Connection Arrangements for Offshore Renewables

Decisions and Further Work Recommendations

December 2013

APPENDIX A –CONSULTATION RESPONSES

1.1 Our consultation on connection arrangements for offshore renewable generation closed on 30 May 2013. We received non confidential responses from the following organisations:

1.2 In the pages overleaf we have summarised the principal points made in each of the responses, and our response in turn to each of these.

Comments from respondents other than NIE

In the section below we address the responses including NIE's.

Ref	Organisation	Topic	Comment	Our response
1	**Tidal Ventures Limited (TVL) and DP Marine Energy** (consortium with Bord Gais Energy and Openhydro	OPTIONS FOR PHYSICAL CONNECTION ARRANGEMENTS AND WIDER TRANSMISSION SYSTEM REINFORCEMENTS		
		Physical connections	TVL and DP Marine see a distribution connection with no IME3 unbundling requirements as key for their marine schemes.	Power delivery below 110 kV is not impacted by IME3 unbundling. UR is presently carrying out work on the issue of contestability and will issue a discussion paper on this in early 2014.
		Wider Transmission connection Issues	Any 110kV reinforcement required for their distribution voltage connection must be in place in a timely manner.	NIE and SONI have a duty to ensure that the network is developed in an efficient, economic and coordinated manner. This includes the timely development of deep reinforcement.
		OWNERSHIP, RESPONSIBILITIES AND LICENSE ARRANGEMENTS		
		Ownership (NIE/SONI/Third Party)	TVL and DP Marine Energy fully support the proposal for the marine scheme distribution connections to be designed, installed, maintained, decommissioned and owned by the developer up to the onshore distribution connection point. Suggest that is important that UR's plans to review contestability is completed and introduced in 2014. Support the view that the O&M charges for connection assets onshore be reviewed.	Full contestability in connections will be required to facilitate these arrangements. UR is presently carrying out work on the issue of contestability and will issue a discussion paper on this in early 2014
		SYSTEM SECURITY, LEAST COST TECHNICALLY ACCEPTABLE (LCTA) CONNECTION DESIGN, COST ALLOCATION AND CHARGING ARRANGEMENTS		
		Review the	Feel that it is timely to review other aspects of	UR is presently carrying out work on the issue

Ref	Organisation	Topic	Comment	Our response
		transmission connection security	connection policy. This includes the introduction of contestability and the transmission O&M charges.	of contestability and will issue a discussion paper on this in early 2014. The contestability work stream will consider options for the construction, maintenance and ownership of connection assets.
		CHANGES TO THE CONNECTION APPLICATION PROCESS AND THE NI CONNECTION QUEUE		
		Should connections be requested and added to ITC after a Crown Estate lease is signed?	Support the option that offshore tidal projects should be permitted to make an application for connection to the NI system ahead of Planning Approval, once the AFL is signed with The Crown Estate and should be included in the ITC analysis. The importance of firm connection information is emphasised.	The UR is the dispute resolution body for connection issues. NIE and SONI's licences require them to provide a connection offer on application, subject to certain caveats. The receipt of statutory consents is not one of these caveats. The maximum time between receipt of a connection application by NIE / SONI and acceptance of an offer by the generator is less than 6 months (max 3 months to issue offer followed by a 3 month validity period) However, in practice a generator would need to be confident it would in a financial position to accept an offer before making its application. Financing for a development of this scale is unlikely to be in place before the necessary consents are obtained, e.g. the maximum capacity of the offshore generation is determined as part of the consenting process. NIE and SONI both have licence conditions requiring them not to discriminate against or unduly prefer any party in the connection process. There is no barrier that we are aware of for any developer applying for a connection offer at an earlier stage, but it would need to be in a position to accept the offer, make the necessary payments and lodge the relevant security cover.
		Comparisons with On-shore connections process	Responder believes that there are significant difference between the onshore and offshore planning requirements and costs with additional licenses required. Combined with the higher development costs and risks for tidal schemes it is believed that there is a need to apply for a grid connection prior to planning permissions being received or there is a danger these schemes will not deliver output by the 2020 requirement.	

Ref	Organisation	Topic	Comment	Our response
				If the developer is unhappy with NIE's processing of its application it is entitled to follow the dispute resolution process. The key principle moving forward is that all generation scheme developments should be treated equally and fairly, regardless of whether they are based onshore or offshore.
		THE NEED FOR CHANGES TO THE GRID CODE		
		Necessary amendments to the Grid Code	Propose that a working group reporting to the Grid Code Review panel investigates the need for changes to the grid code outside of this consultation.	It is proposed that required Grid Code changes are dealt with through the normal process. We intend to write to SONI to instruct it to review the suitability of the Grid Code for offshore generation under Condition 16 of its licence. SONI are responsible for the review and will determine how it is structured.
		Additional comments: They indicate that the consultation is timely and request that UR move to a decision on the key connection policy issues for offshore generation.		
2	**DP Marine Energy/DEM A Blue Energy**	General	Joint response with TVL, letter to confirm views are as provided by TVL (Reference 1 previous).	See response to TVL (Reference 1 previous).
3	**Council for Nature Conservation and the Countryside.**	OPTIONS FOR PHYSICAL CONNECTION ARRANGEMENTS AND WIDER TRANSMISSION SYSTEM REINFORCEMENTS		
		Physical connections	Much of our coastline, and some of our marine environment, is designated in one way or another, ranging from landscape designations (Areas of Outstanding Natural Beauty), through national nature conservation designations (Areas of Special Scientific Interest) to international designations (Special Areas of Conservation, Special Protection	Achieving the necessary planning consents, including protecting designated areas will influence the design and location of transmission equipment along with other constraints including supply security requirements. The connection charging statement obliges the TSO and DNO to offer the least cost

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			Areas, Ramsar Sites and World Heritage Sites). The areas chosen for offshore renewable energy generation are all particularly sensitive, with multiple designations on the adjoining coasts. These designations will have a significant importance in the siting of substations and transmission infrastructure, and could well influence the choice of system.	technically acceptable solution. For a solution to be technically acceptable it must be capable of being constructed, and therefore compatible with the environmental constraints specified in any consents.
		THE NEED FOR CHANGES TO THE GRID CODE		
		Additional Comments	CNCCNI indicated that they felt that the consultation paper did not clearly present this very technical subject in a clear manner, acronyms were used and not explained and there was no glossary to help define the technical terms used in the presentation.	This is a very technical subject matter. That being said we are working to improve our communications and will take this comment on board in future consultations.
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4	**Openhydro**	General	Openhydro support TVL response (see Reference 1 above).	See response to TVL (Reference 1 previous).
5	**ABO Wind N.I. Limited**	CHANGES TO THE CONNECTION APPLICATION PROCESS AND THE NI CONNECTION QUEUE		
		Should connections be requested and added to ITC after a Crown Estate lease is signed?	Strongly object to the proposal in the consultation, "One potential option would be to allow offshore developers to apply for a connection and be added to the ITC analysis once they have developed rights from The Crown Estate".	The UR is the dispute resolution body for connection issues. NIE and SONI's licences require them to provide a connection offer on application, subject to certain caveats. The receipt of statutory consents is not one of these caveats. The maximum time between receipt of a connection application by NIE / SONI and acceptance of an offer by the generator is less than 6 months (max 3 months to issue offer followed by a 3 month validity period) However, in practice a generator would need to be confident it would in a financial position to accept an offer before making its application. Financing for a development of
		Alternatives?	Happy with a system where a connection application can be progressed prior to receipt of planning permission provided it applies equally to all generators on and offshore.	
		Comparisons with On-shore connections process	Main concern is that early grid connection application for Offshore generation would lead to higher levels of constraint for onshore generators which is fundamentally unfair,	

