

# Offshore Electricity Transmission: Updated proposals for the enduring regime

## Updated proposals

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**Contact:** Giedre Kaminskaite-Salters

**Team:** Offshore Enduring

**Tel:** 020 7901 7493

**Email:** [Offshore.Enduring@ofgem.gov.uk](mailto:Offshore.Enduring@ofgem.gov.uk)

### Overview:

This document sets out our minded-to positions on the tender arrangements for both Generator build and Offshore Transmission Owner (OFTO) build options under the enduring regime for offshore transmission. Whilst provisions already exist to enable the running of both Generator build and OFTO build tender exercises, on the basis of these positions we now intend to commence work on revising the Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations 2010 in order to have revised regulations in place by the end of 2012. In addition, this publication sets out further policy proposals and seeks stakeholder feedback on several aspects of the OFTO licence under the enduring regime and on running tender exercises for phased/staged projects. Following responses from the stakeholder community, we intend to carry out further policy work in these areas later this year.

Where questions are raised in this document, we welcome responses by 17 July 2012.

## Context

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Electricity generated from offshore wind represents a key pillar of the government's target to provide 15% of the United Kingdom's (UK's) energy needs from renewable sources by 2020. As part of the strategy to deliver this target, Ofgem<sup>1</sup> and the Department of Energy and Climate Change (DECC) have developed a regulatory regime for the construction and operation of offshore transmission assets. The legal framework for the regime was established in June 2009, and the current Tender Regulations came into effect in July 2010<sup>2</sup>. The regime is being delivered in two parts: transitional and enduring<sup>3</sup>. The core premise of the regime is that Offshore Transmission Owners (OFTOs) are selected and licensed through a competitive tender process run by Ofgem. Over £250m has already been invested, with over £2bn likely to follow through the transitional tender exercises alone. For the enduring regime the investment opportunity is expected to be significantly larger, with up to £14bn worth of assets potentially being tendered between now and 2020, and with ongoing investment expected thereafter. The enduring regime is also operating in the context of the proposed development of increasingly complex, integrated and coordinated offshore grid networks in the UK and, more broadly, the European Union (EU).

On the basis of our successful experience of running transitional tender exercises to date, and the existing Tender Regulations, we are ready to start running tender exercises as and when required by offshore generators' project timelines. However, we consider that the current arrangements could benefit from further refinement and enhancement, to ensure they take on board lessons learnt from the transitional regime and facilitate the handling of increasingly complex and large future transactions. With that objective in mind, we consulted, in December 2011, on tender exercises under the enduring regime. Having considered feedback received from that consultation, as well as having carried out further policy analysis, we have set out in this document our minded-to positions on the enduring tender arrangements for the Generator build and OFTO build options. This will enable us to commence work on revising the Tender Regulations - a process we aim to complete by the end of 2012.

Separately, we have used this opportunity to seek stakeholder feedback on a number of areas relating to the OFTO licence for the enduring regime, and to running tender exercises for phased/staged projects. The valuable feedback received from the stakeholder community will then enable us to carry out further policy work to finalise all aspects of the licence and the commercial framework during the course of 2012-2013.

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<sup>1</sup> For ease of reference, Ofgem is used to refer to Ofgem, Ofgem E-Serve and the Gas and Electricity Markets Authority (The Authority) in this document.

<sup>2</sup> The Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations 2010.

<sup>3</sup> Transitional projects were required to meet the qualifying project requirements set out in the Tender Regulations by 31 March 2012. Projects that did not meet these requirements by the relevant date are subject to the enduring regime.

## Associated documents

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- [Offshore Transmission - Consultation on potential measures to support efficient network coordination, March 2012 \(Reference number 26/12\)](#)
- [DECC/Ofgem Offshore Transmission Coordination Project Conclusions Report, March 2012](#)
- [Offshore Electricity Transmission: Consultation on tender exercises under the enduring regime, December 2011 \(Reference number 178/11\)](#)
- [Government response to offshore transmission consultations, December 2010 \(Reference number 157/10\)](#)
- [Offshore Electricity Transmission: Implementing further refinements to the enduring regime, November 2010 \(Reference number 137/10\)](#)
- [Providing additional flexibility in the enduring regulatory regime for offshore electricity transmission: Initial joint decision statement, October 2010](#)
- [Offshore Electricity Transmission: Further consultation on the Enduring Regulatory Regime, August 2010 \(Reference number 113/10\)](#)
- [Offshore Electricity Transmission: Consultation on the Enduring Regime, December 2009 \(Reference number 157/09\)](#)
- [The Electricity \(Competitive Tenders for Offshore Transmission Licences\) Regulations, 2010](#)
- [Offshore Electricity Transmission: Tender Rules for the second transitional tender round, November 2010](#)
- [Transmission Licence Standard Conditions](#)
- [Generic Offshore Transmission Owner \(OFTO\) Licence \(Version 1.2\), December 2011](#)
- [Guidance on the Offshore Transmission Owner Licence for Transitional Tender Round 2, December 2011](#)
- [The Electricity and Gas \(Internal Markets\) Regulations, 2011](#)

NB Prior to the publications listed above, Ofgem and DECC consulted extensively on the regime. All documents relating to those consultations are available on the Ofgem website.

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## Executive summary

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Offshore transmission plays an integral part in attaining the government's target to provide 15% of the United Kingdom's (UK's) energy needs from renewable sources by 2020. To facilitate this objective, 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. The legal framework for the regime was established in June 2009, and the current Tender Regulations came into effect in July 2010<sup>4</sup>. The regime is being delivered in two parts: transitional and enduring. Over £250m has already been invested, with over £2bn likely to follow through the transitional tender exercises alone. Projects qualifying after 31 March 2012 will fall under the enduring regime, which is expected to deliver an investment opportunity of up to £14bn to 2020, with ongoing investment potential expected thereafter.

The enduring regulatory regime to enable the tendering of transmission assets is currently in place. Moreover, Ofgem, together with windfarm developers, the bidding community and other stakeholders such as the National Electricity Transmission System Operator (NETSO) and the Crown Estate, have extensive experience of tendering for transmission assets under the transitional regime to date. The necessary mechanisms and processes are therefore already in place to commence enduring tender exercises in line with generators' expected project timelines. However, given the size of the investment opportunity, as well as the expected complexity of the assets going forward, we are keen to ensure that the enduring regime is efficient, effective and supports the interests of generators, OFTOs and, most importantly, consumers.

We consulted on potential refinements to the enduring regime in December 2011<sup>5</sup>. We reviewed stakeholder feedback received and carried out further detailed policy work, including with technical advisers. This document sets out our minded-to positions in relation to tender exercises under the enduring regime, for both Generator and OFTO build options. These positions will now act as a basis for our work on revising the Tender Regulations, which we expect to be updated by the end of 2012.

The sections below provide a brief overview of the final proposals set out in this document. Moreover, they outline other matters covered by this publication as well as some of the further policy development areas that will be taken forward during the course of 2012.

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<sup>4</sup> The Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations 2010.

<sup>5</sup> Offshore Electricity Transmission: Consultation on tender exercises under the enduring regime, December 2011, Ref (178/11): <http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=42&refer=Networks/offtrans/pdc/cdr/Cons2011>

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## **Minded-to positions on enduring tender exercises**

In this document, we set out a number of minded-to positions on which we had sought feedback from the stakeholder community in our previous correspondence.

For example, under the Generator build option, the tender exercises under the enduring regime will closely resemble the approach taken under the transitional regime, which has worked effectively to date, with minor changes such as the need for added flexibility in running the Qualification to Tender (QTT) stage.

As regards the OFTO build option, generators have requested further information in relation to potential refinements to this build option. We have seen increasing interest from generators, the supply chain, funding market and sponsors in relation to the OFTO build option. We consider that there is good evidence that the parties to be involved in OFTO build tender exercises would have the financial strength and delivery capability to deliver transmission assets to the required timelines, cost and quality and thereby ensure the timely delivery of generation capacity to the benefit of consumers.

Consequently, this document provides further information and sets out a number of minded-to positions on the OFTO build option. This includes a confirmation that OFTOs will be responsible for the detailed design and procurement (as well as construction, operation and decommissioning) of transmission assets. We recognise that OFTO build tender exercises will require close cooperation between Ofgem and generators. We are therefore grateful to those generators who have sought to engage actively with us to date, and would encourage others to continue coming forward for more detailed discussions.

As set out above, the minded-to positions relating to enduring tender exercises will now act as a basis for revising the Tender Regulations with a view to having a revised regulatory framework in place by the end of 2012.

## **Policy proposals on OFTO licence changes**

In addition to the minded-to positions on enduring tender exercises, this document also sets out our policy proposals on potential improvements to the enduring licence and related aspects of the commercial framework. This includes, for example, potential enhancements to the availability incentive under both build options. Feedback received will inform our thinking on the revised OFTO licence for the enduring regime; we intend to take this work forward during the course of 2012 and early 2013.

## **High level principles on phased and/or staged projects**

In our December 2011 consultation we set out our proposed approach to running tender exercises for phased and/or staged projects.

Within this document we set out the findings of analysis undertaken by Ofgem and our external technical advisers on the impacts of our baseline approach for tendering large phased and/or staged projects (such as some Crown Estate Round 3 projects). The findings of the analysis have enabled us to propose a set of principles for treating staged and phased projects under the enduring regime. However, we also set out within this document an intent to explore some aspects



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of the proposed treatment of phased/staged projects further over the course of 2012.

### **Further policy development areas**

Chapter 5 of this document sets out the next steps in the implementation of the enduring regime, including the development of the revised Tender Regulations and work on the OFTO licence for both Generator and OFTO build options. In addition, this document outlines a number of specific policy areas on which we intend to carry out further development during the course of 2012. Those areas include: duration of the revenue stream, approach to refinancing gains, and revenue stream indexation. In addition, we intend to share further information on our approach to cost assessment, including for example a consideration of the treatment of transmission losses.

# 1. The enduring regulatory regime for offshore electricity transmission

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## Chapter Summary

This chapter outlines the purpose of, and background to, this document. It sets out the scope of our minded-to positions and further proposals within the rest of this document and provides an overview of key interdependencies.

### Purpose of this document

- 1.1. The purpose of this document is to set out our minded-to positions relating to enduring tender exercises for both the Generator build and Offshore Transmission Owner (OFTO) build options. On the basis of these positions, we now intend to commence work on revising the Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations 2010 (the Tender Regulations), with a view to having a revised set of regulations in place by the end of 2012.
- 1.2. We have also used this opportunity to set out a number of further policy proposals and seek stakeholder feedback on certain aspects of the OFTO licence under the enduring regime and on certain other aspects of the commercial framework, as well as high level principles for tendering phased and/or staged projects. Responses received will inform further policy development in these areas.

### Structure of this document

- 1.3. Each chapter in this document sets out our proposed approach, as well as questions on particular areas where views are being sought. This document has five chapters.
  - This chapter outlines the purpose of, and background to, this document.
  - Chapter 2 sets out our minded-to positions and proposals for the Generator build option.
  - Chapter 3 sets out our minded-to positions and proposals for the OFTO build option.
  - Chapter 4 considers transmission assets that are likely to be constructed in phases and/or stages.
  - Chapter 5 sets out our next steps.

