

Gareth Atkins
Offshore Enduring
Ofgem
9 Millbank
London
SW1P 3GE

Centrica Plc
Millstream
Maidenhead Rd
Windsor
Berkshire SL4 5GD
www.centrica.com

1 March 2013

By email

Dear Gareth,

RE: Consultation on a proposed framework to enable coordination of offshore transmission (164/12)

Thank you for the opportunity to respond to your consultation. This non-confidential response reflects the views of the Centrica group of companies, excluding Centrica Storage.

In principle we support offshore coordination policies that enable economically sound Generator Focussed Anticipatory Investment (GFAI) and Wider Network Benefit Investment (WNBI) to take place. However, we do not believe that Ofgem's proposed measures adequately recognise the risks coordination introduces to developers' projects.

Risks associated with the next generation of GB offshore wind farms are already considerable. Developers have to contend with greater distances from shore, deeper water, unprecedented scale and challenges of integrating new technology. Projects need to meet the expectations of non-utility investors if they are to attract the necessary finance.

Connection offers incorporating Anticipatory Investment (AI) are difficult in this challenging investment context. AI constitutes additional expenditure (which *per se* constrains balance sheets and harms project returns) but the developer upside from AI is far from assured:

Developer led WNBI (and GFAI where applicable)

- There is no guarantee a developer will recover its AI cost – based on precedent from OFTO projects, a developer would be prudent to factor in an expected disallowance of at least 8%¹.

¹ National Audit Office: Offshore electricity transmission: a new model for delivering infrastructure, 22 June 2012. £22m total disallowed expenditure on total allowed transfer value of £254m for first four OFTOs

- It is far from certain that Ofgem will take account of the increased technical challenges of future offshore wind when assessing economic and efficient costs, so the delta between actual and allowed expenditure could well widen going forward.
- Ofgem caps the allowed cost of financing offshore transmission construction at 8.5% pre-tax nominal (IDC). We believe this is significantly below a risk reflective cost of finance for offshore transmission construction (i.e. 8.5% represents economic loss to the developer). The more AI a developer builds, the bigger the £ loss on finance costs.
- IDC is only payable during the construction period, but developers carry financing costs from the development phase of a project all the way through to the point of sale to the OFTO (i.e. the period and the rate of allowed finance costs are both curtailed compared to what the developer actually incurs).

Non-developer led WNBI (and GFAI where applicable)

- In practice, we believe a developer would still incur additional capex even if the main WNBI was taken forward by a third party.
 - A developer may still have to spend £m on an oversized offshore platform, cable bays etc so a third party could connect their integrating works.
 - The lack of developer upside noted for developer led WNBI would apply to this additional expenditure.
- Outages (of potentially long duration) would be needed on the developer's OFTO asset whilst a third party connected their integrating works to complete the WNBI.
 - Outage "compensation" under the CUSC is restricted to reimbursement of the generator's TNUoS over the outage period.
 - TNUoS reimbursement would only represent a small fraction of the generator's (uncompensated) loss of revenue from lost renewable electricity production.

Your consultation states that a TNUoS charging benefit may materialise for generators whose connections support WNBI and a CUSC modification proposal might come forward in the course of 2013. However, based on our assessment of the current costs, risks and benefits, we suspect most developers - and crucially offshore wind investors - will find it extremely difficult to sanction coordinated offshore wind connections.

Our responses to your specific questions can be found in Annex 1 below. Please feel free to contact me if you would like to discuss our response further.