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			discriminatory and possibly open to legal challenge.	this scale is unlikely to be in place before the necessary consents are obtained, e.g. the maximum capacity of the offshore generation can is determined as part of the consenting process. NIE and SONI both have licence conditions requiring them not to discriminate against or unduly prefer any party in the connection process. There is no barrier that we are aware of for any developer applying for a connection offer at an earlier stage, but it would need to be in a position to accept the offer, make the necessary payments and lodge the relevant security cover. If the developer is unhappy with NIE's processing of its application it is entitled to follow the dispute resolution process. The key principle moving forward is that all generation scheme developments should be treated equally and fairly, regardless of whether they are based onshore or offshore.
		Additional Comments	As the issues are fundamental to on and offshore developers, ABO Wind suggest that UR widen the consultation and take into account onshore connection policy as an input to the decision making process	We intend to issue a discussion paper in early 2014 covering contestability for all connections.
6	**Bord Gáis Energy (BG Energy)**	OPTIONS FOR PHYSICAL CONNECTION ARRANGEMENTS AND WIDER TRANSMISSION SYSTEM REINFORCEMENTS		
		Physical connections	For technical reasons, BG Energy's preferred connection method for its 100MW offshore tidal project is to connect below 110kV, which would therefore be considered a distribution connection.	If BG Energy believes it requires a distribution connection, then it should submit its connection application to NIE rather than SONI. The current connection framework will apply, except where amended by the contestability workstream.

Ref	Organisation	Topic	Comment	Our response
		Wider Transmission connection Issues	BG Energy has concerns relating to the suggestion in the consultation paper that there is a 20km maximum length limit for a single connection circuit. Our understanding is that this limit only relates to 'Supergrid Connected Generators' – those above 275kV – and therefore would not apply to the connection of its tidal project.	Under the current arrangements NIE/SONI would be obliged to offer BG Energy the least cost technically acceptable solution. Should they be unhappy with NIE's definition of this they are able to raise a dispute with the UR. We currently see no reason for a divergence from the standards applied to other forms of generation, however we will be writing to both NIE and SONI to ensure that all relevant standards, codes and engineering recommendations are reviewed to ensure they are fit for purpose for offshore generation.
		OWNERSHIP, RESPONSIBILITIES AND LICENSE ARRANGEMENTS		
		Ownership (NIE/SONI/Third Party)	BG Energy's current preference is that responsibility for the ownership, operation and maintenance of the offshore connection assets rests with the project developers. Critical to this preference is their view that, given their current preferred connection methodology, the Torr Head Project would not be subject to IME3 unbundling requirements (that is it would be seen as a distribution network level connection) BG Energy does not believe that the facilitation of its tidal project requires a significant review of the general connection and charging principles. However, BG Energy urges the Utility Regulator to promptly progress arrangements for the contestability of shallow connection assets in NI. This is critical for developers in terms of better enabling them to manage the costs, timelines and general risks associated with grid connections.	The UR is presently carrying out work on the issue of contestability and will issue a discussion paper on this in early 2014.

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		CHANGES TO THE CONNECTION APPLICATION PROCESS AND THE NI CONNECTION QUEUE		
		Should connections be requested and added to ITC after a Crown Estate lease is signed?	BG Energy is of the view that its tidal project should be permitted to make an application for connection to the NI system ahead of Planning Approval to better enable the progression of the project. BG Energy believes that the project should be included in the ITC analysis at the soonest possible date to provide greater certainty to the projects and to reduce certain of the controllable risks related to the project.	The UR is the dispute resolution body for connection issues. NIE and SONI's licences require them to provide a connection offer on application, subject to certain caveats. The receipt of statutory consents is not one of these caveats. The maximum time between receipt of a connection application by NIE / SONI and acceptance of an offer by the generator is less than 6 months (max 3 months to issue offer followed by a 3 month validity period) However, in practice a generator would need to be confident it would in a financial position to accept an offer before making its application. Financing for a development of this scale is unlikely to be in place before the necessary consents are obtained, e.g. the maximum capacity of the offshore generation can is determined as part of the consenting process. NIE and SONI both have licence conditions requiring them not to discriminate against or unduly prefer any party in the connection process. There is no barrier that we are aware of for any developer applying for a connection offer at an earlier stage, but it would need to be in a position to accept the offer, make the necessary payments and lodge the relevant security cover. If the developer is unhappy with NIE's processing of its application it is entitled to follow the dispute resolution process. The key principle moving forward is that all generation scheme developments should be
		Comparisons with On-shore connections process	For the wider stake holder community, BG Energy would support an analysis being undertaken by the System Operators to study the impact of the different offshore projects on the system and the availability of capacity on the system.	

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				treated equally and fairly, regardless of whether they are based onshore or offshore.
		THE NEED FOR CHANGES TO THE GRID CODE		
		Necessary amendments to the Grid Code	BG Energy proposes the establishment of a Grid Code Review Panel Working Group to examine and assess if and where changes to the Grid Code may be needed to facilitate the connection of offshore renewable generation.	It is proposed that required Grid Code changes are dealt with through the normal process. We intend to write to SONI to instruct it to review the suitability of the Grid Code for offshore generation under Condition 16 of its licence.
7	**The Crown Estate**	OPTIONS FOR PHYSICAL CONNECTION ARRANGEMENTS AND WIDER TRANSMISSION SYSTEM REINFORCEMENTS		
		Physical connections	Do not have a view on preferred location for transmission connection. Important however to define ownership boundaries as early, and as clearly, as possible to ensure all parties can understand operational requirements and minimise interface risk. They believe the approach to defining the interface point should follow the standard onshore principles as far as possible between generation and transmission infrastructure, in order to minimise changes required to standard codes and procedures. They do not have a view on the appropriate onshore infrastructure (e.g. whether a near shore substation is required). This should be determined in accordance with existing connection rules and technical requirements.	We have reviewed the legal position and can confirm that the existing framework applies to the limit of NI territorial waters. The UR is presently carrying out work on the issue of contestability and will issue a discussion paper on this in early 2014
		OWNERSHIP, RESPONSIBILITIES AND LICENSE ARRANGEMENTS		
		Ownership (NIE/SONI/Third Party)	If the assets are determined as transmission assets, they believe that the most viable option is for the assets to be owned and maintained by NIE (potentially following construction by the offshore generation developer as part of a combined offshore	Our current understanding of the legal framework is that NIE is certified to own transmission assets to the boundary of NI territorial waters. The contestability work stream will consider