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- 1.4. Additional information is available in the appendices.

### **Background**

- 1.5. The legal framework for the offshore electricity transmission regime was established in June 2009 and the current Tender Regulations came into effect in July 2010. Ofgem is currently working within that framework to appoint OFTOs through competitive tenders for offshore transmission licences.
- 1.6. The regime is being delivered in two parts: a transitional and an enduring regime. The transitional regime applies to assets constructed, or currently under construction, by generators and allows these generators to transfer ownership of completed transmission assets to a licensed OFTO, appointed through a competitive tender process. Projects seeking to qualify for tender exercises under the transitional regime were required to meet the qualifying project requirements set out within the Tender Regulations by 31 March 2012.
- 1.7. All projects qualifying for tender exercises after 31 March 2012 are subject to the enduring regime. Currently, proposed transmission assets within over 20 sites or zones licensed by the Crown Estate and worth up to £14bn are likely to seek qualification for the enduring regime between now and 2020. These include projects relating to the nine Crown Estate Round 3 zones. These projects have Bilateral Connection Agreements (BCAs) in place with the National Electricity Transmission System Operator (NETSO) to deliver up to 32GW of additional capacity.
- 1.8. Developments in the offshore transmission regime have been documented in a series of publications dating back to 2008. This document builds on the decision in December 2010 to introduce additional flexibility into the enduring regime via introduction of the Generator build option.
- 1.9. In December 2010 the government published details of the changes to be made by the Secretary of State to the Connection and Use of System Code (CUSC), the System Operator-Transmission Owner Code (STC) and the Grid Code to implement the Generator build option under the enduring regime and ensure a robust regulatory framework across all build options under the enduring regime. The changes to the CUSC and the Grid Code took effect on 31 December 2010. The changes to be made to the STC are currently under review. National Grid Electricity Transmission (NGET) submitted a change proposal to the STC Committee on 20 November 2011. A working group is currently analysing the change proposal and we expect it to be submitted to the Authority for decision in late August 2012.
- 1.10. Since implementation of the changes to the CUSC and the Grid Code in 2010, NGET has undertaken a consistency check in respect of both codes and has identified some necessary further minor changes. Change

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proposals in respect of the CUSC<sup>6</sup> and the Grid Code<sup>7</sup> were approved by the Authority on 30 March 2012 and 30 April 2012 respectively.

- 1.11. Having previously committed to considering further refinements to the enduring regime, our first consultation on these refinements was published in December 2011. This document builds upon that consultation.
- 1.12. All the Ofgem publications discussed in this section are available on our website and are also signposted within the Associated Documents section at the start of this document.

### **Overview of the enduring regulatory regime**

- 1.13. As set out in June 2009, the objectives of competitive tenders for offshore transmission licences are:
  - the delivery of fit for purpose transmission infrastructure to connect offshore generation
  - provision of certainty and best value to consumers through the competitive process
  - attracting new entrants to the sector.
- 1.14. The enduring regime involves a series of common features, listed below, irrespective of the build option under which an OFTO is appointed.
  - OFTOs will be appointed and granted a transmission licence through a competitive tender process run by Ofgem under the Tender Regulations.
  - Codes and technical rules require the development of infrastructure to a consistent set of standards.
  - OFTOs will be required, through licence obligations and industry codes, to operate systems efficiently.
  - Long term revenues and incentives will be provided under the OFTO licence to provide certainty for industry participants. Project-specific licence conditions, including any performance obligations, will be determined by Ofgem as part of the tender exercise for that project.

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<sup>6</sup> Connection and Use of System Code (CUSC) CMP192: National Grid proposal for enduring user commitment arrangements, March 2012:  
<http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=80&refer=Licensing/ElecCodes/CUSC/Amend>

<sup>7</sup> Grid Code F/11: Generator Led Due Diligence Review, April 2012:  
<http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=56&refer=Licensing/ElecCodes/GridCode/Mods>

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1.15. The broad stages of transmission asset development, as they relate to the Generator build and OFTO build options set out within Chapters 2 and 3 of this document, are summarised below (and are also shown, later in the document, in Diagram 1).

- **Connection offer:** any generator wishing to connect to the National Electricity Transmission System (NETS) must make an application in writing to the NETSO, under the CUSC. When an offshore generator seeks connection to the NETS, it will be given a Generator build offer, unless it indicates a preference for an OFTO build offer.
- **High level design:** the generator will produce a concept design as part of its pre-construction works. This will set out the outputs required based on the generator's user requirements, the connection agreement with the NETSO, and the generator's pre-construction works. Under the OFTO build option this would form part of the tender specification against which bidders would develop their detailed asset design (see paragraphs 3.24-3.29).
- **Pre-construction:** refers to the works undertaken by the generator under both build options before construction of the transmission assets, including the Environmental Impact Assessment (EIA), land acquisition and acquisition of property rights and consents. These activities are described further in Chapter 3.
- **Procurement:** refers to agreement with the supply chain on the specification for works, securing manufacturing capacity and negotiating and signing construction contracts with suppliers.
- **Construction:** refers to the manufacture of transmission assets following initial procurement of suppliers, and the period through to completion of construction of the transmission assets. It also includes commissioning of those assets as a transmission system or part of a transmission system.
- **Operations and Maintenance (O&M):** refers to the ongoing operation, maintenance and, eventually, decommissioning of the transmission assets by the OFTO.

### Overview of build options

#### *Early OFTO build option*

1.16. In December 2010, we set out two OFTO build options, available to generators under the enduring regime.

1. Early OFTO build – The OFTO would be appointed following initial scoping work by the generator, and would be responsible for all

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aspects of pre-construction, consenting, procurement, construction, operation and decommissioning of the transmission assets.

2. Late OFTO build – The OFTO would be appointed to deliver the procurement of the transmission assets and construction elements of the build programme (as well as operation and decommissioning), after a generator has completed any pre-construction works, including consenting.
- 1.17. In December 2011, we consulted on our approach to developing the OFTO build option. We proposed to focus more immediately on a single OFTO build option, which refines the late OFTO build option. The majority of stakeholder feedback was supportive of this approach. Much of this feedback reflected the reasoning we had set out, namely that, following comments from industry, early OFTO build was unlikely to be an attractive option to the market at this stage because of the higher uncertainty and risk attached to an early OFTO build project.
- 1.18. A number of stakeholders expressed a view that if a more coordinated offshore network design starts to emerge then the early OFTO build option should not be ruled out for some types of asset. Responses generally agreed however that this was not as an immediate priority as the late OFTO build and Generator build options.
- 1.19. Our focus in this document therefore remains on the single OFTO build option outlined in December 2011 and the Generator build option. We recognise that early OFTO build could be considered in relation to some of the coordinated network design scenarios outlined in our March 2012 consultation on potential measures to support efficient network coordination (March 2012 consultation)<sup>8</sup>, particularly where the assets will have wider network use. We will consider the application of this option further as part of our ongoing work on offshore network coordination (for further information on offshore network coordination see paragraphs 1.29-1.32).

### *Generator build and OFTO build options*

- 1.20. Diagram 1 illustrates the indicative stages in the development of transmission assets and shows in broad terms how the tender processes for Generator build and OFTO build relate to these stages.

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<sup>8</sup> Offshore Transmission - Consultation on potential measures to support efficient network coordination, March 2012, Ref (26/12): <http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=12&refer=Networks/offtrans/pdc/cdr/2012>

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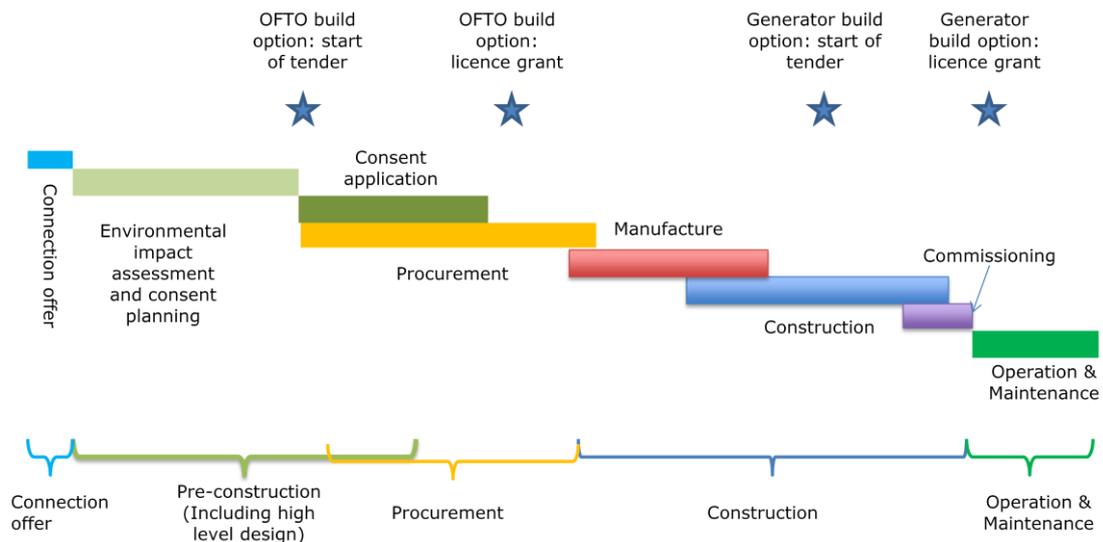


Diagram 1 - Indicative stages in the development of the transmission assets

- Generator build** –The generator will obtain the connection agreement and take responsibility for all aspects of design, pre-construction, procurement and construction of the transmission infrastructure. Transfer of ownership to an OFTO will take place after the generator has completed construction. The OFTO will operate, maintain and decommission the transmission assets. Chapter 2 sets out details of the Generator build option.
- OFTO build** –The generator will obtain the connection agreement and undertake high level design and pre-construction activities. The OFTO will undertake detailed design work and procurement with suppliers, negotiate and finalise construction contracts, and will deliver the build programme. The OFTO will operate, maintain and decommission the transmission assets. Chapter 3 sets out details of the OFTO build option.

### Interdependencies

#### *European Union (EU) Third Energy Package*

1.21. The government has implemented the EU Third Energy Package into Great Britain's (GB's) legislation through the Electricity and Gas (Internal Markets) Regulations 2011 (the Third Package Regulations). The measures of the package aim to ensure that the benefits of a competitive energy market can be realised, and as such its objectives are well aligned with those of the enduring regime for offshore electricity transmission. A key requirement of the package is ownership unbundling – the separation of transmission interests (ownership and operation of transmission systems) from generation, production and supply activities. The Third Package Regulations have amended the Electricity Act 1989 to include the

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requirement for electricity transmission licensees to be certified as independent.

