

To: (by e-mail)

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Matthew Grant

From: (by e-mail)

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Dear Mr Grant,

### **RenewableUK consultation response**

#### **Regulation of Transmission Connecting Non-GB Generation to the GB Electricity Transmission System**

RenewableUK welcomes Ofgem's consultation on the regulation of transmission connecting non-GB generation to the GB electricity transmission system. While potentially contributing to the UK's 2020 renewables target, such also projects have implications for the grid and for generators in GB. RenewableUK believes:

- **There is a need to clarify the regulatory treatment of non-GB connections. Short-term arrangements need to be put in place within a year in order to allow the delivery before 2020 of planned projects.**
- **The availability and certainty of grid capacity for GB generators should not be undermined by the potential for connection of non-GB generators. The GB SO and TOs will need a thorough understanding of and information on processes, risks, and project progress in the host nation.**
- **Arrangements for ownership of transmission assets by non-GB and by GB generators should not favour one over the other. Likewise, non-GB generators should pay appropriate Use of System charges to reflect their impact on the GB system.**
- **The non-GB generator should meet requirements that do not adversely impact GB system security, whether under the licence or as a separately negotiated contract with the GB SO.**
- **There is potential benefit in further Interconnection to Ireland, and elsewhere, and flexibility should be built in for fair use of non-GB transmission lines by third parties, should they in future be converted to this end.**

## **Introduction**

RenewableUK is the trade and professional body for the UK wind and marine renewables industries. Formed in 1978, and with over 660 corporate members, RenewableUK is the leading renewable energy trade association in the UK, representing the large majority of the UK's wind, wave, and tidal energy companies. The association's response aims to represent these industries, aided by the expertise and knowledge of our members.

This response follows the order of the questions posed.

## **Chapter 1**

***Question 1:*** *What are the key milestones for the delivery of non-GB generation and connections pre-2020? How does the decision on the regulation and licensing of non-GB connection fit into this timeline?*

Development and consenting of transmission infrastructure such as that considered under this consultation normally takes about 3 years. The construction phase also takes about 3 years, leading to a total of 6 years. Taking into account the fact that some projects have already started engaging in this process, we believe projects can be delivered pre-2020. However, the timescales are tight, and decisions on regulation and licensing of connection for non-GB generation need to be timely and effective in the short term, ideally by mid-2014 so that the appropriate technical solutions can be progressed.

***Question 2:*** *From the perspective of a non-GB project developer, how does the decision on the regulatory arrangements interact with Governments' decisions on renewable support?*

Though details on allocation of CfDs are yet to be fully detailed, once these are known, more interactions will doubtless become apparent. A specific set of risks involves the introduction of legislative or regulatory changes where these have long lead-in times and may delay FID on the connection and therefore generation asset. CfD offers have delivery timescales written into them. Government must not set these so wide as to make management of the finite LCF budget too uncertain and thereby jeopardise other potential recipients of that portion of the budget.

The regulatory arrangements for non-GB transmission need to be designed in such a way as to enable the non-GB developer effectively to interact with the CfD allocation process.<sup>1</sup>

**Question 3:** *Are there other factors that Ofgem should be aware of relating to the timing and development of non-GB connections?*

Since the introduction of more flexible securities and liabilities for transmission connections under CMP 192, and under the Connect and Manage regime, allocation of Transmission Entry Capacity (TEC) and grid planning generally has had to change significantly. In certain areas, there are effective queues in place for both Enabling and Wider Works, with connection offers for newer entrants suffering as a result.

The TOs must be able to make reasonable assessments of the likelihood of contracted generation assets being commissioned in order to plan their upgrade programmes effectively. This will in turn require, as a minimum, reasonable knowledge of the consenting and licensing process in the host nation of the GB connected asset.

Non-GB generator information should therefore be provided to the GB TOs to put them in no worse a position to assess the likelihood of non-GB generation assets requiring their contracted TEC than for GB generation. This may eventually lead to a broader function for an enhanced SO, the role of which is currently being considered under ITPR, but shorter-term provisions should be considered in the meantime.

## **Chapter 2**

**Question 4:** *Do you agree these are appropriate principles to take into account in relation to non-GB connections?*

Yes.

- Protecting consumers from exposure to undue costs and risks: A well-designed and effective regulatory regime for the connection of non-GB generation would contribute to ensure this objective is met.
- Promoting efficient capital and operational network costs: We would stress the importance of an effective regulatory regime to ensure this principle is put into practice.

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<sup>1</sup> Assuming a bespoke process is not introduced for non-GB generation.