Yours sincerely,

Tim Collins

Regulatory Affairs

Centrica Energy

t: 01753 492119

m: 07789 577609

e: tim.collins1@centrica.com

Annex 1 - Responses to specific questions - consultation on a proposed framework to enable coordination of offshore transmission (164/12)

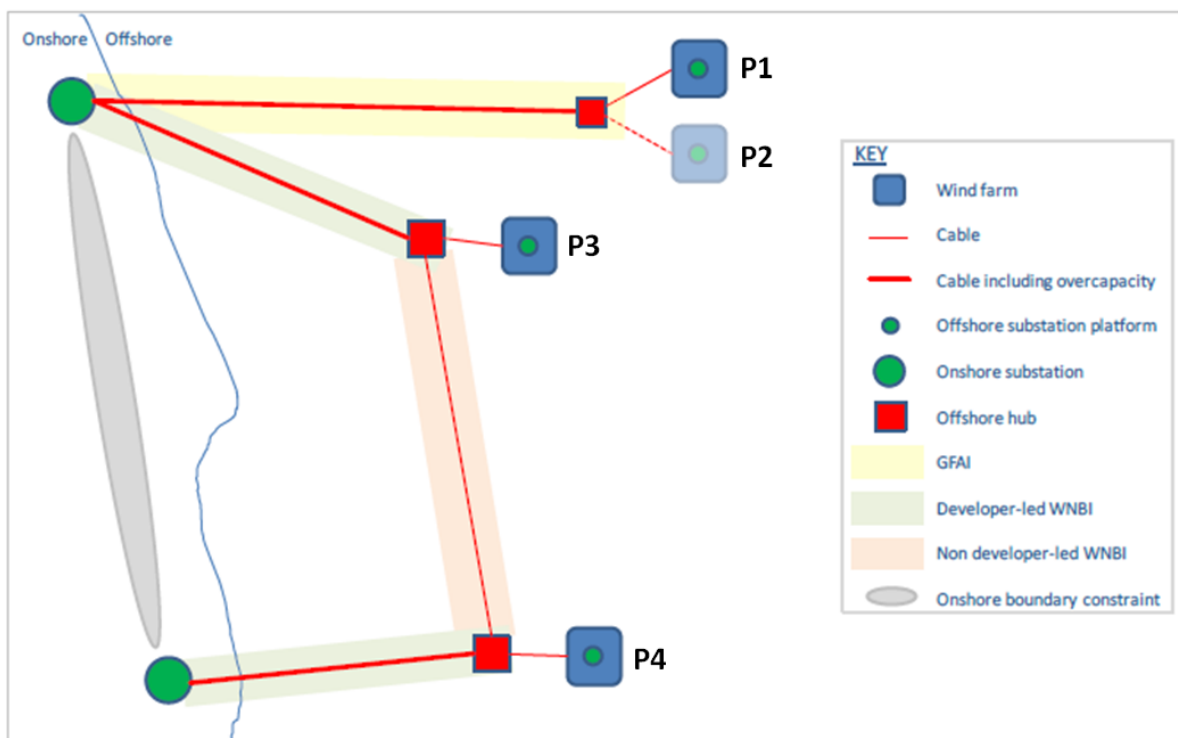
CHAPTER 2: Overview of our proposed framework for the delivery of coordinated offshore transmission assets

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

Your high-level framework seems to suggest non-developer led WNBI would be identified *outside* the connection application process. In our view, non-developer led WNBI might also be identified *within* the connection application process.

Taking figure 2.1 from your consultation document as an example (and labelling the wind farms P1-P4 for clarity), we consider the connection process might identify non-developer led WNBI as follows:

Figure 2.1: Example of coordinated transmission projects



- (i) The developer applies to the system operator for a connection for P3 and P4.
- (ii) The system operator, aware of the onshore boundary constraint (and the difficulties it may have consenting an onshore reinforcement) proposes a connection including WNBI to relieve the onshore constraint and connect P3 and P4 (as per Figure 2.1).

- (iii) The developer is unable to take the WNBI forward because doing so would render its project uneconomic (see cover letter and below).
- (iv) The developer and system operator therefore agree radial connections to shore for P3 and P4, with some oversizing of the offshore platforms.
- (v) The connection agreement therefore builds in the option of non-developer led WNBI being progressed at a later date (i.e. the offshore link between P3 and P4). **NB:** Progression of the non-developer led WNBI would have to be subject to satisfactory resolution of the regulatory barriers (notably the need for cost reflective outage compensation for the generator while the non-developer led WNBI was connected to the developer's assets).