- 1.22. The Third Package Regulations have designated the Authority as the body with the responsibility for administering the certification process. OFTO licensees need to be certified by the Authority as complying with the full ownership unbundling requirements. We are currently reviewing the applications for certification from all current OFTOs. We have reached preliminary decisions to certify a number of these applications. The European Commission has responded positively on our preliminary decisions<sup>9</sup>.
- 1.23. We encourage any interested parties to be aware of the certification requirements and have met with a range of stakeholders over the last few months to explain the unbundling requirements and the certification process. More information about certification can be found in our open letter published on 10 November 2011<sup>10</sup>.

### *Commissioning and full commencement*

- 1.24. In our December consultation, we discussed the government's intentions in relation to further commencing the regulatory regime. We also noted an issue raised by generators regarding the commissioning of offshore transmission assets under the Generator build option following further commencement.
- 1.25. We recognise the strong preference of generators to be able to convey electricity on these assets for a period prior to transfer of the assets to a licensed OFTO. We understand that some conveyance of electricity may be necessary in order to commission the transmission assets, which in turn facilitates the acceptance of the assets by an OFTO. We recognise that it is also desirable for renewable electricity to keep flowing over these assets during the finalisation of commercial activities to reach financial close and grant of a transmission licence to an OFTO.
- 1.26. The Department of Energy and Climate Change (DECC) and Ofgem are working together to develop a solution to these concerns, which balances the preference for generators to be able to commission their transmission assets, under the enduring Generator build option, with the need for ensuring that generators transfer the transmission assets to the OFTO in a timely manner.
- 1.27. The Queen's Speech of May 2012, which opened the current parliamentary session, confirmed that secure, clean and affordable energy is a key priority for government. The forthcoming Energy Bill will legislate for

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<sup>9</sup>[http://ec.europa.eu/energy/gas\\_electricity/interpretative\\_notes/doc/certification/certifications\\_decisions.pdf](http://ec.europa.eu/energy/gas_electricity/interpretative_notes/doc/certification/certifications_decisions.pdf)

<sup>10</sup>Certification of Transmission System Operators (TSOs) under the ownership unbundling requirements of the Third Package, November 2011:  
<http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=95&refer=Europe>

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Electricity Market Reform (EMR), implementing the conclusions of the Ofgem Review, creation of the Office for Nuclear Regulation, and a small number of delivery critical measures. DECC proposes that one of these measures will look to address the concerns raised by generator developers regarding the commissioning of transmission assets. The Energy Bill was published in draft on 22 May 2012.

- 1.28. We are continuing to consider how existing transitional projects should be treated with a view to recognising their transitional nature whilst also ensuring they are transferred as soon as is reasonably practicable. It remains the basis of DECC and Ofgem policy, and the efficient running of the competitive tender process, that both transitional and Generator build transmission systems are transferred to an OFTO as soon as possible after the assets have been constructed and are available for use.

### *Coordinated network development*

- 1.29. In March 2012 we published a consultation on potential changes to the offshore regulatory framework to support efficient network coordination. This invited views on:
- the treatment of Anticipatory Investment (AI), in order to support development of an efficient offshore network for consumers whilst providing project developers with clarity on their ability to recoup economically incurred costs for such infrastructure
  - potential improvements to offshore network planning documents published by the NETSO, such as the Offshore Development Information Statement (ODIS), a key planning document that provides project developers with a long-term view of offshore network planning.
- 1.30. A joint DECC/Ofgem Offshore Transmission Coordination Project (OTCP) conclusions report was published alongside our March 2012 consultation. This described six key barriers to coordination, as identified by stakeholders through the Offshore Transmission Coordination Group (OTCG), and set out high level proposals for how these may be dealt with.
- 1.31. The NETSO has since published its own consultation proposing changes to, and an amalgamation of, the electricity planning documents, including the ODIS. We will continue to work with the NETSO to ensure changes reflect industry needs.
- 1.32. See paragraph 5.6 for further details on potential interdependencies between coordinated network development and the arrangements set out in the remainder of this document.

### *Competition in onshore transmission*



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- 1.33. As part of the new RIIO (Revenue = Incentives + Innovation + Outputs) model of price control, we are developing a framework to enable third parties to bid to build, own and operate parts of the onshore electricity transmission system. We anticipate that, where appropriate, the framework will build on the principles set out within the offshore regime.
- 1.34. In continuing to develop the framework to allow competition in onshore electricity transmission we intend to prioritise further work on what benefits such competition could bring. This will inform the subsequent development of the detailed framework. We intend to publish further work on the benefits of competition later this year, and will provide more information on our timetable for implementation at that time. Please see the open letter on our website for further details<sup>11</sup>.

### Responding to this document

- 1.35. We would welcome comments from respondents on all issues in this publication, although particular issues on which we are seeking feedback are highlighted in the relevant chapters. We would also be happy to discuss the questions raised in the document with stakeholders and interested parties.
- 1.36. We welcome responses by **17 July 2012**. All responses should be sent to: [Offshore.Enduring@ofgem.gov.uk](mailto:Offshore.Enduring@ofgem.gov.uk).

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<sup>11</sup> RIIO-T1: Implementing competition in onshore electricity transmission – update, April 2012:  
<http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=192&refer=Networks/Trans/PriceControls/RIIO-T1/ConRes>

## 2. Generator build option

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### Chapter Summary

This chapter considers the key elements of the Generator build option under the enduring regime. It sets out that the Generator build option will closely resemble the approach successfully implemented for transitional tender exercises, but proposes some refinements, particularly in relation to the OFTO licence.

### Question box

Q2.1 Are there any areas of the OFTO of Last Resort process on which you feel further clarity is needed?

Q2.2 Do you agree that option 2 is the most appropriate enhancement for the availability incentive to incentivise OFTOs to plan outages with regard to maximising exported energy? If not, which option offers the optimal way forward for the enduring regime?

### High level overview

- 2.1. Under the Generator build option the generator will take responsibility for all aspects of pre-construction, procurement and construction of the transmission assets. A prospective OFTO (appointed following a competitive tender exercise run by Ofgem) will bid their approach to the financing, operation, maintenance and decommissioning of the transmission assets, and a Tender Revenue Stream (TRS) value that includes the costs associated with carrying out these activities.
- 2.2. This chapter focuses on the key arrangements and considerations for Generator build. It builds on our previous publications on the enduring regime, including in particular the proposals within our December 2011 consultation, by setting out a range of minded-to positions, along with proposals on a limited number of further areas for consultation.

### Interactions between participants

- 2.3. In our last consultation on the enduring tender arrangements we asked whether there should be any restrictions on interactions between parties before or during a tender exercise in order to ensure fair and effective competition and best value for consumers.
- 2.4. With respect to interactions between generators and bidders, the responses to the consultation were broadly in favour of maintaining rules similar to those used for transitional tender exercises. We are minded to therefore continue with the arrangements whereby generators and bidders

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are not permitted to contact each other in relation to any aspect of a tender exercise during a tender exercise unless permitted by Ofgem<sup>12</sup>.

- 2.5. We note that interactions between generators and bidders may occur prior to the commencement of a tender exercise. Where such interactions occur we would expect generators and bidders to be transparent about any such interactions (for example by disclosing all relevant information during the subsequent tender exercise) and that the outcomes of these interactions would not prejudice the competitive arrangements during a tender exercise - any collusion or anti-competitive behaviour between a generator and bidder will continue to amount to an event of disqualification from a tender exercise, as stipulated in the Tender Regulations.
- 2.6. We are minded that any entity (including the generator) involved in the development, construction or maintenance of the transmission assets, who wishes to be part of a bidding consortium will be expected to put in place and maintain appropriate internal barriers during the tender exercise, to Ofgem's satisfaction.

### **Triggering the tender and commitment to a tender exercise**

- 2.7. We proposed in our December 2011 consultation that a generator should notify Ofgem of the build option which they have opted for in their BCA with the NETSO, and that they should include this information when they make a written request to Ofgem to commence a tender exercise for their project. Respondents were broadly supportive of this approach and we are therefore minded to reflect this requirement within the final arrangements for the enduring regime.
- 2.8. In addition, we are minded that a generator who wishes Ofgem to run a Generator build tender exercise for their project will need to comply with a series of qualifying project requirements and tender entry conditions set out in the Tender Regulations. We propose that the qualifying project requirements and tender entry conditions will be similar to those applied to transitional tender exercises.
- 2.9. In order for Ofgem to commence a tender exercise, the generator must:
  - write to notify Ofgem of their build option and request the commencement of a tender exercise for their project
  - notify Ofgem as soon as they consider that their project has met the qualifying project requirements in order to allow the timely commencement of the tender exercise.

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<sup>12</sup> This restriction is currently set out in the Tender Rules for the Second Transitional Tender Round, November 2010:  
<http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=7&refer=Networks/offtrans/rttt>

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- 2.10. It is the generator's responsibility to notify us within a timescale which allows the tender exercise to be run and an OFTO to be appointed, consistent with the delivery of the transmission infrastructure and its contracted connection date. We expect that the period between commencement of the Pre-Qualification (PQ) stage and appointment of a preferred bidder will be approximately 12 months.
- 2.11. Some respondents to our December 2011 consultation expressed concerns that the existing definition of 'developer', ie the person who can request the commencement of a tender exercise (as set out in the 2010 Tender Regulations) may be too restrictive for some future project arrangements. We will consider the need to revise the existing definition as part of our review of the Tender Regulations in late summer or early autumn 2012.

### *Commitment to a tender exercise*

- 2.12. We consider that bidders and other interested parties will need sufficient certainty that the tender exercise and the project will go ahead in order for us to run the most efficient tender exercise with the best outcome for consumers. Therefore, in line with the approach adopted for transitional tender exercises, we are minded that a generator should provide Ofgem with security in the form of a letter of credit or a cash deposit before a tender exercise commences for its qualifying project.
- 2.13. We will continue with the current approach to the publication of cost recovery methodologies in advance of tender exercises. As part of this we believe there may be merit in generators paying an increased upfront tender fee as an initial contribution to the costs of the running the tender exercise. This will minimise consumers' exposure to the costs of running a tender exercise and we anticipate that the fee would be recoverable through the transfer value. This would be part of our review of the balancing of fee structures across a tender exercise.

### **Assets included in the tender exercise**

- 2.14. As set out in our December 2011 consultation, under Generator build the transmission assets constructed by the generator will form the assets included in the tender exercise for that project. We referred to this as the 'tender specification'. However, to avoid potential confusion with the specification required under the OFTO build option (see paragraphs 3.24 – 3.29), we will in future reserve the term 'tender specification' for OFTO build.
- 2.15. Under Generator build we expect to publish a Preliminary Information Memorandum (PIM) at the PQ stage that provides a high level overview of the project. We expect to publish a more detailed project specific Information Memorandum (IM) before the start of the Invitation to Tender (ITT) stage. This will provide further details on the assets and set out the investment opportunity available to bidders.

