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Statement on the proposed framework to enable coordination: An update to our December consultation

Policy Statement

Reference:	123/13	Contact	Alison Russell
Publication date:	18 July 2013	Team:	Offshore Coordination Policy
		Tel:	020 7901 3866
		Email:	offshore.coordination@ofgem.gov.uk

Overview:

This policy statement provides an update to the December 2012 consultation on a proposed framework to enable coordination, which closed on 1 March 2013. Following the December consultation, it sets out our view on the proposed way forward for two of the categories of investment described in the consultation - Generator Focused Anticipatory Investment and Developer-led Wider Network Benefit Investment (WNBI) and identifies where further work is needed.

We also set out our view on the third category of investment described - Non Developer-led WNBI, where we consider further policy development is required. Subject to the outcome of this policy development work, our current plan is to carry out further consultation later this year.

We received a number of responses to the December consultation and a summary of the non-confidential responses is included at Appendix 2 to this policy statement.

Context

Electricity generated from offshore renewable energy sources is expected to make an important contribution towards the UK achieving its renewable energy targets by 2020. As part of the government's recent publication of draft Contracts for Difference (CfD) strike prices, it was estimated that these could support 8 to 16 gigawatts (GW) of offshore wind capacity by 2020¹. There is also substantial scope for further growth beyond this, with zones leased by The Crown Estate in the third leasing round (Round 3) representing up to 32GW of additional offshore generation. Accommodating such capacity will require a timely, cost-effective and secure offshore transmission network to transfer electricity generated offshore to the onshore network.

The Office of Gas and Electricity Markets (Ofgem), and the Department of Energy and Climate Change (DECC) have collaborated since 2005 to design and implement the regulatory regime for offshore electricity transmission. Under these arrangements, Ofgem is responsible for granting offshore transmission licences on the basis of a regulated competitive tender process. In July 2009 Ofgem commenced the first transitional tender round for offshore transmission assets, attracting almost £4 billion of investment appetite and generating substantial savings for generators and consumers. Ofgem is now in the process of running the second and last transitional tender round and has recently consulted on the design of tender exercises going forward (the enduring regime).

To date offshore transmission assets have been developed as standalone connections to shore ("radial" connections). However, the Round 3 offshore wind projects are larger, more complex and at a greater distance offshore than those that have been developed so far; as a result there is likely to be the potential for efficiencies from greater coordination of offshore transmission infrastructure. This could include coordination between connections, and coordination of the strategic development of the wider network through offshore reinforcement projects.

Associated documents

- Joint Ofgem/DECC OTCP Conclusions Report, March 2012
- Offshore Transmission Consultation on potential measures to support efficient network coordination, March 2012 (26/12)
- Open letter: Offshore Transmission update on Coordination policy developments, July 2012 (102/12)
- <u>Consultation on a proposed framework to enable coordination of offshore transmission,</u> <u>December 2012 (164/12)</u>
- ITPR Project: Emerging Thinking, June 2013 (83/13)
- <u>Offshore Electricity Transmission: Statement on future generator build tenders, July 2013</u> (119/13)
- Key developments in offshore transmission policy, July 2013

¹ Levy Control Framework and Draft CfD Strike Prices, June 2013.

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Executive summary

We consulted in 2012 on a proposed framework to enable coordination of offshore transmission. In the December document: Consultation on a proposed framework to enable coordination of offshore transmission, we set out our position on the framework for coordinated investment according to the type of investment being undertaken. This policy statement provides our updated position.

We consider that the owner of the generation project for which **Generator Focused Anticipatory Investment (GFAI)** is undertaken is best placed to manage the associated stranding risk. We confirm our view that consumers should be protected from increased stranding risk through user commitment type arrangements and that subject to the effective management of stranding risk, developers could be given greater confidence on the route to cost recovery for the scope of GFAI undertaken. We encourage National Grid or industry to bring forward a Connection and Use of System Code (CUSC) modification proposal for the Authority's approval to extend appropriate user commitment arrangements to this category of investment.

We confirm our intention to implement a gateway assessment process for **developer-led Wider Network Benefit Investment (WNBI)**, as per the December consultation. The introduction of a voluntary gateway assessment process will support developers in undertaking offshore WNBI where this represents an economic and efficient response to wider transmission network requirements. In a gateway assessment, we will assess the rationale (supported by a needs case) for including WNBI in the scope of work to be carried out. Where we are convinced by the developer's rationale for including specific additional or oversized transmission assets associated with the WNBI, we will commit to not reassessing the rationale during the tender exercise, providing the assumptions/inputs to the gateway assessment remain valid.

As with all projects that enter a tender exercise, projects which pass through the gateway assessments will be subject to the cost assessment process as part of a tender exercise in the usual way. However this cost assessment process will be informed by our decisions during the gateway assessment process. We will take forward further work to develop the process to be followed for gateway assessments and appropriate interfaces with our cost assessment procedures.

We will continue to explore policy options in relation to our lead option for **non developer-led WNBI** (that onshore Transmission Owners might be funded to undertake preliminary works for some assets, where there is no developer willing to take them forward). Subject to this further policy work, we currently plan to seek views on a detailed approach later this year.

In March 2012, we launched the Integrated Transmission Planning and Regulation (ITPR) project. The project is a review of the Great Britain (GB) electricity arrangements for system planning and delivery that currently apply to onshore, offshore and interconnector assets and we have recently published a consultation on our emerging thinking. Our coordination policy work focuses on enhancing the existing offshore regulatory framework to enable greater coordination in offshore transmission. This aims to support coordination in nearer term offshore projects,

whereas the ITPR project is looking at potential additional changes in the longer term to support an integrated GB system as a whole.

We have included an updated impact assessment at Appendix 3 of this policy statement. It outlines the options considered for GFAI and developer-led WNBI, and makes a final assessment of the impacts of our decisions in those two categories. Our impact assessment shows that there are potential savings from coordination, but this will vary on a case by case basis. We also expect that our decisions will have a positive impact on sustainable development.

1. Introduction

Chapter summary

Outlines the purpose of and background to the policy statement, including recent publications and interactions between our work on offshore coordination and other relevant work areas.

Purpose of the document

- 1.1. Our principal objective is to protect the interests of present and future consumers. Our proposals to support the development of offshore coordinated assets facilitate the development of an economic and efficient transmission network. In this way our proposals serve the interests of consumers by helping to ensure that the costs of developing transmission assets, borne by consumers through their energy bills, are not higher than they need to be and by ensuring that the transmission network supports investment in low carbon generation.
- 1.2. The purpose of our work on offshore coordination is to help ensure coordinated networks can be delivered while retaining the benefits of the competitive offshore transmission regime. This policy statement sets out an update to our proposed regulatory framework to support the delivery of coordinated offshore transmission assets², following our consultation in December 2012.

Background information

1.3. The Office of Gas and Electricity Markets (Ofgem) and the Department of Energy and Climate Change (DECC) have developed a regulatory regime for the construction and operation of offshore transmission assets. The key premise of the regime is that Offshore Transmission Owners (OFTOs) are selected and licensed through a competitive tender process run by Ofgem. Developers may choose either the generator build option or the OFTO build option for each competitive tender. Under the generator build option, OFTOs will operate, maintain and decommission the transmission assets. Under the OFTO build option the OFTO will undertake the detailed design work and procurement and deliver the build programme, as well as being responsible for the operation, maintenance and decommissioning of the assets.

 ² 'Offshore transmission assets' means the transmission system in respect of which the offshore transmission licence is (or is to be) granted or anything which forms part of that system - Paragraph 1(3) (a) of Schedule 2A to the Electricity Act 1989.

- 1.4. To date, offshore transmission assets have been constructed by developers. Developers' costs of construction are then recovered when they transfer the assets to an OFTO selected via a competitive tender exercise, which is administered by Ofgem. The tender exercise includes a cost assessment undertaken by Ofgem to establish the economic and efficient costs that have been, or ought to have been, incurred in connection with the transmission assets. The cost assessment forms the basis of the transfer value that will be paid to the developer by the successful bidder once appointed.
- 1.5. In early 2011, Ofgem and DECC jointly launched the Offshore Transmission Coordination Project (OTCP). The OTCP's purpose was to assess the potential costs, risks and benefits that may arise from the development of a coordinated offshore electricity transmission network. It also considered whether further measures were necessary to help ensure that onshore and offshore transmission networks develop in a strategic and coordinated manner.
- 1.6. The OTCP identified that a coordinated approach to the future development of some offshore transmission assets may be economically beneficial. Analysis across four offshore generation scenarios suggested coordination could potentially deliver savings of around 8-15% (\pounds 0.5-3.5 billion) compared to radial configurations³.
- 1.7. In March 2012 we published a consultation⁴ (the March consultation) on potential measures to support efficient coordination of offshore transmission assets. Responses to the consultation were generally positive and there was broad agreement with much of our analysis, with some areas identified for further work.
- 1.8. In July 2012 we published an open letter⁵ (the July open letter) to give an update on our policy developments in these areas, and to consult further on specific areas. Responses to the open letter outlined suggestions for improvements to the network planning process and the framework for anticipatory investment.
- 1.9. In December 2012 we published a further consultation⁶ (the December consultation), refining the measures previously set out into a range of proposals addressing the investment categories identified (see paragraph 1.10 below). Responses were generally supportive of the proposals, in particular in respect of gateway assessments. A summary of responses to the consultation

³ <u>Redpoint Energy: Offshore Transmission - assessment of regulatory, commercial and economic issues</u> and options, December 2011.

⁴ Offshore Transmission - Consultation on potential measures to support efficient network coordination, March 2012, Ref 26/12.

⁵ Offshore Transmission: update on Coordination policy developments, July 2012, Ref 102/12.

⁶ <u>Consultation on a proposed framework to enable coordination of offshore transmission, Dec 2012, Ref 164/12</u>.



is included in Appendix 2 of this document. Full (non confidential) responses can be found on our website⁷.

Structure of this document

- 1.10. This document updates our policy across the different investment categories we described in the December consultation, illustrated in Figure 1.1 below:
 - Category 1: Generator-Focused Anticipatory Investment
 - Category 2: Developer-led Wider Network Benefit Investment
 - Category 3: Non developer-led Wider Network Benefit Investment





1.11. The categories identified above have the potential to overlap with each other, for example the offshore transmission assets might include an element of oversizing for a particular set of generating assets as well has having wider network benefit. Assets might also move between categories. It is important to recognise this and treat the various asset elements according to the investment category within which they fall. This might include the GFAI element of a project providing user commitment, while the WNBI portion was taken through a voluntary gateway assessment process.

⁷ See n.6 above.

1.12. In Chapters 2 and 3 we set out our proposed way forward for Categories 1 and 2. In Chapter 4 we set out an update on the questions raised on the Connection Infrastructure Options Note (CION) in the December consultation; an update on Category 3 and next steps. An updated impact assessment is included at Appendix 3.

Interactions and interdependencies

Offshore Electricity Transmission: Statement on future generator build tenders

1.13. Our generator build policy statement⁸ is published alongside this coordination policy statement. The generator build option for future tender exercises under the enduring regime was consulted on during 2011 and 2012. The generator build policy statement summarises the key policy positions that we have reached relating to generator build including those relating to the OFTO licence for generator build. The policy statement also gives an overview of the regulatory regime and the tender process in advance of commencing the first enduring tender round, Tender Round 3 (TR3).

