MAINSTREAM RENEWABLE POWER

Ofgem Consultation

Regulation of Transmission connecting Non-GB generation to the GB Transmission System

Mainstream Renewable Power Response

January 2014

MAINSTREAM RENEWABLE POWER

Matthew Grant
European Electricity Transmission
Ofgem
Millbank,
London

17 January 2014

Dear Matthew,

Consultation on the Regulation of Transmission connecting non-GB generation to the GB Transmission System

Introduction

Mainstream Renewable Power is a leading renewable energy company developing renewable energy projects across several continents. The Company expects to be a major provider of renewable capacity for the UK and has 4500MW in its development pipeline.

We are developing onshore wind projects in North America, South America, and South Africa. In the German North Sea, we are developing the 1500 MW Horizont project.

In the UK, we are developing two large offshore wind projects. In Scottish territorial waters we are developing the 450 MW Neart Na Gaoithe project. Additionally, through the SMart Wind consortium, we are developing the 4000MW Hornsea Round 3 zone. The first phase of 2 GW within the zone is being developed with our partners, Siemens Project Ventures and Dong Energy.

We are also developing the 5GW Energy Bridge project which will initially connect renewable energy generated in Ireland into the UK transmission network. Both the Hornsea and Energy Bridge projects are based on the effective coordination and integration of offshore transmission assets. Energy Bridge has been submitted as a Project of Common Interest. This project will be facilitated by the integrated framework envisaged by the Memorandum of Understanding between the British and Irish governments and the supporting Inter-Governmental Agreement.

The provision of an effective and efficient framework to facilitate and support the development of non-GB generation connecting into the GB transmission network, is a key issue for us.

We welcome the recognition by both Ofgem and DECC that facilitating the achievement of our 2020 renewable energy targets and wider energy market objectives can be furthered by the contribution from non-GB generation.

We also appreciate the factors that Ofgem needs to take into account in determining the appropriate framework for the regulation of non-GB generation and transmission assets. We recognise there will need to be consideration given to the facilitation of near term developments and the strategic goals of greater cross border trading, cost efficiency and security of supply. However, we believe that it is possible to put in place supportive regulatory frameworks today to enable near term investment decisions that are also capable of expansion and development to deal with more sophisticated asset configurations/uses in the future.

We do not believe that action to facilitate development now, should be delayed by any process which seeks to encompass all possible future configurations. With the appropriate regulatory principles and safeguards in place, developers will have the confidence to invest in beneficial projects now – and contribute to the evolving framework as it develops to meet future needs.

Without the requisite safeguards and guarantees, the level of regulatory risk surrounding non GB generation projects is likely to be unacceptable to developers and investors.

The timescale for delivery of our Energy Bridge project by 2020 is extremely tight. We have already undertaken a great deal of work on the project in the absence of a clear regulatory pathway. We now face a step change in the level of commitment and investment needed to take the project forward. In the absence of certainty regarding the regulatory and commercial frameworks for non-GB connection during 2014, it is unlikely that the necessary commercial commitments will be possible, to achieve delivery by 2020.

Executive Summary

- The regulatory principles which govern how transmission/interconnector assets are regulated are already in place and well tried and tested. These principles (with specific additions) should be applied to existing frameworks/processes or their expansion to deal with the specific challenge of connecting non-GB generation

- The two imperatives in the short term are enabling projects to deliver before 2020 and ensuring that the regulatory work programme supports and dovetails with the objectives of the UK and Irish governments, as set out in the Memorandum of Understanding and forthcoming Inter-Governmental Agreement

- Development of any “new” frameworks will take at least 3 years and the associated uncertainty for developers and other stakeholders is likely to last even longer

- The Interconnector Framework (with appropriate exemptions) is the appropriate vehicle to deliver the required outcomes. It needs to provide certainty for investors, developers and users, both at the outset and as offshore transmission regulatory frameworks evolve over time.