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### *Project data room and seabed survey*

- 2.16. Responses were generally in agreement that the data room is broadly fit for purpose for a Generator build tender exercise. We therefore do not propose to make any significant changes to the data room requirements.
- 2.17. We also consulted on whether there could be benefits to generators undertaking a seabed survey against a comprehensive generic survey specification agreed by industry and making this survey available to bidders via the data room. There was little appetite from the majority of respondents for this to be a requirement under Generator build. We note, however, that there is currently variation in the approaches and standards used by generators when commissioning geophysical studies, geotechnical investigations (GIs) and cable route assessments. This has been evident from experience under transitional tender exercises. Greater consistency across the industry could improve standards and reduce the level of risk priced in by bidders.
- 2.18. We would therefore welcome industry led development of minimum standards for seabed surveys and cable installation. We consider that this could reduce the risk of project delays resulting from insufficient information on cable burial conditions.

### **Tender stages and timings**

#### *Pre-Qualification (PQ) stage*

- 2.19. The purpose of the PQ stage is to undertake a generic assessment of a bidder's suitability as a potential OFTO, rather than a specific assessment for a particular project. At the end of this stage Ofgem expects to identify a longlist of bidders to progress to the Qualification to Tender (QTT) stage.
- 2.20. In our last consultation on the enduring tender arrangements we proposed that, where it is feasible and efficient to do so, we would group Generator build tender exercises within Generator build tender rounds, as we have done for transitional tender exercises. We explored three options for the PQ stage, two of which involved a generic PQ stage.
- 2.21. In general there was agreement from respondents that grouping projects into tender rounds is a sensible approach. Respondents showed no clear preference between the option whereby a generic PQ stage is run in tender windows with pre-qualification being for a defined time period, or the option whereby a generic PQ stage is run after a group of projects have qualified for a tender round. In addition, a number of respondents highlighted that the process needs to be flexible to accommodate individual project timescales.
- 2.22. We consider that the approach of running Generator build tender rounds covering identified projects is likely to be the most robust approach from a procurement perspective and will reduce the likelihood of needing to run

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the PQ stage on an individual project basis. We are therefore minded to run a PQ stage per Generator build tender round, with pre-qualification for bidders on the resulting longlist being valid for a specific group of identified projects which have qualified for the tender round.

- 2.23. However, we are also mindful of the need for flexibility to accommodate individual project timescales. We are therefore minded to retain the ability to run the PQ stage on an individual project basis where appropriate for those particular circumstances. This may be necessary, for example, where a tender exercise is required at short notice for a specific project.

### *Qualification to Tender (QTT) stage*

- 2.24. The purpose of the QTT stage, where we choose to run it, is to identify, based on an evaluation of bidders' broad proposals in relation to a specific project, a suitable shortlist of bidders to be invited to bid at the ITT stage for a project.
- 2.25. As set out in our December 2011 consultation, project specific circumstances may mean it is sometimes more efficient and time effective not to run a QTT stage in addition to the PQ stage. We are therefore minded to determine on a case by case basis whether to run a QTT stage for each project. If we were to decide not to run a QTT stage, then we would run an enhanced PQ stage in order to ensure the PQ stage is rigorous enough to shortlist bidders to an appropriate number for the ITT stage.

### *Invitation to Tender (ITT) stage*

- 2.26. The purpose of the ITT stage is to evaluate all shortlisted bidders' technical and financial proposals, based on access to a fully populated project-specific data room, against a range of criteria in order to identify a preferred bidder (and possibly a reserve bidder) for each project.
- 2.27. We are minded to adopt the approach set out in our December 2011 consultation, of starting the ITT stage at a point when the generator is able to provide as much certainty on the project as possible to bidders and funders and when Ofgem can therefore achieve the most competitive outcome.

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### *Best and Final Offer (BAFO) stage*

- 2.28. We propose to allow flexibility to run a BAFO stage if needed. Circumstances in which we may run a BAFO stage include instances where we are unable to determine a preferred bidder because the evaluation outcome is too close to enable a decision to be made, or where there is potential for further improvements in pricing from running a BAFO.

### **Structure of revenue entitlement and risk allocation**

- 2.29. In our December 2011 consultation we provided detail on the pass through costs included within the OFTO licence for transitional tender exercises. We asked stakeholders whether they agreed with our position that the current split between costs priced into the TRS and those allowed as a pass through provide best value for consumers.
- 2.30. Respondents were generally content with the existing pass throughs. While some stakeholders did suggest additional or enhanced pass throughs there was no strong consensus on possible changes. One respondent suggested a pass through for insurance costs and two respondents suggested alterations to the decommissioning pass through (please refer to paragraphs 2.80 – 2.84 on decommissioning for more information on our approach to decommissioning under the enduring regime).
- 2.31. We continue to consider that the current pass through items included for transitional tender exercises provide the best balance between managing consumer interests and OFTO entitlements and incentives to enable them to provide efficient transmission services. They reduce the contingency required by OFTOs in case of certain low probability, high cost events. They also remove OFTO exposure to increases in certain set costs such as network rates. We consider however that not adding additional pass throughs will enable consumers to benefit from competitive pricing in other areas. We are therefore minded to apply the current pass through items for the transitional regime under the Generator build option. We will however keep the items covered by pass throughs under review.
- 2.32. We also asked stakeholders whether there were any aspects of the current arrangements for transitional tender exercises or within the changes we proposed in that document, including revenue term, bid requirements and risk profile, which may prevent access to certain sources of finance under Generator build. There were few responses to this question, however the common theme amongst those who did respond highlighted the importance of clarity and consistency across the regime.

### *Duration of revenue stream*

- 2.33. In our December 2011 consultation we proposed that the appointed OFTO would bid on the basis of a 20 year TRS in order to align the revenue term with the anticipated design life of the offshore generation assets; however, we also asked respondents whether they agreed that this provided best

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value for consumers under the enduring regime. This was in recognition of the fact that some of the transmission assets may have a useful life in excess of 20 years and that extending the revenue term may help access new sources of finance.

- 2.34. The majority of respondents considered that 20 years was a good basis for the duration of the TRS. Many also suggested that this should be kept under review or made flexible to enable adjustment for project specific circumstances.
- 2.35. It is clear that a 20 year TRS is a sound basis for a Generator build tender exercise. The market and stakeholders have confidence in this approach, which has been well tested under transitional tender exercises. However, as we recognised in December 2011, it is anticipated that the useful life of some transmission assets may exceed 20 years, as may the life of future generation assets. We will therefore continue to review the benefits of an adjusted TRS period and will set out more detail later in the year.

### *TRS indexation*

- 2.36. The current mechanism for TRS indexation, set out in version 1.2 of the OFTO licence<sup>13</sup>, applies an uplift to the revenue stream in April of each year, based on the Retail Price Index (RPI) increase from the base date to the September immediately preceding the April in which the uplift applies. In our December 2011 consultation we sought views on whether this approach provided best value to consumers given the different types of funding sources available to OFTOs and the inflation risk being taken by the consumer.
- 2.37. Responses fell into two main groups:
- some respondents consider the current approach to be appropriate, with key benefits including the fact that it is well understood by the market, is attractive to investors and the RPI hedging approach adopted makes the offshore transmission assets a low risk investment. As a result the arrangements were seen to provide value for money to the consumer through a low cost of capital
  - other respondents suggested the TRS could be subject to proportional indexation, with the key benefits being that it could allow the removal of the RPI swap, which in turn removes the potential for breakage costs if the RPI swap needs to be terminated before its expiry. This, arguably, would give greater certainty to the costs borne by the consumer as not all of the TRS is subject to indexation.

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<sup>13</sup> Version 1.2 of the OFTO licence applies to all projects in Transitional Round 2. Transitional Round 1 projects are subject to a different indexation mechanism.

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- 2.38. We feel there are a number of considerations that need to be taken into account when developing our policy proposals in this area. As our analysis is ongoing, we will provide further detail later this year.

### *Refinancing*

- 2.39. For transitional projects, the OFTO bears the full risk of, and reward for, any refinancing solutions. We previously asked for responses on whether introducing a refinancing gain share mechanism under the enduring regime would deliver optimum benefits to the consumer.
- 2.40. On balance, the majority of respondents were not in favour of a refinancing gain share mechanism being included for the Generator build option. Key considerations identified by respondents included the following:
- an expectation of a future refinance is likely to be built into bidders' financial projections and equity pricing. Therefore any reduction in the refinancing gains an OFTO could realise may reduce bidding appetite and/or push up pricing
  - if OFTOs are typically funded by bank finance initially, refinancing needs to happen to enable lenders to recycle their capital to facilitate lending to new projects. Any mechanism or policy must therefore retain sufficient incentive for the OFTO to refinance
  - there was less appetite for an asymmetric mechanism, where refinancing gains are shared but potential refinancing losses are not shared, compared to a symmetric mechanism with equal sharing of potential gains and losses, particularly in light of the potential for availability of long-term debt funding to change in the future.
- 2.41. We are aware of the above considerations and have taken these into account while continuing to develop our policy position. We consider that this area requires further analysis and we expect to provide further detail later in the year.

### *End of revenue stream*

- 2.42. We recognise that some transmission assets may have a useful life in excess of the initial revenue period. The government set out in March 2009<sup>14</sup> that in such circumstances the Authority would make a decision about any ongoing regulation of the transmission assets based on the ongoing demand for them and the Authority's statutory duties at that

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<sup>14</sup> Government response to 'Offshore Electricity Transmission – A further Joint Ofgem/DECC regulatory policy update', March 2009  
<http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=24&refer=Networks/offtrans/pdc/cdr/cons2009>

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time. This decision would be made before the initial revenue period had lapsed. This continues to be our position.

- 2.43. In March 2009, we set out options for dealing with the end of the revenue period; these options had already been explored in our joint Ofgem/DECC consultation of November 2008<sup>15</sup>. We outlined three approaches we might take, dependent on the individual project circumstances.
1. Revoke the incumbent OFTO's licence – this would be in the event that there was no ongoing demand for the asset demonstrated by the incumbent, or other parties.
  2. Extend the revenue period with a revised revenue stream for the incumbent OFTO.
  3. Undertake a further tender exercise to appoint an OFTO.
- 2.44. We continue to consider that whichever of these three approaches we adopted would be dependent upon ongoing demand for the connection, which could only be robustly assessed closer to the end of the initial revenue period.
- 2.45. We anticipate maintaining the Authority's right to give an OFTO 18 months' notice of revocation of their licence in order to facilitate arrangements for the end of the revenue period where necessary<sup>16</sup>. We are reviewing the mechanism by which this operates to ensure that there would be no gap or overlap between licensees for the same transmission assets in an end of revenue stream scenario and we will provide more detail on this in our consultation later in 2012 on the OFTO licence.

### **Bid evaluation**

- 2.46. As has been the approach to date for transitional tender exercises, we will set out the approach to evaluation in the tender documentation issued at each stage of a Generator build tender exercise. We expect to follow a similar approach to that used for transitional tender exercises such that we will set the bid requirements and evaluation criteria against which we will evaluate all bids. The bid requirements and evaluation criteria will continue to cover both financial and technical aspects.
- 2.47. We currently consider that the present evaluation weighting (60:40) in favour of the TRS bid (over the quality of underlying assumptions), as has

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<sup>15</sup> Offshore Electricity Transmission – A Joint Ofgem/DECC Regulatory Policy Update, November 2008, Ref (153/08)  
<http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=81&refer=Networks/offtrans/pdc/cdr/cons2008>

<sup>16</sup> This relates to situations where the licensee is not in breach. There would remain separate arrangements for circumstances in which the licensee was deemed to have breached their licence.



