

Response: Consultation on getting an electricity connection when the network is constrained

April 2016

RenewableUK is the leading trade association in the renewable electricity sector, representing over 450 organisations across the value chain in the wind, wave and tidal stream industries. As the questions asked in this consultation are particular to each respondent's individual circumstances, we shall here limit our comments to the broader issue of connections in a constrained network.

Support for ICE, but more could be done

We welcome the Incentive on Connections Engagement (ICE) process, and note that it has broad support from our members. We are very encouraged by the new direction of Ofgem's thinking, as set out in the 'Quicker and More Efficient Connections' consultation. We are particularly supportive of Ofgem's proposed 'RAV buyback model'. We urge solutions to be rolled out quickly before a major block to decarbonisation objectives has fully unfolded.

Addressing the issue of connections on a constrained network appears to be detached from the ICE plans. ICE plans appear to limit themselves to considering alternative connection offers. ICE plans have helped in making sure that DNOs have delivered heatmaps and some have contracted capacity registers. The publication of well-maintained heat maps by the DNOs is a helpful service as it can enable customers to make their own assessment of network capacity, although they serve to highlight how widespread a problem network constraints are.

Constraints on connecting to the distribution network have been building for some time, and can be traced back to an historic failure to anticipate the spread of distributed renewable power generators, first with onshore wind under the Renewables Obligation, and latterly with solar under both the Feed-in Tariff and the RO. This is despite targets and policies pointing in this direction since the introduction of the RO in 2002 and the setting of the EU renewable targets for 2020 and the consequent aim of 30-35% of the UK's power to come from renewables by that time. There should have been ample time to consider action to expand the capacity of the distribution networks. As it stands now, the drive for new connections in the run-up to the closure of the Renewables Obligation has put even more pressure on the DNOs in already constrained areas. The unprecedented levels of applications for storage connections as a result of National Grid's upcoming Enhanced Frequency Response service – up to 19GW at the DNO level as of April 2016 – has only served to increase the pressure for connections on an already stressed system.

The non-firm dynamic connections that have been offered up to this point cannot be considered more than an interim measure. Sooner or later these non-firm volumes will become saturated and will no longer be an economic option for generation looking to connect at the distribution level. The offering of non-firm connections must be partnered with action to strategically reinforce networks so that constraints fall away in due course. DNOs have, it seems, waited until constraint issues built up to unsustainable levels before taking actions to alleviate them. We feel that Ofgem could have targeted these constrained connection problems at an earlier date as well, with perhaps an earlier push for network reinforcement and flexible connections.

Steps requested by RenewableUK members

With regards to what could be done on top of the DNOs' ICE plans, we suggest that the following steps are considered in order to help DNOs' customers to establish for themselves the viability of any connection requests:

1. DNOs should make available historic network operational data for so that interested parties could assess for themselves the potential frequency and duration of curtailment, and thus the viability of various connection opportunities.
2. In addition, DNOs should be required to provide a forecast of the likelihood, frequency and duration of curtailment when making non-firm connection offers.
3. A meaningful long term estimation of constraints at each relevant point on each DNO's network could be published and maintained at regular intervals.
4. The integration of non-firm constraints into an enduring solution could be progressed by each DNO.

At a more general level, we believe that a version of the 'connect and manage' model applied to connection applications at the transmission level would be appropriate at the distribution level also. This passes the risk of failing to provide adequate network capacity back to the DNO through compensating generators for constraint. This gives a very clear signal to DNOs of when the cost of reinforcement is justified.

Several of our members shall be submitting their own individual responses to this consultation, featuring details of specific instances where constraints on the distribution system have affected them. We look forward to seeing what actions Ofgem takes to help alleviate these network congestion problems.

For further information please contact:

Eamonn Bell
RenewableUK Policy Manager for Networks & Systems
Email: Eamonn.Bell@RenewableUK.com
Tel: 020 7901 3029