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			project, which follows the 'Generator Build' OFTO model). If this model were to be adopted, they would like to see NIE subject to a form of availability incentive to incentivise O&M over the lifetime of the asset. The regulatory regime must be clear in relation to the unbundling provisions in the Third Package. No specific comments on the distribution connection arrangements, these appear acceptable. Developers should not bear any regulatory risk from how the framework is designed and implemented given requirements for unbundling are set out in relevant law.	options for both the construction, maintenance and ownership of connection assets. The responsibilities of the present TO and TSO extend to off-shore generator connections in NI territorial waters. . There are however a number of implications that will require to be addressed by UR, SONI and NIE. Present SO and TO codes and standards will require to be amended to accommodate new offshore transmission connections. In particular a review of the present supply security standard will be required to establish offshore connections acceptable to the offshore developer, SO and UR in terms of performance and cost. The current connection charging regime for NI will apply to offshore connections. Connection assets (as defined by the connection charging statement) are paid for by the developer.
		Offshore licence holder	The regulatory regime established should be proportionate to the policy challenge in hand.	
		Cost recovery of offshore connection assets	A fair value should be allocated to the assets transferred to NIE.	
		SYSTEM SECURITY, LEAST COST TECHNICALLY ACCEPTABLE (LCTA) CONNECTION DESIGN, COST ALLOCATION AND CHARGING ARRANGEMENTS		
		Review the transmission connection security	Responder indicates they have no comments in this area.	n/a
		CHANGES TO THE CONNECTION APPLICATION PROCESS AND THE NI CONNECTION QUEUE		
		Should connections be requested and added to ITC	They strongly support the principle to enable offshore generators the ability to seek connection capacity and be placed on the ITC analysis list on basis of development rights	The UR is the dispute resolution body for connection issues. NIE and SONI's licences require them to provide a connection offer on application, subject to certain caveats. The

Ref	Organisation	Topic	Comment	Our response
		after a Crown Estate lease is signed?	awarded by The Crown Estate. This would be essential in order to enable developers to progress the consents for necessary offshore and onshore works for offshore generation projects, and is a vital component of any financial investment decision for a renewable energy project.	receipt of statutory consents is not one of these caveats. The maximum time between receipt of a connection application by NIE / SONI and acceptance of an offer by the generator is less than 6 months (max 3 months to issue offer followed by a 3 month validity period) However, in practice a generator would need to be confident it would in a financial position to accept an offer before making its application. Financing for a development of this scale is unlikely to be in place before the necessary consents are obtained, e.g. the maximum capacity of the offshore generation can is determined as part of the consenting process. NIE and SONI both have licence conditions requiring them not to discriminate against or unduly prefer any party in the connection process. There is no barrier that we are aware of for any developer applying for a connection offer at an earlier stage, but it would need to be in a position to accept the offer, make the necessary payments and lodge the relevant security cover. If the developer is unhappy with NIE's processing of its application it is entitled to follow the dispute resolution process. The key principle moving forward is that all generation scheme developments should be treated equally and fairly, regardless of whether they are based onshore or offshore.
		Comparisons with On-shore connections process		
8	**Department**	OWNERSHIP, RESPONSIBILITIES AND LICENSE ARRANGEMENTS		

Ref	Organisation	Topic	Comment	Our response
	of Enterprise Trade and Investment (DETI)	Ownership (NIE/SONI/Third Party)	DETI's primary concern is that any connection option chosen by NIAUR is IME3 compliant and does not put the Department at risk of substantial infraction fines, should it be judged subsequently that it is not, in fact, compliant. It would therefore be helpful if NIAUR could set out how each option suggested in the consultation document meets the requirements of all aspects of the IME3 Directive. The Department would urge NIAUR to finalise IME3 compliant options for offshore connection as soon as is practicable in order that the offshore developers who have been awarded development rights from The Crown Estate can have clarity on the connection regime. From that perspective it would be useful if NIAUR could publish its timescale with milestones for key decision points.	Our current understanding of the legal framework is that NIE is certified to own transmission assets to the boundary of NI territorial waters. The contestability work stream will consider options for both the construction and ownership of connection assets. Any solution must be compliant with all relevant legislation.
		Offshore licence holder	Whichever regime is chosen by NIAUR it is essential that this is fully compliant with IME3 requirements from the outset and that the developer does not bear any risk of non-compliance with the IME3 unbundling rules as projects progress.	
9	**DW Consultancy Ltd. (DWC)**	CHANGES TO THE CONNECTION APPLICATION PROCESS AND THE NI CONNECTION QUEUE		
		Should connections be requested and added to ITC after a Crown Estate lease is signed?	DW Consultancy view any proposal to allow offshore renewables to 'jump' ahead of onshore renewables in the connection offer process as completely discriminatory. Under EU and Northern Ireland legislation there are clear rules to restrict this form of discrimination. DW Consultancy strongly recommends that the Utility Regulator fully considers the legal implications of such an inequitable treatment of onshore renewable generators.	The UR is the dispute resolution body for connection issues. NIE and SONI's licences require them to provide a connection offer on application, subject to certain caveats. The receipt of statutory consents is not one of these caveats. The maximum time between receipt of a connection application by NIE / SONI and acceptance of an offer by the generator is less than 6 months (max 3 months to issue offer followed by a 3 month validity period)

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		Comparisons with On-shore connections process	To prematurely allocate grid capacity to offshore generation in a clearly discriminatory nature will have major implications through the all-island electricity industry. The current process of requiring planning permission for the generating station before you can apply for grid connection is a fair and equitable process for all renewable generators. They oppose (in the strongest possible terms) the current proposal of allowing offshore renewable generators gain an unfair advantage by jumping ahead of onshore renewable generators in the gird connection process in the strongest possible terms.	However, in practice a generator would need to be confident it would in a financial position to accept an offer before making its application. Financing for a development of this scale is unlikely to be in place before the necessary consents are obtained, e.g. the maximum capacity of the offshore generation can is determined as part of the consenting process. NIE and SONI both have licence conditions requiring them not to discriminate against or unduly prefer any party in the connection process. There is no barrier that we are aware of for any developer applying for a connection offer at an earlier stage, but it would need to be in a position to accept the offer, make the necessary payments and lodge the relevant security cover. If the developer is unhappy with NIE's processing of its application it is entitled to follow the dispute resolution process. The key principle moving forward is that all generation scheme developments should be treated equally and fairly, regardless of whether they are based onshore or offshore.
10	**Northern Ireland Renewable Industry Group (NIRIG)**	OPTIONS FOR PHYSICAL CONNECTION ARRANGEMENTS AND WIDER TRANSMISSION SYSTEM REINFORCEMENTS		
		Physical connections	Developers need to be able to manage the delivery of the connection to the Northern Ireland transmission network, both in terms of design and construction of the connection assets. This is the preferred approach and is based both on the experience gained from the Great Britain market but also the developers' requirement to deliver against milestones that	UR is presently carrying out work on the issue of contestability and will issue a discussion paper in early 2014.