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been applied under transitional tender exercises at the ITT stage, remains appropriate. As such we propose to maintain this relative evaluation weighting at the ITT stage under the Generator build option.

### *Generator involvement in evaluation*

- 2.48. In our December 2011 consultation we sought views on our proposal to consider asking the generator to comment on certain key technical aspects of bids received so as to inform our evaluation. We suggested that this might include proposals relating to O&M, and to decommissioning, where these fell within the limitations of any potential conflicts of interest.
- 2.49. Some respondents were in favour of involving generators in bid evaluation, citing the importance to generators of areas such as operational risk. Other respondents did not consider that this involvement was required and additionally noted that it could lead to potential conflicts of interest and confidentiality issues, particularly in relation to proposals relating to O&M, as generators may be likely to offer O&M services to bidders as part of the tender exercise.
- 2.50. As indicated in Diagram 2, generators will be engaged throughout each of the stages of a Generator build tender exercise.

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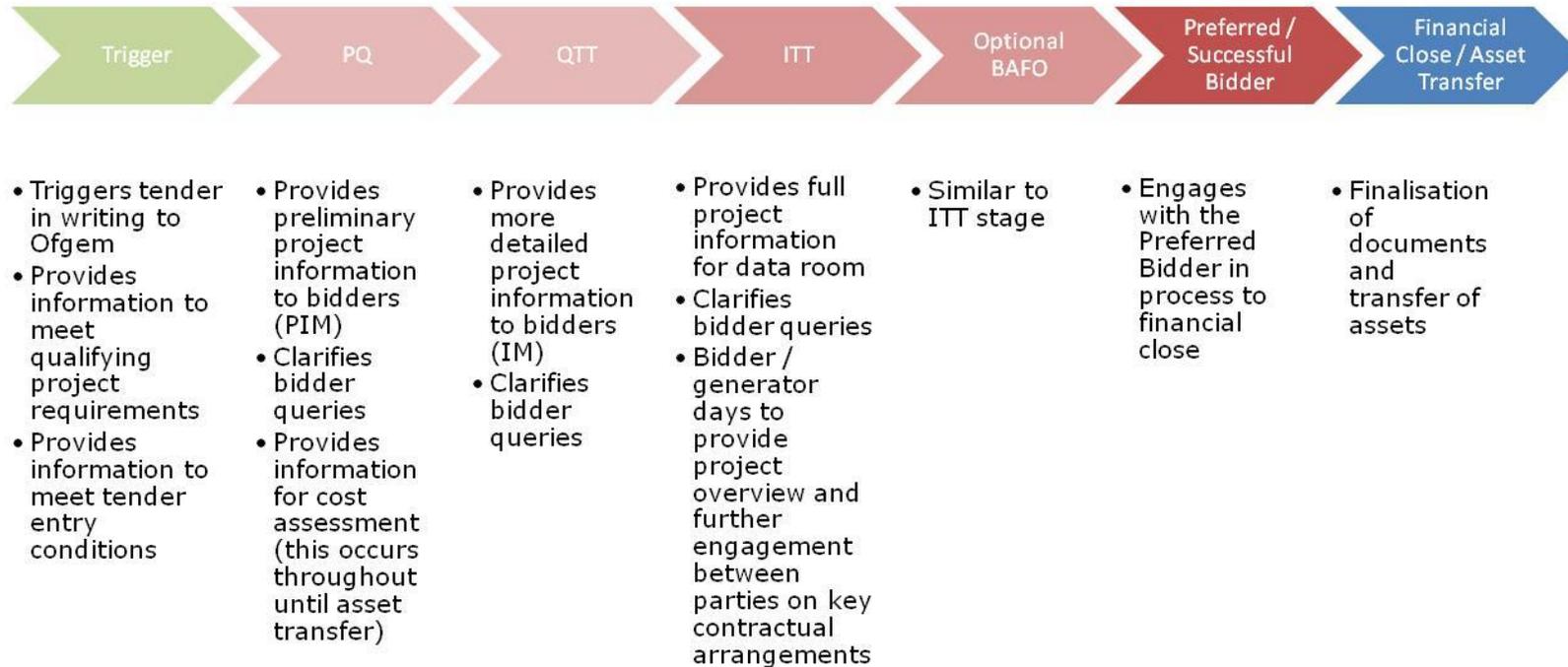


Diagram 2 – Indication of generator engagement within a Generator build tender exercise

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- 2.51. In light of this engagement, and given the relatively narrow scope of key technical aspects in bids under the Generator build option that would be of relevance to generators (particularly due to potential conflicts of interests issues associated with O&M aspects), we are of the view that the additional involvement of generators in bid evaluation is, on balance, unnecessary and undesirable. We are therefore minded not to involve generators in evaluation of bids under the Generator build option.
- 2.52. We confirm that all decisions in all stages of a Generator build tender exercise, including selection of a preferred bidder and granting a licence to a successful bidder, will be taken by Ofgem.

### *Variant bids*

- 2.53. As set out in our August 2010 consultation, because a generator will have designed and constructed the transmission assets included within the scope of the tender exercise under Generator build, there is no scope for bidders to provide design innovation during the tender process and therefore no opportunity for variant design bids.
- 2.54. However, there may be advantages to allowing some variant bids on other selected commercial elements, depending on particular project requirements and/or market conditions, where bidders are able to put forward alternative but robust proposals. We will consider the scope for allowing such variant bids on a project by project basis and will set out the evaluation criteria for such variant bids, if necessary, in the documentation we will publish at each relevant stage of a tender exercise.

### **Cost assessment**

- 2.55. We confirm that we will continue to determine the transfer value of a project through a cost assessment process. In order to inform bids during the tender exercise before the final transfer value has been calculated, we will ensure consistency between bidders by providing bidders with an estimate of the transfer value. As set out in December 2011, the transfer value will take account of lifecycle costs associated with the transmission assets, including consideration of the generator's approach to managing transmission losses (where this refers to losses of energy due to innate properties of the assets/physics of electricity transmission).
- 2.56. We intend to set the final transfer value prior to licence grant, following an assessment of the economic and efficient costs associated with the transmission assets.
- 2.57. We also intend to require that 100% of the transfer value should be payable by the OFTO at the point of asset transfer for enduring tender exercises. It should be noted that the current Post Tender Revenue Adjustment (PTRA) clause within the OFTO licence provides flexibility in relation to the timing of the cost assessment process and could still be

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available if there was a need to account for a deferred consideration in payment.

- 2.58. In our interactions with the stakeholder community, we have been asked to provide further clarity on the principles that we will apply to cost assessment going forward. We intend to publish guidance on the cost assessment principles and approach later this year.

### **OFTO of Last Resort**

- 2.59. The OFTO of Last Resort process would be used to appoint an existing OFTO or Transmission Owner (TO) to take over transmission assets where the incumbent is unable to fulfil their obligations as OFTO or where a Generator build tender exercise has not been able to determine a person to be granted an offshore transmission licence.
- 2.60. Some respondents to our December 2011 consultation requested further clarity on the OFTO of Last Resort process. Our latest guidance on the OFTO of Last Resort process was published in July 2011<sup>17</sup>. This sets out the steps we would follow prior to, and during, an OFTO of Last Resort process.
- 2.61. We will look to update this guidance in due course to reflect any changes required for the enduring regime. In order to provide guidance of most use to stakeholders we would welcome your views on areas of the OFTO of Last Resort process which you feel need further clarity.

### **Q2.1 Are there any areas of the OFTO of Last Resort process on which you feel further clarity is needed?**

#### **Asset transfer**

- 2.62. In our December 2011 consultation we asked for suggestions on amendments which would improve the efficiency of the process for finalisation of transfer documentation and received a number of these. We expect to publish asset transfer guidance for enduring tender exercises which will reflect these suggestions, along with lessons learned from transitional tender exercises.
- 2.63. As set out in that consultation, we recognise that for some scenarios there may be advantages to some parties in a share sale arrangement over an asset transfer. The responses suggested that our processes should support both approaches. We encourage generators to keep us informed as to the approach they intend to take as this will ensure that we are able to take into consideration any impact on the tender process. As stated previously,

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<sup>17</sup> Guidance on the Offshore Transmission Owner (OFTO) of Last Resort Mechanism, July 2011:  
<http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=18&refer=Networks/offtrans/rttt>

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we would not wish for any additional costs of a share sale relative to an asset sale to be passed to the consumer, but we would expect the consumer to share any benefits.

- 2.64. We are considering introducing greater obligations on generators in the tender process to ensure they take reasonable steps to facilitate the timely conclusion of a tender exercise, particularly with regard to providing all necessary information on a timely basis, and taking reasonable steps to facilitate the transfer of assets to the successful bidder.

### **OFTO licence**

#### **Availability incentive**

- 2.65. The purpose of the availability incentive mechanism is to incentivise the OFTO to keep the transmission assets available, to ensure prompt restoration of the connection in the event of an outage, and maximise overall system availability. It is designed to align OFTO incentives with consumer interests and provide a risk/reward profile that ensures efficient cost of capital. We consider that the availability incentive mechanisms currently provided for in the OFTO licence meet this policy intent.
- 2.66. We do not propose to move away from an availability based regime, but consider that, for the larger and more integrated transmission networks that may be built under the enduring regime (as opposed to the mainly radial point to point systems that have been tendered under the transitional regime) there may be some areas where enhancements to the incentive mechanism may better align OFTO and consumer interests.
- 2.67. Assuming a more integrated network design, OFTOs may be able to re-route export power to ensure that any outages have minimal impact on generators. We therefore see benefit in enhancing the availability incentive mechanism so that OFTOs plan outages to ensure that energy exported is maximised. We also recognise that it may not provide value for money to penalise OFTOs for outages that do not affect the generator's ability to export, for example in times of low wind.
- 2.68. The possible options that we have identified to address the above considerations are outlined below (see Appendix 3 for an outline of the availability incentive options):

#### *Option 1 – Maintain the current incentive*

- 2.69. Under this option the incentive would remain purely availability-based. The availability incentive would apply generically to all types of project under the enduring regime, eg for radial point to point or more integrated offshore network designs.

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- 2.70. While this option is established and appears to be well understood by the market, it does not directly incentivise the OFTO to plan outages to ensure that the generator's ability to export is maximised. This is because it looks only at MWh availability as opposed to capacity availability<sup>18</sup> and also does not take into account the generation output of the generator at the time of the outage.
- 2.71. We therefore consider that it may not offer the optimal solution for the enduring regime.

### *Option 2 – Weighted availability incentive*

- 2.72. This option looks not only at the MWh availability but at the length and capacity availability during the outage. The OFTO would be proportionally increasingly penalised the lower the capacity availability of the export system. This is to reflect that the average loading of a windfarm is well below the maximum capacity. For example, the OFTO would be less penalised for an outage that was a result of a small drop in capacity availability over a longer period of time than it would for the same MWh outage that was a result of a large drop in capacity for a short amount of time.
- 2.73. While this option could penalise the OFTO for outages that had no impact on the generator's ability to export, it would ensure that the OFTO is incentivised to plan outages that minimise impact on the generator's ability to export by incentivising the OFTO to maximise capacity availability.

