

Stuart Borland
Electricity Transmission Investment
Ofgem
9 Millbank
London
SW1P 3GE

5 May 2015

Dear Stuart,

CAP AND FLOOR REGIME: INITIAL PROJECT ASSESSMENT OF THE FAB LINK, IFA2, VIKING LINK AND GREENLINK INTERCONNECTORS

Thank you for the opportunity to comment on this initial project assessment of the FAB Link, IFA2, Viking Link and Greenlink interconnectors.

Our answers to the consultation questions are in Annex 1 attached. Our main comments are as follows.

The case for cap and floor support

As noted in our response to the consultation on the IPA for the NSN interconnector (the "NSN consultation"), we are supportive of cost effective measures to support increased interconnection. Based on the modelling carried out by Pöyry and National Grid, the overall assessment of the FAB, IFA2 and Viking link interconnectors appears to show a greater benefit than was shown for the NSN interconnector. In the event that Ofgem confirms its decision to award cap and floor support to NSN, it would seem inequitable for these three projects not to receive such support as well.

Level playing fields between GB and non-GB generators

In our response to the NSN consultation we raised concerns about the lack of level playing fields between GB and non-GB generators, and the risk that significant growth in interconnector capacity would exacerbate these competitive distortions. Although this latest consultation considers the potential impact of interconnector participation in the GB Capacity Mechanism, our wider concerns remain. GB-based generators face higher costs than non-GB generators for three main reasons:

- Carbon price floor tax costs;
- Generators' 50% share of BSUoS charges;
- TNUoS charges (including the cost of onshore reinforcements for new interconnectors and costs of cap and floor payments).

The proportion of BSUoS and TNUoS charges allocated to generation rather than load in GB is much higher than in most other European countries. The GB share in 2015/16 is expected to be around 31% compared to 2% in France and 4% in Denmark. If this distortion encourages new generation to be built overseas with power transported to the UK via interconnectors (in circumstances where the underlying economics does not

favour it), this would be undesirable from the perspective of UK economic welfare as well as longer-term security of supply. If Ofgem were to take a more positive view in relation to any future proposals along the lines of CUSC proposal CMP201 (which was rejected in November 2013), this would have the potential to change BSUoS charging from a 50:50 split between generation and load to 100% on load.

Level playing field between interconnectors and other technologies

Many of the benefits offered by interconnectors - greater market efficiency through arbitraging differences in wholesale prices, ancillary services and other system operation benefits, and enhanced security of supply – can potentially be offered by other technologies. We suggest that Ofgem should give consideration to the incentives available for alternatives to interconnection, with a view to ensuring that choices between interconnection and other technologies are not distorted.

In summary, while we agree that increased interconnection will help facilitate the completion of the internal energy market, helping to meet low carbon and security of supply objectives in the process, we believe that Ofgem should also address the competitive distortions which may be exacerbated by a growth in interconnection, and the risk that preferential support for interconnectors may inefficiently displace investment in alternative technologies.

Please do not hesitate to get in touch should you wish to discuss any aspect of this response.

Yours sincerely,



Rupert Steele
Director of Regulation

**CAP AND FLOOR REGIME: INITIAL PROJECT ASSESSMENT OF THE FAB LINK, IFA2,
VIKING LINK AND GREENLINK INTERCONNECTORS
– SCOTTISHPOWER RESPONSE**

Chapter 3: Summary of our Initial Project Assessment

1. Do you agree with our minded-to positions on the four projects considered in this consultation?

As noted in our response to the consultation on the IPA for the NSN interconnector (the “NSN consultation”), we are supportive of cost effective measures to support increased interconnection.

Based on the modelling carried out by Pöyry and National Grid, the overall assessment of the FAB, IFA2 and Viking link interconnectors appears to show a greater benefit than was shown for the NSN interconnector. In the event that Ofgem confirms its decision to award cap and floor support to NSN, it would seem inequitable for these three projects not to receive such support as well.

We agree with the minded-to position not to award Greenlink a Cap and Floor regime at this time.

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 introduction to the consultation says that it “considers the need for the four projects and interactions between them, as well as interactions with the proposed interconnector to Norway”. No reference is made, however, to existing interconnectors or those in development and likely to be in place ahead of these interconnectors. NEMO and Eleclink in particular would seem to be of relevance in the context of IFA2 and FAB. The Pöyry analysis does make reference to Eleclink but it is unclear if/how it has been factored into the assessment of benefits of these new projects.

Dynamic effects

We are pleased that Ofgem acknowledges (in footnote 1 of the consultation) that “*the range reflects the fact that the modelling does not capture dynamic effects, such as generators’ responses to changes in profit levels. The lower end of the range represents the modelled impact on GB total welfare which informs whether there are likely to be efficiency improvements in GB from building the interconnector. We think this measure indicates how these dynamic effects might ultimately affect consumers.*” In other words, Ofgem is suggesting that GB total welfare is likely to be a more robust measure of long term consumer benefit than the ‘consumer impact’ modelled by Pöyry – a point that we made strongly in our response to the NSN consultation. However, we are disappointed that this point does not seem to be reflected in the summary of the initial project assessments in Section 3, which if anything gives greater prominence to consumer impact figures than to GB total welfare.