OFTO build

- 1.14. In May 2012, we published a consultation on updated policy proposals for the enduring regime⁹, which included minded-to positions on tender policy for OFTO build. Those policy positions were subsequently reflected within The Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations 2013 (the 2013 Tender Regulations)¹⁰. Since then, we have been engaging further with offshore developers on the detail of how an OFTO build tender would work for particular projects. This engagement has considered whether there may be value in clarifying and/or refining the detail of current arrangements for risk sharing, tender processes and timings, and underlying industry codes and standards. We intend to publish an open letter in due course to provide a more detailed update on OFTO build and how this work has progressed.
- 1.15. For ease of reference, the developer-led WNBI decisions set out in this policy statement refer to scenarios where the transmission assets are constructed under the generator build option. However, these decisions will also apply to scenarios where an OFTO constructs the transmission assets under the OFTO build option, in line with the arrangements we set out in the December 2012 consultation. For further details on arrangements for developer-led WNBI under OFTO build, either see the December 2012 consultation or contact us directly.

⁸ Offshore Electricity Transmission: Statement on future generator build tenders, July 2013, Ref 119/13.

⁹ Offshore Electricity Transmission: Updated proposals under the enduring regime, May 2012, Ref 72/12.

¹⁰ The Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations 2013.



Cost assessment

- 1.16. Our cost assessment process evaluates the economic and efficient costs which ought to be, or ought to have been, incurred in connection with developing and constructing the transmission assets in respect of a qualifying project. Our proposals in relation to GFAI and developer-led WNBI address how the coordination of network needs will be considered as part of the cost assessment process.
- 1.17. Our proposals in respect of developer-led WNBI will enable developers to gain greater confidence on their route to cost recovery for the scope of works, through a voluntary gateway assessment process. Cost recovery for the work carried out will remain subject to the cost assessment process confirming that the investment has been achieved economically and efficiently.
- 1.18. We are currently reviewing how we can develop the cost assessment process to more clearly set out the expectations for both developers and Ofgem. As part of this, we will consider how any changes will work with our coordination proposals. We will be consulting on the cost assessment process over the coming months, with a view to concluding on a revised process in the first quarter of 2014.

Integrated Transmission Planning and Regulation project

1.19. In March 2012, we launched the Integrated Transmission Planning and Regulation (ITPR) project. The project is a review of the Great Britain (GB) electricity arrangements for system planning and delivery that currently apply to onshore, offshore and interconnector assets and we have recently published a consultation on our emerging thinking¹¹. Our coordination policy work focuses on enhancing the existing offshore regulatory framework to enable greater coordination in offshore transmission. This will look to be able to support coordination in nearer term offshore projects, whereas the ITPR project is looking at potential additional changes in the longer term to support an integrated GB system as a whole.

Transmission charging

1.20. An industry group led by National Grid Electricity Transmission (NGET) has considered potential developments to the GB transmission charging arrangements to better accommodate integrated onshore and offshore networks, and the coordination of offshore infrastructure. In June 2013, this industry group published a report¹² detailing the outcomes of their discussions alongside an open letter consultation. The industry group will continue to meet until a formal modification under the Connection and Use of System Code (CUSC) is raised. This modification is not expected to be raised until the Gas

¹¹ ITPR Project: Emerging Thinking, June 2013, Ref 83/13.

¹² Charging for Integrated Onshore-Offshore Networks, Industry Discussion Report, June 2013.



and Electricity Markets Authority (the Authority) has made a decision on CUSC Modification Proposal 213 – Project TransmiT TNUoS Developments¹³.

User commitment arrangements

1.21. NGET have recently raised a housekeeping modification in order to further clarify the user commitment methodology. It proposes necessary changes to the CUSC legal text to give effect to the user commitment arrangements as originally intended by CUSC Modification Proposal 192: Arrangements for Enduring Generation User Commitment (CMP192). We are also expecting NGET to raise a CUSC modification proposal to progress an appropriate review of enduring user commitment arrangements for non-generation users, including interconnector users.

¹³ <u>CMP213 - Project TransmiT TNUoS Developments.</u>

2. Generator Focused Anticipatory Investment

Chapter summary

Sets out our decision on the policy proposals from the consultation document published in December 2012 in respect of Generator Focused Anticipatory Investment.

What is Generator Focused Anticipatory Investment?

- 2.1. Generator Focused Anticipatory Investment (GFAI) is investment in offshore transmission infrastructure which is led by a developer to support the later connection of specific offshore developments. Under this category the developer could select either the generator build or OFTO build option, ie the leading developers may or may not undertake construction of the transmission assets. Developers may request GFAI to support later project stages or phases, or the National Electricity Transmission System Operator (NETSO) might request efficient overcapacity to be constructed for a future nearby development. Where this is the case, developers may request that the GFAI be included within the determination of the transfer value.
- 2.2. GFAI offers the potential benefit of more efficient combined transmission costs for the relevant generation projects. However, it also introduces potential risk of stranding of the coordination elements if the later generation projects do not all connect. We consider the owners of the generation projects for whom the assets are to be constructed are best placed to manage this stranding risk; they also stand to benefit directly from the GFAI.

Our view on GFAI

Our proposals

2.3. During our policy development and 2012 consultation process (the March consultation, the July open letter and the December consultation); our policy analysis identified several issues relating to GFAI. The identification of these issues was supported by the responses we received from stakeholders, such as:



- the need for appropriate allocation of stranding risk¹⁴ to protect consumers
- the requirement for greater certainty on the route to cost recovery for developers undertaking GFAI
- cost assessment guidance for developers undertaking GFAI.
- 2.4. In table 2.1 below we summarise the additional stranding risks we identified in the December consultation with respect to GFAI in the generator build model for offshore transmission assets.

Table 2.1 GFAI stranding risks under the generator build option

	Pre transfer to an OFTO	Post transfer to an OFTO
Single Party	No additional stranding risk identified as the developer supplies funding.	Risk of stranding in respect of unused assets prior to commissioning of later generation project stages.
Multiple Parties	Stranding risk on unsecured assets being constructed for third party by developer. No stranding risk on assets being constructed for own use as the developer will fund these.	Stranding risk in respect of unused assets prior to commissioning of later generation project stages. May relate to assets constructed for the use of the developer or unrelated parties.

- 2.5. We set out in the December consultation that our preferred approach would be to enable GFAI within the parameters of standard industry arrangements, subject to the effective management of stranding risk.
- 2.6. This would mean that the parties best able to manage the stranding risk would do so, by the provision of appropriate security through user commitment arrangements.
- 2.7. Since the implementation of CMP192, the framework for user commitment arrangements is contained within the CUSC. These arrangements are based on incentivising generation projects to provide notice of cancellation, closure and capacity reduction in a timely manner. The arrangements comprise a generic liability to cover wider system investment and a specific liability to cover investment that is directly attributable to the connection of each generator. The methodology used to calculate requirements includes factors to

¹⁴ As in the December consultation, in this document, we are considering additional stranding risk related to the specific issues identified regarding GFAI. We do not address the residual stranding risk once all generation is connected; this element of residual risk is consistent with the position onshore and under OFTO build, under existing arrangements. In this document, the use of the term "stranding risk" includes partial stranding risk resulting from the underutilisation of assets which have been oversized, and where the expected later generation for which the assets have been oversized does not connect.

reflect the risk of stranding or inefficient investment. The arrangements currently apply to transmission assets being built or owned by transmission licensees but currently would not address generator build. National Grid identified in the guidance document to CMP192 that, where the offshore assets are built by the user under the generator build option, these assets are out of scope for the current arrangements¹⁵.

- 2.8. The guidance document to CMP192 makes provision for how wider system investments could be treated whilst being constructed by an OFTO. The guidance suggests user commitment for wider system investments would be shared 50/50 between generation and consumers. We consider that there needs to be further work to understand whether these principles should be extended to include wider system investments undertaken by a developer. Going forward, we expect industry and NGET to consider whether changes to current arrangements may be required.
- 2.9. In the December consultation, we set out our view that user commitment arrangements, by assessing liabilities and requiring the provision of appropriate security, are an effective means to manage stranding risk. Extending user commitment arrangements to include GFAI under the generator build model would extend the current levels of protection afforded to consumers to match that available if offshore transmission assets are constructed by an OFTO.
- 2.10. As GFAI would be developer-led, it would be open to the relevant developer to select either OFTO build or generator build. If the offshore transmission assets were constructed under OFTO build, once the OFTO was appointed, the current user commitment arrangements would apply. We propose that equivalent arrangements should be extended to generator build for GFAI assets, based on the principles applied onshore.
- 2.11. It is possible that some projects may be associated with elements of both GFAI and developer-led WNBI. Where this is the case, we would expect the relevant portion of the overall assets to be managed in line with the arrangements for that type of investment category.
- 2.12. This would mean that:
 - the security arrangements would apply to the GFAI portion of assets i.e. those assets oversized for specific later generation; and
 - the developer-led WNBI portion of the assets i.e. those assets which provide wider network benefit, could go through gateway assessments as described in the next chapter.

¹⁵ <u>CUSC Section 15 (CMP 192) User Commitment Methodology - Guidance and Implementation Document,</u> <u>February 2013.</u>



Responses to the December consultation

- 2.13. Respondents were mostly in agreement with the principle of extending user commitment arrangements to GFAI, agreeing that this would afford protection to consumers against the GFAI stranding risk. National Grid noted in its response its willingness to work with Ofgem and industry to develop these proposals further.
- 2.14. Some respondents expressed a view that stranding risk should be shared with consumers. Ofgem has considered this point carefully, and continues to consider that GFAI stranding risk is best managed by the specific generator for whom the assets have been or are being constructed. On this basis we confirm our view that additional GFAI stranding risk should not be shared with consumers, to any greater extent than would be consistent with the approach to stranding risk onshore or under OFTO build.
- 2.15. In addition to the points above, respondents noted issues in relation to extending user commitment arrangements; for example, the need to dovetail user commitment changes and arrangements with TNUoS charging arrangements; the potential resources (and time) needed to develop the necessary arrangements; and the potential complexity associated with multiparty GFAI. Most respondents who commented on this point considered that GFAI is more likely to be undertaken where it is associated with oversizing for a single developer's own later generation rather than for an unrelated party.
- 2.16. Finally, some respondents proposed that the gateway assessments described in Chapter 3 below should be extended to GFAI. Ofgem has considered this view carefully, but remains of the view that GFAI stranding risk should be allocated to the party best able to manage that risk. As stated above, in our view that party is the generator for whom the assets are being constructed. We do not therefore propose to extend the formal gateway assessment process to GFAI. Where appropriate user commitment arrangements are in place, we consider that this would enable Ofgem to provide greater up front clarity for the developer on their route to cost recovery for the scope of GFAI.
- A summary of responses to the December consultation is included at Appendix 2. The non-confidential responses are also available on Ofgem's website.

Way forward

- 2.18. Following consultation and careful consideration of the responses, we continue to consider that the key factor in giving GFAI developers greater confidence on their route to cost recovery is effective management of GFAI stranding risk.
- 2.19. Implementing robust arrangements to protect consumers against undue GFAI stranding risk, should mean that the incremental risk imposed on consumers is minimal.