- For basic asset configurations it will be challenging but possible to modify/implement a satisfactory regulatory arrangement in timescales consistent with 2020 delivery. **This arrangement must be in place during 2014 and dovetailed with the work programme of the Inter-governmental Agreement.**

- It is important that non GB generation is treated in a fair and non-discriminatory manner, compared with other offshore generation, and in particular that subject to the OFTO regime. The risks faced by both the generation and transmission components of any project will need to be mitigated effectively and assigned to those best able to manage them. We believe that the GB consumer has a key role to play not only in providing support under the CfD arrangements for the generation project, but also providing a floor for the revenues that the transmission project requires. This would be no more than that enjoyed by the equivalent OFTO regime. In return for assuming appropriate risks under the non-GB generation regulatory framework, the GB consumer will enjoy the benefits of competitive renewable energy delivered by an economic and efficient project financing structure. We note the work that has been done in developing a framework for Project Nemo and the development by Ofgem of a "Cap and Floor" arrangement. We believe that this approach can be modified to support non-GB generation. For basic asset configurations, the framework would initially provide a "floor" for the transmission element of the project. As and when the use of the assets evolved to provide multi-user or full interconnection capabilities, a cap could then be added to ensure benefit sharing for the GB consumer.

- For 2020 delivery, it is questionable whether a **full** Regulated Cap & Floor or fixed revenue model could be implemented in time. As such, we propose that a regime which initially incorporates a **Floor** is developed and applied. For the longer term this could then be expanded to allow a greater degree of flexibility and more options in terms of risk/reward tradeoffs as more complex asset configurations/multi-purpose assets are developed in the future.

- Ofgem has well developed mechanisms for scrutinising investments where significant costs and/or stranding risks will be borne by GB consumers. Onshore, this is achieved through scrutiny of the transmission owners' (TOs) business plans as part of price control reviews and the Strategic Wider Works process. Offshore, the OFTO regime has produced a large volume of information to enable the effective assessment of design, risk, cost and efficiency of process.

- This should be applied to the transmission element of non-GB generation projects. After the assessment by Ofgem is completed, a **floor** would be set for each project to ensure that it was able to recover the efficient costs associated with that investment. GB consumers would provide this floor. In return the overall risk and cost of the project would be reduced and provide significantly leveraged benefits to GB consumers.

- For more complex arrangements (transition to full interconnection, GB system reinforcement, multi-purpose assets) it will also be possible to eventually design a scheme which is satisfactory. The scope and complexity involved will require Ofgem (and perhaps government) to consult, analyse and consider the issues in detail and at length. Development of such a scheme should be pursued. However, it must be in parallel with work on a framework to deliver basic asset configurations. It will not be available in time to provide the required investment certainty for projects which wish to deliver before 2020.

  - We recognise that there may be potential benefits of coordination of non-GB connections. Coordination opportunities should be identified by the NETSO/TSO but not enforced on developers (attempts at developing a workable regime for "simple" offshore coordination have taken years and are still not at a satisfactory state for developers to have confidence). As such, scenarios that involve direct and exclusive connections in the short-term, particularly for projects looking to deliver by 2020, should form the baseline of any considerations.

  - In respect of multi-purpose assets - we recognise the benefits of investing ahead of need, where it brings efficiency, but this needs to be tempered with the reality that regulators have so far not been prepared to allow any anticipatory or marginal investment to be underwritten by consumers (this creates an unacceptable risk of stranded investment for the developer).

  - Use and configuration of assets may evolve in the future. This is to be encouraged. The regulatory and licensing arrangements should seek to support this flexibility. The Key element to promote confidence for initial stakeholders is the grandfathering of legitimate expectations/rights under any future evolution process. This allows the detailed design of the process to be left until nearer the time of opportunity, rather than attempting to completely cover all possibilities prior to initial development (which is practically impossible and would lead to significant delays/risk/uncertainty)

- Strategic network planning processes should not interfere with 2020 delivery, but should have an increasing role in future (Ten Year Network Development Plans, ITPR, arrangements for multi-purpose assets etc). Consistency of high level regulatory *principles* will ensure high level congruence of frameworks applied to projects being developed now and those which will be subject to the more sophisticated arrangements developed in the future.

We set our concerns below and also provide answers to the questions set out in the Consultation.

DECC has recently concluded "It is clear from the analysis that GB's security of supply would be enhanced by further interconnection, providing that electricity prices reflect scarcity and interconnector flows reflect prices. Interconnection is also one of the technologies that can assist with the integration of further low-carbon generation."