Ref	Organisation	Topic	Comment	Our response
			are contractually imposed by The Crown Estate. Distribution connections should be allowed to be built contestably to current standards if the same connections assets are involved. It should be noted that for over three years, NIAUR has been committed to a work-stream to review the value of introducing contestability for connections to the electricity network. For 2013/14, NIAUR has now downgraded it to the status of a work-stream, "which they would like to undertake if resources allowed" without consultation or explanation. NIRIG wishes to emphasise that contestability needs to be progressed at both transmission and distribution level as a matter of urgency.	
		OWNERSHIP, RESPONSIBILITIES AND LICENSE ARRANGEMENTS		
		Ownership (NIE/SONI/Third Party)	Whichever transmission ownership arrangements are made, it will be important that Northern Ireland operates under a regime that does not in any way confer a competitive disadvantage for developers here. Any potential contextual difference which does confer a disadvantage in comparison with GB projects must be reflected appropriately in the strike price.	Our current understanding of the legal framework is that NIE is certified to own transmission assets to the boundary of NI territorial waters. The contestability work stream will consider options for both the construction and ownership of connection assets. Any solution must be compliant with all relevant legislation.
		CHANGES TO THE CONNECTION APPLICATION PROCESS AND THE NI CONNECTION QUEUE		
		Should connections be requested and added to ITC after a Crown Estate lease is signed?	To allow developers to design and plan projects appropriately and hence gain access to the relevant connection information, NIRIG is of the view that different processes could apply to onshore and offshore generators with regard to the requirement for planning permission before a connection application can be progressed. This would be to facilitate access to connection information to progress	The UR is the dispute resolution body for connection issues. NIE and SONI's licences require them to provide a connection offer on application, subject to certain caveats. The receipt of statutory consents is not one of these caveats. The maximum time between receipt of a connection application by NIE / SONI and acceptance of an offer by the generator is less than 6 months (max 3

Ref	Organisation	Topic	Comment	Our response
			the pre consenting process. In that context NIRIG would support the possibility to progress a connection application without planning permission for offshore/marine projects provided they had secured exclusive development rights from The Crown Estate. However NIRIG notes the proposal for offshore and marine projects regarding entry to the ITC listing without need for planning consents. This would be different to the current rule set for onshore connections. NIRIG note that this proposal may not pass the test of fairness, non-discriminatory and equitable treatment for all technologies. In light of the potential significant impact of allowing offshore and marine projects to enter the ITC listing before receipt of planning consent, and given the absence of any regulatory impact analysis of this proposal in this consultation, NIRIG would request a further broader consultation on ITC access, addressing the issue based on a rule-set that ensures fair and equitable treatment for all technologies.	months to issue offer followed by a 3 month validity period) However, in practice a generator would need to be confident it would in a financial position to accept an offer before making its application. Financing for a development of this scale is unlikely to be in place before the necessary consents are obtained, e.g. the maximum capacity of the offshore generation can is determined as part of the consenting process. NIE and SONI both have licence conditions requiring them not to discriminate against or unduly prefer any party in the connection process. There is no barrier that we are aware of for any developer applying for a connection offer at an earlier stage, but it would need to be in a position to accept the offer, make the necessary payments and lodge the relevant security cover. If the developer is unhappy with NIE's processing of its application it is entitled to follow the dispute resolution process. The key principle moving forward is that all generation scheme developments should be treated equally and fairly, regardless of whether they are based onshore or offshore.
11	**Energia**	General	Energia confirmed that their views are as provided by NIRIG (see Reference 10 above).	See response to NIRIG in reference 10.
12	**ESB Generation & Wholesale**	OPTIONS FOR PHYSICAL CONNECTION ARRANGEMENTS AND WIDER TRANSMISSION SYSTEM REINFORCEMENTS		

Ref	Organisation	Topic	Comment	Our response
	Markets	Wider Transmission connection Issues	The physical connection arrangements for offshore renewable generation should be compatible with the Isles offshore network model. This will assist in allowing the full potential of renewable generation in NI to be developed. Without this renewable projects may face prohibitive levels of curtailment.	The commercial and regulatory arrangements to meet the requirements of the concept of the Isles offshore network would not meet the times scales to develop a regime for cost effective connection of offshore renewable generation considered in this consultation. The future development of an Isles network, should this be decided upon by the NI Executive, would require consideration of the generation export issues faced at the time of that decision. However, these points are duly noted.
		CHANGES TO THE CONNECTION APPLICATION PROCESS AND THE NI CONNECTION QUEUE		
		Should connections be requested and added to ITC after a Crown Estate lease is signed?	All applications for connection should be treated on the same basis in terms of their eligibility for entry into the connection process and the FAQ/ITC queue for firm capacity. By ensuring a level playing field for both onshore and offshore generation, the market can determine and inform which projects get completed and connected first and this is likely to give the most favourable and competitive outcome in terms of meeting the 2020 renewable targets for NI. It is important that as for onshore connections a strict policy is in place regarding any capacity awarded to offshore generation. If projects are not built out within two years of signing of Connection Agreements that the capacity should be reallocated to whatever project(s) are next in the ITC/FAQ queue. This will ensure capacity is not hoarded and that the network is used optimally (DNV KEMA note, this could be problematic for the offshore projects here).	The UR is the dispute resolution body for connection issues. NIE and SONI's licences require them to provide a connection offer on application, subject to certain caveats. The receipt of statutory consents is not one of these caveats. The maximum time between receipt of a connection application by NIE / SONI and acceptance of an offer by the generator is less than 6 months (max 3 months to issue offer followed by a 3 month validity period) However, in practice a generator would need to be confident it would in a financial position to accept an offer before making its application. Financing for a development of this scale is unlikely to be in place before the necessary consents are obtained, e.g. the maximum capacity of the offshore generation can is determined as part of the consenting process. NIE and SONI both have licence conditions requiring them not to discriminate against or unduly prefer any party in the connection
		Comparisons with On-shore	ESB would not support the approach suggested in the consultation that 800MW of	

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		connections process	offshore renewable generation should be allowed to apply for connection to the network, and enter the queue for allocation of firm capacity, on the basis that it has been awarded development rights by The Crown Estate. This would be different to the current accepted practice whereby a developer applying for a connection must have planning permission in place.	process. There is no barrier that we are aware of for any developer applying for a connection offer at an earlier stage, but it would need to be in a position to accept the offer, make the necessary payments and lodge the relevant security cover. If the developer is unhappy with NIE's processing of its application it is entitled to follow the dispute resolution process. The key principle moving forward is that all generation scheme developments should be treated equally and fairly, regardless of whether they are based onshore or offshore.
13	**First Flight Wind Limited (FFWL)**	OPTIONS FOR PHYSICAL CONNECTION ARRANGEMENTS AND WIDER TRANSMISSION SYSTEM REINFORCEMENTS		
		Physical connections	**Preferred transmission connection variation and reasoning:** the regulatory framework should not preclude designs that could be beneficial to the project and the NI consumer, and a more detailed consideration of options (including new technical opportunities) needs to be carried out before a preferred connection design can be identified. • **Potential offshore substation ownership boundaries**: FFWL note that some connection designs currently under consideration may not include an offshore substation. The optimum point to locate ownership boundaries and metering equipment is the step up transformer LV bushings, and this is consistent with the GB approach. • **Usage and need for a near shore substation:** this will be dependent upon the design of the offshore connection, with lower voltage connections (particularly those where	Our current understanding of the legal framework is that NIE is certified to own transmission assets to the boundary of NI territorial waters. In terms of connection variations and design: • The electrical connection design will be determined by the TO under the current charging rules the developer will pay for the least cost technically acceptable solution. • Present SO and TO codes and standards will require to be reviewed to ensure they are suitable for offshore transmission connections. In particular a review of the present supply security standard will be required to establish offshore connections acceptable to the offshore developer, SO and UR in terms of