Level playing fields between GB and non-GB generators

In our response to the consultation on the initial project assessment for the NSN interconnector (the “NSN consultation”), we raised concerns about the lack of level playing

fields between GB and non-GB generators, and the risk that significant growth in interconnector capacity would exacerbate these competitive distortions. Although this latest consultation considers the potential impact of interconnector participation in the GB capacity mechanism, our wider concerns remain. GB-based generators face higher costs than non-GB generators for three main reasons:

- Carbon price floor tax costs;
- Generators' 50% share of BSUoS charges;
- TNUoS charges (including the cost of onshore reinforcements for new interconnectors and costs of cap and floor payments).

The proportion of BSUoS and TNUoS charges allocated to generation rather than load in GB is much higher than in most other European countries. As shown in the table below, the GB share in 2015/16 is expected to be around 31% compared to 2% in France and 4% in Denmark. If this distortion encourages new generation to be built overseas with power transported to the UK via interconnectors (in circumstances where the underlying economics does not favour such an approach), this would be undesirable from the perspective of UK economic welfare as well as longer-term security of supply. If Ofgem were to take a more positive view in relation to any future proposals along the lines of CUSC proposal CMP201 (which was rejected in November 2013), this would have the potential to change BSUoS charging from a 50:50 split between generation and load to 100% on load, mitigating the cost disadvantage of GB generators.

	Sharing of network operator charges	
	Generation	Load
Great Britain		
TNUoS	≤ 27%*	≥ 73%
BSUoS	50%	50%
Aggregate (2015/16)	31%	69%
Ireland and NI	25%	75%
Belgium	7%	93%
Denmark	4%	96%
France	2%	98%
Netherlands	0%	100%
Germany	0%	100%
Norway	38%	62%

*The TNUoS charge on generators is subject to a cap of €2.50/MWh under EU Regulation 838/2010 Part B. The generator share was 27% in 2014/15 and earlier years but the cap will result in a 23.2% share in 2015/16. The aggregate figure is based on the 2015/16 share. Source: ENTSO-E (https://www.entsoe.eu/publications/market-reports/Documents/SYNTHESIS_2014_Final_140703.pdf); GB aggregate value estimated by ScottishPower

Loophole in capacity mechanism penalty payments

In the initial project assessment of the NSN interconnector we did not think that Ofgem provided sufficient evidence and analysis to conclude that the implied level of subsidy is justified. We recognise that in the present consultation, Ofgem have considered the effect of Capacity Mechanism payments, and welcome this addition.

However, we would note that participation in the CM appears to be a zero risk option for interconnectors. If, as a result of penalties for failing to meet CM obligations, their revenue falls below the floor, it will be topped up to the floor (with the cost being recovered via TNUoS payments). Generators participating in the CM that face penalties for failing to meet

obligations have no such luxury. We would encourage Ofgem to consider whether the floor mechanism for interconnectors should be modified to close this loophole.

Level playing field between interconnectors and other technologies

Many of the benefits offered by interconnectors - greater market efficiency through arbitraging differences in wholesale prices, ancillary services and other system operation benefits, and enhanced security of supply – can potentially be offered by other technologies. We suggest that Ofgem should give consideration to the incentives available for alternatives to interconnection, with a view to ensuring that choices between interconnection and other technologies are not distorted.

In summary, while we agree that increased interconnection will help facilitate the completion of the internal energy market, helping to meet low carbon and security of supply objectives in the process, we believe that Ofgem should also address the competitive distortions which may be exacerbated by a growth in interconnection, and the risk that preferential support for interconnectors may inefficiently displace investment in alternative technologies.

Chapter 4: Economic market modelling of the impact of interconnector flows

3. What are your views on the approach Pöyry has taken to modelling the impact of cross-border interconnector flows?

As noted in our response to the NSN consultation, we think that the approach Pöyry has taken to modelling the impact of cross-border interconnector flows is generally sensible, given the time available. Our detailed comments on the model apply in this case as much as in the case of NSN.

We believe that the large transfer from producer surplus to consumer surplus predicted by Pöyry's model is highly questionable as the model does not appear to include dynamic effects. In particular, given current low levels of generator profitability, we consider it unlikely that generation revenues could be reduced by significant amounts without some compensatory effect. The concept of missing money in the generation sector is widely accepted, and indeed the capacity mechanism has been introduced to ensure there are adequate stable revenues to ensure that security of supply is delivered. Pöyry's analysis appears to ignore this concept and assume there is no correction in the capacity market for the lost revenues and/or market exit as a result of lower wholesale prices and associated infra-marginal rents. In practice we think:

- It is likely that generators would receive higher payments from the capacity mechanism to make up for the fall in wholesale prices. Such payments would represent a transfer from consumer to producer, potentially offsetting much of the consumer benefit predicted by the model.
- To the extent that the additional capacity payments do not restore equilibrium, market exit is likely to cause the necessary scarcity to achieve this.
- To the extent that the new equilibrium involves a lower wholesale price offset by more capacity payments, the growing proportion of generation that is supported by the CfD mechanism would receive larger difference payments that would further offset the producer to consumer transfer modelled by Pöyry.