The timescales associated with non-GB generation projects that could contribute to the UK's 2020 renewables targets are extremely challenging. We believe that solutions should be sought under the existing legislative framework. We note that Ofgem's ITPR Emerging Thinking consultation acknowledged that decisions for the regulatory treatment of non-GB connections may need to be progressed ahead of its wider work on ITPR. We believe that this is essential to deliver prospective capacity prior to 2020 and welcome the commitment by Ofgem to provide further clarity in spring 2014. We further believe that the work should be undertaken in two parallel streams:

i) Work to support "basic asset configuration" connections which will allow delivery of such projects by 2020
ii) Work to deliver a "comprehensive" regime which encompasses all the different configurations noted in the Consultation and is capable of adapting to novel situations as they arise

These two streams will be guided by the same regulatory principles and as such will allow developers to proceed with the confidence that arrangements put in place in the near term, will not be compromised by later developments.

Any solution should also be congruent with, but not dependent on, the Integrated Transmission Planning and Regulation (ITPR) project, which is being managed on a more strategic timescale. We believe that the underlying principles (with appropriate additions) which apply to both the current regulatory and legislative frameworks and also to the review being conducted under the auspices of ITPR, will ensure that there will be no inconsistencies between solutions adopted now and those which will eventually come forward under ITPR.

Transmission to support trading between Ireland and the UK

We have a specific interest in facilitating the trading of renewable energy between Ireland and the UK.

In January 2013 the UK and Irish governments signed a Memorandum of Understanding (MoU) to evaluate the case for trading renewable between the two countries. The trading would involve the physical export of electricity from renewable sources from Ireland to the UK. It is essential that the MOU timetable and work programme are delivered as soon as possible. In particular, the scope and level of detail of the subsequent Inter-Governmental Agreement is of key importance. The associated regulatory framework will need to both facilitate and support the objectives of the IGA. As such it is important that the Regulatory Authorities in both jurisdictions work closely together and provide advice to their respective governments as part of the IGA process, with a focus on arrangements that are available now, rather than waiting for its outcome. This will prevent inadvertent barriers arising to delivery of the required outcomes and ensure that the overall timetable is as efficient as possible.

In this response we provide answers to the specific Consultation questions and also our high level view on the way in which the connection of non-GB generation should be progressed.

Yours sincerely,

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Consultation Questions

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?*

The process for development and consenting of transmission infrastructure such as that considered under this consultation is of the order of 3 years. The construction phase also takes approximately 3 years, giving a total of 6 years. From this it will be seen that timescales are tight for delivery by 2020 and certainty is required as soon as possible.

- Publication and finalisation of the IGA in early 2014
- Content and deliverability of the IGA (Implementation and delivery plan incorporating agreed regulatory framework) in early 2014
- Subsequent agreement on regulatory treatment of transmission assets
- Consenting covering all aspects of consent
- Any new environmental assessments which may be being considered.
- Timeline of construction of transmission network assets.
- Lead times in committing to e.g. HV DC cables/convertors
- Regulatory Framework stable enough to provide required confidence
- Full details confirming accreditation and eligibility of non UK generation for low carbon support in early 2014
- Detailed working of CfD/RO as applied to non GB generation by Q3 2014
- Confidence on route to market for a timetable matching that of the low carbon support available and confidence that the offered price for power fully reflects the benchmark index chosen by Govt to base support on.

Projects require certainty in order for investors to commit the necessary funds on a fully risk assessed basis. As such, the regulatory and legal frameworks applicable to such developments need to be both stable and fully understood.

There will need to be an investable regulatory framework and migration path for any future interconnection, following the delivery of "basic asset configurations".

In the first instance, the immediate priority will be to ensure that the OFGEM process reflects and dovetails with the intent and spirit of the Inter-governmental Areement being developed by the UK and Irish governments.

The timescale for delivery of our Energy Bridge project by 2020 is extremely tight. We have already undertaken a great deal of work on the project in the absence of a clear regulatory pathway. We now face a step change in the level of commitment and investment needed to take the project forward. In the absence of certainty regarding the regulatory and commercial frameworks for non-GB connection during 2014, it is unlikely that the necessary commercial commitments will be possible, to achieve delivery by 2020.