- 2.20. We remain of the view that this can be best achieved within the scope of the current industry framework. User commitment arrangements are contained within the CUSC following the implementation of CMP192.
- 2.21. National Grid, who is the CUSC Administrator, in its response stated its willingness to work with industry and Ofgem to develop the necessary arrangements. National Grid has suggested that the appropriate time to raise such a modification would be once CMP219 Post Implementation clarifications, has been implemented. This would provide a stable baseline against which to develop proposals. National Grid has therefore indicated they expect a modification proposal could be raised in Q4 2013, though this would be dependent on the progress of CMP219. We welcome this commitment and would encourage National Grid to initiate discussions to begin the process of identifying the necessary user commitment and associated arrangements at an early date.
- 2.22. Once appropriate user commitment arrangements are in place, Ofgem expects to be able to provide greater up front clarity on our approach to cost assessment, and treatment of the scope of GFAI as part of the cost assessment process.
- 2.23. Responses to the December consultation by several parties noted potential difficulties associated with GFAI where there are multiple parties involved. We agree that this scenario is more complex than GFAI for a single party. We would be happy to explore further with industry the challenges associated with multiparty GFAI and to consider possible solutions as appropriate.

3. Developer-led Wider Network Benefit Investment

Chapter summary

Sets out our decision to introduce a voluntary gateway assessment process and gives an update on our work on potential routes to support developer-led WNBI outside of a gateway approach.

What is developer-led WNBI?

- 3.1. Developer-led WNBI is investment in transmission capacity to provide wider network benefit, which is led by developers (whether generator build or OFTO build). It includes investment in offshore transmission assets or capacity that goes beyond that needed by a single developer and is for the purpose of supporting the reinforcement of the GB transmission network (the wider network). This could include investment providing for, or creating the potential for, increased boundary transfers between different zones of the wider network via offshore links.
- 3.2. The connection offer process has a key role in the development of a coordinated offshore transmission network. Where it is economic and efficient, WNBI may form part of a developer's connection offer and subsequent bilateral connection agreement (BCA)¹⁶.

Our decision to introduce gateway assessments

Issue to be addressed

3.3. Developer-led WNBI may facilitate the economic and efficient development of the wider transmission system. However, it also has the potential to introduce stranding risks if the expected wider network need does not materialise. Previous stakeholder feedback suggested that a lack of clarity on how these assets will be treated during an offshore tender exercise is a barrier to coordination. Our proposal to introduce voluntary gateway assessments for developer-led WNBI seeks to address this issue.

Overview of the gateway assessments

3.4. In December we consulted on our proposal to introduce a voluntary option for developers to submit offshore projects that include WNBI to Ofgem gateway

¹⁶ In planning and developing offshore transmission assets under the generator build option, developers are required under the <u>Grid Code (Planning Code)</u> to take into account reasonable requests from the NETSO where it is reasonable and practicable to do so (PC.8.3).



assessment(s). This will support offshore developers in taking forward WNBI, where it represents an economic and efficient response to wider transmission network requirements, and is set out in the developer's BCA. In responding to our proposals, stakeholders broadly supported the implementation of these gateway assessments.

3.5. We intend to introduce a voluntary gateway assessment process for developer-led WNBI.

- 3.6. Developers will have the option to go through one or two Ofgem gateway assessments, timed broadly ahead of the commencement of preliminary works and ahead of construction works. Where a developer is comfortable that it can support its decision to develop the WNBI as part of a cost assessment during a tender exercise, the developer can choose not to go through one, or both, of the gateway assessments. In general we would expect that two voluntary gateway assessments would be sufficient. However, if a developer considers that there are substantial benefits to passing through more than two gateway assessments in a particular case (for example in the case of particularly large, complex projects) we would look to engage with the developer to understand these benefits and consider the best way forward.
- 3.7. At the first gateway assessment, Ofgem will review the rationale for including the WNBI in a developer's design solution at the preliminary works stage. This is the case for developers following both the generator build and OFTO build option. Where we are convinced by the developer's rationale for undertaking certain preliminary works associated with the WNBI, we would commit to not reassessing this rationale during the tender exercise.
- 3.8. At the second gateway Ofgem will review the rationale for constructing the WNBI. Where the developer opts for generator build, our assessment at the second gateway will inform our cost assessment process undertaken during the subsequent tender exercise. Where we are convinced by the developer's rationale for including specific additional, or oversized, transmission assets associated with the WNBI, we would commit to not reassessing this rationale during the tender exercise. Where a developer is following the OFTO build option, our assessment will help to inform the scope of the OFTO build tender exercise.
- 3.9. Any Ofgem commitment regarding not re-assessing the rationale for the WNBI at the first or second gateway, would be conditional on the NETSO and the developer continuing to engage and monitor the needs case for the WNBI. Where the needs case changes, we would expect these parties to review the design of the offshore assets and make any necessary changes where this would be economic and efficient. We expect that this process would take into account both the needs of the wider network and the impact of any changes on the cost and timing of an offshore developer's connection. In some instances, a change in the needs case for the WNBI may mean that the WNBI is no longer taken forward. Further information on roles and responsibilities during the gateway assessment process is given later in this chapter.

3.10. All the costs incurred in connection with development and construction of the agreed scope of the transmission assets, including the WNBI elements, would remain subject to the economic and efficient test as part of Ofgem's cost assessment.

Figure 3.1: Overview of voluntary gateway assessment route for generator build option



Connection offer process – NETSO/TOs identify the need for WNBI in offshore transmission works. NETSO and the developer enter into BCA that specifies that the developer will lead on those works.

The developer, supported by the NETSO, may submit a needs case for the WNBI to Ofgem. Where a robust needs case is submitted, <u>Ofgem makes commitments on our approach</u> to cost assessment on the rationale for WNBI preliminary works.

The developer, supported by the NETSO, may submit a needs case to Ofgem. Where a robust needs case is submitted, <u>Ofgem makes</u> <u>commitments on our approach to cost</u> <u>assessment on the rationale for WNBI</u> <u>construction works.</u>

The developer triggers a tender exercise. Ofgem conducts a cost estimate and assessment, taking into account commitments at the 1st and 2nd gateway assessments.

Roles and responsibilities

- 3.11. In December, we proposed high level roles and responsibilities to support a gateway assessment process. In responding to our proposals, stakeholders broadly agreed with these roles and, in particular, that the NETSO should support the needs case for developer-led WNBI at the gateway assessments.
- 3.12. Given this feedback, we maintain our position that the developer should lead in triggering and making a submission to the voluntary gateway assessments, and that the NETSO (drawing on relevant Transmission

Owners (TOs) as necessary) should assist with developing the needs case for the WNBI for any Ofgem gateway assessments. Further, both parties will have a role in monitoring the needs case for the WNBI, with the developer reviewing their design where this is an appropriate response to a change in the needs case.

3.13. Stakeholders' responses raised some concerns around potential issues with sharing sensitive information on the needs case between the NETSO and developers. However, we consider that there are sufficient alternatives, such as the NETSO submitting confidential information directly to Ofgem, which could overcome these potential issues. We will continue to work with the NETSO and industry to better understand the potential barriers for sharing sensitive information, and options available to address them.

Assessment criteria

- 3.14. In the December consultation, we proposed a number of high level criteria¹⁷ that we would use to assess gateway assessment submissions. These included:
 - the (economic) needs case for investment
 - the timing and scope of the project and its technical readiness
 - proposals for ongoing NETSO-developer engagement.
- 3.15. In response to our proposals, stakeholders broadly supported the use of the above criteria, with some making further suggestions, such as: assessment of environmental and non-economic social benefits, and contribution to government policy objectives. We consider that these suggestions would form part of the needs case for the WNBI and therefore do not require separate identification.
- 3.16. While the list above is not exhaustive and further policy work is required to finalise the list of criteria, we consider that the high level criteria included above remain appropriate for assessing gateway assessment submissions.
- 3.17. Gateway assessments will, in general, be expected to take place before a tender exercise¹⁸ has commenced. As the purpose of the gateway assessment is to inform a resulting tender exercise cost assessment, we expect the developer to be able to show their commitment to triggering a tender exercise for those assets before we undertake a gateway assessment.
- 3.18. As noted in our December consultation, these assessment criteria are not a definitive list and we will carry out further work to refine criteria requirements.

¹⁷ For further details see page 59, December consultation, n. 6 above.

¹⁸ As defined under <u>The Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations</u> <u>2013</u>.

We will also be working with NETSO and developers to further develop what information a robust needs case may include. The criteria and needs case requirements will be applicable to all projects, ensuring transparency of approach. However, given the unique technical requirements of offshore transmission and variation between projects, early engagement with developers ahead of a gateway assessment submission will provide an opportunity for Ofgem to provide further details on what information will need to be contained within an individual gateway assessment submission.

Timing of the gateway assessments

- 3.19. In the December consultation we proposed providing flexibility in the timing of gateway assessments, driven by the needs of individual projects. The identified flexibility applied to the point at which the developer would trigger the gateway assessment, based on the developer's ability to provide sufficient information to enable Ofgem to conduct an informed assessment. We expect that early engagement between developers and Ofgem would inform the point at which the gateway assessment would be triggered. This flexibility of approach received support from stakeholders. **We maintain our position on the timing of gateway assessments.**
- 3.20. Developers and the NETSO will need to undertake analysis to evidence the feasibility and needs case for taking forward the WNBI before considering triggering the first gateway assessment. We consider that developers will generally only be able to satisfy the assessment criteria for the first gateway assessment after they have signed a BCA. We expect that in most cases there may need to be significant further engagement on connection optioneering between the developer and the NETSO in order to inform a needs case submission. We expect early engagement between developers and Ofgem will help inform when the gateway assessment should be triggered.
- 3.21. Similarly, for the second gateway assessment, developers will be able to trigger the gateway assessment when they have sufficient information to enable us to conduct an informed assessment. Under the generator build option, we expect the timing of this gateway assessment to be as late as possible, to help ensure that the evidence provided in a developer's submission remains up to date at the point at which significant final procurement decisions for the WNBI are made.

Potential for Ofgem to support developer-led WNBI outside the gateway assessments

3.22. We have considered whether there is a need and potential for Ofgem to provide further support to developers outside of gateway assessments for some specific types of low cost WNBI. Such works could include low cost preliminary works which allow the option of taking forward WNBI to be kept open during the preliminary works stage. The aim of such an approach is to support developers where a gateway assessment may seem a disproportionately lengthy or resource intensive process given the value of the WNBI.

- 3.23. In our December consultation we asked stakeholders to identify low cost works which may be suitable for this approach, and to provide suggestions of how such a route may work in practice. Responses to these questions were mixed. Some stakeholders saw a benefit to a formal approach to supporting low cost works outside the gateway assessments, whilst some thought that these works would be considered as best practice by developers and therefore should be taken forward by developers in any case.
- 3.24. Since December we have done further analysis to try and indentify a potential set of low cost WNBI works. Our research highlighted strong differences between individual projects at both the preliminary and construction works stage. These differences included site specific needs, developer approach and the wider network need. In view of this research it does not appear possible to identify a robust list of potential low cost WNBI works at this stage.
- 3.25. Our analysis also confirmed that in many cases, low cost preliminary works which maintain the option of taking forward WNBI as part of early stage preliminary works are already considered best practice.
- 3.26. Given these findings, we do not consider that there is a clear need or means to develop any additional routes for Ofgem to support low cost WNBI outside of the voluntary gateway assessments at this stage. However, we will consider if any changes are needed to our cost assessment process guidance to reflect current industry best practice.