- Promoting efficient and coordinated development of the network: We encourage Ofgem to pursue benefits offered by this approach. However we would also highlight the importance of enabling the delivery of what could be realised in the short term, avoiding unnecessary delays. Ofgem could consider how coordination between different developer led projects can be enhanced as this approach will be less prone to delays than a centralised design.
- Supporting investment in low-carbon generation: As UK's leading renewable energy trade association we are committed to the achievement of the same objective.

***Question 5: Are there other principles that we should also consider?***

RenewableUK would like to emphasise the importance of general sustainability considerations, which should already be at the core of Ofgem's decision making process. Wider benefits to GB, such as the growth of the economy, the creation of jobs, the securing of energy supply and the contribution to meeting the UK's targets in terms of renewables deployment and carbon emission reduction should be part of the key principles to be taken into account by Ofgem.

**Chapter 3**

***Question 6: We invite views on our interpretation of the different asset definitions/boundaries and interpretation of the legislation provided in this chapter. What implications does this have for the regulatory options presented in the next chapter?***

We agree with Ofgem's interpretation of the Electricity Act, which considers an electrical line connecting GB to non-GB generation as an Interconnector. The EC Electricity Regulation could however be less restrictive; a non-GB generator is not connected to the national transmission system of a member state, and could therefore fall outside the definition of Interconnector. We recommend therefore that, in the short term, the asset for expedience be classified as an Interconnector from the perspective of GB licensing. However, with appropriate exemptions in place, it would look commercially and physically like a transmission asset. In the long term we suggest that, in addition to Interconnection, consideration should be given to alternative options which may lead to more effective licensing regimes.

**Question 7:** *We are interested in views from stakeholders on what impact alternative interpretations would have on potential projects? Please provide detail where possible.*

As mentioned in our response to question 6, different interpretations could be given to the EC Electricity Regulation, but some of these would require legislative changes in the Electricity Act, leading to longer lead in times for those to be put in place.

**Question 8:** *How could generation licensing for non-GB generation ensure appropriate safeguards for the export of renewables to the GB transmission system?*

We agree that any non-GB connection asset should be licensed in such a way as to conform with GB rules on system security. The GB SO and TOs may to some extent be familiar with Irish licensing arrangements and technical requirements, but when making decisions on the non-GB regime, this should not be assumed to be the case for other Member States. It is crucial that CUSC and other rules are transposed in their entirety so that GB consumers are not liable for any extra costs associated with connecting non-compliant assets to the MITS.

We believe, for simplicity, that the ideal is for one licensing arrangement to apply. Further requirements, for example from the country in which the generation resides, should be negotiated with the SO on a case-by-case basis.

#### **Chapter 4**

**Question 9:** *Are non-GB connections deliverable by 2020 via direct and exclusive connections?*

As mentioned in our response to question 1, should regulatory uncertainties be resolved in a timely manner, we believe non-GB generation could be directly and exclusively connected to GB by 2020.

**Question 10:** *What are the technology challenges of delivering direct and exclusive connections? What are the technology challenges of delivering multi-purpose assets?*

We consider non-GB generator connections to GB as technically similar to projects connected under the OFTO regime and within the RIIO framework. Furthermore we understand that in principle there should not be any technical barrier to adding

Interconnector functions to direct connections at a later date. We therefore believe that technology challenges should not be affecting choices related to the regulatory regime. However, absolute regulatory certainty is needed for designing and specifying the assets with the correct configurations and ownership boundaries, to avoid the type of problems encountered with the first OFTOs superimposed onto assets that were designed as part of generating stations.

**Question 11:** *What are the potential benefits and challenges of enabling flexibility for a non-GB connection to also be used for a) market-to-market trading; and b) GB network reinforcement? What are the implications for investment certainty?*

We understand from discussions with developers that additions to equipment and operational changes do not present in-principle insurmountable challenges. We note that such an approach may be beneficial for GB consumers where the original connection asset was progressed on the basis of a merchant led approach<sup>2</sup> with no consumer underwriting.<sup>3</sup>

Wider roll out of variable renewables is likely to need greater levels of Interconnection than the UK currently has. The exact extent of this benefit in relation to specific non-GB assets is difficult to model without a longer term assessment of the relative wind regimes of the host nation and GB. For example, a modestly sized front moving eastwards from the Atlantic could complement scarcity of wind resource at the same time in GB. As the front moved eastward and passed over Ireland into GB, GB wind farms would begin generating and be able to trade excess power back to Ireland rather than be curtailed. In such an instance, the Interconnector would create significant benefit. In terms of security of supply benefits to the GB system, access arrangements post-reconfiguration would need to be carefully considered, particularly to ensure that sufficient incentives exist so that, in extreme cases, the Interconnector doesn't export during times of scarcity.<sup>4</sup>

With these uncertainties in mind and on the assumption that the merchant led model is the only appropriate system for connecting the current volume of non-GB wind in the pipeline, with assets enhanced or reconfigured at a later date, we would question whether future revenues from any reconfiguration would be possible to model now

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<sup>2</sup> So long as the licencing arrangements preclude windfall profits for use of the reconfigured asset at a later date.

