

By email: offshore.coordination@ofgem.gov.uk

DONG Energy Power (UK) Ltd.
33 Grosvenor Place
Belgravia
London SW1X 7HY
United Kingdom

Tel +44 (0) 207 811 5200
Fax +44 (0) 207 811 5298

www.dongenergy.com
Company no. 49 84 787

Dear Gareth,

1 March 2013

RE: Consultation on a proposed framework to enable coordination of offshore transmission

Your ref. 164/12
Our ref. 130301_OFTO coordination

ebjoh@dongenergy.co.uk
Tel 0207815200

Thank you for the opportunity to comment on this consultation. DONG Energy is a leading energy company operating in Northern Europe and headquartered in Denmark. It is one of the most active offshore wind operators and investors in the United Kingdom. We operate 700 MW of offshore wind farms, and have approximately 1.2 GW under construction and a strong pipeline of future projects.

DONG Energy has participated in four completed transitional OFTO tenders with a combined value of nearly £300 million, has interests in three more projects due to complete under the transitional regime. We have a stake in a total of 4.5 GW of Round 3 projects with elements of coordination or anticipatory investment in their connection offers that are affected by this consultation.

As we have set out in previous consultation responses, we believe the OFTO build option is currently too risky for developers to be a realistic option, and although we are happy to engage with Ofgem in order to develop a better, more flexible solution we do not believe that Round 3 projects will be able to opt for this: the risks associated with the technology challenges and procurement timings are simply too great. For this reason, our response to this consultation is from the point of view of enabling coordinated solutions to be taken forward in a timely manner as part of generator build projects.

In addition to our comments to the specific consultation questions, we would like to highlight the following important issues:

The step change in size, technology risk and cost of Round 3 projects:

Round 3 projects are located further from shore, in deeper waters, and will utilise many technologies (e.g. larger wind turbines, HVDC transmission technology) that have not previously been deployed in UK waters. This equates to a step change in terms of size, cost, risk, which Ofgem needs to be mindful of when designing its offshore networks coordination policy. For example,

developers will require more upfront comfort from Ofgem with regards to the cost assessment process, as even a small percentage of disallowed costs on up to £1bn worth of transmission assets is a very different consideration compared to transitional projects.

Also, given the funding requirements for the large Round 3 projects, Ofgem's minded to position to place the entire stranding risk on developers of GFAL assets means that it becomes very difficult for developers to take FID on large, phased projects.

The need for consistent treatment across investment categories

We strongly support Ofgem's proposal to introduce a 2-stage gateway assessment process which was put forward in the last consultation on coordination of offshore networks. Such an assessment process would give crucial confidence with regards to the subsequent cost assessment process to developers of large assets with considerable design and technology risk. We disagree that the full burden of stranding risk should fall on developers undertaking large projects in order to help the UK meet its renewables and carbon reduction targets.

For consistency, the gateway assessment process should apply to all offshore assets with elements of coordination and/or anticipatory investment, and the stranding risk of oversized offshore assets should not fall solely on developers.

The need for outage compensation for non-developer led WNBI

We do not think there will be a great appetite among offshore wind developers to take on the responsibilities associated with developer-led WNBI beyond providing spare capacity on offshore platforms to enable later coordination to be taken forward by a third party. This is because the capital requirements for the generator build option for simpler, radial connections is already considerable, and developers are unlikely to want to increase the amount of capital to be raised for constructing transmission assets that do not directly benefit the connection of the wind farm to the onshore network. There could also be an impact on existing offshore generators where the WNBI does not directly affect their connection assets, but the construction area is in the vicinity and a production outage is required for safety reasons.

Installing equipment in an offshore environment takes time, and new technologies such as HVDC will require extensive testing to ensure that it works as expected. Where developers have included low-regrets WNBI assets on offshore platforms to enable further investment to reinforce onshore boundaries, there is a risk that the construction and commissioning phase of the non-developer led WNBI assets will result in considerable outage periods. Under the current regulatory regime there would be no compensation for those generators, and no guarantees for when the access to the onshore network would be re-established. An outage due to the construction of onshore reinforcement could thus lead to a substantial loss of revenue for the generator, as the support mechanisms for wind farms are time limited and there are no proposals for CfD contracts to 'pause' or be extended to accommodate such events.