4. Next steps

Chapter summary

Sets out our next steps on the matters addressed in this policy statement and provides an update on other matters included in the December consultation document.

Purpose of this chapter

- 4.1. In the December consultation, we consulted on how a third category of investment, non developer-led WNBI could be brought forward. We also consulted on several issues on system planning and design which are related to the proposed coordination framework.
- 4.2. In this chapter, we set out a short update on our thinking since that consultation and identify next steps in these areas. Finally, we summarise our expected next steps on the policy updates contained in this policy statement.

Non developer-led WNBI

- 4.3. In our December consultation we set out how non developer-led WNBI (WNBI that has not been identified as part of a developer's BCA) could be brought forward. Our lead option set out in the December consultation is for onshore TOs to undertake preliminary works for non developer-led WNBI, followed by an OFTO build tender to identify an OFTO to construct and own the assets.
- 4.4. We described a potential high level process to enable onshore TOs to undertake preliminary works for this type of asset. This included onshore TOs proposing such works to Ofgem, who would then assess the proposal against a set of criteria to determine whether to provide funding for the TO to undertake the preliminary works (a first gateway assessment). We also consulted on incentives and obligations that could be considered under such funding. We set out areas for further work, including how to enable an OFTO build tender exercise following the completion of the preliminary works (a second gateway assessment).
- 4.5. Most respondents felt it may be appropriate for onshore TOs to take forward preliminary works for non developer-led WNBI, subject to further policy detail. Many supported a two-gateway assessment approach for this category. Regarding the incentives and requirements that Ofgem might put on preliminary works funding as part of non developer-led WNBI, many respondents echoed the incentives and requirements we listed in the consultation document such as timely delivery, stakeholder engagement and supporting a fair and open competitive tender process.

4.6. We intend to continue to review policy options with respect to this model and subject to this further work, currently plan to seek stakeholder views on the detailed approach later this year. This could potentially cover a decision on the role of onshore TOs in non developer-led WNBI. It could also include proposals for receiving and reviewing funding proposals from onshore TOs, consideration of any changes that may be required to the tender process and the allocation of risks and liabilities across parties participating in this type of work.

System planning

Connections Infrastructure Options Note

- 4.7. As part of the connection offer process, NGET is required to provide details to the developer of the preliminary identification and consideration of the connection options available. This includes the preliminary costs used in assessing such options and the offshore works assumptions, including the assumed interface point identified. NGET fulfils these requirements by the production of the Connections Infrastructure Options Note (CION). The CION sets out the offshore works assumptions and consideration of options available and is provided to the developer during the connection offer process.
- 4.8. Previous stakeholder feedback highlighted that improvements could be made to the CION process and the CION document that could benefit coordination. We therefore sought views from stakeholders in the December consultation on such potential improvements.
- 4.9. Respondents expressed broad support for an improved CION process. In particular the process was seen as a useful tool to gain developers' views and achieve support for possible connection/coordination options. Suggestions for improvements included the formalisation of content, status and timing, with clear opportunity for developers to input to the process. Additionally, the potential was identified to make the CION more "forward looking" and ensure that it better considered what technology options would be viable for a project.
- 4.10. In terms of barriers to improvements, a minority of responses questioned whether the CION process was the appropriate process to facilitate coordination. Additionally, the diverse drivers of the different parties involved (the NETSO, TOs and developers) and the potential need for increased time within the CION process (for issuance of offer and acceptance) were also noted.
- 4.11. In the December consultation, we stated that we expect NGET to consider stakeholder feedback on the CION process, including feedback provided to Ofgem in non-confidential responses to our consultation. National Grid, in its response, has committed to working with industry to develop the CION. We understand that NGET has begun internal consideration of the responses given and possible ways forward, including potential timelines. We welcome this commitment and will continue to monitor with interest steps taken in this area.

4.12. The ITPR project is considering further the roles and responsibilities of the different parties in system planning for onshore, offshore and interconnectors, given the diverse drivers of the different parties involved. We have recently published an ITPR "Emerging Thinking" consultation¹⁹.

System planning data

- 4.13. As noted in the recent ITPR Emerging Thinking consultation, the introduction of the British Electricity Trading and Transmission Arrangements (BETTA) resulted in provision of more comprehensive sets of network and generator data to the TOs to facilitate their network planning. However, with an increased number of parties involved in the planning and delivery of network assets there may be a case for a coordinating body or SO to do more in this area.
- 4.14. Associated with the CION, Ofgem is exploring methods with industry for the provision of system planning data for undertaking system studies for network design options, such as harmonics analysis, detailed stability analysis and overall system operation considerations²⁰. This is looking at the role of parties in this process and the expectations regarding the assumptions in data exchanged between parties so that they all can take an assessment of the risk the data introduces to the development work they are undertaking. This is to allow the risk to be factored in and mitigated in the subsequent designs. There could also be a role for the SO in coordinating system studies undertaken by the delivery parties to ensure overall system operability or could include taking more of a role in undertaking the studies (in place of the delivery parties).

Summary of policy updates in this document

- 4.15. On **GFAI**, Ofgem welcomes NGET's confirmation in its response to the December consultation of its willingness to work with Ofgem and industry to further the development of user commitment type arrangements for developer-led GFAI. We will monitor developments and evaluate any modification brought forward for decision in due course. Subject to such changes, we would expect to provide greater confidence to GFAI developers on their route to cost recovery through the tender process.
- 4.16. In respect of **Developer-led WNBI**, we propose that voluntary gateway assessments should be implemented for WNBI to support the development of coordinated offshore transmission assets.
- 4.17. The December consultation also raised the question of whether there was potential for Ofgem to support developer-led WNBI outside the gateway assessment process for low cost WNBI works. Based on analysis we have

¹⁹ ITPR Project: Emerging Thinking, June 2013 (83/13).

²⁰ This could include considering cross-system stability/dynamics, sub-synchronous resonance and power system stabiliser tuning/grading.

undertaken since the December consultation, we do not consider that there is a clear need or means to develop any additional routes for Ofgem to support low cost WNBI outside of the voluntary gateway assessments at this stage. We will consider if any changes are needed to our cost assessment process guidance to reflect current industry best practice.

4.18. As set out in the December consultation, we confirm our expectation that NGET will consider stakeholder feedback on **the CION process** and document. In its response to the document, NGET committed to work with industry to develop the CION, including formalisation if this is deemed appropriate by the industry. We welcome this commitment and will monitor developments in this area.

Summary of next steps

4.19. In a number of areas set out in this document, we have identified that additional Ofgem work is required. This section summarises the areas identified for further work.

GFAI

- 4.20. We will continue to monitor the ongoing developments to user commitment arrangements, in particular CMP219. We look forward to National Grid as the CUSC administrator bringing forward suitable proposals to extend user commitment arrangements as discussed in this policy statement.
- 4.21. When the resulting modification proposal is presented to the Authority for approval we will evaluate it carefully to confirm that the arrangements are appropriate and adequately protect consumers from additional stranding risk resulting from GFAI.

Developer-led WNBI

- 4.22. We are currently considering how the **cost assessment process** can be developed to more clearly set out expectations for both developers and Ofgem for future tenders. As part of this work, detailed consideration will be given to the interactions with the process for voluntary gateway assessments.
- 4.23. Going forward, we will be considering whether any changes are required to National Grid's licence to ensure that it includes any necessary obligations to facilitate the gateway assessment process. This will include reviewing whether current licence conditions are sufficient so that the NETSO:
 - supports sharing of information between the TOs, developers and/or OFTOs as appropriate
 - supports the developer in building the needs case for submission
 - monitors the needs case on an ongoing basis, communicating relevant information to the relevant parties as appropriate.

4.24. Where changes to industry arrangements to support the gateway process are identified, these should be taken forward through the appropriate industry governance processes.

Non developer-led WNBI

4.25. As identified above, we intend to continue to review policy options with respect to this model and subject to that further work, plan to seek stakeholder views on the detailed approach later this year. This would potentially cover a decision on the role of onshore TOs in non developer-led WNBI. It could also include proposals for receiving and reviewing funding proposals from onshore TOs, consideration of any changes that may be required to the tender process and the allocation of risks and liabilities across parties participating in this type of work.

Transmission charging

- 4.26. We will monitor closely developments undertaken by the informal working group considering integrated charging, including any modification proposed as indicated under the interdependencies section in Chapter 1.
- 4.27. When any resulting modification proposal is presented to the Authority for approval, we will evaluate the impacts carefully to ensure that the proposed arrangements properly support the development of coordinated offshore transmission assets where this would have benefits for the consumer.

System Planning

- 4.28. We will monitor carefully steps taken by NGET in the developing improvements to the CION process in conjunction with industry.
- 4.29. We will also consider, in conjunction with industry, appropriate processes for undertaking system studies in the future.

Appendices

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Appendix 1 – Contact details for queries

- 1.1. While this statement is not a consultation document, Ofgem is happy to receive questions or comments from interested parties in relation to any of the issues we have set out.
- 1.2. Queries should be sent to:

Alison Russell Offshore Coordination Policy Team

Address: 9 Millbank London SW1P 3GE

Telephone number: 0207 901 3866 Email: <u>offshore.coordination@ofgem.gov.uk</u>

Appendix 2 – Responses to the December 2012 consultation

Introduction

- A2.1. The Ofgem consultation document 'Consultation on a proposed framework to enable coordination of offshore transmission' was published on 7 December 2012. It set out our proposed framework to enable the investment needed for efficient coordination in offshore transmission development, for further consultation. The framework built on the initial proposals set out in our March 2012 consultation document and July 2012 open letter, taking into account stakeholder feedback.
- A2.2. The consultation closed on 1 March 2013, and we received 14 non-confidential responses. This appendix gives an overview of the key themes from those responses. Copies of all non-confidential responses are available on the Ofgem website.²¹

Summary

Proposed framework for the delivery of coordinated offshore transmission assets

High-level framework

- A2.3. The majority of responses expressed broad agreement with the high-level framework although some respondents raised some concerns.
- A2.4. One respondent suggested the framework underestimates developer risks and others noted that the incentives for developers to take forward Anticipatory Investment (AI)/WNBI remain limited and that risks remain regarding cost recovery.
- A2.5. One respondent suggested that generators should not be expected to undertake WNBI; instead it should be undertaken through the incumbent TO and be contracted back to developers. Another respondent suggested that a developer should have permission from other network users before undertaking WNBI. A third respondent suggested that developers should be subject to the same requirements as TOs regarding delivery of transmission assets and handling confidential data.
- A2.6. A number of responses noted the importance of further developing, and where appropriate implementing, policy proposals as soon as possible.