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			offshore substations are avoided) favouring the use of a remote substation nearer the shore to enable voltage transformation to take place and minimising the number of onshore cables, and higher voltage connections favouring a direct connection back to the existing network. A near shore substation would also be required if redundancy was to be introduced on the onshore circuits, but not the offshore ones. However, the location of any near shore substation should reflect the high level of designation around the coastline and be set back accordingly to accommodate sensitivities. FFWL note that some connection designs currently under consideration may not include an offshore substation. The optimum point to locate ownership boundaries and metering equipment is the step up transformer LV bushings, and this is consistent with the GB approach.	performance and cost. The requirement for a near shore substation could be included in this review of the security standards.
		OWNERSHIP, RESPONSIBILITIES AND LICENSE ARRANGEMENTS		
		Ownership (NIE/SONI/Third Party)	Any solution involving FFWL owning the transmission assets on a long term basis will introduce legal and regulatory uncertainty surrounding compliance with the EU Third Energy Package and further impact confidence investment confidence. Also, FFWL indicate that long term ownership would reduce the ability of the generator to recycle the capital into new offshore wind projects. FFWL's preferred option for the ownership and funding aspect of the connection is for NIE to purchase the connection assets (designed and procured by FFWL) in a regulated sales process (which does not need to mirror the GB	Our current understanding of the legal framework is that NIE is certified to own transmission assets to the boundary of NI territorial waters. The contestability work stream will consider options for both the construction and ownership of connection assets. Any solution must be compliant with all relevant legislation.

Ref	Organisation	Topic	Comment	Our response
			OFTO process), and for the project to provide NIE with a low-risk revenue over the lifetime of the project. Given the experience from the GB market of the parties in the FFWL consortium, FFWL believe the best option is for the developer to be responsible for the design and construction of the connection assets. In light of the likely timescales and cost of implementation, FFWL do not believe it is appropriate to introduce a full OFTO regime (option four in the consultation document), as there is limited scope for additional offshore wind farms in Northern Irish waters. FFWL also do not believe there to be any benefits from placing the ownership responsibility on the SO (option three in the consultation document) as they do not have the relevant experience as transmission owners.	
		Offshore licence holder	NIE's onshore licence should be allowed to be extended offshore, but with modifications to the onshore process (for example introduction of divestment of assets and generator payment of "local" TUoS charges to provide long term revenue to NIE).	
		SYSTEM SECURITY, LEAST COST TECHNICALLY ACCEPTABLE (LCTA) CONNECTION DESIGN, COST ALLOCATION AND CHARGING ARRANGEMENTS		
		Review the transmission connection security	The consultation identifies that transmission level generation connections in Northern Ireland are designed according to Planning Standard PLM_SP_1. At present, this standard limits the maximum loss of infeed to the system to be no greater than 550MW, and a single circuit is acceptable to connect generation up to and including this figure, provided it does not exceed 20km in length.	NIE, in conjunction with SONI, are currently carrying out a review of Planning Standard PLM_SP_1 which covers transmission system security, this will in due course be subject to public consultation. This will subsequently be assessed by the UR. We will ensure this review has fully covered offshore generation connections before and changes are approved.

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			Beyond 20km, more onerous n-2 'backbone network' standards should be used. The maximum capacity of a 220kV offshore cable is considered to be approximately 330MW. As such FFWL would anticipate that at least two offshore cables would be required to connect a 600MW offshore wind farm and therefore this would be inherently compliant with this aspect of the standard. However if the 20km limit is to be considered, due to the cable distance offshore and to the existing onshore network, a non-redundant connection would be considered non-compliant. To date, in all markets, redundant cables have not been deemed economic in the offshore wind industry due to the very large capital costs of such investments. The SQSS in GB consequently defines a separate suite of security requirements for offshore transmission, and this is supported by cost benefit analysis. They believe that it may not be appropriate prescriptively to assign redundancy requirements to offshore wind connections, and provided that maximum loss of infeed limits are respected the most appropriate means to assess the level of redundancy is via a specific cost benefit assessment. This is particularly relevant considering the uniqueness of this project in Northern Ireland. If overarching standards are to be developed, they should mirror the results of such a cost benefit analysis.	The current connection charging arrangements apply to offshore connections. This includes charging for the least cost technically acceptable solution. If the developer disagrees with NIE's definition of this it can follow the dispute process. .
		CHANGES TO THE CONNECTION APPLICATION PROCESS AND THE NI CONNECTION QUEUE		
		Should	It will be difficult to proceed with the project	The UR is the dispute resolution body for

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		connections be requested and added to ITC after a Crown Estate lease is signed?	unless the requirement of having planning consent prior to making a grid connection application is removed. FFWL believe a more appropriate option is for the generator to be able to apply once the exclusive development rights have been awarded by The Crown Estate. Allowing the opportunity to apply for grid connection in advance of planning consent is necessary for the offshore generators as the design of an offshore wind farm (in terms of the location of the offshore platforms, cable corridors and landfalls) and the EIA process (in terms of the above and all the onshore infrastructure) both require a full understanding of the connection arrangements in advance of a planning application being made. If the wind farm was required to have planning permission before applying for its grid connection, it would require the project to consider a wide consenting envelope, spanning many different connection options across a large geographic area and different configurations of offshore platform design. FFW does not believe it is possible to split the timing of a connection application, and the point of entry onto the ITC queue as this eliminates the advantage of early application and does not provide the certainty necessary to a project.	connection issues. NIE and SONI's licences require them to provide a connection offer on application, subject to certain caveats. The receipt of statutory consents is not one of these caveats. The maximum time between receipt of a connection application by NIE / SONI and acceptance of an offer by the generator is less than 6 months (max 3 months to issue offer followed by a 3 month validity period) However, in practice a generator would need to be confident it would in a financial position to accept an offer before making its application. Financing for a development of this scale is unlikely to be in place before the necessary consents are obtained, e.g. the maximum capacity of the offshore generation can is determined as part of the consenting process. NIE and SONI both have licence conditions requiring them not to discriminate against or unduly prefer any party in the connection process. There is no barrier that we are aware of for any developer applying for a connection offer at an earlier stage, but it would need to be in a position to accept the offer, make the necessary payments and lodge the relevant security cover. If the developer is unhappy with NIE's processing of its application it is entitled to follow the dispute resolution process. The key principle moving forward is that all generation scheme developments should be treated equally and fairly, regardless of whether they are based onshore or offshore.