In order to ensure developers are willing to incorporate even the most minimal aspects of WNBI it is important that Ofgem considers introducing a cap on the outage period that the third party taking forward the full WNBI, and a compensation regime for the developer which goes beyond a TNUoS refund.

Our ref. 130301_OFTO coordination

Our responses to the detailed questions can be found below.

Yours sincerely



Ebba Phillips John
Regulatory Affairs Advisor
DONG Energy

Q2.1 Do you agree with our high-level framework for the development of coordinated offshore transmission assets?

We welcome Ofgem's development of a regulatory regime for coordinated offshore networks. A regulatory framework is urgently needed as Round 3 projects are negotiating connection offers with National Grid that include elements of coordination.

Ofgem should recognise that the projects that coordinated offers apply to are a 'new generation' of offshore wind projects. Developers are undertaking a step change in terms of the size, cost, and technological risk associated with the projects, and offshore network coordination is adding another element of risk (but with a potential upside of increased redundancy) to offshore wind projects.

Q2.2 Do you agree with our expectations of how coordination opportunities will be identified for parties to progress? Are they consistent with existing roles and responsibilities of parties with regards to the development of the network?

Yes, we agree with Ofgem's expectations. It is reasonable that the main process for identifying coordination opportunities is through the BCA process, and that the opportunity for TOs taking forward wider network reinforcements offshore should require sign-off by Ofgem.

However, as we have previously noted the BCA process alone may result in inadequate levels of coordination, and an overarching, strategic vision is necessary. One way of reconciling this may be through increased TO/SO separation whereby the system operator (SO) behaves like an independent TSO (or ISO) without such close ties to the onshore TO. This would fulfil the role of design authority in a less biased way, and allow the Ten Year Statement to be strengthened to become a scenario-based strategic roadmap with industry input. From our experience, no developers were consulted before lines connecting their various projects appeared on the maps in ODIS or the TYS.

Q2.3 Do respondents consider that changes to the CION process are needed, for example, should the CION be developed further to support coordination? If so, what changes are needed to the process or document? Would an improved CION assist in building developers' confidence in accepting coordinated connection offers?

We strongly agree that if the CION process is to be used as a means of identifying and justifying coordinated investment it must be enhanced and formalised.

Currently the CION is a relatively informal document and process, which is not an obligation for system users under the Planning Code. References to a CION do appear in the STC code, where it is used to prepare connection offers between NETSO and affected TOs. However the applicant has no sight of this at the offer issue stage and offshore CION's are typically of a different format and wider in scope (number of options) than an onshore CION, occur outside of the regulated offer timescales, and have no defined 'end point' where the document is declared final.

This places a burden on developers and introduces uncertainty as to their project's connection point and transmission design late into the process. This could only increase if coordinated elements were to be considered. If the CION is to be used as a tool for identifying coordination, indeed even if it were to be a formally recognised document going forward, we believe the following points should be considered:

- Issuance of a draft CION alongside a connection offer so the developer can sense-check assumptions and understand alternatives before signing an agreement.
- There should be a fixed timetable for finalising the CION, with dates either defined by the developer's program, through bilateral negotiation or fixed e.g. at 6 months post signature. This should also align with the dates for a developer's responsibility to submit Detailed Planning under the Planning Code, and should require a change to the requirement to submit data within 28 days of signature. I.e. it is difficult to submit detailed design data prior to conclusion of the CION process.
- Post finalisation, CION can only be changed (and thus connection point, dates etc.) by agreement of all affected parties, and
- Many of the offshore works assumptions and associated clauses in connection agreements derived from NGET's initial assumptions and analysis could be omitted and left until the conclusion of the CION process. This would reduce pressure on developers to sign up to terms which could be subject to change. The connection agreements would then become more standardised and simpler allowing the developer to secure capacity on more general terms prior to detailed optioneering.

