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Dear Andrew

Interconnector policy review: Working Paper 3 – Wider impacts

The Flexible Generators Group (FGG) represents the owners of and investors in small scale, flexible generation. These power stations are embedded in distribution networks and provide a variety of vital services to the system operator to help it deliver secure, economic supplies to electricity customers. We also participate in the Capacity Market (CM) and have made significant investment in new capacity on the back of CM agreements.

FGG welcomes the opportunity to contribute to this consultation. The interconnectors compete with FGG member companies and we have long been concerned that their treatment within the various market frameworks is distorting competition. We have not answered all the questions directly, but have covered all the issues we believe the questions are seeking to get views on.

General Approach

FGG are concerned that the analysis looks too high level and is not backed by robust analysis. It is clear from the modelling that NGESO does for its Electricity Capacity Report that the interconnectors may add to security of supply and provide a route to market for renewable electricity, but may in a system stress event result in price contagion and reduce supply security. Ofgem's own high level analysis seems to suggest that there is no clear benefit from increased interconnection. Ofgem should therefore look more closely at the difference between a general benefit in theory against the security risk at times of system stress.

If the UK is going to go on allowing further interconnection then a more robust way to model the available capacity at each end of the interconnector is needed. Much of Ofgem's document talks about the services that the interconnectors may be able to provide, such as frequency response, but in reality it is the generators on the other end providing these services and Ofgem must be sure that interconnected states have enough plants capable of providing such services to both national and international markets. Without a far more detailed understanding of the interconnected markets it is unclear how Ofgem would know this. We therefore feel Ofgem makes a lot of assertions, but actual knowledge of the details of the interconnected markets is needed.

Wider Impacts

In general FGG agrees with Ofgem's view that a greater understanding of how the interconnectors influence system operability is needed. While their ability to deliver "cheaper" electricity is understood, their impact on wider parts of the market, such as system stability, remains unclear. As noted above, FGG believes that this illustrates the need to understand the details of the interconnected markets and to make sure that the assets connected in interconnected countries can provide services to their own market and the GB market if they are to be relied on.

FGG also believes it is important that NGEN buys services from interconnector users in the same way it would from other users. NGEN and Ofgem should work on ensuring this happens, in the same way this is meant to be working under the Capacity Market. Furthermore, Ofgem must quickly separate NGEN from the rest of the NG so that there can be no perception of undue discrimination given National Grid's large investment in interconnectors.

Decarbonisation

FGG agree that interconnectors do allow a route to market for additional renewables. What Ofgem does not question is whether there are wider policy issues that mean renewables are being deployed more slowly in GB as a result of interconnection and how much correlation there is between, at least interconnected countries', renewable output. There seem to be good strategic reasons for wanting renewable power to be deployed in the UK, but currently the charging for connections and use of system means that renewables in GB may be being rolled out less quickly than in other EU countries.

One of the biggest risks to global decarbonisation is countries relying on others to deliver environmental improvements for them, such as relying on importing green power. Paragraph 3.3 points to cheaper power displacing more expensive power, but power may be more expensive because of the regime in which UK generators operate, rather than actually being cheaper. There is therefore a risk of displacing more efficient generators at the expense of those with lower costs (network charges, BSUoS, business rates, etc.). Ofgem does not seem to have done an analysis of the actual competition between GB and other European generators which is critical if market distortions are to be avoided.

We are all aware that high levels of renewable output combined with periods of low demand within the UK currently results in system management issues, such as RoCoF. If the interconnectors are adding to this problem then the cost of that needs to be properly considered. To date we do not believe the costs of the interconnectors has been properly analysed. Further, GB generators will face high BSUoS costs when system management costs increase, creating a "BSUoS death spiral" for them. While Ofgem is aiming to take BSUoS off generators, in the meantime the competitive disadvantage and associated risks to GB investment remains.

Flexibility

FGG recognises that interconnectors can provide flexibility, but it is actually generators and DSR providers who provide the flexibility not interconnectors, they are just wires. It is not clear that the analysis that Ofgem has undertaken has also considered the impact of interconnector reliability on the costs of reserve within the GB market. As Ofgem notes, interconnectors are often the largest load on the system and therefore NGEN must carry reserve to cover any failure. What is the costs of this reserve vs the benefit of flexibility that we do not currently see interconnectors providing? Ofgem must ensure the costs of these cables are also considered.