²¹ Consultation on a proposed framework to enable coordination of offshore transmission, December 2012, <u>Ref 164/12.</u>

Connection Infrastructure Options Note (CION)

- A2.7. Respondents expressed broad support for an improved CION process to facilitate coordination of offshore transmission. The process was seen as a useful tool to gain developer's views and gain buy-in to possible connection/coordination options.
- A2.8. Responses suggest developers would like to see the CION content, status and timetable formalised (eg codified) and a draft issued alongside the connection offer, with the opportunity to formally input to the process. Some responses also suggested a lack of formality around the CION process can lead to "open-endedness". One respondent noted the potential for more stakeholder engagement in the CION process, and also the potential to make the CION more "forward looking" (such as considering connections under offer rather than just contracted background) and a process that better considers technology developments. The same respondent also noted the relevance to National Grid's Network Development Policy.
- A2.9. The different drivers of the NETSO, onshore TOs, OFTOs and developers were noted. It was also argued that to be effective, the process must reflect a need to seek the best overall solution, recognising the different drivers of parties. One respondent noted the potential for a TO conflict of interest, to minimise onshore costs with potential elevated costs falling within the OFTO tendered assets.
- A2.10. In terms of barriers to improvement, it was recognised that the needs of the CION document have evolved and therefore, further development of the CION may be appropriate. However, two responses suggested the CION might not be the most appropriate process, with one response citing the Strategic Options Review process as a potential alternative. The potential for additional time to be required to complete the process and facilitate multiparty discussions was also raised as a barrier. NGET has committed to work with the industry to develop the CION to make it more appropriate for the changed needs of the document.

Design or delivery of transmission assets

- A2.11. Respondents outlined a number of potential issues with the design of transmission assets where generation projects are reliant on works to be undertaken by another developer. For example, one respondent noted that potential risk for developers in relying on a third party to provide transmission assets would lead to developers favouring a radial approach; others also mentioned potential limitations to optimisation of design. Another respondent noted uncertainty over the role a second developer would have in the design of the assets, where they were reliant on works by a first developer.
- A2.12. In terms of potential issues with the delivery of transmission assets, respondents noted the risk of delay by either developer. Developers may be less incentivised to deliver those transmission assets which are linked to a different project rather than their own. There were consequently flow-on risks, for example in securing finance. Respondents felt risks to delivery of transmission assets could be mitigated with clear allocation of risk and



responsibility, and appropriate incentives and penalties (for example liquidated damages).

Data confidentiality

- A2.13. Many respondents agreed that NETSO intermediation could go some way towards mitigating data confidentiality issues between developers. However, respondents also pointed out that NETSO intermediation alone would not be enough, and there would need to be limits on what the NETSO could do with any confidential data it received.
- A2.14. One respondent noted that the NETSO could act as a data warehouse and use data to facilitate coordination and assessment of related work, while a couple of other respondents noted arrangements for data sharing should be codified or contractualised.
- A2.15. One developer respondent noted that increasing the NETSO role in data management would make them integral to the design process, and could add complexity, cost and delay to the negotiation process if not managed properly

Generator Focused Anticipatory Investment

Transfer of assets

- A2.16. Respondents generally agreed with the principle of extending user commitment arrangements. Some respondents considered that offshore wind projects sharing assets would be at least as well off as they would be under radial arrangements, while another respondent noted that the TNUoS benefit would be justified for both developers. A number of respondents requested further clarity on the detail of such arrangements.
- A2.17. There was general support for consumers to share some of the anticipatory investment costs for stranding risk. A couple of developer respondents considered that placing the entire stranding risk of GFAI on developers for large projects, would make financial investment decisions on larger projects difficult.

User commitment

- A2.18. Respondents considered that user commitment needed to be either developed as an interim measure, or clarified, before it could address GFAI assets being constructed by a developer. A small number of developer respondents also considered that the adequacy of CMP192 arrangements should be addressed before extending user commitment arrangements. For example, they considered that uncertainties still remain with the new arrangements which should be addressed prior to further development (of the arrangements) for coordinated networks
- A2.19. In its response as the CUSC administrator, National Grid stated its willingness to work with industry and Ofgem to develop the necessary arrangements to extend user commitment to GFAI.

A2.20. Respondents also identified barriers to extending user commitment arrangements. These included that there would need to be cost reflective compensation for developers if outages were needed to connect later generation (for all categories of anticipatory investment), and that allowing several parties to connect through a generator build arrangement may require significant regulatory work. Some respondents also identified that significant time and resources may be required to develop the arrangements in a timely manner, but this was more in relation to the development of multiparty arrangements.

Developer-led Wider Network Benefit Investment

NETSO role in supporting needs case

- A2.21. A strong majority of respondents agreed that the NETSO should support the needs case for developer-led WNBI. A few respondents considered that TO/developer input and cooperation would be necessary, and a few felt that licence changes would be necessary to enable the NETSO to operate in an enhanced role. One respondent felt that licence changes would not be needed.
- A2.22. One respondent identified potential real or perceived conflict of interest issues around the NETSO role and its competitive businesses, and noted that these would need to be managed to ensure impartiality. One further respondent noted potential issues with business separation arrangements for developers.
- A2.23. Most respondents felt that confidentiality would be a barrier to the NETSO sharing information required to support a project needs case. Several suggested that there may be a role for the NETSO in ensuring confidentiality (for example through licence obligations or in facilitating the signing of confidentiality agreements). A small number of respondents felt there were no barriers to the NETSO sharing information with the appropriate developer in order to support the needs case for WNBI.

Gateway assessments

- A2.24. Overall a strong majority of respondents supported the implementation of a gateway assessment process to enable developers to take forward WNBI.
- A2.25. Most respondents supported the use of the assessment criteria listed in the December consultation. A number also suggested additional criteria, such as assessment of environmental and non-economic social benefits, and contribution to government policy objectives.
- A2.26. A majority of respondents generally agreed with the proposed timing of the gateway assessments. Many noted that flexibility in the timing of the gateway assessments is important. One respondent suggested running the first gateway assessment during the connection offer process. A couple of respondents held concerns around the timing of the second gateway assessment, suggesting this may have to happen within a relatively tight timeframe.



Low-regret works and de minimis threshold

- A2.27. Views were mixed in relation to low-regret works and a de minimis threshold. Some respondents suggested aspects that a low-regret definition should incorporate, such as:
 - a list of preapproved items provided by Ofgem
 - a cost threshold
 - works with straightforward and identifiable costs
 - works that encompass certain assets included in a BCA.

Similarly, a couple of respondents suggested specific de minimis threshold values, such as £50 million; 10% of OFTO capex; 20% of original investment cost; or anything below the cost of undertaking a gateway assessment.

A2.28. A few respondents suggested that no low-regret definition or de minimis threshold was needed – either because any low-risk work should be borne by generators, or because they could not envisage the situation whereby low regret WNBI would apply.

Non developer-led Wider Network Benefit Investment

Party to undertake preliminary works

A2.29. Overall, the strong majority of respondents felt it may be appropriate for onshore TOs to take forward preliminary works for non developer led WNBI, subject to further policy detail. Two respondents suggested that a role for TOs may be appropriate on a project-by-project basis, rather than as an ongoing obligation. Others noted that TOs' work in this area should not affect their delivery of onshore asset investment. Some respondents highlighted the need to ensure that fair competition following the preliminary works is maintained. Some felt that preliminary works funding should be available to all parties. One respondent felt that there should be a formal route for developers to express concerns to Ofgem if necessary.

Gateway assessments

- A2.30. A strong majority of respondents supported a two-gateway assessment approach for non developer-led WNBI. Some felt that there should be no difference in approach for developer-led and non developer-led WNBI.
- A2.31. Two respondents indicated that a degree of flexibility should be important when undertaking gateway assessments, both in terms of timings of assessments, as well as the number of gateway assessments that would be required.
- A2.32. Regarding criteria for assessing preliminary works proposals at the gateways for non developer-led WNBI, a majority agreed with the criteria listed in the December consultation. One respondent noted that the criteria should also examine whether the proposal delivers cost savings to consumers versus a plausible counterfactual, while another thought that those affected by the preliminary works should be involved in the gateway assessment.
- A2.33. One respondent noted that the proposal to provide ex ante funding for preliminary works meant cost recovery certainty for those works, and that this certainty should be extended to generators undertaking WNBI.



Incentives and requirements

- A2.34. Regarding the incentives and requirements that Ofgem might put on preliminary works funding as part of non developer-led WNBI; many respondents echoed the incentives and requirements we listed in the December consultation, such as timely delivery, stakeholder engagement and supporting a fair and open competitive tender process.
- A2.35. One respondent suggested that incentives should mirror output-based incentives used under Revenue = Incentives + Innovation + Outputs (RIIO) for onshore TOs, and a couple suggested that outage compensation or a financial-based incentive should be in place to minimise the outage period associated with non developer-led WNBI. Another considered that the consenting process should not fall within TO-led preliminary works, and so should not be a requirement. The same respondent considered that the liabilities following the completion of the preliminary works should be addressed.
- A2.36. A strong majority of respondents agreed that engagement with the list of stakeholders detailed in the consultation was important. Two respondents also suggested that engagement with the NETSO should occur before and during preliminary works.

Miscellaneous comments

- A2.37. There were a number of other relevant comments made by respondents, both across the proposed policy framework as a whole and in relation to the three categories of investment.
- A2.38. A range of potential data sharing and confidentiality issues were noted across our proposed coordination policy framework.
- A2.39. Several respondents suggested potential (cost reflective) compensation for developers if generation outages are required to connect later generation.
- A2.40. A number of respondents felt that the gateway assessment process should be extended to cover all categories of investment (and therefore all resulting tenders).
- A2.41. In relation to GFAI, one respondent felt that user commitment should dovetail with TNUoS charging developments. Another suggested that Ofgem should consider establishing expert groups with a mandate to bring forward proposals. One respondent felt that enabling several parties to connect through a generator build arrangement may require significant further regulatory work.
- A2.42. Further comments regarding developer-led WNBI suggested that developer incentives may limit scope of WNBI, and that some economic barriers to developers taking forward WNBI still exist.

Appendix 3 – Updated Impact Assessment

Summary

- A3.1. In 2012, we published three consultations on our emerging policy development on coordination, outlining potential measures to support the development of a coordinated network. In particular, we consulted on potential improvements to the network planning process and a proposed approach to anticipatory investment in offshore transmission infrastructure.
- A3.2. For the March 2012 consultation, given that we were at an early stage of our policy development, we included an initial impact assessment which set out the effects of a broad range of potential options to support the coordination of offshore transmission. We updated this impact assessment in the December 2012 consultation.
- A3.3. Since the December consultation, we have analysed submissions, and updated our proposed framework to enable coordination. Specifically, in this policy statement we have set out our views on two of the three categories for investment needed to support coordination: Generator Focused Anticipatory Investment (GFAI) and developer-led Wider Network Benefit Investment (WNBI). Work on the third category, non developer-led WNBI remains ongoing.
- A3.4. This updated impact assessment reflects the options considered for the first two investment categories – GFAI and developer-led WNBI, and makes a final assessment of the impacts of our decisions. Our view on the impacts has not significantly changed since the December impact assessment. The impacts of future decisions on non developer-led WNBI will be assessed as part of ongoing policy development.
- A3.5. Our updated views outlined in this policy statement relate to the identification of the need for, and type of, investment to support coordination, who undertakes preliminary and construction works relating to that type of investment and our gateway assessments.
- A3.6. Our impact assessment shows that:
 - there are potential savings from coordination, but this will vary on a case by case basis. There is the potential for reduced transmission charging due to coordination, but also the potential for increased costs. These will have either a direct or indirect impact on consumers
 - we expect the current benefits of the competitive offshore regime to be maintained
 - we expect that our decisions may have an impact on generators' investment decisions, especially with regards to taking forward WNBI. We expect the impacts of this on sustainable development will be positive,

particularly in managing the transition to a low carbon economy and in developing improved environmental performance.