Q2.4 Are there any barriers to improving the CION, if so, what barriers exist and how could they be addressed?

We believe that if the CION is to be improved, and used to facilitate coordination the following barriers exist:

- TOs and developers operate to different timescales. A developer is consent led at the stages where CION is being developed and works under the PINS process for the entire wind farm (transmission is viewed as 'associated development'), whereas unless National Grid is building a new overhead line they fall outside of this more stringent, front loaded process.
- Reluctance on the part of TOs to finalise the CION and commit to a fixed course of action and connection design until late in the process conflicts with developers' need for certainty for consent, financing etc.
- NETSO, onshore TOs, OFTOs and developers have different drivers: developers want to de-risk the connection of their wind farm (the deltas on cost between transmission infrastructure options is usually very low, compared to overall capital expenditure of the offshore wind farm which is several times greater than the total cost of the transmission connection), whereas NETSO seeks develop an economic and efficient network, as per license obligations, and TOs are driven to optimise the return on their regulatory incentive mechanisms. To be effective, the process must reflect a need to seek the best

overall solutions, recognising the very significant Value at Risk a developer has in the offshore generation assets as well as simply the capital cost of transmission.

Our ref. 130301_OFTO coordination

- An example of the above is that the new RIIO settlement places strong drivers on TOs to reduce onshore connection costs, therefore if process is driven by NETSO and onshore TOs a bias towards cheaper onshore options may creep in, with elevated costs falling within the OFTO tendered assets. Greater degrees of separation between the interests of and incentives on the NETSO business and National Grid TO business, specifically with respect to the CION process may be necessary.
- It is very time intensive to review and develop the CION and impossible to finalise within offer timescales. However the issue of a draft CION with the connection offer will allow the applicant to identify sensitivities to the assumptions and be able to negotiate appropriate commercial and technical terms in the agreements.

Q2.5 Do respondents anticipate issues with the design or delivery of transmission assets where generation projects are reliant on works to be undertaken by another developer? If so, what would be the appropriate mechanism to address such issues?

We understand this category is to cover projects where the different developers are not part of a Joint Venture agreement. There are several issues that need to be carefully considered, depending on whether the developer is the one taking forward the works, or one relying on another developer to undertake works.

A. Developer takes forward works on behalf of future developer

The main issue here is related to works that are in the GFAL category, where under generator build one generator will be constructing an oversized connection for a second, independent generator who posts user commitment to the NETSO. It is unclear to us how under Ofgem's proposed process for GFAL the first generator would be able to make an assessment of the likelihood of the second generator coming forward, and be confident that it can recover its costs in Ofgem's cost assessment process. There is also a potential issue if the second developer were to withdraw prior to construction of the assets, triggering the need for a redesign of smaller assets and likely a new round of procurement. This could have significant implications in terms of cost, but mostly for timing for the first generator, who could be facing a delay of two years or more, jeopardising its RO accreditation date or its CfD contract, and thus its entire business case.

Therefore, for the scenarios where one generator takes forward investment for a second generator, even when that investment is not for the wider benefit of the system Ofgem would have to make an assessment of the appropriateness of the transmission project. This is necessary to give the first developer the required certainty to enable it to take forward the investment and recoup the efficient and economic costs through the subsequent tender process.

B. Developer is dependent on works taken forward by another developer

Our ref. 130301_OFTO coordination

We have identified several additional issues when assessing this scenario from the point of view of the 'dependent' developer:

