NeuConnect

The American Barns Banbury Road Lighthorne Warwickshire CV35 0AE

Mr I Hussain Interconnectors, Networks Ofgem 9 Millbank London SW1P 3GE Ian Leedham Head of Commercial, Legal & Regulation

lan.Leedham@frontierpower.biz Mobile +44 (0)7785 770118

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BY EMAIL & POST

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Dear Ikbal

Cap and Floor Regime: Initial Project Assessment of the GridLink, NeuConnect and NorthConnect Interconnectors ('Consultation').

Thank you for inviting us to respond to the above Consultation.

Our response is only in relation to the NeuConnect project, which is being developed by Meridiam, Frontier Power and Greenage Power.

We are pleased that Ofgem shares our view that the NeuConnect Project is likely to generate significant net benefits for GB consumers, as well as providing additional security of supply and sustainability benefits to GB.

We have set out below at Annexure 1 our responses to the Consultation questions posed by Ofgem, which we are happy to expand upon or discuss further if required.

We look forward to working with you in the next stages of the NeuConnect project and to supporting the further development of the Cap & Floor regime.

Yours sincerely

lan Leedham

Head of Commercial, Legal & Regulation

NeuConnect

ANNEXURE 1: Consultation Response to specific questions

Question	NeuConnect Response
Chapter Three Question 1: Do you agree with our minded-to positions on the three projects considered in this consultation?	Yes, we agree there are significant benefits to consumers in delivering the NeuConnect Interconnector.
Question 2: Is there any additional information that you think we should take into account when reaching our decision on the IPA of the projects?	The scenarios presented offer differing views and we would invite Ofgem to consider that generators, wind and solar farms in Germany may respond even more positively to the increased interconnection and so encourage further new investment. The additional interconnection would also help the GB market in balancing intermittent wind generation with a connection to Germany as well as reducing price volatility.
Chapter Four Question 3: What are your views on the approach Pöyry has taken to modelling the impact of cross-border interconnector flows?	We are pleased to note that both the Pöyry and our own economic studies show that NeuConnect has overall positive social welfare in all business cases. In the Reference/ Base case our own studies suggest up to 40% improvement on the Pöyry base case. We conclude this difference is largely due to an assumption by Pöyry of higher coal, gas and carbon prices in Germany (more so than in the UK), than our projections and considerably higher than current forward prices.
	Pöyry also appear to assume an additional 5GW peak German load assumption, using more fossil fuel, whereas our study shows a lower peak load and greater use of renewables based upon fewer constraints in the German market.
	Pöyry also assume all Window 1 interconnectors are operating by 2022.
	The differences in assumptions lead Pöyry to a closer projected wholesale power price in the UK/ Germany than we estimate. The effect of a lower arbitrage would of course lead to lower projected revenues of the interconnector.
	In conclusion, given the forecasted nature of such studies on future power markets we note the project contributes positively overall in both studies, we are optimistic that a larger price arbitrage will exist between the two markets to deliver greater economic benefits to the UK and Germany.

Question 4: Do you have any additional evidence in this area that we should take into account?

No, not at this time. However, we would welcome further understanding of Pöyry's rationale and study in relation to the de-rating factor (DRF). We may like to submit further information and commission our own studies to support a lower de-rating factor either to Ofgem and/ or the Department for Business Energy & Industrial Strategy (BEIS).

The recent BEIS (Panel of Technical Experts) Final Report on National Grid's Electricity Capacity Report 2017, recommends the refining of de-rating factors for individual interconnectors rather than countries, as regional rather than country specific capacity markets tend to drive interconnector flows.

The BEIS report also makes no change in analysis based upon exit from the EU, as the "mutual benefits of electricity trade are so large" that trade will continue. We would therefore hope that the strategic capacity reserve operating in Germany (as opposed to a capacity market) has not led to an unduly conservative de-rating factor being applied. If a more regional approach is adopted as suggested in the report, then we assume the Pöyry modelling did not take into account existing transmission network constraints on renewables in Northern Germany.

Discounting the reserved capacity gives an unduly conservative and narrow range of available capacity leading to a high de-rating factor when compared with other interconnectors connected to markets in France, Belgium and the Netherlands. It would also not account for any additional flow from the connected Nordic region into Germany.

