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Neil Copeland Ofgem 3<sup>rd</sup> Floor, 107 West Regent Street Cornerstone Glasgow G2 2BA

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Dear Neil,

## **Network Innovation Review**

Thank you very much for the opportunity to comment on the Network Innovation Review.

Transmission Excellence is a company that specialises in the improvement of electricity transmission through the introduction of innovative new technologies and ways of working. We have worked – and are continuing to work – as a "third party", bringing forward concepts that would be suitable for NIC funding with the involvement of a suitable licence holder.

Much of our work relates to offshore transmission, which – at least in theory – should be an ideal recipient for NIC funding since it is a such new area (it barely existed ten years ago): this means that it contains many of the low-risk high-payoff innovation opportunities that have long ago been exploited in onshore transmission.

We therefore bring two perspectives to our response that are likely to differ from the majority of your responses. Firstly because of our interest in offshore, and secondly because of our experience as a "third party". As we set out in the annex below, we believe that some relatively small changes to the NIC regime will make it much more attractive to offshore and third party concepts – increasing the level of competition and ultimately increasing the level of benefits that the consumer receives from their NIC investments.

If you have any questions, please do not hesitate to contact me.

Yours sincerely

Tean kelly

Sean Kelly Director

## ANNEX: RESPONSE TO QUESTIONS

Chapter	Question	Our Response
& Question Numbers		
3,1	What are your views on our proposals to introduce a requirement for the network companies to	We support the basic idea that RIIO companies would be required to develop innovation strategies. As currently structured, however, such strategies cannot be expected to encompass offshore transmission. Given that offshore transmission is expected to be more than half of all transmission investment any innovation strategy that excludes it will be seriously devalued.
	jointly develop an industry-wide innovation strategy?	Special Features of Offshore Transmission Innovation The problem is that the way that offshore transmission for wind farms is built, owned and regulated makes large innovation projects, on the scale of NIC projects, extremely difficult:
		<ul> <li>Onshore transmission owners have very limited activity offshore: there are currently two offshore HVDC links under construction by onshore transmission owners, but in future such projects are likely to be undertaken by CATOs. As a result onshore transmission owners are reluctant to involve themselves in offshore NIC projects that they will not benefit from.</li> </ul>
		<ul> <li>OFTOs are not involved in the construction of offshore transmission; rather this is a task handled solely by the wind farm developers. OFTOs are therefore reluctant to involve themselves in offshore NIC projects that aim to reduce the cost or improve the performance of future projects that will be built, and likely owned, by someone else.</li> </ul>
		• The wind farm developers who build offshore transmission are unable to undertake NIC-scale innovation projects because of the way that they are structured. Before winning a Contract for Difference (CfD) the level of financial uncertainty requires them to minimise expenditure. But once the CfD is awarded the contractual requirement for rapid delivery limits any opportunities for innovation.
		It should be emphasised that, despite the issues above, offshore innovation projects can be expected to give strong benefits for consumers. Since wind farms compete for CfD through an auction process there are very strong competitive pressures on all wind farm developers to rapidly apply innovative new approaches, and – once these approaches are widely adopted – 100% of the benefit should flow to consumers through lower energy prices.
		Recommendation for development of innovation strategy
		The above points suggest that if the full benefit to consumers is to be realised there will need to be voices representing offshore transmission involved in the creation of the industry innovation strategy. One such voice can be provided by the Offshore Wind
		strategy. One such voice can be provided by the Offshore Wind Programme Board: the board (of which I am a member) is a joint initiative between the UK government and the offshore wind industry and it includes a Grid Group that is already involved with the