- **The risk of delay or cancellation from the first developer.** The second developer would be required to provide user commitment to the NETSO to reduce the risk of asset stranding. However, the second generator will have no protection from the risks of the first generator delaying or cancelling its project, and the first generator is under no obligation to deliver the transmission system to time. This could have large implications for the viability of the second project, as for example under the Government's new CfD mechanism generators will be required to commission its project within a set time period, or risk losing its financial support. As the CfD contracts specifying the commissioning time window will be entered into when a project receives planning permission and signs its grid connection agreement, there is a long period where actions by the first developer could jeopardise the ability of the second project to reach a timely completion.
- **The risk associated with data sharing and confidentiality.** In order to be able to design the connection, the first generator will require a significant amount of detailed technical information from the second generator, including information about its generating station (e.g. turbine layout, model etc.) to be able to optimise the design of the connection. While a data confidentiality agreement and cooperation with National Grid may address some concerns around data sharing, the first generator will have access to substantial amounts of information at an early stage which would provide it with information that the second generator would base its CfD bid on, for example. The first developer might also be able to use the information provided by the second developer to improve its negotiation with suppliers. There is a further issue in that the second developer may not be able to share the required information due to confidentiality agreements with its suppliers, particularly for HVDC transmission systems where suppliers protect their intellectual property through stringent confidentiality agreements which may limit the first user's ability to share project critical data with the second system user (and Ofgem/NETSO), particularly during a tender process.
- **The adverse impact on wind farm design optimisation.** Our experience is that the optimisation of the wind farm design is an on-going process, which does not end at receipt of consent. The optimisation of the transmission assets follows the optimisation of the wind farm, but for the first developer to be able to take forward a transmission asset design solution to the construction phase, it will require the second developer to make a final decision on its wind farm design at a stage which might preclude further enhancements, for example with regards to layout and turbine choice.

In general, we do not believe that the option for two developers to develop a shared connection in this manner is desirable for either party, and it would in particular be difficult for the second developer to attract outside investment prior to construction as it is dependent on the ability of the first developer (whom it cannot control) to deliver the transmission assets to schedule. We expect that developers would prefer a radial solution without the increased risks associated

with dependence on a second party, even if the shared solution could result in reduced TNUoS costs.

Our ref. 130301_OFTO coordination

An additional risk, which we raised in our response to the Ofgem consultation on the Enduring Licence (159/12), is that of the duration of the licence period for phased projects, which could become an issue for the later developer in the scenario explored above. We continue to emphasise the need for Ofgem to provide clear guidance on the process for licence extension as soon as possible, or to change the 20 year licence period for projects developed in phases.

Q2.6 To what extent could NETSO intermediation mitigate data confidentiality issues between developers? Are any further measures required?

See our response to question 2.5.

It is recommended that a dialogue with the (particularly HVDC) supply chain community is undertaken to determine how much information, and at what stage, they willing to share with other developers and NETSO. For example, it may be necessary to share tender data with Ofgem, prior to signature, as part of an assessment gateway. This could be an issue for suppliers during negotiations.

A further concern with attributing this responsibility solely to NETSO is that NETSO becomes integral to the design process and a developer's contractual relationship with their key suppliers for the offshore transmission system. NETSO will bear responsibility for obtaining and passing confidential User's data to 3rd party contractors, employed by the first generator. This adds several layers of complexity to a relationship, and failure to do so in a timely manner, or if the quality is compromised, could impact the first generator's contractual obligations with its supplier, and put connection of their generation phase at risk of delay, cost overruns or a technically inadequate solution. If cost overruns result in such an event, this would need to be appropriately considered in Ofgem's cost assessment for the OFTO tender of the first phase of transmission assets.

Q3.1 Do respondents agree with our preferred option, to support the transfer of GFAI assets to the OFTO if security is provided to protect consumers against stranding risk?

The size and technical complexity of Round 3 transmission assets should not be underestimated: for developers it is a step change in terms of risk and cost, and this needs to be acknowledged by Ofgem. In our response to the last consultation on coordination of offshore networks we strongly supported the proposal to introduce the 2-stage gateway assessment process across all investment categories. We disagree that the full burden of stranding risk should fall on developers undertaking large projects in order to help the UK meet its renewables and carbon reduction targets. A decision to do so could jeopardise the ability of developers to deliver large-scale Round 3 projects in phases, where the size of the investment means a staged FID is needed.