In our response to the NSN consultation, we noted that Pöyry's report (page 70) says that their pan-European BID3 model 'also has the advantage of accounting for the impact of decisions and developments of large but not directly connected countries (such as Germany) on smaller surrounding markets'. However, we would be interested in understanding whether the Pöyry modelling considers the development of other significant interconnectors in the area, such as Eleclink and NEMO, and how.

We would also request that in the final project assessment, the financial impacts (consumer, producer, interconnector and overall welfare impacts) are shown disaggregated between 'GB as importer' and 'GB as exporter'. This will give the reader a clearer understanding of the relative financial importance of arbitrage and efficiency savings associated with flows in each direction (which may be very different from the relative magnitudes of the flows) and will improve transparency of the process.

GB consumer benefit versus GB welfare impact

We highlighted the absence of dynamic effects in Pöyry's modelling in our response to the NSN consultation and Ofgem claimed in its summary of responses that dynamic effects had in fact been considered when making its overall decision. As far as we can see, this claim is based on the observation that the 'GB total welfare' metric does not suffer from the absence of dynamic modelling – as opposed to GB consumer impact, which does – rather than on any direct attempt to adjust the GB consumer impact figures for dynamic effects.

Ofgem's May 2014 proposal for rolling out the cap and floor regime suggests that the needs case assessment will be based on the "overall likely social welfare benefit and disaggregated consumer, interconnector developer and generator impacts for GB and other relevant countries (with particular explanation of impacts on GB consumers' interests)". In other words, there are two considerations: the overall social welfare benefit and the narrower consumer benefit.

Net social welfare is a measure of economic efficiency and is the metric most commonly used in public sector policy appraisal. We believe this should be the primary consideration for Ofgem in determining whether to provide cap and floor support to an interconnector project, particularly when provision of such support may well involve a degree of subsidy payment. Unless the welfare benefits materially exceed the expected level of subsidy payment, it is likely to be economically inefficient to provide such subsidy.

For all these reasons we think it would be inappropriate to place too much weight on narrow measures of consumer benefit (ie transfers from producers to consumers) as opposed to net social welfare. Although Ofgem appears to acknowledge this in footnote 1 to the present consultation, we are disappointed that the implied emphasis on 'GB total welfare' does not seem to be reflected in the summary of the initial project assessments in Section 3, which if anything gives greater prominence to GB consumer impact figures.

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

See our answer to Question 3.

Chapter 5: Impacts on the GB transmission system

5. Do you have any views on the information presented in this chapter (“Impacts on the GB Transmission system”)?

We note that the system operation impacts estimated by National Grid Electricity Transmission (NGET) account for more than half of the overall GB impact in all three projects that Ofgem is minded to support (see table below).

	FAB Link	IFA2	Viking Link
System operation impacts £m NPV	827	602	516
Total quantified GB impact £m NPV (with CM)	1,489	531	590
SO impacts as % of total	56%	113%	87%

In the two projects where National Grid Interconnector Holdings (NGIH) is a joint developer (IFA2 and Viking Link), the assessment of system operation impacts is even more critical, accounting for 113% and 87% of total benefits respectively. This highlights the risk that conflicts of interest could arise as a result of National Grid being involved both as project developer and as the source of independent modelling on which Ofgem relies for its assessment.

Ofgem has noted that the NGET assumptions on network capability are aligned with the Year 7 ETYS boundary capabilities, which are informed by each of the TOs. We feel that there would be value in NGET engaging with the TOs directly to determine whether this sufficiently addresses boundary capability impacts for all TOs.

6. Are there any additional factors you think we should have considered?

We have no project specific comments from a system design perspective.

Chapter 6: Hard-to-monetise assessment of interconnectors

7. Have we appropriately assessed the hard-to-monetise impacts of the interconnectors?

The approach to assessing hard-to-monetise impacts in Chapter 6 and Figure 2 seems broadly appropriate. The hard-to-monetise impacts of interconnectors do not appear to be particularly significant compared to the economic impacts considered in previous chapters, and we would not expect much weight to be given to them in the overall assessment.

8. Are there any additional impacts of the interconnectors that we should consider qualitatively?

We would suggest that the ‘diversity and resilience’ section could usefully make reference to the fact that increased interconnector capacity may exacerbate distortions between GB and non-GB generators (as explained in our response to Question 2 above).

Chapter 7: Assessment of connection location, capacity, cable routes and technical design

9. Do you have any views on the information presented in this chapter (“Assessment of connection location, capacity, cable routes and technical design”)?

We have no comments to make at this stage.

Chapter 8: Next steps on our IPA

10. Do you have any comments on our assessment of the project plans?

We have no comments to make at this stage on the proposed management of these projects.

ScottishPower
May 2015