Question 2: *From the perspective of a non-GB project developer, how does the decision on the regulatory arrangements interact with Government decisions on renewable support (such as the award of a Contract for Difference (CfD))?*

This is a critical area – most projects will be seeking low carbon support under the CfD mechanism and as such the regulatory arrangements will be crucial in assessing whether that support can be fully and freely accessed. Any regulatory arrangements which could potentially affect the commercial/business case will need to be fully developed, agreed and stable (grandfathered) prior to commitment by developers.

The regulatory arrangements will determine (inter alia):

- The allocation of risk amongst stakeholders
- The cost of managing that risk (and whether it is ultimately manageable)
- The timescales over which assets are allowed to recover their costs
- The required revenue profiles to ensure costs are recovered

These are all essential components of a robust business case which investors will need to present to providers of finance for projects. As a critical cost component, the broader "regulated costs" involved in any project would need to be known with a high degree of confidence, together with expected revenues from any renewable support mechanism.

The transmission element of any non-GB generation project is a key consideration for developers, financiers and operators. We believe that the applicable regulatory regime should minimise both cost and risk for these assets by providing an equivalent level of consumer risk sharing to that enjoyed by assets subject to the OFTO regime. This would be provided by a revenue floor for the transmission assets. This in turn will lower the overall project cost and ensure that the GB

consumer enjoys maximum value for money. In the absence of such an arrangement, costs and risks for the transmission asset are likely to be unacceptable.

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

OFGEM should be aware of :

- The commitment by the UK and Ireland to explore and facilitate the trading of renewable energy between these two EU partner states
- The imperative to complete the Single Market in electricity and the contribution that projects such as this can make to realising the benefits that this will bring
- Developer and consumer needs are interrelated and aligned. Regulatory frameworks need to provide solutions in timescales consistent with both. The UK government, on behalf of consumers, is committed to meeting our 2020 renewable energy objectives. Developers who will provide the capacity to deliver these face milestones and timescales which necessitate significant investment decisions. If the particular regulatory framework or processes to deliver it are not aligned with these, then investment decisions will either be delayed or cancelled.
- The importance of EU and regional network planning, including the TSO Ten Year Network Development Plans (TYNDP), but also the need to incorporate significant infrastructure projects which are *developer led*, as well as TSO led.
- The need to ensure that regulatory processes properly support the facilitation of Projects of Common Interest and where necessary reform, adapt or expand the relevant structures.

Chapter 2

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

Protecting consumers from exposure to undue costs or risks

- *"The regulatory framework should seek to allocate costs and risks to industry parties in a way that mitigates them most effectively and drives efficient decisions. GB consumers should only face costs or risks where the potential benefit to them is clear."*

  The principle is sound. It should be noted that the determination of potential benefit may be the result of government policy, rather than a purely Ofgem internal assessment. We would stress that GB consumers should take on risks where it is appropriate for them to do so, where there is a precedent in other regulatory frameworks and where there is a net benefit in doing so. Non-GB generation meets the criteria for all of these conditions.

- *"There are also mechanisms whereby Ofgem applies specific scrutiny to investments where significant costs and/or stranding risks will be borne by GB consumers. Onshore, this is achieved through scrutiny of the transmission owners' (TOs) business plans as part of price control reviews*

and the Strategic Wider Works process. Offshore, we are introducing a gateway process whereby Ofgem will provide its view on the case for undertaking additional investment in offshore transmission assets where this would provide wider network benefit."

We have noted elsewhere that there are processes under the OFTO regime that could usefully be transferred and applied to the regulation of non GB generation, under an interconnector umbrella. We have suggested that specific scrutiny of the transmission part of any project would enable Ofgem to derive a floor price guarantee to the transmission asset owner. We expect that Ofgem would also have a key role in providing its view on the case for undertaking additional investment in offshore transmission assets where this would provide wider network benefit, or where assets originally in a "basic asset configuration" evolved to provide a multi-purpose facility.

- *"If GB consumers provide any underwriting of non-GB connections, we would expect mechanisms to be put in place to ensure that appropriate costs, benefits and risks are allocated to the relevant non-GB generators."*

We agree with the above. It will be critical to ensure that all stakeholders agree on what is meant by "appropriate". We would expect fair treatment and non-discrimination, when compared to the underwriting which GB consumers already give to assets under other regulatory connection frameworks.