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14	**Northern Ireland Electricity Limited (NIE)**	OWNERSHIP, RESPONSIBILITIES AND LICENSE ARRANGEMENTS		
		Ownership (NIE/SONI/Third Party)	NIE considers that the optimal construction arrangements are as set out in Variation 1 of section 5 of the consultation, with NIE being responsible and licensed for the construction and ownership of the onshore connection assets as far as a new shoreline substation and SONI being responsible and licensed for the operation of same. The generator would then in turn be responsible, under their generation licence, for the offshore infrastructure that would connect their wind farm to the shoreline substation. In respect of variation 2, they indicate that neither NIE nor SONI have any licence obligations or powers that extend beyond the boundary of NI and there would therefore not only need to be a change in the terms of their respective licences but also a change in legislation.	Our current understanding of the legal framework is that NIE is already certified to own transmission assets to the boundary of NI territorial waters. The contestability work stream will consider options for both the construction and ownership of connection assets. Any solution must be compliant with all relevant legislation.
		SYSTEM SECURITY, LEAST COST TECHNICALLY ACCEPTABLE (LCTA) CONNECTION DESIGN, COST ALLOCATION AND CHARGING ARRANGEMENTS		
		Review the transmission connection security	NIE also consider that the present security and planning standard PLM-SP-1 may not properly define the security requirements for the connection of large scale renewable generation to the transmission network. NIE, in conjunction with SONI, are currently carrying out a review of this standard, which will in due course be subject to public consultation1. In view of this on-going process NIE would not wish at this stage to comment on the possible conclusions that may arise as a result of this review. Also, point noted regarding Variation 3, whilst NIE,	NIE, in conjunction with SONI, are currently carrying out a review of Planning Standard PLM_SP_1 which covers transmission system security, this will in due course be subject to public consultation. This will subsequently be assessed by the UR. We will ensure this review has fully covered offshore generation connections before and changes are approved.

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			as a transmission licensee, is required to comply with a set of regulated network related licence standards it is not clear how this would play out in the context of the offshore developer not being subject to any transmission licence.	
		CHANGES TO THE CONNECTION APPLICATION PROCESS AND THE NI CONNECTION QUEUE		
		Should connections be requested and added to ITC after a Crown Estate lease is signed?	Whilst NIE understands the issues set out in the consultation around how best to deal with offshore connection applicants, one needs to consider how to resolve them at a more fundamental and strategic level. Indeed, it is NIE's view that the rules for entrance to the connection application process need to be considered afresh for both onshore and offshore applications to ensure that an overall approach is arrived at that is both transparent and properly defined within licensed and/or regulatory documentation.	The UR is the dispute resolution body for connection issues. NIE and SONI's licences require them to provide a connection offer on application, subject to certain caveats. The receipt of statutory consents is not one of these caveats. The maximum time between receipt of a connection application by NIE / SONI and acceptance of an offer by the generator is less than 6 months (max 3 months to issue offer followed by a 3 month validity period) However, in practice a generator would need to be confident it would in a financial position to accept an offer before making its application. Financing for a development of this scale is unlikely to be in place before the necessary consents are obtained, e.g. the maximum capacity of the offshore generation can is determined as part of the consenting process. NIE and SONI both have licence conditions requiring them not to discriminate against or unduly prefer any party in the connection process. There is no barrier that we are aware of for any developer applying for a connection offer at an earlier stage, but it would need to be in a position to accept the offer, make the necessary payments and lodge the relevant

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				security cover. If the developer is unhappy with NIE's processing of its application it is entitled to follow the dispute resolution process. The key principle moving forward is that all generation scheme developments should be treated equally and fairly, regardless of whether they are based onshore or offshore.
		THE NEED FOR CHANGES TO THE GRID CODE		
		Necessary amendments to the Grid Code	In terms of Grid Code, NIE would not be a primary stakeholder in respect of the scope of changes that may be required to cater for off shore wind generation. They would however comment that the proposed connection arrangement recommended by NIE in section 2 of this response should have the least consequences compared to other options (UR Variation 1).	It is proposed that required Grid Code changes are dealt with through the normal process. We intend to write to SONI to instruct it to review the suitability of the Grid Code for offshore generation under Condition 16 of its licence. We will also be writing to NIE to instruct it to review the Distribution Code.
15	**Renewable Energy International (REI)**	OPTIONS FOR PHYSICAL CONNECTION ARRANGEMENTS AND WIDER TRANSMISSION SYSTEM REINFORCEMENTS		
		Physical connections	REI feel that distribution connections should be permitted to be built contestably to the required electricity industry standards.	The UR is presently carrying out work on the issue of contestability and will issue a discussion paper in early 2014.
		CHANGES TO THE CONNECTION APPLICATION PROCESS AND THE NI CONNECTION QUEUE		
		Should connections be requested and added to ITC after a Crown Estate lease is signed?	REI feel that to ensure fair and equitable treatment for all technologies and to respect the connection queue order, that all generators (including offshore generators) should enter the FAQ allocation process when they make a generation connection application, that is, once they have received the necessary DOE/DETI consents, as is currently the situation for on-shore projects in Northern Ireland.	The UR is the dispute resolution body for connection issues. NIE and SONI's licences require them to provide a connection offer on application, subject to certain caveats. The receipt of statutory consents is not one of these caveats. The maximum time between receipt of a connection application by NIE / SONI and acceptance of an offer by the generator is less than 6 months (max 3 months to issue offer followed by a 3 month

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				validity period) However, in practice a generator would need to be confident it would in a financial position to accept an offer before making its application. Financing for a development of this scale is unlikely to be in place before the necessary consents are obtained, e.g. the maximum capacity of the offshore generation can is determined as part of the consenting process. NIE and SONI both have licence conditions requiring them not to discriminate against or unduly prefer any party in the connection process. There is no barrier that we are aware of for any developer applying for a connection offer at an earlier stage, but it would need to be in a position to accept the offer, make the necessary payments and lodge the relevant security cover. If the developer is unhappy with NIE's processing of its application it is entitled to follow the dispute resolution process. The key principle moving forward is that all generation scheme developments should be treated equally and fairly, regardless of whether they are based onshore or offshore.
16	**RES UK & Ireland Limited**	OPTIONS FOR PHYSICAL CONNECTION ARRANGEMENTS AND WIDER TRANSMISSION SYSTEM REINFORCEMENTS		
		Physical connections	RES urges UREGNI to consider measures to ensure that contestability for all connections, both onshore and offshore as a matter of urgency. RES further state that "contestability in connections would allow the introduction of competition and flexibility to the market without requiring onshore generation	The UR is presently carrying out work on the issue of contestability and will issue a discussion paper in early 2014.