Whatever the route taken to identify Anticipatory Investment (particularly WNBI), process clarity alone is unlikely to enable coordination. Ofgem needs to address the economic barriers in the OFTO regime, not just issues of process / frameworks:

Economic barriers to developer led WNBI

- There is no guarantee a developer will recover its AI cost – based on precedent from OFTO projects, a developer would be prudent to factor in an expected disallowance of at least 8%².
- It is far from certain that Ofgem will take account of the increased technical challenges of future offshore wind when assessing economic and efficient costs, so the delta between actual and allowed expenditure could well widen going forward.
- Ofgem caps the allowed cost of financing offshore transmission construction at 8.5% pre-tax nominal (IDC). We believe this is significantly below a risk reflective cost of finance for offshore transmission construction (i.e. 8.5% represents economic loss to the developer). The more AI a developer builds, the bigger the £ loss on finance costs.
- IDC is only payable during the construction period, but developers carry financing costs from the development phase of a project all the way through to the point of sale to the OFTO (i.e. the period and the rate of allowed finance costs are both curtailed

Economic barriers to non-developer led WNBI

- Outages (of potentially long duration) would be needed on the developer's OFTO asset whilst a third party connected their integrating works to complete the WNBI.

² National Audit Office: Offshore electricity transmission: a new model for delivering infrastructure, 22 June 2012. £22m total disallowed expenditure on total allowed transfer value of £254m for first four OFTOs

- Outage “compensation” under the CUSC is restricted to reimbursement of the generator’s TNUoS over the outage period.
- TNUoS reimbursement would only represent a small fraction of the generator’s (uncompensated) loss of revenue from lost renewable electricity production.

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?

We welcome the publication by NGET of the Electricity Ten Year Statement which provides stakeholders with holistic and longer term perspectives on GB network development. We consider this document could help identify high level coordination opportunities.

We believe the existing connection process between developer(s) and system operator remains the appropriate vehicle for exploring coordination opportunities in detail. However, we reiterate that coordination opportunities are hindered more by economic barriers than a lack of opportunity to discuss options.

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 note that the lack of formality around the CION process. Whilst this means that the CION process is relatively flexible, there is a risk that it becomes open ended and lacks clear objectives, deliverables and timetables. It may be appropriate to use the CUSC to provide some structure to the CION process.

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

See our response to 2.3 above.

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?

The issues for generators relying on works from another developer to connect their project are similar to those around OFTO Build.

Offshore wind projects are extremely capex intensive. Developers require a timely connection to shore so they can begin to recover their substantial investment without delay. Risks

associated with late connection delivery need to be mitigated if an offshore wind developer is to recover its project's cost of capital.

In recognition of the significant risk to a developer of late OFTO delivery, all developers to date have opted for Generator Build radial connections. By putting themselves in a position to manage the delivery risk of their OFTO asset, developers are taking prudent steps to protect the value of their project.

If a developer had to rely on a third party to manage OFTO delivery risk, mitigating arrangements would need to be put in place. Practically, this is likely to mean Liquidated Damages payable to the affected developer in the event of any delay to their renewable electricity production caused by the third party (in this case, another Generator).

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

We believe the NETSO could have a role facilitating the signing of confidentiality agreements between developers seeking to explore multi-party coordinated options.

CHAPTER 3: Category 1: Generator-Focused Anticipatory Investment

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?

We recognise that OFTOs would require remuneration for the full value of an oversized OFTO asset whilst the first generator (quite rightly) would only expect to pay for OFTO services up to their required level of TEC. Oversized GFAI assets therefore create a gap in the money the first generator would pay in TNUoS and the OFTO's TRS until the later generator connects.

