered to be a reasonable charge) within any specific geographic location.

Q21. When might it be reasonable to withdraw capacity it has previously offered to customers?

This matter is currently under discussion within the DG Steering Group. There appears to be a consensus of opinion in that a regime of providing 'milestones' is the preferred way forward and allowing sufficient time for the developer to progress the necessary Planning Consents. Thereafter it is considered that the grid connection offer and associated capacity should be considered for withdrawal. Clearly if Planning Consents could be achieved in a more favourable timeframe this would assist and provide the preferred way forward.

One other issue to be resolved is the potential for delays within the CfD procedures, for example projects unsuccessful in a prior round holding on to grid capacity for future auctions, with no guarantee of ever being utilised.

Q22. Are there any other changes which could be made to reduce the need for reinforcement?

We believe that reinforcement will be required once a network becomes saturated regardless of any limited support offered by 'smart connections'. Perhaps the question should be rephrased as to what level we (strategically) require any particular part of a network to be (continually) reinforced. This then comes down to a question of having a network strategy.

We note that a number of DNO are offering 'constrained' connection offers. We would suggest that whilst these are being offered and accepted as a 'good way forward' the fact remains that

- 1) Very often there is no other option available to the developers,
- 2) The 'level' of the constraint is exceptionally difficult to quantify and
- 3) We would suggest that no demand type connection would be in a position to accept any level of unconstrained (export) capacity and yet this is the only option available to some DG projects.

Q23. What would justify a DNO offering more flexible terms for connection charges? What might be the impact of this?

We have no fundamental view on this subject other than to point out that the DNO would in effect be acting and providing similar facilities as a bank.

Q24. What type of schemes would most benefit from this arrangement?

We have no view on this.

Q25. What could be done to protect other customers from picking up any costs which cannot be recovered from the original connection customer?

Please see Annex C on stranded assets. With regard to reinforcement occasioned by DG type projects we would suggest that it is not stranded assets that are the problem – more likely to be lack of capacity in the first instance.

Q26. Are there any other measures that would reduce the cost impact of connecting to the network?

If it is the intention to progress DG connections, with attendant requirements for reinforcement, then we need a national strategy for reinforcement works together with an updated charging methodology.

Q27. Which of the arrangements described above would deliver the greatest benefit to the connections process without placing additional risk or cost on the generality of customers, and why?

We do not believe that there is any significant risk or cost on the DUoS customer base that has not previously existed with regard to the funding of reinforcement.

The problem that has arisen is that the reinforcement previously required was essentially for demand customers (rather than DG) and that the 'rate' of reinforcement was slower and more predictable.

The fact remains that DG requires a different network configuration than that that has been designed and built for demand and centralised generation purposes and this fact is taking a period of time for the Regulator to assimilate.

Q28. Should wider benefits beyond energy system benefits (such as those provided by NTBMs) be taken account of in DNOs' or third parties' considerations of any of the measures or mechanisms described in this paper?

We believe that wider benefits should be considered as part of the wider debate. However we still believe that the primary concern is whether it is recognised and accepted that there is a national requirement to connect DG in the first instance.

Clearly with the existing frustrations relating to cost of connection, time for connection and lack of capacity there appears to be a gap between what is required and what is actually deliverable.

Q29. Do you have any other suggestions for delivering quicker and more efficient connections?

We would suggest a clearly defined and costed national strategy for 'converting and modifying' the existing transmission and distribution networks from that supporting the current centralised generation arrangements to that required to deliver a distributed generation arrangement.

Conclusion

As numerous stakeholders are realising, an agreed national strategy for reinforcement and reinforcement charging is now urgently required. The UK has legally binding renewable energy targets and the current state of play for connections is undermining the ability to meet these as Distributed Generation (DG) form a major part of the required investment. Ultimately there are a number of reasons as to why, particularly DG connections are taking what may be considered to be an inordinate time to gain a connection and it must be assumed that outside influences such as the existing local authority planning process does not assist.

Please contact us to discuss any of the above in greater detail.