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			developers to also take on the responsibility of owning a private wire"	
		Wider Transmission connection Issues	RES is strongly of the view that grid constraints are likely to emerge as one of the key risks to effective development of renewables in the All Island market in the latter half of this decade. As the build out of renewables projects in Northern Ireland continues to progress towards 2020 targets so the existing NIE transmission system is going to be operated at or beyond its rated capabilities giving rise to system constraints. The RIDP investments provide the outline of a plan for a transmission system that will support the future electricity generation profile of the All Island market but recent lack of progress in certain network investments, particularly in relation to the progression of desperately needed connection clusters, does not inspire confidence that necessary investment will be delivered in time to avoid very significant overall system constraints. Of particular concern is the existing North-South tie line, which in the run up to 2020, taking account connection of a large offshore wind farm in Northern Ireland, is likely to become a significant grid bottleneck. This circuit is therefore likely to be the source of significant constraint, until the planned Meath – Tyrone 400kV upgrade is complete. Completion of this transmission reinforcement will be crucial to the limiting of constraints, and therefore protecting investor confidence in Northern Ireland renewables projects, however difficulties with planning application of this planned reinforcement do not augur well for a timely delivery. The concerns over network	We agree that the lack of a second North-South interconnector is going to be become a major constraint on the integration of renewable generation. We have identified this issue to the planning service. We intend to continue working with CER to on the timely construction of this essential cross-border infrastructure.

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			development has influenced RES's response on Offshore developers accessing the ITC queue without planning permissions.	
		OWNERSHIP, RESPONSIBILITIES AND LICENSE ARRANGEMENTS		
		Ownership (NIE/SONI/Third Party)	RES notes and supports the development of new arrangements that introduce flexibility around the rights of parties other than existing transmission licensees to deliver, own and operate transmission wires. RES would encourage UREGNI to ensure that the benefits of new flexibility are not restricted to the offshore sector.	Our current understanding of the legal framework is that NIE is certified to own transmission assets to the boundary of NI territorial waters. The contestability work stream will consider options for both the construction and ownership of connection assets. Any solution must be compliant with all relevant legislation.
		CHANGES TO THE CONNECTION APPLICATION PROCESS AND THE NI CONNECTION QUEUE		
		Should connections be requested and added to ITC after a Crown Estate lease is signed?	RES also understands that offshore renewables projects may reasonably require an offer of terms for connection from the relevant grid licensee in order to have a level of certainty for connection route corridor to permit investment in environmental and sea bed studies necessary to support a formal application to DETI and DOE for an Article 39 consent, a Marine Licence and planning consent. For this reason it seems reasonable that offshore renewables projects should be permitted to submit a connection application, in order to receive a SONI connection offer only in order to allow the initiation of such studies at a milestone prior to receipt of DETI and DOE consents. Such a practice is also consistent with the approach adopted by National Grid in relation to connection offers for the Crown Estate Round 3 offshore wind projects in Great Britain. However, if SONI sees fit to permit such an approach to offshore renewables connection applications,	The UR is the dispute resolution body for connection issues. NIE and SONI's licences require them to provide a connection offer on application, subject to certain caveats. The receipt of statutory consents is not one of these caveats. The maximum time between receipt of a connection application by NIE / SONI and acceptance of an offer by the generator is less than 6 months (max 3 months to issue offer followed by a 3 month validity period) However, in practice a generator would need to be confident it would in a financial position to accept an offer before making its application. Financing for a development of this scale is unlikely to be in place before the necessary consents are obtained, e.g. the maximum capacity of the offshore generation can is determined as part of the consenting process. NIE and SONI both have licence conditions

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			RES would NOT support the proposal to link adding of offshore renewables projects to the ITC list by date of connection application, as this would unduly discriminate against onshore generation projects. RES considers that, for offshore renewables only: 1. the relationship between submission of connection application and adding to the ITC list should be broken; and 2. the link between receipt of planning consent and submission of a subsequent generation connection application with adding to the ITC list should be maintained.	requiring them not to discriminate against or unduly prefer any party in the connection process. There is no barrier that we are aware of for any developer applying for a connection offer at an earlier stage, but it would need to be in a position to accept the offer, make the necessary payments and lodge the relevant security cover. If the developer is unhappy with NIE's processing of its application it is entitled to follow the dispute resolution process. The key principle moving forward is that all generation scheme developments should be treated equally and fairly, regardless of whether they are based onshore or offshore.
		Comparisons with On-shore connections process	RES outline their understanding of the allocation of the FAQ after the following process: 1. SONI has processed a competent (complete) and valid (supported by DOE/DETI consent) connection application; 2. Generator has accepted the connection offer (ITC queue place backdated to time of competent and valid connection application) within a reasonable validity period; and 3. FAQ should be allocated to generators in the ITC queue (in order dictated by the ITC methodology) following completion of necessary Associated Transmission Reinforcements (ATRs). RES then indicate that if another process were to be adopted it may result in undue discrimination (as detailed in Condition 15 of the SONI Licence) against onshore generator connection applicants. It will therefore be essential for investor confidence in Northern Ireland and for the achievement of the DETI	

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			2020 targets that such discrimination does not arise.	
17	**SONI**	OPTIONS FOR PHYSICAL CONNECTION ARRANGEMENTS AND WIDER TRANSMISSION SYSTEM REINFORCEMENTS		
		Physical connections	Variation 1 with the Point of Connection at the off-shore substation and therefore respecting existing on-shore arrangements would appear to be the most appropriate option for ease of adoption by all parties concerned. The off-shore assets from the off-shore connection point onwards would be installed, owned, operated and maintained by the generators. SONI would make the following additional points:- 1. there is merit in having the near shore S/S as it provides a means of operationally separating the onshore from the offshore assets. 2. SONI would operate the off-shore assets if NIE became the TO for these assets. 3. SONI would consider, subject to the required license changes and regulatory understandings, entering into discussions with UR and the developers regarding ownership and / or operation of the offshore assets should NIE decide that it was inappropriate for them to do so. SONI believe Variation 2 is legally compliant with current arrangements only if the Point of Connection is at the offshore platform and the asset ownership arrangements are with the TO / TSO. However, SONI believe this arrangement to be inherently less secure and more difficult to operate than Variation 1. SONI believe all the assets associated with Variation 3 would have to remain in the ownership of the Generator. SONI consider	Our current understanding of the legal framework is that NIE is certified to own transmission assets to the boundary of NI territorial waters. The contestability work stream will consider options for both the construction and ownership of connection assets. Any solution must be compliant with all relevant legislation.

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			this arrangement to be totally out of line with current legislation and practice. The ownership boundary must be at the agreed point of connection. If the Point of connection is off-shore SONI is prepared to consider either the operation of TO owned assets or the ownership and operation of off-shore assets subject to agreement with all parties as to the arrangements for this to work. The arrangements put in place must allow the application of Safety Rules at all times and be compliant with Grid Code. The off-shore generation developer is best placed to install the off-shore assets.	
		OWNERSHIP, RESPONSIBILITIES AND LICENSE ARRANGEMENTS		
		Ownership (NIE/SONI/Third Party)	The Point of Connection should determine the ownership boundary. In consideration of the options presented by UR for asset ownership SONI believe that the assets up to the Point of Connection must be owned and operated by the TO or TSO to ensure compliance with the certified IME3 arrangements in N Ireland. If it is decided that the Point of Connection is to be at an off-shore platform then the most straightforward option would be to extend onshore ownership arrangements to offshore assets. SONI are prepared to enter into discussions regarding ownership and operation of on-shore or off-shore assets should that become the preferred approach. SONI therefore believe that it is most appropriate to extend the grid and associated TO / TSO responsibilities to off-shore generator connections. This would have the additional benefit of ensuring compliance with the IME3 unbundling requirements without	See response to physical connection arrangements.