<sup>3</sup> Notwithstanding the possibility of enhanced support under the CfD- see qu 2 above.

<sup>4</sup> This problem may be specific to UK-Ireland connections, as both are relatively isolated systems relative to mainland Europe.

and therefore whether they would be considered bankable by present financiers and investors to the initial asset. However, we would suggest that the regulatory framework Ofgem adopts remain sufficiently flexible to enable swift reconfiguration where need and benefit can be identified at a later date.

Government support for renewable technologies will need to reflect the level, if any, of consumer underwriting of connection assets. For example, where a merchant led regulatory model is implemented for a direct one-way connection to the UK MITS, the connection asset will be funded by the developer of the generation asset. The investment would therefore be recouped through the agreed support level for the generation asset. This in turn would need to be reflected in any future charging arrangements where the asset is upgraded to a 'real' Interconnector to avoid windfall profits, whereby the UK consumer could, in effect, pay twice for the asset. Ofgem may wish to consider writing in the relevant protections against windfall profits for a future Interconnector into the licence of the initial merchant led connection asset.

## **Chapter 5**

***Question 12:*** *Is the Interconnector licence with exemption(s), as currently available, a feasible option for non-GB connections? If not, what are the key challenges of applying this route to non-GB connections? How could these challenges be addressed?*

We believe that an Interconnector licence with exemption(s) could be a feasible option for non-GB connections, although there may be some uncertainty for developers associated with this solution. An exemption from the provisions under Article 17 would be based on the information provided by Ofgem and the other involved NRA and be subject to the views of the other relevant NRA and the European Commission. Guidance should therefore be sought in advance from the European Commission. This would provide developers with more certainty regarding the possibility of being granted an exemption.

***Question 13:*** *Under this route would an exemption (under Article 17 of the Electricity Regulation) be required? If so, which provisions would you seek exemption from? How would your project be affected if exemptions could not be applied for?*

We believe that it is very likely that an exemption under Article 17 would be required. A direct and exclusive connection necessarily requires a Third Party Access

exemption, given only one generator will make use of the transmission infrastructure. An Ownership Unbundling exemption may also be requested. We would not be supportive of such a provision on an enduring basis<sup>5</sup> as we believe that directly connected non-GB generation should compete on a level playing field with GB generation. However, an exemption from unbundling would seem appropriate for a limited period to allow full commissioning and operational debugging of the project, especially where phased, and with complex coordination control systems. Other exemptions which may be required relate to restrictions on the use of revenues and on tariff regulation.

**Question 14:** *Given that an application of the regulated Cap and Floor or fixed revenue model would take time to implement for non-GB connections, should these still be explored further?*

As noted in the consultation document, a Cap and Floor model similar to the one developed for project NEMO cannot be transferred in its current form to assets which directly and exclusively connect non-GB generation assets. Such a model could still be applied to assets which connect a combination of non-GB generation assets and Market-to-Market Interconnection. Similarly, a regulated model with fixed revenue has not yet been developed in GB, therefore requiring further consideration which would necessarily lead to longer lead in times.

In the context of non-GB connections, we believe that Ofgem should primarily focus on options leading to the creation of a regulatory regime to be applied in the short-term, i.e. a direct and exclusive connection. However other options may prove to be more efficient in the longer term and we therefore encourage Ofgem to keep exploring other possible solutions further under the Integrated Transmission Planning and Regulation Project (ITPR), which is currently reviewing the existing arrangements for system planning and delivery to determine whether they are appropriate to achieving a long-term efficient integrated network. There is a pressing need to develop thoughts on the regulatory treatment of Interconnections in general, as the Cap and Floor model in its current version will be insufficient to ensure that the socio-economically beneficial Interconnectors are realised.

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<sup>5</sup> We would accept that an unbundling exemption for a period to allow full commissioning and operational debugging of the project, especially where phased, and with complex coordination control systems.