### *Option 3 – Availability-based incentive with bonus mechanism*

- 2.74. Under this option the existing availability incentive would remain in place but an additional bonus incentive mechanism based on lost transmission would also be included. This bonus mechanism would be positive only and would act to reduce any deduction under the availability incentive when an outage occurred in times of low or no generation.
- 2.75. The bonus mechanism would apply on top of the current availability incentive mechanism. It would negate (where the outage had no impact on generation) or reduce (where the outage had very little impact on generation) the impact of any unavailability deductions that occurred during times of low or no generation.
- 2.76. This would incentivise the OFTOs to be flexible in their outage planning to accommodate generation levels wherever possible at the time of planned outages. This would ensure that the OFTO was not penalised where they planned an outage that had no impact on the generator's ability to export. However, the levels of bonus payments would be dependent on the

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<sup>18</sup> Capacity availability is the percentage of maximum possible output that could be transmitted at a given moment.

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generation levels at the time of an outage. This would introduce generation risk to the OFTO, albeit upside risk as the risk would apply to the bonus only. We note that adopting such an approach would be predicated on the OFTO being able to respond to the incentive in how they manage outages.

- 2.77. Furthermore, in order to obtain the bonus payments, the OFTO would be reliant on receiving timely and accurate information regarding predicted generation levels from the generator. This mechanism would require the lost transmission to be measured or estimated, which would add complexity to the mechanism.
- 2.78. On balance we consider that option 2 is likely to offer the optimal way to achieve consumer benefits without undermining the key premise of an availability-based regime. This is because the introduction of the weighting mechanism may appropriately incentivise the OFTO to ensure outages have minimal effect on the generator, while maintaining an availability-based regime and not introducing a mechanism that is reliant on measuring predicted generation levels. However, we seek stakeholder views on the proposed options.
- 2.79. We intend to consult further on the availability incentive mechanism later in 2012 (as part of our consultation on the OFTO licence under the enduring regime), but would welcome early views on the discussion set out above.

### **Q2.2 Do you agree that option 2 is the most appropriate enhancement for the availability incentive to incentivise OFTOs to plan outages with regard to maximising exported energy? If not, which option offers the optimal way forward for the enduring regime?**

#### **Decommissioning**

- 2.80. Under the Energy Act 2004, the Secretary of State has responsibility for decommissioning of offshore installations. The Secretary of State has the option to require the liable party to agree with DECC a decommissioning programme and security arrangements for meeting the associated costs.
- 2.81. For transitional tender exercises, bidders are required to price decommissioning costs within their bids to enable them to fulfil their decommissioning obligations. If the final cost of meeting the decommissioning programme agreed with DECC is higher than the appointed OFTO's bid assumption, then the OFTO will have to fund the difference. The OFTO licence does however include a pass through for additional decommissioning costs arising from any future legislative change.
- 2.82. In our December 2011 consultation, we asked for respondents' views on whether we should review the management of decommissioning costs for the enduring regime or maintain the approach taken under the transitional



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regime. There was no overriding consensus from respondents as to the benefits of either maintaining the transitional regime approach or introducing a change such as a broader pass through mechanism.

- 2.83. We considered the option of a general pass through mechanism to cover all decommissioning costs when they arise, rather than bidders including these costs in their bids. This could address uncertainties about the prospective costs of future decommissioning activities. However, it fails to ensure that the OFTO is able to make provision for appropriate and economic decommissioning costs and is ready to carry out decommissioning activities in line with their plan agreed with DECC, if required. It would also remove the opportunity for bidders to compete on decommissioning costs within their TRS bids and could disincentivise OFTOs from keeping decommissioning costs as low as possible. We are minded, therefore, that the most efficient approach at this time is for bidders to continue to price in decommissioning costs within their TRS bids.
- 2.84. Recognising, however, that beyond an OFTO's revenue period there may be scope for asset re-tender, we are engaging with DECC to ensure current decommissioning arrangements remain appropriate under the full range of end of life scenarios.

## 3. OFTO build option

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### Chapter Summary

This chapter sets out a range of minded-to positions for the OFTO build option under the enduring regime, as well as a limited number of areas for further consultation.

### Question box

Q3.1 What are your views on the anticipated costs an unsuccessful bidder may incur in developing an OFTO build bid at the ITT stage, and how Ofgem might approach calculating an allowance for costs?

Q3.2 Do you have any comments on our proposals for:  
i) qualifying project requirements, including the potential to require one or more additional qualifying project requirements in order to provide additional assurance that a project will be taken forward by a generator?  
ii) tender entry conditions?

Q3.3 Do you have any comments on whether our proposed approach to the tender specification provides the necessary information for a bidder to develop a design proposal which meets the generator's requirements?

Q3.4 Do you have any comments on our proposals for seabed surveys, including the level of information generators will be expected to supply and the timing for providing that information?

Q3.5 Do you have any thoughts on how to ensure the generator's supply chain activities on a given project do not result in the supply chain for that project being effectively closed off to any suppliers?

Q3.6 What are your views on how we ensure any process relating to delay to licence grant maintains transparency and parity across bidders?

Q3.7 Do you have any examples of mechanisms to manage weather related delays which you think would be useful to inform our approach?

Q3.8 Do you consider the proposed design and construction criteria to be appropriate and sufficient, and if not, what other criteria would you consider relevant?

Q3.9 Do you have any views on the key elements within the tender specification, as set out in the draft template within Appendix 4, on which there may be advantages in considering a variant bid?

### High level overview

3.1. Under the OFTO build option, the generator would obtain the connection offer and undertake high level design and pre-construction works. A prospective OFTO would bid their approach to the procurement, financing,

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construction, operation, maintenance and decommissioning of transmission assets, and the costs associated with carrying out these activities.

- 3.2. This chapter focuses on the key arrangements and considerations for OFTO build. It builds on our previous publications on the enduring regime, including in particular the proposals within our December 2011 consultation, by setting out a range of minded-to positions, along with proposals on a limited number of further areas for consultation.
- 3.3. We have consistently set out that we expect the OFTO build option to deliver consumer benefits into the long term, through enabling greater competition and attracting new entrants across the supply chain and the bidding community. The arrangements set out within this chapter provide generators with flexibility in the timings for triggering a tender, and the opportunity to realise savings on capital expenditure relating to the construction of transmission infrastructure, whilst retaining the ability to clearly define their requirements for those assets through the tender specification.

### **Interactions between participants**

- 3.4. With respect to interactions between generators and bidders we are minded to apply the same requirements under OFTO build as set out for Generator build tender exercises - see paragraphs 2.3 – 2.6.
- 3.5. Paragraphs 3.71 – 3.78 set out further details on engagement between suppliers and bidders under the OFTO build option.

### **Triggering the tender and commitment to a tender exercise**

- 3.6. In line with the arrangements set out in paragraph 2.7 for Generator build, a generator who wishes Ofgem to run an OFTO build tender exercise for their project will need to notify Ofgem of their chosen build option and comply with a series of qualifying project requirements and tender entry conditions. We expect generators to notify us as soon as they consider that their project has met the qualifying project requirements in order to enable Ofgem to determine whether the requirements for a qualifying project have been met and to allow the timely commencement of a tender exercise for the project.
- 3.7. We therefore recommend that the generator should make a written request to Ofgem to commence an OFTO build tender exercise for their project no later than six months before the date at which the generator expects to submit its planning consent application. This timeline aligns with our proposals for mapping the tender process to the OFTO supply chain engagement and procurement activities within the overall project delivery programme – as set out in Diagram 3 under paragraph 3.36. The linkage of the tender process with the consenting process in this particular instance is due to the fact that submission of a planning consent

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represents a key milestone in terms of the level of detail in respect of the project that should be made available to bidders.

- 3.8. We intend however to engage with generators confidentially on a project by project basis well in advance of the point at which the tender is triggered in order to ensure the OFTO build tender process can best align with and facilitate the project's needs. We would therefore encourage any generators considering selecting the OFTO build option to contact us as soon as possible in order to commence that engagement process.
- 3.9. We set out in our December 2011 consultation that there may be a case for flexibility in the process for triggering a tender exercise where the assets involved would not just be for the use of a sole generator. This scenario was considered in our March 2012 consultation and is also considered further in Chapter 5 of this document.

### *Commitment to a tender exercise*

- 3.10. In December 2011 we proposed that generators will need to provide Ofgem with a security in the form of a letter of credit or a cash deposit to cover the tender costs associated with the tender exercise/project not going ahead. We also proposed that under OFTO build the generator would be liable to forfeit a proportion of their security if they changed their build preference from OFTO build to Generator build during the course of a tender exercise, as this would result in aborted tender costs associated with cancellation of the tender exercise. We proposed that the amount forfeited from the generator's security would be based on the costs incurred by Ofgem and bidders during the tender exercise up to that point.
- 3.11. While most respondents agreed with this proposal, in general, generator respondents wished to be able to switch from OFTO build to Generator build with the cost of doing this reflecting only the reasonable costs incurred in the tender process up to that point and taking into account factors outside of the generator's control when determining the level of security to be forfeited.
- 3.12. We consider that it is important to provide bidders with certainty that a tender exercise will go ahead in order to ensure the most competitive tender process and to ensure that the risks to consumers of cancellation of a tender exercise are minimised. We consider that the arrangements we proposed in December 2011 will ensure that generators do not speculatively expose consumers to unnecessary or inefficient costs.
- 3.13. We are therefore minded that, as under the current transitional arrangements, if an OFTO build tender exercise is cancelled due to action taken by the generator (including where this is with a view to requiring a future Generator build tender exercise instead), the generator will forfeit an amount from their security based on the costs incurred by Ofgem and bidders during the tender exercise up to that point. Under such a scenario bidders will be repaid, wholly or in part, any payment they have made to

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Ofgem as part of the tender exercise (including any interest which may have been accrued).

- 3.14. We will determine and set out the appropriate level of generator security required in advance of an OFTO build tender exercise.