		identification of innovation priorities. We believe that there should be formal requirement for bodies like this to be involved in the process of creating an innovation strategy – i.e. not just as consultees involved only after the strategy has been drawn up by others.
	If you agree, should companies	Integration of electricity and gas plans would bring extra complexity, and it is not clear to us what (if any) benefits would be obtained.
	retain their own strategies, and in addition should	Separate plans therefore seem more appropriate,
	there be a single system strategy,	
	or one for gas and another for electricity?	
	How often should the strategy be updated?	Two years seems reasonable
3,2	What are your	The problems described above for offshore NIC projects are
	views on our proposals to help facilitate	particularly problematic where the innovative concept for offshore transmission is being promoted by a third party.
	facilitate increased involvement of third parties in the NIC via the network companies?	While the concept of requiring an external call for proposals and requiring companies to "respond to all proposals publically and explain why any are not progressed" is good in principle, it is not clear to us what is to stop high quality projects from failing to go ahead simply because there is no existing transmission company that provides them with "natural home". This would lead to an unnecessary reduction in competition, as well as a loss to consumers through the blocking of a high-quality project.
		Accommodating Projects without a "Natural Home"
		To ensure that high quality innovative projects that lack a "natural home" (e.g. many offshore projects) can still be brought forward to compete for funding, our recommended solution is to provide an "NIC sponsor of last resort" for projects that have been independently judged to be attractive, but which lack a suitable sponsor as they don't clearly relate to the businesses of any existing NIC-qualifying licence holder.
		The obvious company to take on this role would be the NETSO, as its remit ultimately covers all transmission assets; we suggest that the rules on the number of projects that can be sponsored could be altered to allow it sponsor an unlimited number of third-party projects.
		We accept that where a third-party project receives "NIC sponsor of last resort" treatment the third-party will need to bear all project risks and provide the 10% minimum funding.
		Reassuring Transmission Companies that Risks can be Transferred to Third Parties
		In many cases a transmission company will only be willing to provide a home for an NIC project brought forward by a third party if the third party will take on the administration of the project and will take all of the project's financial risks.
		This is particularly likely to be the case for OFTOs, as their financial structure generally does not allow them to take on additional risks.

		<ul> <li>While the transfer of the project's financial risks can be achieved through a contract, project administration and reputational risks are more difficult. We therefore propose that Ofgem should provide reassurance that – if requested by the transmission company hosting a third-party NIC project – it will:</li> <li>i) Deal directly with the third-party in relation to the day-to-day administration of the project, only seeking to involve the transmission company host for licence-related issues that must be dealt with by the licensee.</li> <li>ii) Not hold the licensee responsible reputationally for errors and</li> </ul>
		omissions by the third party where the associated financial risk has been transferred contractually to the third party.
	Should there one industry-wide or one-per-TO calls for proposal?	We would prefer to see a single industry-wide call for proposals to having each company undertake its own call.
		The industry-wide approach would reduce unnecessary administrative demands for third-parties.
		We also recommend that the industry-wide call for proposals should include independent reviews of any offshore proposals rather than relying on OFTOs who are not set up to undertake this function. We would be happy to discuss ways that this could be implemented.
3,3	What are you views on providing direct access for third parties to the NIC?	We note Ofgem's point that existing legislation prohibits third parties from directly participating in the NIC. For this reason we have proposed the "sponsor of last resort" concept set out above as a suitable medium-term measure (i.e. from the 2018 funding round).
		In the longer-term we think that direct access for third parties to the NIC would maximise the level of competition, the quality of projects and the benefits for consumers. The necessary legislative changes should be feasible given the government support for this course – as shown, for instance, in the 2016 UK Budget which refers to the possibility of "opening up the £100m Network Innovation Competition to better enable innovation by non-licenced companies".
		The consultation document states that Ofgem does "not currently have sufficient evidence to show that a change in the current arrangements could reasonably be expected to enhance the benefits of the NIC for consumers". We may be able to help provide this evidence. We believe that we can show how projects that we have been working on with a major government-sponsored entity would have given substantial net benefits to consumers – many tens of millions of pounds – had they not been blocked by the current arrangements which make it difficult for offshore transmission projects to find sponsors.
		We are neutral in relation to the question of whether the allocation of NIC funding is best undertaken by Ofgem (with the independent expert panel) or should be outsourced to one of the governmental bodies that specialises in allocating such funding.
3,4	What are your views on our proposals to remove the	For third parties the removal of the Successful Delivery Reward is particularly significant since in many cases it will oblige them to make the 10% minimum investment themselves and – unlike transmission companies – they cannot obtain a return on this investment through

Successful	improved performance of their network or through a reduction of their
Delivery Reward	costs. (The consumer will benefit from such performance
and the provision to recover Bid	improvements and cost reductions, but the third party will not).
Preparation	Since third parties cannot obtain a return on their 10% investment
Costs?	through their networks (by definition they have none), we suggest that the IP rules allow the third party to benefit from any IP created by the project; royalty payments may be shared with consumers if they exceed some multiple of the third party's investment.

Chapter & Question Numbers	Question	Our Response
4,1	What are your views on the rationale for reducing the level of electricity NIC funding pot?	The reduction in the electricity NIC "pot" is understandable given the poor take-up of funding recently. Our proposals for encouraging offshore and third party projects would complement the reduction in pot size by increasing the demand for NIC funding. This would help eliminate the low take up and the
4,2	What are your views on the proposed funding level of the electricity NIC?	consequent lack of competitive pressure that have been apparent recently.

We have not responded to the specific questions in relation to Chapter 5 but, as a third-party without innovation-funding specialists, we generally welcome any actions to simplify and clarify the NIC regime.