Stuart Borland
Electricity Transmission Investment
Ofgem
9 Millbank
SW1P 3GE

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Cap.Floor@ofgem.gov.uk

Cap and floor regime: Initial Project Assessment for the NSN Interconnector to Norway

Dear Stuart,

RWE welcomes the opportunity to respond to the Ofgem consultation on the Cap and floor regime: Initial Project Assessment for the NSN Interconnector to Norway (the Consultation Document). We are responding on behalf of RWE companies operating in the UK.

RWE remains supportive of efforts to improve interconnection between GB and the continent which will improve market liquidity, competition and security of supply. We expect interconnectors to play a growing role in the integrated European electricity market by enabling balancing of supply and demand as the impact of renewable generation increases.

We believe it is important that the merchant approach towards DC interconnection is retained as the preferred route towards investment. However, we recognise that interconnectors form part of the transmission system in line with Directive 2009/72/EC. As such interconnectors must comply with all EU Regulations, guidelines and network codes. The cap and floor approach has a role to play in ensuring efficient and cost effective provision of vital infrastructure where such an approach can be properly justified.

The consultation document on the NSN interconnectors highlights a number of important factors that were not considered in detail in previous consultations on the cap and floor regime and in connection with Project NEMO, the interconnector between GB and Belgium. We believe that these issues should be considered when examining the applicability of the cap and floor regime to the NSN project and other future interconnectors. In particular:

- **There is unjustified risk for customers under the Cap and Floor arrangements as a result of uncertainty in outcomes:** The overall total welfare impact for the NSN project is projected to be in the range of -€2bn and €2.5bn[1]. This comprises an overall GB welfare benefit of "*around €360mn in the Base Case, -€940mn in the Low Scenario, and €1.200mn in the High Scenario (NPV terms), including IC welfare*"[2]. For Norway, the overall social welfare is "*significantly positive in the Base Case (around €800mn, NPV terms), highly positive in the High scenario (€2,500mn) and very negative in the low scenario (-€1.800mn)*"[3]. This range of

[1] "Near Term Interconnector Cost-benefit analysis: Independent Report", A Poyry Report for Ofgem, December 2014 (the Poyry Interconnector Report), Figure 1
[2] Poyry Interconnector Report, Page 41
[3] Poyry Interconnector Report, Page 41

outcomes illustrates that there is considerable uncertainty in the welfare justifications for the NSN interconnector. Consequently the "cap and floor" arrangements could result in GB customers underwriting a significant degree of downside risk for interconnector investment (i.e. there is insufficient revenue from flows and customers end up funding the investment through the floor arrangements);

- **The Carbon Floor Price now supports merchant interconnector investment**: The Carbon Floor Price plays a crucial role in sustaining the net benefit of the NSN interconnector to GB consumers and justifying the investment. The Poyry Interconnectors Report states that the "*NSN presents a benefit to GB consumers in all scenarios, as GB prices remain higher than Norwegian*"[4]. The Base Case welfare value of €367mn falls to only €108m in the "no CPS sensitivity" case which assumes the removal of the Carbon Floor Price from 2020. Consequently, there is no justification for investment support through the cap and floor arrangements while the Carbon Floor Price remains in place;

- **The Capacity Market provides additional revenue:** DECC are currently implementing arrangements that would enable interconnector owners to participate directly in the GB capacity market. This would provide an "upside" for interconnector owners[5]. Consequently we do not believe that the cap and floor arrangements are required to support interconnector investment risk while interconnector owners have the opportunity to participate in the Capacity Market;

- **The cumulative effect of the Carbon Floor Price and the Capacity Market will under underwrite the downside risks for interconnector investment**: Participation of interconnectors including NSN in the cap and floor regime is unnecessary in the presence of both the GB Carbon Price Floor and participation of interconnectors in the GB capacity mechanism. Consequently interconnector investment risks should be borne by the developers and that the schemes should be justified merchant projects;

- **The role of National Grid is compromised**: National Grid has been providing advice to Ofgem on interconnectors[6] in its role as system operator and transmission owner while operating as an interconnector owner and interconnector operator. We are concerned that the independence of National Grid advice may be compromised given National Grid's various roles. The role of interconnection in the GB electricity market including the impact on balancing costs, constraints, offsetting onshore GB transmission investment and the location of the connection points should be assessed independently of National Grid. In addition, we do not have sufficient information to confirm that the location of interconnection onshore connection is efficient investment in relation to the provision of GB transmission infrastructure. We believe that further work is required to confirm that the information provided by National Grid results in the lowest cost for GB consumers; and

- **Implementation of the EU Target Model and market coupling presents the opportunity for merchant investment in interconnection:** The EU target model is due for implementation in 2015/2016. Based on the arrangements in the various Network Codes we believe that the case for merchant interconnection is much stronger than it was at the time that the NEMO project was considered. Therefore we believe that Ofgem should undertake a thorough review of the role of merchant interconnection following implementation of the target model prior to concluding that the cap and floor arrangements are a necessary precondition for investment.