Key issues and objectives

Existing regulatory arrangements

- A3.7. Under the current offshore regulatory regime, potential opportunities for coordination are identified through system planning documents and the connection offer process:
 - Any generator wishing to connect to the National Electricity Transmission System must make an application in writing to the National Electricity System Transmission Operator (NETSO).
 - In response to this request the NETSO will provide an economic and efficient connection offer. This offer could include coordinated assets.
 - The developer and the NETSO will then negotiate and sign a Bilateral Connection Agreement (BCA) which may or may not include coordinated offshore transmission assets.
 - Following the signing of the BCA, a developer will carry out the agreed works or trigger an OFTO build tender following carrying out the preliminary works.
 - The developer recovers its economic and efficient costs through a competitive tender exercise run by Ofgem.
 - Ofgem will then grant a licence to operate, maintain and decommission the offshore transmission assets. (Under the OFTO build option the OFTO will undertake the detailed design work and procurement and deliver the build programme, as well as being responsible for the operation, maintenance and decommissioning of the assets.)

Key issues

- A3.8. Under the existing arrangements it is possible for coordination to be taken forward. Under the transitional regime some investment has already been made on an anticipatory basis and some connection offers have included coordinated elements. However, a number of barriers to the development of an effective coordinated network have been identified; including the current network planning process and a lack of clarity around the approach to anticipatory investment. These barriers and other broad issues were consulted on in the March 2012 consultation.
- A3.9. Further analysis since the March consultation highlighted several specific key issues with the current approach which do not support the development of coordinated assets. We set these out below, referring to the first two investment categories set out in the December consultation.
- A3.10. **For GFAI**, where a developer has taken forward GFAI, whether for its own use or that of a later generator, stakeholders have suggested that it is not

clear how Ofgem will treat the additional capacity at cost assessment. In addition, if transfer of the GFAI for the economic and efficient value is permitted, then consumers must be protected from undue stranding risk post transfer.

A3.11. For developer-led WNBI our analysis and previous stakeholder feedback has suggested that a key barrier to developers undertaking WNBI is a lack of clarity on how transmission assets that go beyond the immediate needs of the developer will be treated during a tender exercise.

Objectives

- A3.12. Ofgem's principal objective is to protect the interests of both existing and future energy consumers, wherever appropriate, by promoting effective competition in the energy market. Our decisions and proposals to support the development of offshore coordinated assets facilitate the development of an economic and efficient transmission network. In this way our decisions and proposals serve the interests of consumers by helping to ensure that the costs of developing transmission assets, borne by consumers through their energy bills, are no higher than they need to be.
- A3.13. In developing the framework set out in our December 2012 consultation, we considered three key principles:
 - Ensuring that consumers are protected from undue stranding risk, and where they do take on some stranding risk, that they receive clear benefit for doing so.
 - Building on the existing offshore regulatory regime, so as to retain the benefits of competition, minimise disruption due to implementation and help to capture the benefits of coordination in the short term.
 - Providing greater clarity for developers on their route to cost recovery where they are taking forward work on behalf of other generators or the wider network.

Options

- A3.14. The March 2012 impact assessment focussed on two primary options for how investment in coordinated transmission assets would be taken forward under the offshore regime. These were a 'do nothing' approach where there would be no changes to the existing regime, or an approach which provided greater clarity on how anticipatory investment would be treated under the offshore regulatory regime. Sub-options for the latter approach were organised under five headings:
 - Identifying the need for, and type of, investment to support coordination.
 - Who undertakes preliminary works for investment to support coordination.
 - Who undertakes construction works for investment to support coordination.

- Potential Ofgem assessment points.
- Ofgem assessment criteria.
- A3.15. The options reflected the early stage of our policy development. In the December consultation we refined these options, and set out our proposed overall framework for the delivery of coordinated offshore transmission assets for the three different investment categories: GFAI, developer-led WNBI and non developer-led WNBI. We now set out further information on our final decisions on GFAI and developer-led WNBI.

Identifying the need for, and type of, investment to support coordination

- A3.16. Through our previous consultations, we considered the following options:
 - Building on the existing connection offer process, where developers, the NETSO and Transmission Owners (TOs) have a role.
 - Developer-led offshore developers would have the key role in identifying where there are opportunities for investment which enables efficient coordination.
 - A blueprint and build approach this option involved the central direction of the offshore network build-out whereby a central design authority (such as the NETSO) would set out a blueprint for what assets need to be built offshore to develop a coordinated network.

A3.17. After consulting and taking into consideration all responses, **at this stage**, we consider that the connection offer process remains a key method to identify the need for, and type of, investment to support coordination.

- A3.18. We note that NGET has committed to working with industry to develop the Connection Infrastructure Options Note (CION), and that we are exploring methods with the industry for the provision of system planning data for undertaking system studies for network design options.
- A3.19. We consider this approach will build upon the existing framework and roles of parties that exist onshore and offshore. In particular, we consider it important that both the NETSO and TOs fulfil their duties under their current roles. We consider this approach aligns with our objective to retain the benefits of competition, minimises disruption due to implementation and helps to capture the benefits of coordination in the short term.
- A3.20. In our December 2012 consultation we noted that if TOs, supported by the NETSO on the needs case, consider that development works are needed that are not specified in a BCA for a developer to undertake, our lead option was for them to submit an application for preliminary works funding through onshore price control processes. Demonstration by the TO of engagement with developers will be a key aspect of our consideration in our evaluation of the request for funding. Development of policy on this issue is ongoing.

A3.21. In developing the framework for coordinated offshore system planning and network development, we are seeking to build upon the existing framework and the roles of parties that exist onshore and offshore. The wider issues are being taken forward as part of policy development under our Integrated Transmission Planning and Regulation (ITPR) project.

Who undertakes preliminary works for investment to support coordination

- A3.22. In addition to a 'do nothing' approach, our consultations have put forward the following options:
 - a. Funding existing onshore TO or OFTO (or TOs if, for example, the asset crossed different TOs' geographical boundaries) in the area to undertake the preliminary works.
 - b. Continuing to give developers the choice of undertaking preliminary works, but with the local TO taking on the activity should the developer be unwilling or unable to. (This may be the case where significant WNBI is not a natural fit with the works being taken forward by that developer.)
 - c. Ofgem to run a tender exercise for the preliminary works. We noted that there may be limited value to this approach where the cost of the preliminary works is relatively small.
- A3.23. Following responses to the March 2012 consultation and after undertaking further analysis, we decided not to take forward options (a) and (c). In line with option (b), at this stage, we consider developers should retain the choice to undertake preliminary WNBI works for the development of coordinated offshore transmission assets under developer-led WNBI (as set out in our December consultation).
- A3.24. This approach provides flexibility by allowing developers to take forward development of WNBI where they have agreed to do so as part of their BCA. We are not proposing to introduce any restrictions at this time on which assets developers can take forward, as discussed further in the next section. In addition, we do not expect developers to be willing to take forward all WNBI.
- A3.25. We consider that this approach builds on the existing offshore regulatory regime, retaining the benefits of competition, while minimising disruption due to implementation issues and helping to capture the benefits of coordination in the short term.
- A3.26. Policy work is ongoing on the third category of investment identified in the December consultation, non developer-led WNBI. Hence this category is not addressed further in this impact assessment.

Who undertakes construction works for investment to support coordination

A3.27. In the March 2012 consultation we consulted on who should undertake construction works for WNBI. This was in response to concerns that for WNBI,

developers may not have sufficient incentives to ensure these assets are built in a timely and fit-for-purpose manner. Where a developer has a BCA which includes assets to support coordination, the March initial impact assessment considered the following options:

- a. Developers continue to have the choice of generator build and OFTO build options for all offshore assets, including those that are significantly driven by wider network benefits.
- b. Assets that are significantly driven by wider network benefits would be exclusively developed through the OFTO build option.
- A3.28. We consider that for assets which are being driven primarily by wider network benefit, there may be a natural tendency for developers to select the OFTO build option. However, our analysis and stakeholder feedback suggested that defining a class of assets that could not be taken forward by developers would be problematic; there may be benefits to be had in allowing flexibility in the route by which projects are progressed.
- A3.29. The December consultation proposed maintaining the current level of flexibility around a developer's ability to choose between generator and OFTO build, with consumers being protected from undue stranding risk through the gateway assessment and cost assessment processes. **At this stage, we continue to consider that developers should retain the choice of build for developer-led WNBI**.

Potential Ofgem gateway assessment points

- A3.30. In March 2012, we consulted on the potential introduction of Ofgem gateway assessments to support developers in undertaking anticipatory investment where this represents an economic and efficient response to wider transmission network requirements. In addition to a 'do nothing' approach, we considered the following options for potential Ofgem assessment points:
 - a. Ofgem assesses the economic case of proposals to take forward coordinated assets through annual assessments.
 - b. Ofgem assesses the economic case of proposals to take forward coordinated assets at either one or two points. Gateway assessments could inform decisions on preliminary works and construction works respectively.
- A3.31. The aim of these assessments would be to give developers taking forward coordinated investments greater clarity on their route to cost recovery for those elements. At the same time, the assessments would also serve to allow Ofgem to judge whether the potential benefits to consumers outweighed the potential costs and risk of the investment.
- A3.32. Feedback and further policy analysis led us to consider further options **for GFAI** in the December 2012 consultation. In addition to a 'do nothing' approach, we considered options to:

- a. provide improved clarity on the route to cost recovery via a tender exercise through early cost benefit analysis
- provide improved clarity on the route to cost recovery via a tender exercise through the application of additional cost assessment criteria in the tender exercise
- c. enable GFAI within the parameters of normal industry arrangements, subject to the effective management of stranding risk.
- A3.33. We consider that GFAI should be enabled within the parameters of the normal industry arrangements as we consider the developer for whom the GFAI is constructed is best placed to manage, and hence should retain, the stranding risk.
- A3.34. We encourage National Grid to bring forward a Connection and Use of System Code (CUSC) modification proposal for the Authority's approval to extend appropriate user commitment arrangements to this category of investment.
- A3.35. Once appropriate user commitment arrangements are in place, Ofgem expects to be able to provide greater up front clarity on our approach to cost assessment, and treatment of the scope of GFAI as part of the cost assessment process.
- A3.36. For WNBI, we have decided that a voluntary gateway(s) assessment approach should be taken forward (in line with option (a)). WNBI has the potential benefit of achieving a more efficient transmission system overall, but also introduces potential stranding risks if the wider network need does not materialise. WNBI has a wider group of potential users than GFAI and offers benefits to the wider GB network.
- A3.37. In view of the potential benefit to consumers overall from supporting the development of a more coordinated network, we consider that some stranding risk could be shared across the wider base of transmission users and consumers, consistent with the approach to wider network investment onshore. Guidance from National Grid on CUSC Modification Proposal 192: Arrangements for Enduring Generation User Commitment (CMP192) suggests user commitment for wider system investments (where the assets are being constructed by an OFTO) would be shared equally between generation and consumers. Given this position, we consider that there is stronger need for a role for Ofgem in ensuring that the likely benefits outweigh potential risks.