The lack of a gateway assessment process for GFAL projects is also a concern when it comes to the risk of having costs disallowed in Ofgem's cost assessment process. So far, all projects that have gone through the OFTO tender exercise has had costs disallowed, but the magnitude of the potential disallowed costs increases significantly as the project size and technology risk increases. An assessment stage prior to procurement and construction would give developers comfort that its intended design is deemed appropriate. This is more important for Round 3 projects as the increase in the transfer value of assets compared to transitional projects is very large. Developers of GFAL assets will also require ex ante comfort from Ofgem with regards to its technology and design choice.

As highlighted in our response to Question 2.5, we believe there are issues associated with GFAL where multiple parties share a connection. This is both for the first developer responsible for the delivery of the transmission assets, and the second developer. We do not believe that the first developer is the best party to assess the likelihood of the second generator delaying or cancelling its project. For these cases an Ofgem assessment as proposed for the WNBI assets should take place. We also note that for some projects the distinction between investment categories is less well defined, and transmission assets can be made up of both GFAL and WNBI components. For these assets we believe Ofgem would need to apply the gateway assessment to the entire transmission project, including the GFAL component, and thus for consistency this process should be applied to all investment categories.

We note that the consumer will be receiving some of the benefits of coordination and anticipatory investment in the form of reduced costs for connecting offshore generation, but will bear none of the risk. For generators, the costs associated with taking on the risk of stranded transmission assets could mean that a coordinated solution is less attractive than a more expensive, radial solution which offers connection certainty and the ability to their own construction risks.

Q3.2 To what extent do the current user commitment arrangements address the scenarios set out in table 3.1 and paragraph 3.13?

As we understand the proposed user commitment arrangements, phased projects in investment category 1 (GFAL) would be required to post security on a proportion of (and be fully liable for) a value at risk equivalent to its share of the oversized assets. In addition to the issues outlined above, this could have an adverse impact on the ability of generators to attract partnership investment in the later phases. This requirement to attract investment will increasingly be done prior to construction as requirements for capital recycling increases steeply with increased project size for Round 3 commitments.

The current user commitment arrangements need to be clarified in terms of how asset reuse factors and strategic investment factors apply. As mentioned in Question 2.5 there is an additional issue with the regards to the protection of the first generator from a cancellation decision of the second generator, in terms of the design choice and impact on its construction timetable.

Q3.3 Are there any barriers to extending user commitment arrangements to address any gaps identified in question 3.2?

We do not believe it is appropriate to mirror the onshore arrangements for offshore projects: offshore developers will not be able to carry the full burden of stranding risk, and the proposed arrangements would make it very difficult for developers to take forward the large scale Round 3 offshore wind projects required for the UK's renewables and decarbonisation goals.

Q4.1 Do you agree that the NETSO should support the needs case for developer-led WNBI, drawing on relevant TO(s) as necessary? Do you consider changes to the NETSO licence or industry codes are needed to support this?

We do not believe developers have the sufficient knowledge or ability to assess the need for WNBI, even if it might ultimately be responsible for the construction. If, as proposed, the NETSO is responsible for identifying WNBI through the bilateral connections process then the NETSO should be required to produce the needs case for the WNBI, whether it is carried out under the generator build or the OFTO build option, with certain inputs from developers and relevant TOs on costs and delivery timescales.

To develop the needs case we believe that the Security and Quality of Supply Standard (SQSS) will need to change, in particular with respect to the security factors that differ between onshore and offshore transmission systems. For example, if a WNBI asset is constructed offshore, it serves the same purpose as an equivalent investment onshore but can it be built to less stringent security standards because it is offshore (and the economics are different)? Alternatively, where a developer's system itself forms part of a WNBI or coordinated network, should it be constructed to a higher standard than a radial link? If the latter, does this discriminate against users connected via a radial connection? Alternatively, all investments in offshore transmission (radial and coordinated) should be subject to a cost/benefit analysis to determine the level of redundancy which is appropriate, rather than being built to prescribed standards.

We believe there are many questions, and inconsistencies in the standards, to be addressed on this last matter.

Q4.2 Are there any specific barriers to the NETSO sharing information required to support the needs case for developer-led WNBI with the appropriate developer?