We presume you are suggesting the "missing" OFTO revenue would be recovered from wider TNUoS payers until the later generator connected, but the later generator would incur a liability until it connected to ensure that some rents were extracted from it if its project was aborted.

In principle reform to the securities and liabilities regime could address the risk of wider TNUoS payers fully funding redundant GFAI capacity indefinitely. However, it is not clear to us whether the later generator would be fully or partially liable for the missing OFTO revenue if it aborted its project - you state that consumers should not bear "undue" stranding risk.

A reformed securities and liabilities regime would need to ensure that offshore wind projects sharing OFTO assets were at least as well off as they would be if they chose to connect via separate radial lines. If reform to user commitment did not (or could not) deliver this outcome,

then there would appear to be little case for GFAI coordination.

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

For clarity, we include your Table 3.1 below:

Table 3.1 Key issues for allocating stranding risk for GFAI under the Generator build option

	Pre transfer to an OFTO	Post transfer to an OFTO
Single Party	<p>The developer will bear stranding risk and will be able to take a commercial view on whether the potential benefits outweigh the risks.</p>	<p>The developer would require certainty of cost recovery, i.e. for the transfer value to reflect the economic and efficient costs of constructing the GFAI scope.</p> <p>If this is the case, the developer would pay Transmission Network Use of System (TNUoS) charges based on the transmission entry capacity associated with the first generation project's use of the transmission assets it has triggered; TNUoS charges associated with the remaining transmission assets would be payable from the connection date of the later generator.</p> <p>At the same time, there is a need to avoid consumers bearing undue stranding risk before the connection of the later generator where the GFAI is transferred to the OFTO for the economic and efficient costs of construction. In the interim, there would need to be user commitment (or equivalent) provided from the developer for its later generation project's share of costs taken on by the OFTO until its connection.</p>
Multiple Parties	<p>The developer will bear the costs of developing additional capacity for the later generator and would require certainty of recovering the economic and efficient costs for the additional capacity at transfer.</p> <p>At the same time, there is a need to avoid consumers bearing undue stranding risk if comfort is given to the developer, so the later generator would need to provide user commitment for the share of costs the developer is incurring on its behalf.</p>	<p>The developer would require certainty of cost recovery, i.e. for the transfer value to reflect the economic and efficient costs of constructing the GFAI scope.</p> <p>If this is the case, the developer would pay TNUoS charges based on the transmission entry capacity associated with the first generation project's use of the transmission assets it has triggered; the later generator would pay cost reflective TNUoS charges for its use of the transmission entry capacity it has triggered when it connected.</p> <p>At the same time, there is a need to avoid consumers bearing undue stranding risk before the connection of the later generator where the GFAI is transferred to the OFTO for the economic and efficient costs of construction. In the interim, there would need to be user commitment (or equivalent) from the later generator for its share of costs taken on by the OFTO until its connection.</p>

Conceptually your proposed changes to user commitment arrangements (or equivalent) appear to provide strong protection to the consumer. However, the key questions facing the relevant generators in the multiple party GFAI scenario would be:

- For the generator constructing the GFAL, can the potential TNUoS benefit be justified versus the costs and risks of:
 - (i) Additional technical complexity in the OFTO assets (scale, technology)
 - (ii) The cost of financing the additional capex
 - (iii) The risk of disallowed capex (typically 8% based on the NAO report)
 - (iv) The negative financial impact of Ofgem's IDC regime
 - (v) The potential costs of having to compensate the later generator in the event of connection delay.

- For the later generator, can the potential TNUoS benefit be justified versus the costs and risks of:
 - (i) Substantial securities and liabilities under a revised CMP 192 regime (in the worst case, this could be up to the value of the missing OFTO revenue for the term of the OFTO licence)
 - (ii) A delay to its connection caused by the first generator (if not fully compensated via LDs).