Ofgem assessment criteria

- A3.38. In the March 2012 consultation we outlined three criteria that Ofgem could consider in assessing proposals to take forward coordinated offshore assets: needs case; timing and scope; and technical readiness. In the December consultation we expanded that list of criteria to include:
 - for developer-led WNBI: commitment to a tender; and plans for NETSOdeveloper engagement after the gateway assessments.

- for preliminary works proposals at the first gateway assessment for non developer-led WNBI: eligibility; outputs required to successfully transition the project to an OFTO build tender; and evidence of engagement between the TO and industry participants.
- A3.39. This list of criteria is not exhaustive and we will refine it as part of the further work to develop the process for voluntary gateway assessments.
- A3.40. At this stage, we consider that the high level list of criteria above remains suitable for assessing gateway assessment submissions as it will help us to evaluate whether the benefits of the WNBI are expected to outweigh the costs and risks.

Impacts

A3.41. This section sets out our analysis of the impacts of:

- pursuing a coordinated offshore network when compared to a radial approach
- our decisions on GFAI
- our decisions on developer-led WNBI.

Impacts on consumers

- A3.42. Coordinated networks are expected to require less offshore infrastructure, and hence we expect that lower capital costs and operating expenditure savings will drive a reduction in overall costs.
- A3.43. However, there is also the potential for increased costs to consumers under a coordinated network due to the increased risk of asset stranding. In addition, costs could rise due to unforeseen issues including those associated with the use of newer technology i.e. costs from project delays caused by using HVDC technology these could be due to delays as a result of supply chain availability, installation or lack of standards around HVDC amongst other reasons.²²
- A3.44. The total cost of developing, operating and maintaining Great Britain's transmission assets is paid for by both generation and demand users through the TNUoS charging arrangements. In the long-term, if there are savings associated with developing a coordinated network, they will directly drive a reduction in the total sums recovered under TNUoS. We expect this will lead to a reduction in consumer bills.

²² A recent SKM report on worldwide HVDC installations notes that some VSC projects have and are continuing to suffer from project delays: <u>Review of Worldwide Experience of Voltage Source</u> <u>Convertor (VSC) High Voltage Direct Current Technology (HVDC) Installations, March 2013.</u>

- A3.45. In contrast, any additional costs associated with developing a coordinated network could directly lead to higher TNUoS charging, ie if there is asset stranding that is not covered by user commitment. This could lead to an increase in consumer bills.
- A3.46. We commissioned a cost-benefit analysis as part of the Offshore Transmission Coordination Project (undertaken by TNEI/PPA Energy and Redpoint Energy) in order to assess the benefits of pursuing coordination when developing offshore transmission assets for the connection of generation assets situated within the zones leased by the Crown Estate in the third leasing round (Round 3). The analysis, taken across four different offshore generation deployment scenarios, suggests coordination overall has the potential to deliver savings of around 8-15% or £0.5-3.5 billion²³ when compared to a radial configuration. Coordinated assets built as a result of GFAI or developer-led WNBI would make up a portion of those savings.
- A3.47. Savings will, however, vary on a case by case basis. The extent of uncertainties and the complexity of individual project decisions mean that we do not consider it possible to meaningfully quantify the likely impact of our policy decisions up front. Instead, we have proposed a framework which will appropriately allocate costs and risks (following cost reflective principles) to ensure that coordination is taken forward in cases where the benefits are considered likely to outweigh these costs and risks, but not where it is less clear there will be a net benefit.
- A3.48. Modifications to charging and user commitment will have a key role in determining distribution and are yet to be finalised, but using cost reflective principles will mean that consumers should not take on undue costs and we will ensure this happens when we are considering the modifications.
- A3.49. For GFAI, we expect that extending user commitment arrangements will mitigate the risk of increased costs to consumers, by protecting against increased stranding risk.
- A3.50. For WNBI, consumers would be taking on significant risk, so our voluntary gateway assessments will ensure that the benefits of having coordination are sufficiently clear on a case by case basis. We also propose to mitigate the risk of increased costs to consumers by the use of robust criteria and cost assessment processes.

Impacts on competition

A3.51. Competition is central to the existing offshore regulatory regime, with OFTO licences granted by Ofgem through competitive tender exercises. To date, the existing offshore regime has succeeded in attracting competitive tender bids and allowing new OFTOs to enter the energy sector.

²³ Analysis published in December 2011. <u>Redpoint Energy: Offshore Transmission - assessment of regulatory, commercial and economic issues and options, December 2011</u> and <u>TNEI/PPA Energy: Asset Delivery Workstream - Final Report, December 2011.</u>

- A3.52. Our decisions to support GFAI and developer-led WNBI represent incremental enhancements to the current offshore regulatory regime. This will ensure that the current benefits of the competitive offshore regime are maintained. We would not expect our decisions on coordination to have significant negative impact on generators in offshore transmission.
- A3.53. In particular, for GFAI, implementing user commitment arrangements within the normal industry processes will continue to facilitate effective competition in the generation and supply of electricity, and competition in the sale, distribution and purchase of electricity (as required by Electricity Transmission Licence: Standard Conditions – Condition C10: Connection and Use of System Code (CUSC))²⁴.
- A3.54. By enabling more efficient and timely connection offers, our framework has the potential to improve competition in the generation sector by supporting reductions in the cost of offshore generation.

Impacts on sustainable development

Managing the transition to a low carbon economy

- A3.55. The recent DECC publication 'Electricity Market Reform: Delivering UK Investment' suggests that that there could be between 8 to 16GW of offshore wind capacity by 2020²⁵. In addition, DECC has a target of reducing the costs of offshore wind (development, construction and operations) to £100/MWh by 2020. The OTCP found that generator driven investment that includes coordinated aspects may facilitate the development of a more economic, efficient and timely offshore transmission network and help contribute towards these targets.
- A3.56. Similarly, the OTCP found that anticipatory investment to support wider network reinforcements could help to deliver a more timely, economic and efficient reinforcement of the onshore transmission network and may reduce onshore congestion. This could potentially allow for earlier connection dates or lower transmission charging for both offshore and onshore low carbon generation.
- A3.57. The impact of these changes should therefore be to reduce costs and, where possible encourage greater deployment of low carbon generation. In turn, this could be expected to lead to reductions in GB carbon emissions. However, as electricity generation is included in the EU Emissions Trading Scheme there would not be net carbon savings at the EU level. Given that the costs of transmission are a smaller proportion of the overall costs of low carbon generation, it is likely that the carbon savings impact could be relatively modest.

Eradicating fuel poverty and protecting vulnerable customers

²⁴ <u>Electricity Transmission Licence: Standard Conditions</u>, Condition C10 p 190.

²⁵ Levy Control Framework and Draft CfD Strike Prices, June 2013.

A3.58. We do not foresee that our proposals will have any significant impacts in this area.

Promoting energy savings

A3.59. Although we recognise that design choices and technology, eg HVDC technology (which may be used increasingly in coordinated networks), will impact on energy efficiency, their effect will be considered as part of our proposed voluntary gateway assessments for developer-led WNBI and our cost assessment.

Ensuring a secure and reliable electricity supply

- A3.60. A coordinated network may increase the security of both the onshore and offshore transmission networks by providing multiple export routes for offshore generators and providing new opportunities for a more economic and timely reinforcement of the onshore network.
- A3.61. In some cases, coordination may also lead to a temporary decrease in the security of supply in transmission assets during the early build out of the offshore wind farm compared to a radial build out. However, coordinated assets would still need to comply with the System Security and Quality of Supply Standards. This ensures that the overall security of supply remains within an appropriate range.

Developing improved environmental performance

- A3.62. The OTCP identified that coordination has the potential to minimise environmental impacts (and necessary planning applications) by reducing cabling and landing sites in sensitive areas reduce congestion on the onshore network, and offer, during the later stages of build out, additional routes for export of power in the event of a transmission asset failure. Our proposals have the potential to reduce the areas impacted, ie by having coordinated assets rather than more radial connections to shore.
- A3.63. It is expected that coordination would have less of an impact on flora and fauna by causing disturbance only once for a coordinated asset (eg an oversized asset) rather than more than once for two or more radial connections.

Impacts on health and safety

A3.64. We would expect developers to be carrying out their statutory responsibilities under the health and safety framework. We therefore do not foresee that our proposals will have any specific impacts in this area.

Risks and unintended consequences

A3.65. We consider asset stranding to be one of the key risks identified in the OTCP conclusions report and our initial impact assessment. Our proposals seek to ensure that asset stranding risks are allocated appropriately amongst those

parties who can best manage them, and who stand to benefit from the investment.

- A3.66. Potential risks and unintended consequences relating to our proposed framework are set out below.
- A3.67. **For GFAI**, compared to the current arrangements, the extension of the user commitment arrangements could carry with it the requirement for additional parties to provide user commitment. We do not consider that the effects of this would be disproportionate to the benefits of our proposal.
- A3.68. **For developer-led WNBI** a key risk for developers is that they are not able to recover their costs for developing WNBI during a tender exercise. The voluntary gateway assessments support developers by ensuring that they have sufficient evidence to allow the recovery of economic and efficient costs during a later cost assessment. However, we recognise that developers do still bear some risk of stranding should they not trigger a subsequent tender exercise.
- A3.69. A further potential risk associated with the introduction of voluntary gateway assessments could be undue delays to the developer's timeline for developing their transmission assets due to going through the gateway assessment process. The gateway assessments seek to mitigate this risk by ensuring that: developers do not have to pass through the gateway assessments where they are already comfortable in taking forward the coordinated assets, by providing case by case flexibility in the timing of gateway assessments, and by minimising potential for a developer successfully passing through the first gateway assessment but not the second. We would also encourage developers to engage with us in advance of seeking a gateway assessment to allow us to plan accordingly and to ensure they understand the submission requirements.
- A3.70. Responses to the March 2012 consultation requested clarity as to what might cause Ofgem to be convinced of the rationale for the WNBI at the first gateway assessment but then not at the second gateway assessment. We consider that the factors which could influence whether developing the WNBI at the construction stage will be project specific. We are keen to work with developers and the NETSO to ensure that the likelihood and impact of potential stranding risks are appropriately considered by the proposed design solution submitted to us at the first gateway assessment.
- A3.71. Responses to the December consultation also noted the risk of confidentiality issues on commercial data and the use of data around negotiation of commercial positions. Particularly there were concerns from developers about the potential for confidential information being passed on to other developers who are essentially their 'competitors'. Respondents identified the NETSO as having a key role in mitigating data confidentiality issues, and we are keen to work with the NETSO to address any potential barriers to information sharing.