Some information required to support the needs case will be publicly available, such as information on boundary flows which is included in National Grid's Electricity Ten Year Statement. Other types of information required is generator-specific, and would require the NETSO to act as an intermediary to gather information to include in generators' CBAs.

We strongly believe, as stated above, that the NETSO should take the lead in identifying the needs case for WNBI. We are unsure what information, or with what relevant parties this information, would be shared.

It should be noted that the appetite for WNBI is likely to be low across the industry, and any significant investment (beyond installing spare switchgear bays offshore, for example) is unlikely to be taken forward by developers. Any significant spend will clearly depend on developers' ability to take FID on a project that includes transmission assets larger than those required for the connection of the wind farm, the developer's ability to raise the funds required to carry out the WNBI, and willingness to bear any additional construction risk, bearing in mind that there is little-to-no upside or incentive for their specific generation project.

Under the current regulatory regime there would be no compensation for generators that have installed 'enabling WNBI' for the subsequent outage period that will be necessary for the installation of the non-developer led WNBI assets, and no guarantees of when the access to the onshore network would be re-established. An outage due to the construction of onshore reinforcement could thus lead to a substantial loss of revenue for the generator, as the support mechanism of offshore wind is time limited and there are no provisions to extend the duration of the support payments or otherwise mitigate the loss in revenue that would be experienced through transmission outages as described above.

In order to ensure developers are willing to incorporate even the most minimal aspects of WNBI it is important that Ofgem considers introducing a cap on the outage period that the third party taking forward the full WNBI can take and a compensation regime for the developer which goes beyond a TNUoS refund.

Q4.3 What are your views on the criteria that Ofgem could use when assessing proposals for developer-led WNBI?

We fully support the proposed assessment criteria, and believe they should be applied consistently to all aspects of coordinated/oversized offshore connections. As set out above, given the challenges associated with developing Round 3 offshore wind sites and their associated offshore connections, the gateway process for assessing coordinated and oversized investments should apply equally to all projects. Not only would this provide increased comfort for generators that the design and procurement decisions would be found to be inefficient, but we believe it would greatly benefit Ofgem's understanding of the decision process and the technical challenges tackled by Round 3 developers. Ofgem's subsequent cost assessment process would be able to capture the knowledge gained through an early engagement process.

Q4.4 Do you agree with our proposal for the timing of the Ofgem assessment gateways to support developer-led WNBI?

We support Ofgem's proposed two-stage assessment process, and welcome the flexibility and the ability for the developer to initiate the gateway assessments when it suits the offshore wind farm project.

The main issue we can identify here is the timing of the second assessment phase. This will need to occur during the tender process for the long lead transmission assets (particularly oversized HVDC links) as the developer will

not be able to finalise the tender and appoint a winning bidder until it has certainty that Ofgem will approve the project at the second gateway. Further, due to considerable price uncertainty and project specific factors in this particular area, the developer will have little certainty as to the overall CAPEX of a project until such tenders are received. This means that the second gateway has to take place within a very short space of time. Delays to the second gateway assessment could potentially invalidate offers from suppliers if the developer is unable to commit to bids in a timely manner, and suppliers could find other interested parties in a constrained, global market.

Q4.5 Are there some specific types of low regret WNBI that developers may be willing to take forward without a gateway assessment?

There may be some low-cost investments that developers could be willing to take forward without a gateway assessment– for example providing extra switchgear bays on platforms. However, even though this would be a relatively small cost (approximately £5 million per spare switchgear bay offshore), including spare bays may require a larger substation which will carry higher costs.

In the example above there may also be a need for additional infrastructure to be installed offshore in such instances (e.g. reactive compensation or harmonic filtering plant) to support the overall solution, and this may be most economically installed upfront by a developer rather than retrofitted when interconnecting cables are installed. This would have to be the subject of a more rigorous cost/benefit analysis and an Ofgem gateway assessment may still be required in this instance.

The minimum conditions for developers to be able to take forward 'low regret' WNBI would be for Ofgem to provide certainty (through a list of pre-approved items and associated costs, for example rather than a project specific assessment) that costs will be recoverable, and for National Grid to clearly state the needs case for the assets.