Needless to say, developers - and crucially offshore wind investors - are currently unable to calculate the costs, risks and benefits of GFAL to either party as the revised security, liability and charging arrangements have not yet been proposed. It is difficult to see how a developer could accept a connection offer with multi-party GFAL in this context.

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

The most obvious barrier is the required resource and time to develop and implement the required changes in a timely manner.

CHAPTER 4: Category 2: Developer-Led Wider Network Benefit Investment

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 believe the NETSO should support the needs case for WNBI at Ofgem's assessment gateway providing a developer is content to undertake it.

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?

A developer would want to understand the rationale for the WNBI it was being asked to undertake before agreeing to it. It may be necessary for the NETSO to facilitate the signing of confidentiality agreements between relevant parties so this information can be provided to the developer.

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

In the first instance, WNBI should only progress to an Ofgem assessment gateway if the developer and the system operator have agreed a connection offer which is economically viable for the developer and achieves (or could achieve) wider network benefits in the opinion of the system operator.

Provided the above preconditions are respected, Ofgem's criteria should be mostly based around whether the proposed WNBI achieves savings in the overall cost of transmission to consumers versus a plausible counterfactual (presumably a radial connection(s) plus the best alternative onshore reinforcement). We would however point out that Ofgem should identify genuine savings and not savings achieved by disallowing developer expenditure.

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

Your proposed timing for the first assessment gateway (i.e. high level assessment approving the preliminary works) seems reasonable, i.e. after the developer has signed the BCA.

We are not clear on the timing Ofgem envisages for the second gateway (i.e. when the developer has a firm proposal on design, potentially proposed cost etc). Effective communication between the relevant parties would help determine an appropriate time, although in practice we expect a series of discussions between the parties rather than a discrete "one shot" assessment may be required.

Ofgem's gateway proposals need to be enhanced by providing developers with commitments around costs and not simply scope of Anticipatory Investment. The gateways as currently proposed are unlikely to give developers sufficient comfort that the risks of additional expenditure can be justified.

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

Developers may be willing to undertake limited "low regret" WNBI, for example oversizing an

offshore platform(s) to allow a third party to connect an integrating cable (see our response to Question 2.1). However, for the term “low regret WNBI” to be a meaningful concept, Ofgem would need to specify either an inventory of “low regret works” and/or a £m value below which Ofgem would allow automatic cost recovery. Without this, it is hard to see how a developer could ascertain whether WNBI was “low regret” without going through an assessment gateway (defeating the object of the “low regret” concept).

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.

Our initial view would be developer-led WNBI below £50m and below 10% of total developer OFTO capex should be considered “low regret WNBI” and be eligible for full cost recovery without a gateway assessment.

CHAPTER 5: Category 3: Non Developer-led Wider Network Benefit Investment

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 a developer has declined to take forward the WNBI and outage compensation arrangements are reformed so there is no economic loss to the developer of a third party connecting WNBI into the developer’s OFTO assets, it would seem reasonable to permit onshore TOs to progress preliminary works.

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?

In the first instance, outage compensation arrangements need to be reformed so there is no economic loss to the developer of a third party connecting WNBI into the developer’s OFTO assets.

Provided the above precondition on outage compensation is respected, Ofgem’s criteria should be mostly based around whether the proposed WNBI achieves savings in the overall cost of transmission to consumers versus a plausible counterfactual (presumably the best alternative onshore reinforcement).

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

No specific comments.

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

No specific comments.

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

Onshore TOs proposing non developer-led WNBI should be required to engage the relevant offshore wind generator(s) and OFTO(s), i.e. any generator(s) and OFTO(s) whose assets would comprise part of the WNBI and may therefore be affected by an outage resulting from the need to interconnect. We underscore that non-developer led WNBI should not be allowed to take place without reform of outage compensation arrangements. Offshore wind generators (and OFTOs) should not be financially penalised as a result of a third party connecting WNBI into their assets (either through foregone renewable electricity production or undue penalties under the Availability Incentive).