As the owners of peaking plant we are also concerned that NGENSO favours taking actions over interconnectors, or from larger plants, rather than smaller plant. NGENSO acknowledges that its systems have issues with accommodating smaller BM participants and, despite the need for reserve increasing the use of reserve services, it does not seem to have increased across all asset types. Notably we are not seeing NBM STOR actions keeping pace with reserve requirements, despite its low costs compared to other reserve. Ofgem therefore needs to check that interconnectors actions are being taken in an efficient manner.

Frequency Response and Reserve

Ofgem set out the risks and opportunities that arise from interconnection. However, it does not seem to recognise that over time, with more renewables on both ends of the interconnectors they may also add to the frequency issues, etc. already being seen in the UK. Where interconnectors are providing these services they must be doing so on a level playing field, i.e. bidding into the same auctions as the GB providers and being paid on the same basis. Simply allowing SO to SO trades will distort the market for these services.

FGG note the SO to SO trade prices notified via the BMRS are significantly higher than any market prices (c€350/MWh). While there may be few of these trades executed and low volumes, it is still not obvious why such high prices are ever offered or accepted. If NGENSO is going to buy energy over interconnectors, with the exception of emergencies, it should do so via the usual markets and at market prices.

Black Start

While interconnectors may, under certain circumstances, add to system security we believe NGENSO should focus on developing local black start before using interconnectors. The ability to restart regions of the UK, by using embedded plants, would be likely to provide better value for money than relying on interconnectors. Black start using power plants is tried and tested, interconnectors are not.

Reactive Power

Ofgem says the provision of reactive power is possible, but that the interconnectors need to be in the right location. It is not clear how the interconnectors choose their locations, as they do not face the signals from Use of System charges that other generators see differ by region. Ofgem may want to consider this further. As with other services, the interconnectors must also compete in the same markets that the other parties do, ideally with a similar cost based.

Boundary capability and constraint management

While the interconnectors can reduce some constraints they are mainly likely to be able to achieve more in a regime where they are also carrying power from wind farms connected to them. We noted the Offshore transmission network review and hope that this will consider how interconnector locations are influencing wider costs. We understand that interconnectors are traded down by NG (e.g., currently IFA2 traded down 300MW), for several reasons: to manage RoCoF; for constraint reasons; for downward regulation; and occasionally for voltage control. The recent trades on IFA2 seem to be manage a constraint in the south of England (MACHEX constraint). What are the costs of these actions and are there areas where Ofgem should be saying that further interconnection must not be located?

System Security

FGG believes that interconnectors should not be in the CM as they cannot deliver energy in a stress event. Interconnector flows should reflect the relative prices in the interconnected markets. However, in a CM event we believe that the ESO is likely to resort to SO to SO trades if interconnector flows do not respond to prices (possibly as a stress event is occurring across Europe). This creates a risk that customers pay for the interconnectors to be in the CM and then pay for SO trades as well.

While we appreciate the CM policy sits with BEIS, Ofgem seems to assert that interconnectors add to security, but it does not specifically address the issue of system stress (such as extreme weather, interrupted gas supplies, etc.) and we do not believe that there has been any robust analysis of system adequacy if we widen the scope of “system” to include interconnected countries. The ECR modelling done by NGENSO seems to indicate that there remains a lack of understanding around the way different countries calculate margins and what is a contracted reserve response (DSR contracts) vs estimated response (DSR in response to price). This is evidenced by the wide range of derating factors suggested for interconnectors within the CM. If they are reliably adding to security then this would be reflected in the deratings and it is not.

Future Work

It is not clear from Ofgem’s working papers that the GB customers would benefit from any further interconnection. FGG believes that Ofgem need to consider if the modelling being used to look at the impacts of interconnectors on the markets on each end needs further work. We have already seen a situation where France threatened to cut off power to the Channel Islands and the UK needs to be clear that in a stress event the interconnected markets have enough capacity between them to support customers in both countries.

The impact of Brexit on facilitating economic flows in real time also needs to be resolved. There should be no need to rely on SO to SO trades if parties can trade economically.

All markets where interconnectors compete with GB generators need to accommodate interconnectors competing on the same basis as other service providers. FGG feels that the cost of power coming over interconnectors needs to be adjusted to level the playing field, for example adding in a tax that reflects network charging, CPS, etc., otherwise the interconnector flows will result in closing more efficient plants in the GB market while leaving less efficient generators operating in interconnected markets.

Interconnectors need to be removed from the capacity market. There is no good reason to require customers to pay more than once for these wires.

If you wish to discuss this further please contact myself or Lisa Waters (lisa@waterswye.co.uk or 020 8239 9917).

I look forward to hearing from you.

Yours sincerely



pp Mark Draper
Chairman