**Question 15:** *If so, what are the main challenges and benefits of applying a regulated Cap and Floor or fixed revenue model to non-GB connections? How could these be addressed?*

We believe that an incentive based on availability (fixed-revenue model) will be more attractive to infrastructure investors rather than a market incentive (Cap and Floor model), making the fixed revenue model more suitable for a longer term solution and for multi-purpose transmission infrastructure.

On market-to-market Interconnectors, it is crucial to realise interconnections that lead to a welfare gain in the interconnected markets. As renewable energy is increased, there is a corresponding increase in the need and sense of urgency to provide the right incentives for those Interconnectors to materialise. The socio-economic aspect of developing a regulated regime for Interconnections should be given more attention when considering an enduring regime for Interconnector investments.

## **Chapter 6**

**Question 16:** *What is the appropriate mechanism for ensuring access to capacity for non-GB generation?*

Noting our response to question 3 above, we would reiterate that a large volume of planned non-GB generation could exacerbate delays and uncertainty in connecting new generation. This applies particularly in areas of Scotland, but increasingly elsewhere as, for example, new nuclear assets are brought online. This is a general problem in the GB. If a swift solution is implemented, then there is no reason to treat non-GB generation differently.

Regardless, TOs should be given independent information and assistance in modelling scenarios, including non-GB generation, for the purposes of grid planning.<sup>6</sup> In view of the unprecedented nature of non-GB connections, and the associated uncertainty as to when these projects will be ready to connect, rigorous criteria should be applied for assessing their readiness to take up contracted TEC.

**Question 17:** *What are the implications of following the current connections process for non-GB connections? Should non-GB generators be treated differently to GB*

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<sup>6</sup> Where needed. We note that some TOs operate in, for example, Ireland and may be comfortable with the planning and licencing processes there.

*based generation? Should non-GB generators be treated differently to other Interconnector users?*

Please see previous answer.

**Question 18:** *How would the role of the Interconnector operator need to adapt if a direct-connect asset was used for additional purposes, such as a) market-to-market Interconnection; or b) GB network reinforcement? Should the GB or non-GB NETSO have a role in operating these assets? If yes, what role?*

Where a connection asset has been enhanced and/or reconfigured, the original generating asset it connected would need to maintain priority access. In this instance, we would question whether SO control would be easy to implement or desirable. Where other regimes involving GB consumer underwriting have been adopted, SO control under suitable licence conditions may be appropriate. This would ensure economic and efficient use of the asset in the interests of GB consumers, commensurate with the risk borne in the deployment and ongoing use of the asset.

**Questions 19:** *Can the existing charging / cost allocation approaches used onshore or for Interconnection be applied to non-GB connections? If not why not, and what alternatives are available?*

Current charging arrangements would give non-GB generators a competitive advantage over GB generation, as Interconnectors do not currently pay TNUoS. Developers we have spoken to have suggested that would be willing to opt in to liability for such payments. We would ask Ofgem to consider how this can be made compulsory where the 'interconnector' is a direct and exclusive connection for non-GB generation, with sufficient flexibility to make subsequent amendments where the assets are reconfigured. BSUoS should also be payable in these circumstances.

**Question 20:** *How can capacity allocation for direct and exclusive connections ensure consistency with European legislation and European Network Codes? How could this be achieved with the introduction of market-to-market connections?*

No comment.

**Question 21:** *Are there other challenges we should be considering when looking at non-GB connections?*

While decisions on the non-GB regime are pressing, these should not draw resources away from wider work on Interconnection, and we look forward to seeing Ofgem's consultation on this in the spring of 2014.

When considering the potential for non-GB connections to be converted into full Interconnectors, there is a need to consider:

- the relative benefits of trading electricity between the GB and Irish energy markets
- the potential for use of Irish transmission infrastructure to bypass grid congestion between Scotland and England
- optimisation of imports of renewable energy from Northern Ireland to GB in order to maintain maximal contribution to UK renewables targets

While these points cannot be definitively concluded in advance of decisions on the regulatory regime for non-GB connection, they should be given due consideration. They should also be addressed in further work by Ofgem under ITPR, and by DECC, in relation to Interconnection, to ensure there is a coherent UK-wide (not just GB) Interconnection policy.

We trust this submission is helpful to you. We would be happy to explore the issues with you further at one of RenewableUK's industry strategy groups. The relevant groups meet ever 2-4 months. Please don't hesitate to contact us if you would like to take up this opportunity.

Thank you again for the opportunity to input.

Yours sincerely,

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Grid Policy Team