Promoting efficient capital and operational network costs

- *"For onshore transmission owners, we set allowed costs in the RIIO price control following scrutiny of TO business plans. We will also undertake a cost assessment to inform the setting of a regulated floor under the Cap and Floor regime for the NEMO interconnector."*

Developers will require certainty regarding the particular methodology used in any cost assessment process and confidence that full allowed costs will actually be recovered. The uncertainties in the current OFTO regime regarding cost recovery which the developer faces, should not be replicated in any Ireland-GB arrangements.

Promoting efficient and coordinated development of the network

- *"For non-GB connections, the physical location of the transmission assets and their cross-border nature mean that in principle they could provide an efficient way to support market integration as well as connecting non-GB generation. For the onshore and offshore networks, the National Electricity Transmission System Operator (NETSO) has a key role to ensure that connections are made in a timely manner whilst also taking into account wider system needs and the technical rules underpinning the planning of transmission infrastructure."*

We agree that the NETSO has an important role and that market integration is also relevant. However, given the challenging timescales to deliver projects by 2020, the priority must be the connection of capacity. Strategic coordination is a matter to be fully explored in subsequent initiatives, including ITPR and the development of the regime applicable to multi-purpose assets.

We support the use of TSO expertise in providing coordination information to developers, but this should not for guidance only and not mandatory.

Supporting investment in low carbon electricity generation

We support Ofgem's statement that "*it is important that the regulatory framework ensures that new generation, including low carbon sources can be connected to the network in a timely manner and that network regulation supports generators' investment decisions appropriately.*"

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

- Acceptance that in particular areas, the GB consumer has a role to play in underwriting certain risks and costs, in order to secure an overall net benefit
- Assisting in the completion of the Single market (on a number of fronts) in order to bring benefits to consumers
- Ensuring that the development of regulatory frameworks minimises regulatory risk for industry stakeholders and that legitimate expectations are not compromised by new policy developments;
- Ensuring that transmission regulation supports the development of networks to enable the above

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?*

The interpretation is consistent with previous practice. The interconnector framework is compatible with this interpretation and provides the means to deliver the appropriate regulatory regime.

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

Any alternative interpretations would be likely to:

- Require a great deal of work in definition and application
- Not meet the timescales for delivery by 2020
- Expose developers to uncertainty and risk
- Provide no additional benefits for stakeholders over and above those secure by working within the broad interconnector regime.

Question 8: *We seek input from stakeholders on how generation licensing for non-GB generation could ensure appropriate safeguards for the export of renewables to the GB transmission system?*

Directly connected generation located outside of GB will need to reflect certain GB standards and requirements. Appropriate conditions can be incorporated in the generation licence. It would be prudent to ensure that National Regulatory Authority in the non-GB state had the opportunity to contribute towards those requirements, particularly where there was the prospect of eventual connection to the non-GB host network. Such standards should, where possible, be equivalent to those placed on GB generators. They will also reflect requirements for safe operation in the non-GB state. Such projects will exhibit an integrated generation/transmission solution and it will be important to ensure that the interconnector license conditions dealing with system standards and requirements are consistent with the requirements placed in the relevant generation licences.

Chapter 4

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

Yes – our Energy Bridge project is deliverable, provided that regulatory certainty, together with the details of an appropriate regulatory framework, is confirmed during 2014.

Effective coordination of stakeholders involved in the process will be important to ensure that they have an effective and efficient means of contributing towards the process. The framework will need to be aligned with and supportive of the IGA between the UK and Irish governments.

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

Multi-purpose assets are likely to require that additional consideration is given to appropriate network operation, protection and control. This is a matter that would benefit from specific engagement with relevant responsible transmission system operators.

At a strategic level, non-GB generator connections to GB are technically similar to projects connected under the OFTO regime and within the RIIO framework. In principle we do not foresee any technical barrier to upgrading direct connections into full interconnectors at a later date. We therefore believe that technology challenges should not play a part in determining the appropriate regulatory regime.

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?*

The benefits include:

- Efficient use of assets

- Avoidance of duplication or reinforcement
- Enhanced operational flexibility/system security
- Reduced costs/enhanced benefits to the consumer

The challenges primarily relate to the status of various stakeholders when an asset initially developed to provide one function has the opportunity to provide additional functions. It is unlikely that the additional functions will be obtainable without impacting the position of existing stakeholders in some manner. The processes for protecting the rights and legitimate commercial expectations of existing stakeholders when change occurs need to be defined at the outset. These will include the degree of "grandfathering" of initial rights and the (re) distribution of costs and benefits (including new costs and benefits) among all parties, when assets provide additional flexibility or services over and above their original remit.