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			the need for further certification decisions.	
		Alternative suggestions	SONI recognise that the development of an off-shore grid linking the N Ireland, Ireland and Great Britain may be a longer term possibility but SONI also recognise that the process to achieve this aim has to start somewhere. For that reason it may be worth considering an interim arrangement whereby all off-shore equipment to facilitate these connection arrangements is installed to meet all relevant N Ireland Planning, Operational and equipment standards. In the first instance, full responsibility for the ownership, operation and maintenance of the circuitry could be left with the developer / generator. The developer / generator would be suitably licensed (if possible) and the legislation drafted accordingly. Should the use of these transmission assets be required at a later stage to create an off-shore grid, connect other licensed generators or prove the most cost effective way for NIE to provide necessary system reinforcement then consideration could be given to transferring all or some of the assets to the TO / TSO at that time. This way the assets would not be totally lost to more efficient use by N Ireland customers.	These suggestions are duly noted.
		SYSTEM SECURITY, LEAST COST TECHNICALLY ACCEPTABLE (LCTA) CONNECTION DESIGN, COST ALLOCATION AND CHARGING ARRANGEMENTS		
		Review the transmission connection security	System Security SONI believe that the transmission network and associated generator connections should be designed, built and operated to an appropriate standard that ensures customers continue to enjoy the same standard and quality of supply as at present. The portfolio of	NIE, in conjunction with SONI, are currently carrying out a review of Planning Standard PLM_SP_1 which covers transmission system security, this will in due course be subject to public consultation. This will subsequently be assessed by the UR. We will ensure this review has fully covered offshore generation

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			generation plant is changing rapidly and it is timely to review all the relevant transmission Standards applicable in N Ireland. As the all-island system is a relatively small synchronous system the standards applicable will have to be fit for purpose and SONI would caution against straight comparisons with standards that apply for generator connection or network configurations for much larger systems. SONI is fully involved with NIE in reviewing the existing transmission standards and, if necessary, will propose new revised standards that should apply in N Ireland. During this process SONI is happy to consider the Regulators consultants' views as expressed in the paper and all other views as expressed in response to this consultation. SONI note that, at 600MW, the off-shore wind farm would be in excess of the largest single in-feed to the existing all-island network and, as such, consideration will have to be given to the system security and economic implications of a single connection arrangement. SONI would also believe that the present or revised standards must be met for all aspects of these proposed off-shore connections that are to be owner / operated by the TO / TSO if they are to be treated the same way as all other generators. Connection Design, cost allocation and charging arrangements SONI is prepared to enter into discussions with the Regulators regarding these aspects of policy. SONI believe these policy matters to be applicable to all forms of generator connections.	connections before and changes are approved.

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		CHANGES TO THE CONNECTION APPLICATION PROCESS AND THE NI CONNECTION QUEUE		
		Should connections be requested and added to ITC after a Crown Estate lease is signed?	In general terms SONI do not see the connection process as discrete from ITC analysis and the allocation of FAQ. If a party is eligible to make a connection application then they should be eligible to enter the queue for FAQ allocation and, upon acceptance of terms, be considered in the queue on an on-going basis until the generation is established and the associated transmission reinforcements have been completed to provide fully firm access. The difficulty arises because the Planning Permission hurdle and connection application date applicable for onshore generators is not easily transferrable to off-shore generators as the consenting processes are entirely different. SONI would be keen to reach a position where all generating parties can be treated equitably and, through both consultation processes, hope an accommodation can be reached. SONI does not believe the connection processes can be demonstrably different for off-shore but that, in recognising the differences between onshore, offshore and generating technologies, an equivalent or unique position in planning consent processes can be achieved by all generator developers to allow them to make a connection application. SONI is also mindful that the connection of this renewable wind and tidal generation will require significant transmission network build and reinforcement and believe it is in everyone's interest to resolve this issue and move forward.	The UR is the dispute resolution body for connection issues. NIE and SONI's licences require them to provide a connection offer on application, subject to certain caveats. The receipt of statutory consents is not one of these caveats. The maximum time between receipt of a connection application by NIE / SONI and acceptance of an offer by the generator is less than 6 months (max 3 months to issue offer followed by a 3 month validity period) However, in practice a generator would need to be confident it would in a financial position to accept an offer before making its application. Financing for a development of this scale is unlikely to be in place before the necessary consents are obtained, e.g. the maximum capacity of the offshore generation can is determined as part of the consenting process. NIE and SONI both have licence conditions requiring them not to discriminate against or unduly prefer any party in the connection process. There is no barrier that we are aware of for any developer applying for a connection offer at an earlier stage, but it would need to be in a position to accept the offer, make the necessary payments and lodge the relevant security cover. If the developer is unhappy with NIE's processing of its application it is entitled to follow the dispute resolution process. The key principle moving forward is that all generation scheme developments should be

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				treated equally and fairly, regardless of whether they are based onshore or offshore.
		THE NEED FOR CHANGES TO THE GRID CODE		
		Necessary amendments to the Grid Code	The application of the NI Grid Code and the execution of all Users responsibilities requires there to be clear definition and understanding around the Point of Connection and Control boundaries. There must also be understood rules and standards around the on-going operation and performance of the equipment connected to the transmission system so that there is no detriment to the quality of supply experienced by other users. To properly reflect N Ireland system requirements for off-shore generation SONI will develop an appropriate Minimum Functional Specification (MFS) for off-shore wind and tidal generators. SONI will also consider any other changes that may be required to the Grid Code to ensure off-shore generation is properly covered by the Code. SONI note the reference in the Consultation paper to dynamic VAr Compensation and harmonic filtering and are aware through experience and the evolving DS3 programme how important these factors are in overall system performance. SONI will ensure that these matters are considered fully when reviewing the Grid Code generally and developing the required specifications. It should be noted that the draft EU Network Code on Requirements for Grid Connection applicable to all generators is due to be adopted through the comitology process later this year. While it is currently not binding it is likely to be adopted before any connections	It is proposed that required Grid Code changes are dealt with through the normal process. We intend to write to SONI to instruct it to review the suitability of the Grid Code and all other relevant standards for offshore generation under the relevant Conditions of its licence.

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			are made. For information this Code defines both onshore and offshore connection points but tends to favour the grid connection taking place offshore, probably at an offshore platform. SONI will bring any proposed Grid Code changes to the N Ireland Grid Code Panel for consideration as per normal arrangements prior to submission of agreed changes to UR for approval.	
18	**Transmission Investment LLP**	OWNERSHIP, RESPONSIBILITIES AND LICENSE ARRANGEMENTS		
		Ownership (NIE/SONI/Third Party)	Transmission Investment LLP note that establishing a completely new competitive regime for the appointment of an OFTO-type entity for a single 600MW offshore wind farm may not be justifiable. There are however alternative options for selecting an OFTO. Transmission Investment LLP believes that there could be a role for an OFTO-type entity in the operational phase.	Our current understanding of the legal framework is that NIE is certified to own transmission assets to the boundary of NI territorial waters. The contestability work stream will consider options for both the construction and ownership of connection assets. Any solution must be compliant with all relevant legislation.