### *Cost recovery*

- 3.15. We consulted in December 2011 on whether the transitional regime approach to recovering bids costs (where the successful bidder recoups their tender fees through the Tender Fee Cost Adjustment Term (TCA<sub>t</sub>), which is a pass through cost in the OFTO licence) is sufficient for OFTO build or whether all bidders should be able to recover some bid costs (ie costs additional to the tender fees required by Ofgem) following an OFTO build tender exercise. The rationale for considering this approach was to reflect that bidders are likely to incur higher costs at the ITT stage because of the greater complexity of information required. Some generator respondents considered the transitional regime approach to be appropriate for recovery of bid costs under OFTO build. Other generator respondents, however, considered that there could be benefits to reviewing the approach, including as a method of encouraging competition. Bidder respondents were in favour of some or all bid costs being reimbursed to all bidders.
- 3.16. For OFTO build tender exercises we are minded to apply the current approach whereby the successful bidder recoups their tender fees through the TCA<sub>t</sub> pass through. We also consider that it may be reasonable for a proportion of shortlisted bidders' costs to be reimbursed if these costs are likely to otherwise be a significant barrier to participation. We anticipate that this could apply to a specified proportion of the costs associated with submitting a detailed design proposal for the transmission assets during the ITT stage. This may promote greater bidder interest in, and competition within, tender exercises and ensure that bidders provide the most robust and well informed detailed design proposals at the ITT stage. Any such costs would most likely be recovered from a combination of the generator and bidder fees for participating in a tender exercise.
- 3.17. We would be interested in your views on the anticipated costs an unsuccessful bidder may incur in developing an OFTO build bid at the ITT stage, and how we might approach calculating an allowance for costs. This will help inform our view on the potential impact of such costs on bidder participation. Please note that any response could be provided on a confidential basis.
- 3.18. As for Generator build, we will publish our cost recovery methodology, including details of participant fees, ahead of the first OFTO build tender exercise.

**Q3.1 What are your views on the anticipated costs an unsuccessful bidder may incur in developing an OFTO build bid at the ITT stage, and how Ofgem might approach calculating an allowance for costs?**

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### *Qualifying project requirements and tender entry conditions*

- 3.19. As set out within paragraph 3.6 above, the generator will need to meet certain requirements for their project to qualify for an OFTO build tender exercise. We anticipate for OFTO build that, at a minimum, the generator will be required to have entered into:
- a BCA with the NETSO
  - an agreement for lease of the seabed with the Crown Estate Commissioners.
- 3.20. We are also considering introducing one or more additional qualifying project requirements under the OFTO build option in order to provide additional assurance that a project will be taken forward by a generator. This might, for example, include a requirement for a generator to provide evidence that they have made a financial commitment to the project, such as a Board commitment to fund the pre-construction works for the transmission assets, or it might include a commitment from the generator to progress a consent submission. We would be interested in your views as to what the most appropriate additional requirement(s) might be, given that the tender process under OFTO build will commence much earlier in relation to the construction of transmission assets than is the case under Generator build.
- 3.21. We will also set out the tender entry conditions which a generator will need to meet for an OFTO build tender exercise. As under Generator build and transitional tender exercises, we will notify the generator as to when each of these conditions needs to be met for their project. Our current proposals for potential OFTO build tender entry conditions are that the generator should:
- provide information to enable us to issue an IM and establish a project data room and undertake to update us on any changes to that information
  - sign and return a confidentiality agreement (between the generator and a bidder)
  - provide Ofgem with an undertaking that they will respond to all queries from Ofgem within a reasonable period, whether the queries arise from Ofgem or are forwarded on behalf of a third party
  - complete a tender specification in accordance with the tender specification guidance provided by Ofgem (see paragraphs 3.24 – 3.29)
  - provide Ofgem with evidence of their planned submission date(s) to the relevant consenting authorities for the necessary consents for the

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transmission assets to be constructed and maintained, and provide an undertaking to keep Ofgem regularly informed of progress of those consent submission(s)

- undertake to obtain all pre-construction works (see paragraph 3.51) such that they can be transferred to the successful bidder (this will likely include procuring geophysical surveys and GIs in line with Ofgem's requirements and placing them in the data room ahead of the ITT stage of the tender exercise - see paragraph 3.30)
- complete a draft transfer agreement for the pre-construction and seabed survey works
- put in place and maintain appropriate internal information barriers in instances where they are part of a bidding group for their project, in order to prevent information passing between the generator and the bidder group
- comply with any other conditions necessary for that particular tender exercise.

3.22. However, it should be noted that the final tender entry conditions will be dependent on our final policy positions in relation to some issues discussed elsewhere in this document.

3.23. Finally, as discussed for Generator build (see paragraph 2.64), we are also considering introducing greater obligations on generators in the tender process to ensure they take reasonable steps to facilitate the timely conclusion of a tender exercise, particularly with regard to the period between appointment of the preferred bidder and asset transfer.

**Q3.2 Do you have any comments on our proposals for:**  
**i) qualifying project requirements, including the potential to require one or more additional qualifying project requirements in order to provide additional assurance that a project will be taken forward by a generator?**  
**ii) tender entry conditions?**

### **Tender specification**

3.24. In December 2011 we consulted on proposals for an OFTO build tender specification to be provided by the generator. We proposed that the specification should be informed by:

- the BCA (including the construction agreement) as agreed by the generator and the NETSO
- the design requirements set out within the planning consent submission

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- the pre-construction works being carried out by the generator.

We have provided an outline of how we anticipate these three categories shaping a tender specification template (see Appendix 4). Bidders would be required to take these components into consideration when developing their bids.

- 3.25. Most respondents considered that this was appropriate information to be included. Some respondents also suggested that generators would wish to include Front End Engineering Design (FEED) studies for the transmission assets. We are not minded to include FEED studies within the tender specification. It is important that the specification retains as much scope for OFTO design input as possible. We consider that including the FEED as part of the tender specification and thereby requiring bidders to reflect any constraints imposed by it could overly limit further design work by bidders without introducing any efficiencies. In addition, it is possible that not all FEED studies will be available by the start of the ITT stage, and it would therefore not always be possible to incorporate them into the specification. We are therefore minded that where FEED studies are available, generators should make them available to bidders via the project data room instead (see paragraphs 3.30 and 3.31 for further information on the data room). This will enable bidders to use the information to inform their design proposals as they consider appropriate without introducing further constraints on the tender specification.
- 3.26. We anticipate that the tender specification will set out the output requirements which the transmission assets would have to meet, as informed by the information listed in paragraph 3.24. We will provide a tender specification template which generators would be required to populate for their project as part of the proposed tender entry conditions (see paragraph 3.21). This is to ensure that generators provide the necessary information to inform bidders' submissions. For the avoidance of doubt, the generator would be responsible for ensuring that they produced a tender specification which met the requirements of their project; however, we expect generators not to specify additional requirements within the tender specification that may unnecessarily restrict the opportunity for bidders to propose innovative design proposals that would bring benefits to consumers.
- 3.27. We have provided a draft tender specification template in Appendix 4 and would welcome your views on this. If you consider that additional information is required, we would be interested to know the impact this might have on a bidder's design proposals and on tender and delivery timings given the supply chain and procurement, and tender stages and timings proposals we set out later in this chapter.
- 3.28. We propose that a higher level overview of the project would be made available to bidders at earlier stages of the tender exercise in order to provide an indication of the opportunity available to bidders and to inform bid submissions at those stages. This would be part of the PIM.

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- 3.29. Some respondents stated that the consenting process may make it difficult for the OFTO to introduce changes to the design requirements without jeopardising the consent submission. We consider that it is important to avoid scenarios in which consents must be resubmitted because of the risk of delay to projects and increased costs. However, we anticipate that, where relevant, generators will consider the 'Rochdale Envelope' principle to inform the level of flexibility they reflect when submitting a Development Consent Order (DCO) application, consistent with the consultation requirements under the Planning Act 2008<sup>19</sup>. We are therefore minded that any design changes made by an OFTO should remain within the envelope of the tender specification. We consider that this will still enable the OFTO to inform the transmission assets' design but minimise the risk of project delays.

### **Q3.3 Do you have any comments on whether our proposed approach to the tender specification provides the necessary information for a bidder to develop a design proposal which meets the generator's requirements?**

#### *Project data room*

- 3.30. As set out under the proposed tender entry conditions (see paragraph 3.21) the generator will be expected to provide information to enable us to establish a project data room, which will be made available to bidders at the ITT stage.
- 3.31. In our December 2011 consultation we also sought views on what other information, if any, in addition to that referred to within the tender specification and pre-construction works sections, would be needed within the data room for a project. Few respondents identified any additional information which they would expect to be included in the project data room. From those who did respond, there was no consensus as to specific additional requirements, although some generators suggested including any concept and FEED design work. As discussed in paragraph 3.25, we agree that, where available, FEED studies could be included in the data room to inform bidders' design proposals. As has been the case for transitional tender exercises, we will not define the information that must be included within the data room, although we expect to issue guidance to generators regarding the type of information to include.

### **Tender stages and timings**

#### *Overarching tender process and timings*

- 3.32. We consider that the tender stages and timings for OFTO build should provide flexibility to best address individual project needs, for example by ensuring that consenting timescales, generator investment decision

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<sup>19</sup> For information on the 'Rochdale Envelope', see *Using the 'Rochdale Envelope' - Advice Note Nine: the Rochdale Envelope*, The Planning Inspectorate, April 2012: <http://infrastructure.planningportal.gov.uk/wp-content/uploads/2012/03/Advice-note-9.pdf>

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timescales, tender timescales and timings for delivering other elements of a project (including most importantly the generation assets) are aligned. Our focus remains on maximising consumer benefits through a robust competitive process. To deliver this our aim continues to be for the tender stages and timings to be structured so as to provide an efficient process which does not cause project delays and provides appropriate levels of certainty to bidders at each stage.

- 3.33. In our previous consultation on the enduring tender arrangements, we proposed linking the ITT stage to the consenting process. We set out three options, detailed below.
1. Single ITT stage with bidders having a maximum of one month post planning consent decision to submit their ITT bid.
  2. Single ITT stage with bidders submitting ITT bids no earlier than three months before anticipated consent decision. Preferred bidder appointment would occur no earlier than the date of planning consent decision.
  3. Split ITT stage. Technical proposals would be submitted before the planning consent decision, while the TRS bid would be submitted post planning consent decision. Evaluation of the technical proposals would commence prior to the planning consent decision.
- 3.34. The majority of respondents who expressed a preference had a preference for option 2. No respondents had a preference for option 3, while some respondents had a preference for option 1. A small number of respondents considered that none of the three options meets the needs of projects in the enduring regime and the process needs to happen earlier than any of the suggested approaches.
- 3.35. In reaching our minded-to positions for the overarching tender process and timings we have considered our objectives for the enduring regime alongside a number of additional factors:
- the extent to which the tender process needs to be linked to both the consenting process, the generator financial investment decision process, the engineering and design process and supply chain procurement, and the mechanism by which this can be achieved
  - the fact that the transmission assets are generally one part of an integrated generation and transmission project and consequently the requirement that the OFTO build tender process does not cause delay to the overall project
  - potential supply chain capacity constraints, as identified in paragraph 3.71, and the impact of these on the ability of bidders to carry out competitive supply chain procurement without causing delay to the overall project



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- bidders should undertake all procurement and should submit fixed price bids at the ITT stage in order to achieve our aim of maximising competition throughout the wider tender process to maximise value to the consumer
- the need to ensure bidders have sufficient time to take account of the planning consent within their bids.

3.36. Having taken account of the above factors we are minded to adopt the approach to tender stages/timings illustrated in Diagram 3 below, which maps the OFTO build tender process onto the overall project development process. Specifically, our minded-to approach links the OFTO build tender process to the supply chain procurement process rather than to the consenting process, albeit we recognise these are linked, to some extent. Further details on our expectations with regards supply chain and procurement are set out in paragraphs 3.71 – 3.78. However, we set out in paragraphs 3.42 – 3.45 within this section the supply chain engagement and procurement we expect will be necessary at relevant stages of an OFTO build tender exercise.

