The paper has been written by the Common Weal Energy Policy Working Group which consists of professionals across many disciplines.

We are happy that this response is published in full.

Introduction

Common Weal Energy Group is disturbed that the proposal to extend the Interconnector Cap and Floor approach, which is being consulted upon in all 4 Workstreams, has effectively been predetermined by the UK Government's BEIS White Paper which commits to expand capacity to 18GW by 2030.

Moreover we feel that the independent publicly funded research by AFRY which effectively says that the cost benefit analysis case has not been made has in effect been ignored. This research says that consumer prices in the UK for electricity will be higher post 2030 than otherwise, as a significant portion of UK electricity will be exported to the EU provided interconnectors are built according to the model.

We are equally concerned that the long promised review of the transmission charging regime has been significantly delayed and that as a result the auction of Scottish Offshore wind which will provide a major portion of the 40GW to be built by 2030 has been also delayed.

When combined with the possible conflict for access to limited cable laying vessels this puts the target for offshore renewables in jeopardy should further interconnectors be built.

Finally we are concerned that the proposal to build more interconnectors effectively underplays the alternative technologies such as battery, hydrogen and other storage devices which could more effectively balance supply and demand across the grid. Whilst existing interconnectors have helped secure supply over the past years and helped keep electricity prices low, the analysis across the EU is that the main emphasis must be to decarbonise each country as fast as possible. Given the exit of the UK from the EU and the likely divergence of regulatory regimes, the viability of further interconnectors must be questioned.

Whilst we appreciate that Interconnectors may aid the UK to secure supply given unusual and prolonged weather events, alternatives such as hydrogen, hydro and batteries and intra UK interconnectors which could equally secure supply have been only marginally analysed.

We feel that the arguments given in the Workstream 3 paper give little analysis of the actual costs and benefits of the various options.

We note that more analysis may be made before further decisions are made and welcome that.

Question 1: Do you agree with the approach we have taken to workstream 3?

It is important to recognise that interconnectors offer more than just the opportunity to transfer power back and forth between electricity systems, so Common Weal supports the approach of explicitly investigating how these other factors can add synergistic value to major infrastructure investments of this kind. Perhaps it was beyond the scope of this paper, but we were surprised that the scale of research undertaken during its preparation does not appear to have been fully reflected in the published consultation. For example, we would have expected some discussion on the cost or

impact on losses from the options explored. It would have been helpful to see arguments setting out why some services would best be provided by interconnectors, as distinct from being sourced from the internal GB system. The issue of distributed, small scale vs localised large scale provision is not explored and the security of supply issue of dependency on a third country to maintain system integrity is a policy area that should also have been explored.

Perhaps these issues will be addressed in the next consultation iteration.

Question 2: Do you agree with the potential wider impact categories we have focussed on? Are there any other areas we should consider?

We believe the chosen wider impact categories address the most important aspects.

Question 3: Do you think the discussion presented in this document adequately represents the potential impact of interconnection within each category? If not, please explain and provide supporting evidence if possible.

The decarbonisation of generation is supported by measures that can rapidly adjust production and demand, but large scale weather systems can affect renewable production beyond merely the adjacent networks, so this discussion intrinsically depends on the wider EU energy market and continued access by GB to the resources of that market, even if it is unable to access the full trading flexibility available to other participants.

Question 4: Do agree with our initial views with respect to each potential wider impact category? If not, please explain why.

Paragraph 3.4 is interesting, in that it puts forward an argument that, in practice, Ofgem rejects. The consultation argues for,

"regional specialisation of low carbon development, meaning renewables can be located in areas with highest specific load factors, for example by placing renewable projects such as solar power in Southern Europe or wind and hydro in the North Sea. A National Infrastructure Commission report suggested that locating renewables where they would operate most efficiently could achieve the same renewables output with 15% less installed capacity."

Ofgem supports distance-related charging in GB, where (eg) MW mile is a component of the charge calculation and the TNUoS philosophy is one in which generators are charged on the basis of the apparent burden they place on the transmission system, whereas this paper lauds arrangements that allow efficient renewable investment in those areas where it offers the most efficient carbon abatement. This is hypocrisy of the first order.

Ofgem should apply the same interconnector thinking to internal GB connections between north and south and stop penalising generators in the north of Scotland for locating where the best resources exist.

We hope this will now happen following the 8th July adjournment debate in the Commons, led by Alan Brown MP and the response from the Minister that:

"Ofgem's consultation also noted potential issues with transmission charging arrangements and signalled that it is considering a wider and more holistic review of them".

In terms of flexibility, the benefit of interconnectors in reducing curtailment is important, but it is apparently contradicted somewhat by the idea that they are good for importing low-cost electricity

from other networks. It would be interesting to see modelling that looked at the profile of renewable production deficits and the availability of renewable generation for import, which would help quantify the value of this exchange.

Paragraph 3.16 mentions a modelled savings value of £12bn/year for system flexibility, "without hydrogen". This is an important point, but it is not further explored. What would be the equivalent figure with hydrogen?

It is stated that interconnectors can provide virtual inertia. Is there a special property of interconnectors that makes this provision more efficient or cost effective than the equivalent capacity spread over a number of smaller, renewable production sites? Scottish Power has proposed such a system for one of the company's windfarms, so would provision by interconnectors be in any way superior?

Similarly the comment about "black start". A number of alternative proposals have been made for restating the grid from renewables. There is nothing special about interconnectors.

Question 5: Do you agree with our view on how wider impacts have been captured in past needs case assessments?

We have no view on this.

Question 6: How do you think we should approach future needs case assessments within the framework presented in this working paper? Are there any other options we should consider?

The approach indicated seems appropriate given that Ofgem is the decision maker under the current regulatory regime.

Question 7: Do you agree with our initial conclusions? If not, please concisely explain why and provide supporting information if available.

We agree that interconnectors can have an impact on decarbonisation, flexibility, security of supply and system operation. We are aware that there are some benefits and also some costs. Our main concern is that these cost benefits have been inadequately measured or indeed where Afry has analysed them and found a disbenefit to the UK consumer these findings have been ignored.

Much further analysis is required to prove definitively that any particular new interconnector will provide a greater benefit than say a battery, a hydrogen plant or indeed an intra UK interconnector. This is compounded by the lack of clarity on the future of interconnector regulations between the UK and the EU.

Question 8: Do you agree with our initial proposals? If not, please concisely explain why and provide supporting information if available.

Insofar as many of the detailed proposals have been left for further analysis, we agree with the initial proposals.

Question 9: Do you have any further feedback on our analysis, conclusions or proposals presented in this consultation document?

No.