The key factor in facilitating future additional flexibility is to design change processes which have as their core principle the protection of existing stakeholders/investors, but which do not seek to predefine every possible future scenario or option in detail. With this principle established and confidence generated in its practice, individual opportunities to exploit flexibility can be examined as they arise, building a body of best practice.

Chapter 5

Question 12: *Is the interconnector licence with exemptions(s), as currently available, a feasible option for non-GB connections? If so, what are the key challenges of applying this route to non-GB connections? How could these challenges be addressed?*

Yes – it is an appropriate and applicable option and should be pursued. An exemption from the provisions under Article 17 would be based on the information provided by Ofgem and the relevant National Regulatory Authority (NRA) in the partner Member State. It would 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 both the process and form of 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?*

Previous interconnector investment in GB has used this approach. Exemptions from certain provisions under EU legislation are likely to be required. For a basic asset configuration connection of non-GB generation these will include Third Party Access and Use of Revenues. Unbundling provisions may or may not be required depending on the project proposal. Protection for developers would be via the provisions of the GB Electricity interconnector licence.

Ofgem recognise that it has proven increasingly difficult to realise interconnector investment under the merchant exempt framework and that exemption applications for interconnectors used

to connect generation directly have not been pursued before. Merchant interconnectors face risks regarding revenue certainty and volatility. Revenue risks remain for an interconnector connecting non-GB generation and these risks are of similar nature to those facing an OFTO. The OFTO regime recognises this and provides a high degree of protection for the individual OFTO transmission asset owners subject to it.

It is important that non-GB generation is treated in a fair and non-discriminatory manner, compared with other offshore generation, and in particular that subject to the OFTO regime. The risks faced by both the generation and transmission components of any project will need to be mitigated effectively and assigned to those best able to manage them. We believe that the GB consumer has a key role to play not only in providing support under the CfD arrangements for the generation project, but also providing a floor for the revenues that the transmission project requires. This would be no more than that enjoyed by the equivalent OFTO regime. In return for assuming appropriate risks under the non-GB generation regulatory framework, the GB consumer will enjoy the benefits of competitive renewable energy delivered by an economic and efficient project financing structure. We note the work that has been done in developing a framework for Project Nemo and the development by Ofgem of a "Cap and Floor" arrangement. We believe that this approach can be modified to support non-GB generation. For basic asset configurations, the framework would initially provide a "floor" for the transmission element of the project. As and when the use of the assets evolved to provide multi-user or full interconnection capabilities, a cap could then be added to ensure benefit sharing for the GB consumer.

This approach provides an equivalent degree of regulatory protection to that enjoyed by those projects subject to the OFTO regime, builds on the work already undertaken in conjunction with Project Nemo and is capable of being delivered in a timeframe consistent with GB 2020 ambitions.

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?*

For 2020 delivery, it is questionable whether a **full** Regulated Cap & Floor or fixed revenue model could be implemented in time. As noted above, we propose that a regime which initially incorporates a **Floor** is developed and applied. For the longer term this could then be expanded to allow a greater degree of flexibility and more options in terms of risk/reward tradeoffs as more complex asset configurations/multi-purpose assets are developed in the future.

This option would also allow the proper identification and inclusion of wider network needs in the overall process, potentially allowing the GB NETSO or TOs to contribute to interconnector asset design.

Ofgem has well developed mechanisms for scrutinising investments where significant costs and/or stranding risks will be borne by GB consumers. Onshore, this is achieved through scrutiny of the transmission owners' (TOs) business plans as part of price control reviews and the Strategic Wider Works process. Offshore, the OFTO regime has produced a large volume of information to enable the effective assessment of design, risk, cost and efficiency of process.

This should be applied to the transmission element of non-GB generation projects. After the assessment by Ofgem is completed, a floor would be set for each project to ensure that it was able to recover the efficient costs associated with that investment. GB consumers would provide this floor. In return the overall risk and cost of the project would be reduced and provide significantly leveraged benefits to GB consumers.