Other impacts (including implementation costs)

- A3.72. Our proposals represent incremental changes to the current competitive offshore regime. For developer-led WNBI we do not consider that there are substantial implementation costs associated with our proposals. However we do consider that the introduction of voluntary gateway assessments would incur additional costs in running a tender exercise. However, where a gateway assessment takes place we would expect the cost of the gateway assessments to be relatively small in comparison to potential benefits of coordination. We will seek to recover these costs from the appropriate parties. We will set this out in our cost recovery methodology.
- A3.73. Coordination of offshore transmission assets will have some specific impacts on generators' investment decisions. Under a generator build option for the construction of transmission assets, generators are still able to control the construction and commissioning of the connection assets, and effectively manage overall project risk if they perceive that is the best approach for their project.
- A3.74. However, the requirement for user commitment for GFAI may make financial investment decisions more difficult. This would be mitigated by the fact that generally developers are likely to have the ability to determine whether to pursue GFAI and the requirement for user commitment ensure they face the right signals in making that decision. We continue to consider that the party or parties for whom the assets are being constructed are best placed to judge whether the potential benefits outweigh the risks.
- A3.75. It should be noted that as the current user commitment arrangements sit in section 15 of the CUSC, we expect that changes to these arrangements to accommodate GFAI would be made through normal code governance procedures. However, we expect that additional time and resources will need to be committed in order to develop the required changes in a timely manner.
- A3.76. There may also be an impact on a generator's project of undertaking WNBI. The introduction of a voluntary gateway assessment process will support developers in undertaking offshore WNBI where this represents an economic and efficient response to wider transmission network requirements. In a gateway assessment, we will assess the rationale (supported by a needs case) for including WNBI in the scope of work to be carried out. Where we are satisfied this is in the best interests of consumers, we will commit to not reexamining the rationale in the cost assessment undertaken as part of the subsequent tender exercise, provided the assumptions and inputs to the gateway assessment process remain valid.
- A3.77. Our proposals seek to mitigate the increased risk perceived around cost recovery, by giving a route to greater certainty in this area. The developer has a role in considering the right network solution in discussion with the system operator. It is also open to developers to select OFTO build for the construction of the transmission assets.
- A3.78. In addition, we are undertaking further policy work on a non developer-led route, for situations where a generator may be unwilling or unable to develop or construct the transmission assets.

A3.79. There is a technology risk from new technologies which could be involved in coordinated solutions and that could increase risk for generation projects. Generators' involvement in offshore system planning should help mitigate this. For WNBI, we would also consider technology risks as part of a gateway assessment.

Post-implementation review

- A3.80. The December consultation set out our proposed framework to support the delivery of economic and efficient coordinated transmission assets, and this policy statement sets out some of our decisions on that framework, informed by stakeholder responses. If implemented, we anticipate that we would assess the effectiveness of our framework through routine monitoring and regular engagement with parties involved in the offshore regime.
- A3.81. In this policy statement, we have set out our proposed way forward in two of the categories on which we consulted in December 2012. In order for us to be confident that consumers are protected we will monitor and review developments in the CUSC modification process in relation to extending user commitment arrangements. We would look to industry and NGET (as the CUSC Administrator) to bring forward suitable CUSC modification proposals.
- A3.82. We have also decided to implement a voluntary gateway assessment process to support offshore developers in taking forward investment in offshore transmission which will benefit the wider transmission network as a whole. We will engage NGET and developers further as we work to implement the process.

Conclusion

- A3.83. Following stakeholder feedback and further analysis, we have reached policy decisions on GFAI and developer-led wider works. Specifically, at this stage:
 - we consider that the connection offer process remains a key method to identify the need for, and type of, investment to support coordination
 - we consider developers should retain the choice to undertake preliminary WNBI works for coordination under developer-led WNBI
 - we consider that developers should retain the choice of build for developer-led WNBI
 - for GFAI, the generator who will benefit from the GFAI is best placed to manage, and hence should retain, the stranding risk. We would look to industry and NGET (as the CUSC Administrator) to bring forward suitable CUSC modification proposals
 - for WNBI, we have decided that a voluntary gateway assessment(s) approach should be taken forward



- we consider that the high level criteria we proposed in our March and December 2012 consultations remain suitable for assessing gateway assessment submissions.
- A3.84. The decisions set out in this policy statement, seek to ensure that the benefits of coordination are captured and, where possible, make only incremental changes to the current offshore regulatory regime.
- A3.85. In this impact assessment we have set out how our policy decisions help to deliver benefits to consumers, while supporting competition and sustainable development. Where our decisions could give rise to unintended consequences, we are taking steps to mitigate unnecessary risks.

Appendix 4 - Feedback Questionnaire

A4.1 Ofgem considers that stakeholder engagement and consultation is at the heart of good policy development. We are keen to consider any comments or complaints about the manner in which this policy statement has been communicated. In any case we would be keen to get your answers to the following questions:

- 1. Do you have any comments about the overall process, which was adopted for this policy statement?
- 2. Do you have any comments about the overall tone and content of the policy statement?
- 3. Was the policy statement easy to read and understand, could it have been better written?
- 4. To what extent did the policy statement's conclusions provide a balanced view?
- 5. To what extent did the policy statement make reasoned recommendations for improvement?
- 6. Please add any further comments.
- A4.2 Please send your comments to:

Andrew MacFaul

Consultation Co-ordinator Ofgem 9 Millbank London SW1P 3GE andrew.macfaul@ofgem.gov.uk

Appendix 5 – Glossary

А

Anticipatory investment

We defined this in the March 2012 consultation as investment that goes beyond the needs of immediate generation, reflecting the needs created by a likely future generation project or projects. In our July 2012 open letter we subsequently split investment that could support coordination into GFAI and WNBI (as defined below).

Authority

The Gas and Electricity Markets Authority.

В

BCA

Bilateral Connection Agreement.

BETTA

British Electricity Trading and Transmission Arrangements.

С

CION

Connection Infrastructure Options Note.

CMP 192

Connection and Use of System Code Modification Proposal 192 (CMP192) – Arrangements for Enduring User Commitment.

CUSC

Connection and Use of System Code.

D

DECC

Department of Energy and Climate Change.



Developer

Section 3(1) of the Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations 2013 defines 'Developer' as 'any person within section 6D(2)(a) of the Electricity Act 1989' (the 1989 Act). Section 6D(2)(a) of the 1989 Act defines such person as 'the person who made the connection request for the purposes of which the tender exercise has been, is being or is to be, held'. In practice, such person is the entity responsible for the construction of the generation assets and, under generator build, the transmission assets.

Е

Electricity Act

The Electricity Act 1989.

Enduring regime

The regulatory regime for future offshore transmission licensing.

G

Gateway assessment

An Ofgem assessment of the rationale for developer or non developer-led WNBI being taken forwards at the preliminary and/or construction works stages.

GB

Great Britain.

Generator build

Under the generator build option, the developer will take responsibility for all aspects of preliminary work, procurement and construction of the transmission assets. A prospective OFTO will bid their approach to the financing, operation, maintenance and decommissioning of the transmission assets, and a Tender Revenue Stream value that includes the costs associated with carrying out these activities

Generator-Focused Anticipatory Investment (GFAI)

Anticipatory investment that provides transmission capacity for specific future offshore generation projects.

GW

Gigawatt.

Н

HVDC

High Voltage Direct Current.



Ι

Industry codes

The Industry Codes include the Connection and Use of System Code (CUSC), the Balancing and Settlement Code (BSC), the Grid Code, the System Operator – Transmission Owner Code (STC), the Distribution Connection and Use of System Agreement (DCUSA) and the Distribution Code.

Interface

The substation which connects the offshore transmission assets to the onshore transmission system.

Integrated Transmission Planning and Regulation Project (ITPR)

A project launched by Ofgem in March 2012, considering how Great Britain's network planning and delivery arrangements will facilitate a future integrated system for onshore and offshore transmission and interconnection.

L

Low regret WNBI

Low cost WNBI that is expected to have:

- low risk of stranding of the WNBI and/or
- strong benefits of the WNBI in terms of enabling potential future savings or maintaining future network flexibility. This could include low cost preliminary works which allow the option for taking forward WNBI to be kept open during the preliminary works stage.

Ν

Needs case

In this consultation, needs case covers the economic case for investment, considering whether it would be economic and efficient in the context of the electricity transmission network as a whole, and the uncertainties that exist around the offshore transmission anticipatory investment needs case.

NETS

National Electricity Transmission System.

NETSO

National Electricity Transmission System Operator.

NGET

National Grid Electricity Transmission.



0

Offshore Transmission Coordination Project (OTCP)

A project launched jointly by Ofgem and DECC to assess the potential costs, risks and benefits that may arise from the development of a more coordinated offshore and onshore electricity transmission network.

Ofgem

Office of Gas and Electricity Markets.

OFTO

Offshore Transmission Owner.

OFTO build option

Under the OFTO build option, the developer would obtain a connection offer and undertake high level design and preliminary works. A prospective OFTO would bid their approach to the procurement, financing, construction, operation, maintenance and decommissioning of the transmission assets, and the costs associated with carrying out these activities. Following a competitive tender process administered by Ofgem, the successful bidder will be granted an OFTO licence.

OFTO licence

The licence awarded following a tender exercise, allowing an OFTO to own and operate the offshore transmission assets. The licence sets out an OFTO's rights and obligations as the offshore transmission asset owner.

Ρ

Phase

A grouping of transmission assets to be built out over a period of time, where the grouping is defined by certainty of build out (for example in relation to a Final Investment Decision and/or key contractual commitments). A phase may include stages.

Preliminary works

Preliminary works are defined in the Tender Regulations as all necessary works obtained or to be obtained by a developer in relation to the development of the proposed transmission assets, prior to the grant of an offshore transmission licence to a successful bidder in respect of an OFTO build qualifying project, for example, without limitation, works in relation to planning permissions, consents, wayleaves, easements, leases, topography and sea bed surveys, environment and archaeological surveys, impact assessments and professional fees related to obtaining the necessary works.

R

Radial connection

A single, standalone connection from one offshore windfarm to shore.

S

SQSS

System Security and Quality of Supply Standard.

Stage

Transmission assets built out incrementally in a discrete group within a phase.

Stranding risk

The risk of a transmission asset being temporarily or permanently underutilised. In this document, stranding risk includes partial stranding risk resulting from the underutilisation of assets which have been oversized, and where the expected later generation for which the assets have been oversized does not connect.

Strategic wider works (SWW)

Transmission reinforcement works planned by an onshore transmission owner that are designed to reinforce or extend the National Electricity Transmission System in order to make it compliant with the terms of the National Electricity Transmission System Security and Quality of Supply Standard (or such other standard of planning and operation as Ofgem may approve from time to time).

Т

Tender Regulations

The Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations 2013 set out the legal framework and powers for the Gas and Electricity Markets Authority to run a competitive tender process for offshore transmission projects.

Tender Revenue Stream

The payment an OFTO receives over its revenue to term.

Transfer value

The value of the transmission asset, as determined by Ofgem, when it passes from the developer to the OFTO, either ahead of or following construction depending on whether the generator chooses generator or OFTO build.

Transmission Network Use of System (TNUoS)

Charging arrangements that reflect the cost of installing, operating and maintaining the transmission system.

Transmission owner (TO)

An owner of a high-voltage transmission network or asset.



Transmission assets

Transmission assets are defined in Paragraph 1(3) (a) of Schedule 2A to the Electricity Act 1989 as, 'the transmission system in respect of which the offshore transmission licence is (or is to be) granted or anything which forms part of that system'.

Transitional regime

Projects within the transitional regime means projects were required to meet the qualifying project requirements set out in the Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations 2010 by 31 March 2012. Any offshore transmission infrastructure project which meets the qualifying requirements after 31 March 2012 will be considered part of the Enduring regime.

W

Wider Network Benefit Investment (WNBI)

Investment which has wider network benefits by serving to mitigate the need for separate reinforcements of the onshore transmission network.