We would anticipate that if the AI was below a certain financial threshold (as defined by Ofgem) and had been included in a developer's connection agreement by NETSO, then no assessment of the developer's needs case would be necessary and such investments would only be subject to the ex-post cost assessment to determine that they were incurred economically.

Q4.6 Do you consider that there should be a de minimis threshold for low regret developer-led WNBI? What are your views on how this should work, while ensuring consumers are not exposed to significant stranding risk? Where possible, please provide evidence of the types and costs of WNBI that you consider should be captured by the threshold.

We believe the most likely scenario for developer-led WNBI will be the provision of spare switchgear bays on offshore platforms. This will allow subsequent connection of non-developer led WNBI, which a developer is unlikely to want to take responsibility for given the cost of such investments.

It could be possible to set the limit at for example £20 million as a hard cap to cover additional switchgear bays, or alternatively allow an additional 100% of the total switchgear costs for the project. As noted in question 4.5 above there is a risk that the requirement to install extra switchgear bays significantly alters the design and size of the offshore platform, which would increase the cost of the low-regrets WNBI beyond the cost of the additional switchgear bays. In this case, we would expect the developer to trigger the Gateway process to reduce the risk that the costs associated with oversizing the offshore platform will be considered not economic or efficient.

Q5.1 To what extent do you think it would be appropriate for onshore TOs to take forward preliminary works for non developer-led WNBI?

If onshore TOs want to take forward preliminary works for WNBI, they should develop a needs case together with the NETSO, which should be approved by Ofgem. We believe that the ability to engage in WNBI should not be limited to onshore TOs as this seems discriminatory: if Ofgem want WNBI to be taken forward several parties, it should be done in a consistent and fair manner and thus open to all TOs, onshore and offshore.

Q5.2 What are your views on the criteria that Ofgem could use if assessing proposals at the first gateway for non developer-led WNBI?

As stated above, we believe the same assessment principles should be used for all offshore network assets that have elements of coordination or anticipatory investment, regardless of who is responsible for taking them forward.

Q5.3 What are your views on using two gateways for non developer-led wider network benefit investment?

The two gateway approach is appropriate, and should apply to all investment categories as argued above.

Q5.4 What additional incentives and requirements should be placed on preliminary works funding for non developer-led wider network benefit investments?

We understand the RIIO output based incentives to be based around safety, environment, customer satisfaction, reliability and timely connections. For the preliminary works similar incentives should be sufficient. Our main concern is with regards to the lack of outage compensation or consideration of financial incentive to minimise the outage period associated with the construction and commissioning phase of non-developer led WNBI. As set out in previous questions, generators that have installed equipment such as spare switchgear bays to enable WNBI to be taken forward by a third party at a later date will not receive any compensation for the duration of the outage period. As the installation and commissioning of transmission assets offshore could take considerable time, during which the generator is likely to be prevented from exporting, the loss of revenues experienced by the generator during this period

could be significant and is not recoverable as subsidy mechanisms are time-bound.

Our ref. 130301_OFTO coordination

This risk is particularly heightened for new technologies: the downtime required for the installation and commissioning for an HVDC link could be up to six months which is not acceptable from the viewpoint of a generating offshore wind farm unless there is some form of outage compensation. It is important to note that the outage compensation mechanism for planned outages under the CUSC would not be sufficient to cover the lost revenue from outage periods, as it only provides for a TNUoS refund. As previously mentioned, the support mechanisms for offshore wind are time limited, and there are no plans to extend CfD contracts to mitigate the revenue loss from this type of outage. Failure to establish an appropriate mechanism for outage compensation is likely to deter generators from taking forward investments that could enable third party WNBI.

Q5.5 What parties should onshore TOs be expected to engage, and what engagement processes should they follow before and during preliminary works?

The TOs should engage with the NETSO and affected generators. Where existing generation or future developments are affected (in terms of requiring down time to allow the TO to carry out the work in the vicinity, or in terms of impact on the infrastructure connecting the generator) early engagement and cooperation is of utmost importance to ensure that the impact on offshore generation is minimised.