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 broadly agree with Ofgem's assessment of the challenges and benefits. We have set out above our view that a "Floor only" model is the appropriate way to regulate "basic asset" configurations and should be implemented as soon as possible. We would suggest that when a direct and exclusive connection evolves to include additional either more conventional interconnection opportunities or system reinforcement, that would be the time to consider moving from a Floor-only approach to a full Cap and Floor model. Consideration would indeed be required as to how additional uses could be combined with the adjustments that would be needed to a plain Cap and Floor, given the existence of a (prior) directly connected generator, or a "hybrid" approach that combined a Cap and Floor for the market-to-market element with the existing direct-connect element.

We do not believe that these issues are problematic and are capable of resolution according to existing regulatory principles. Moreover, they do not need to be "solved" now for situations which currently do not pertain.

Chapter 6

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

Access is a critical issue for any project. Firm access to the GB system is a fundamental requirement of the business case for a non-GB generator and the interconnector connecting it to the GB network. It is important that access arrangements are acceptable for the generator, the interconnector and prospective third party users (if and when this occurs) For the initial generation project of a "basic asset configuration" it will be necessary to ensure appropriate access over the expected project lifetime of the generation capacity (15-25 years). We would expect that these arrangements would to be compatible with both GB and EU requirement. There will be a role for Ofgem in examining and endorsing access arrangements. We would expect Market Compensation arrangements in GB to fully apply to the non GB generation.

Where there are future additional users of the connection assets, then we existing access rights of the initial user will need to be preserved, under bilateral arrangements. Where capacity was not being used by the initial user, or there were opportunities to sell back capacity to third parties, we would expect these to be consistent with the principles established for other interconnection projects (which largely use the principle of auctions for returned or unused capacity).

Question17: *What are the implications of following the current connections process for non-GB connections? Should non-GB generators be treated differently to GB based generation? Should non-GB generators be treated differently to other interconnector users? If so, please provide your reasoning.*

We have been following the current connections process to secure a Connection Agreement for our Energy Bridge project. This has been satisfactory largely due to the positive approach of National Grid in seeking to provide solutions where (in some areas) the relevant processes are either novel or not yet codified. Non GB generators will need to be treated *appropriately* and *proportionately* rather than differently, based on the different circumstances which necessarily apply when dealing with non-GB generation.

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?*

The role of the NETSO will depend on the specific configuration and use of the assets. Where the assets provide GB network reinforcement, the GB NETSO will require confidence that the assets will be operated under its direction, in order to ensure that its responsibilities with regard to security and stability of the system can be effectively discharged.

Question 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?*

We believe that existing charging structures and cost allocation processes are capable of dealing (with appropriate modification where necessary) with the connection of non-GB generation. Charges at the GB point of connection will be determined on the same basis as other projects operating under the interconnector regime.

Our proposal is for a floor to be provided for the transmission asset owner's revenue stream, in order to de-risk the project and to provide benefit for the GB consumer. The charges levied on the generation project for use of the transmission assets would be a commercial matter for the two parties. The level of guarantee provide to the transmission asset owner would be derived via a separate process which would build on that operated under the OFTO regime.

For the non-GB transmission assets, this would be based on an assessment by Ofgem (as per the OFTO process) of the efficient level of costs incurred in delivering the project, given the information available to the developer, and the legitimate assumptions made on that information at the point of financial close of the project. The Ofgem assessment would deliver a floor or guarantee to support the required OFTO revenue. Under normal circumstances, this revenue would be provided by the generation project. In exceptional circumstances it would provide

equivalent protection to the transmission asset owner as that given to the OFTO, under the OFTO regime. This in turn would ensure a substantial de-risking of the transmission asset with consequent financing benefits for the developer and a lower cost outcome for the GB consumer. Without this protection, it is likely that the risk profile for any transmission asset would be unacceptable.

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?*

The OFTO regime features direct and exclusive connections. This is compliant with European legislation and European Network Codes. We have noted above how we would propose to allocate capacity if a "basic asset configuration" project was further developed to provide multi-purpose facilities. The core requirement would be that the initial user had its legitimate rights of access protected, with any "spare" or unused capacity returned to an efficient and approved allocation mechanism. We believe that this is consistent with the principles in the relevant Codes.

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

All of our points are covered in the above questions.