[4] Poyry Interconnector Report, Page 41
[5] Poyry Interconnector Report, Page 9
[6] See for example "*Benefits of Interconnectors to the GB Transmission System*", Published by National Grid, December 2014 and "*SO Submission to Cap and Floor*", published version 16 December 2014

It is our view that the cap and floor arrangements for NSN have not been fully justified in the Consultation Document. In particular there is undue downside risk for GB customers illustrated by the range of outcomes in the Poyry Interconnector Report. Collectively the GB Carbon Floor Price, the GB Capacity market and the EU target model, which reduce risks for interconnector investment, are capable of creating the conditions for efficient investment in merchant interconnection underwritten by shareholders without the need for additional support in the form of the cap and floor regime underwritten by GB customers.

Our responses to the specific questions are included in Annex 1 to this document.

If you have any comments or wish to discuss the contents of this letter then please do not hesitate to contact me.

Yours faithfully

By email

Bill Reed
Market Development Manager

Annex 1: RWE Response to the Consultation Questions

Chapter Three

Question 1: What are your views on the approach Pöyry has taken to modelling the impact of cross-border interconnector flows?

We agree with the approach taken by Poyry to modelling the impact of cross border interconnector flows.

Question 2: Do you agree with the modelling results for NSN and our conclusion that NSN is likely to provide benefits to GB consumers?

We do not agree with the modelling results for NSN and the conclusions that NSN is likely to provide benefits to GB customers. In essence, the benefits that accrue are due to the presence of a carbon floor price in the GB market. This has the effect of increasing prices in GB relative to other markets, resulting in interconnector flows from GB to these markets. Consequently the benefits that accrue to GB essentially relate to lower power prices. However, this outcome could, of course, be achieved by removing the carbon floor price mechanism. We believe that it is important assess whether the interconnector investment is efficient and economic if we did not have a carbon floor price.

Chapter Four

Question 3: Do you have any comments on the system operation impacts of NSN?

The system operation effects of NSN have been assessed by National Grid and are conditional on the location of the GB onshore connection. We do not have sufficient information to assess whether the outcomes presented are efficient. Further work if therefore required to audit fully the information and to assess whether alternative onshore connections result in efficient interconnection investment.

Question 4: Do you have any views on the onshore connection information?

We do not have sufficient information to assess the onshore connection information. Further work is required to audit fully the information and to assess whether alternative onshore connections result in efficient interconnection investment.

Chapter Five

Question 5: Have we appropriately assessed the qualitative impacts of NSN link?

We note the qualitative assessment of the impact of the NSN link. We do not believe that this assessment should be relied upon to justify the approval of the NSN interconnector and the cap and floor arrangements.

Question 6: Are there any additional impacts of NSN link that we should consider qualitatively?

We have not identified any additional impacts on the NSN link that should be considered qualitatively at this time.

Chapter Six

Question 7: Do you have any comments on our assessment of NSN's chosen connection locations or cable routes?

We do not have sufficient information to assess whether the outcomes presented are efficient. Further work if therefore required to audit fully the information and to assess whether alternative connection locations or cable routes result in efficient interconnection investment.

Chapter Seven

Question 8: Do you have any comments on our assessment of NSN's project plan?

We note the assessment of the NSN project plan. We do not have sufficient information to assess whether the plan presented results in efficient investment.

Chapter Eight

Question 9: Do you agree with our conclusions on the IPA for NSN?

We note Ofgem's conclusions with respect to the IPA for NSN. We do not agree that the information present demonstrates a strong case need in relation to inclusion in the cap and floor regime. Rather we believe that a strong case can be made for merchant investment in the NSN interconnector and that there is no need for inclusion in the cap and floor regime. Indeed inclusion in the cap and floor regime may unduly underwrite the risks associated with the investment to the detriment of GB customers, given the range of outcomes and the other support arrangements provided by GB customers.

Chapter Nine

Question 10: Do you have any comments on our application of the regime to NSN?

We do not believe that inclusion of NSN in the cap and floor has been fully justified. Therefore we do not believe that the regime should be applied in relation to NSN.

Question 11: Do you have any comments on our assessment of the development costs?

We note the comments on the assessment of development costs. We do not have sufficient information to assess whether the development costs presented are efficient.

Question 12: Do you have any comments on our initial assessment of technology choice or tendering strategy for the NSN interconnector?

We note the comments on the initial assessment of technology choice and tendering strategy for the NSN interconnector. We do not have sufficient information to assess whether the assessment of technology choice and the tendering strategy will result in efficient investment.