An average de-rating factor across France, Belgium and Netherlands would lead to a de-rating factor of 71%, which would only then be lower by 1% post 2030 under our economic analysis. This is quite a contrast when compared to the 21% de-rating factor estimated by Pöyry.

We believe Pöyry have looked in one method at a very narrow window of GB Loss of Load Probability (3 hours per annum) and assumed stress events in Germany and the UK are highly correlated. Considering the other method of study used by Pöyry, relating to the 10 tightest periods in each market, this approach does not appear to consider how tight the markets actually are in an absolute sense (the actual number of stress events could be increased or reduced and not effect this methodology if only load is taken into account). We are therefore not convinced that the methodologies used accurately reflect the actual security of supply of an interconnector between

	Germany and the GB market.
	NGET will of course carry out its own analysis and make an appropriate recommendation to BEIS, who will determine the actual DRF at the appropriate time. We are concerned that the Pöyry indicative DRF could be unhelpful to our investment case, when in actual fact both our studies may not have a bearing on NGET's recommendation to BEIS. We would therefore query the need for publication of these indicative DRF figures at this stage and the basis for their estimation.
Chapter Five Question 5: Do you have any views on the information	We broadly support the impact analysis and commentary provided by Ofgem, Pöyry and National Grid Electricity Transmission.
presented in this chapter? Question 6: Are there any additional factors that you think we should have considered?	No
Chapter Six Question 7: Have we appropriately assessed the hard-to-monetise impacts of the interconnectors?	Yes, the NeuConnect interconnector will increase system resilience against high-impact, low probability events. The increased diversity and supply should guard against technical equipment failure, weather related risks, volatility in prices and attacks on energy infrastructure, by connecting a new market. The NeuConnect interconnector will also contribute positively to GB carbon reduction targets.
Question 8: Are there any additional impacts of the interconnectors that we should consider qualitatively?	Although the generation mixes are deemed to be similar, weather patterns and daylight time differentials will provide additional benefits to the GB market, which may not have been quantified sufficiently despite the similar generation mix.
Chapter Seven Question 9: Do you have any views on the information	We welcome Ofgem's positive high-level assessment of our project, finance and supply chain plans.
presented in this chapter?	In terms of further discussions with stakeholders, the NeuConnect project would welcome further engagement with Ofgem and Bundesnetagentur and the respective UK, EU and German governmental departments. There is always an inherent challenge of split jurisdiction and cross border trade with any interconnector which is perhaps sharpened by Brexit. The continued engagement and multi-lateral meetings will assist in the essential development of a cross border interconnector between Germany and the UK, to the benefit of consumers in both countries as well as increased power exchange within Europe. We recognise that establishing a clear, transparent regulatory framework in both countries is essential to secure the development, financing and operation of this valuable interconnection capacity. There remains a need to ensure harmonization is maintained

across all EU energy interconnectors to prevent any distortion of economic signals.

As different regulators have different approaches, each interconnector must be taken on a case by case basis. The regulation in each country should provide an aligned incentive to maximise consumer benefits and be fit for purpose for the markets being connected. It should also support third party (non TSO) investment to promote increased competition for infrastructure funding.

Chapter Nine Question 10: Do you have any comments on our assessment of the project plans?

We note Ofgem's comments in relation to other cap and floor projects, which acknowledges relief on delays to the regime start date for force majeure.

The project welcomes the understanding that delays can be caused by external factors such as force majeure events, but such events may also include regulatory and third-party consent delays. Delays in approvals can have disproportionate effects on project timescales if seasonal survey windows are missed as a result.

Third party delays in approvals or necessary consents may cause delays to the start of operation without significantly increasing the cost of construction.

Therefore, we would like to see a greater recognition of the broad nature of any external delay factor to a regime start date, which may be beyond the reasonable control of the developer, but not necessarily force majeure in the

Any additional guidance will assist in providing greater understanding and confidence for investors, without detracting from the overall obligation for an Interconnector Licensee to mitigate any delays wherever economic and efficient to do so.

strictest of definitions.