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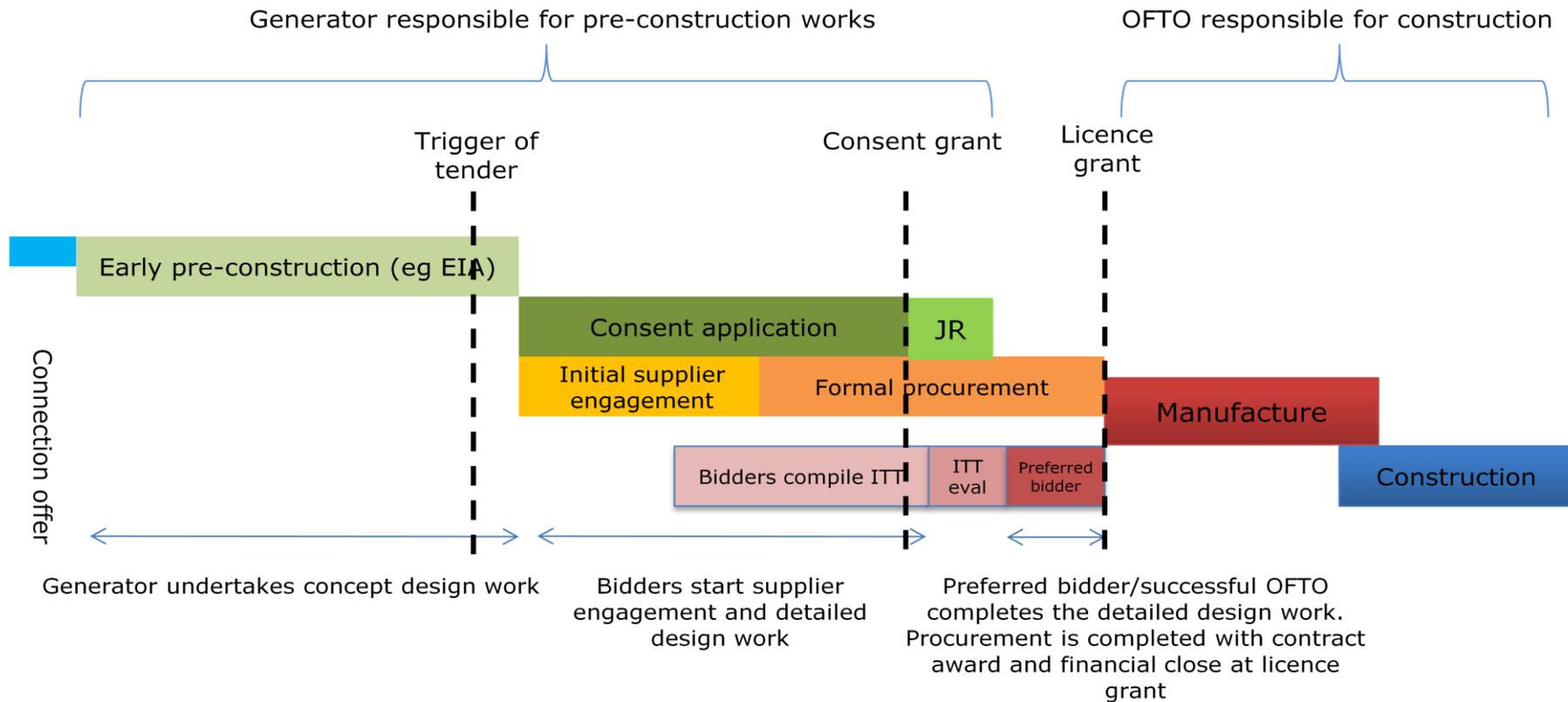


Diagram 3 – Indicative OFTO build tender process. This diagram sets out indicative, relative time periods only. Project specific delivery timescales will impact the precise duration of many of the activities (eg the consenting timescale is likely to differ between England and Scotland; also the nature of the supply chain procurement at any given stage will depend on the project specifics and the specific approach of any given bidder). In the interests of simplicity, the Judicial Review (JR) challenge period in relation to the consenting process does not include the time that would be required to consider any challenge received during that period.

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- 3.37. At an overarching level, licence grant is expected to occur approximately 15-18 months after the start of the ITT stage. The QTT stage is expected to take approximately four months, and will occur immediately before the ITT stage.

### *Pre-Qualification (PQ) stage*

- 3.38. We consider that mapping the OFTO build tender process onto the overall project development process means that it is likely that tender process timelines for separate projects will not align sufficiently to allow stages to be run concurrently across two or more projects. We are therefore minded under OFTO build to run the PQ stage on an individual project basis. We will however look to run the PQ stage as part of an OFTO build tender round wherever possible. Where we run a PQ stage as part of an OFTO build tender round, we would run the PQ stage at the earliest opportunity during the tender round.

### *Qualification to Tender (QTT) stage*

- 3.39. Under Generator build we set out that we are minded to determine on a case by case basis whether to run a QTT stage for each project. However, under OFTO build we consider that a relatively detailed QTT stage will be required in order to robustly assess all of the competencies and attributes required of an OFTO and shortlist bidders for the ITT stage.
- 3.40. We are therefore minded to run the QTT stage for all OFTO build tender exercises. However, we will keep this decision under review and if we identify opportunities to run a more efficient tender process which will deliver value to the consumer, we may decide to make the QTT stage optional in the future.
- 3.41. It is anticipated that the QTT stage will normally (but not necessarily) be run immediately after the PQ stage. There may therefore be a gap between the end of the QTT stage and the start of the ITT stage, as the ITT stage will be timed to commence as late as possible without delaying project delivery timescales in order to maximise the level of certainty available to bidders at this point.

### *Invitation to Tender (ITT) stage*

- 3.42. Prior to commencement of the ITT stage our expectation is that bidders would undertake initial supplier engagement. This could start at any time prior to the ITT stage, possibly before a tender exercise is commenced, and therefore may not be project specific. We would expect this initial supply chain engagement to continue until after the ITT stage commences and to involve activities such as undertaking market studies, obtaining expressions of interest from suppliers and potentially forming consortia.
- 3.43. By the time of ITT submission bidders will be required to submit a fixed price bid, other than in respect of agreed adjustment mechanisms such as

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the market interest rate adjustment mechanism in the current OFTO licence and those mechanisms discussed in the risk allocation section (see paragraph 3.88). We expect bidders will need to undertake procurement during the ITT stage to provide this fixed bid. We envisage that procurement during the ITT stage would include the following:

- design development and agreeing prices for undertaking the various supply contracts for the ITT bid – where the bidder has formed consortia with one or more suppliers
- design development, tendering for suppliers, evaluating offers and agreeing prices for the ITT bid – where the bidder has to go out to market.

- 3.44. It is feasible that this procurement could occur early on in the consenting process, however it is considered more likely that both suppliers and bidders will engage more comprehensively and effectively if the procurement activities occur later. This is because if there is more certainty over the planning consent there will be greater certainty around project timescales and therefore cost and delivery implications. As such it is considered that the OFTO build option is likely to be more attractive to the market, and consequently deliver greater value to the consumer, where project delivery timescales allow procurement to occur relatively late in the consenting process.
- 3.45. We recognise the need to limit the number of bidders at the ITT stage, under OFTO build, to enable supplier procurement at the necessary level of detail to be undertaken, and for bidders to be able to develop a robust and deliverable funding package for the ITT submission. We therefore propose to limit the number of bidders selected for the ITT stage to a minimum of two and a maximum of four, to be decided on a project by project basis. Factors that will be taken into account in determining the number of bidders selected for the ITT stage include the size and complexity of the project, bidders' appetite and the need to achieve the best possible balance between competitiveness and deliverability in order to maximise value to the consumer.
- 3.46. It is anticipated that the ITT submission stage will take 6-9 months. It is considered likely that ITT submission would occur after planning consent has been obtained. As such, the timings are similar to option 1 in our December 2011 consultation.
- 3.47. Following ITT submission, we anticipate that approximately three months would be allowed for Ofgem evaluation in order to determine the preferred bidder.

### *Best and Final Offer (BAFO) stage*

- 3.48. We propose to adopt the same approach to the BAFO stage as detailed within the Generator build chapter, see paragraph 2.28.

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### *Preferred bidder to licence grant*

- 3.49. The preferred bidder would undertake the remainder of the procurement activity before licence grant. Licence grant would occur at financial close, which is anticipated to be reached 4-6 months after preferred bidder appointment. This will allow the OFTO to finalise and sign all principal supply contracts prior to commencing manufacture.
- 3.50. Diagram 3 in paragraph 3.36 also illustrates the JR challenge period in relation to the consenting process. In the event of a challenge being lodged the consenting process could extend beyond the anticipated date of licence grant. In this circumstance we would expect licence grant would be delayed until the challenge is overturned and the planning consent is confirmed.

### **Pre-construction works**

- 3.51. We have previously confirmed that the generator will undertake the pre-construction works and ensure that they can be transferred to the OFTO. We consulted in December 2011 on other aspects of our proposed approach to pre-construction works. There was broad agreement from respondents on the approach we outlined, apart from with regards generator reimbursement (see paragraph 3.55).
- 3.52. As detailed within paragraph 3.24, the pre-construction works will inform the tender specification and the generator will be required to provide all the relevant information to the project data room. Our final decision is that pre-construction works should be as defined as in the list set out in our August 2010 consultation, namely:
- carrying out EIAs and stakeholder consultation in relation to the OFTO works
  - obtaining necessary planning permissions
  - obtaining necessary landowner consents (leases, easements, wayleaves, etc)
  - carrying out engineering surveys (onshore and offshore) in relation to the OFTO works (these could include seabed geophysical and geo-technical surveys and metocean surveys - see paragraphs 3.56 – 3.62)
  - the high level engineering design needed prior to undertaking the activities described above
  - any economic analysis in support of this high level engineering design.

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- 3.53. We consider that this list includes obtaining necessary land rights, land acquisitions, crossing agreements and applications for Compulsory Purchase Orders (CPOs). A minority of respondents queried the level of warranties which an OFTO may require generators to provide for pre-construction works. We expect standard industry warranties for assets of a transfer of this type to be used in this regard.
- 3.54. We are aware that there has been uncertainty as to the extent to which generators are able to take advantage of CPO and wayleave powers. The DECC and Ofgem Offshore Transmission Coordination Project Conclusions Report (March 2012) set out a detailed position in relation to CPO and wayleave powers and we therefore do not intend to consider the matter further here. Please see page 25 of that report for further details<sup>20</sup>.
- 3.55. We proposed in December 2011 that generators would not be able to recover any costs associated with pre-construction works in the event that their planning consent submission is unsuccessful and leads to cancellation of the tender exercise for their project and an asset transfer does not therefore occur. These arrangements ensure that generators do not speculatively expose consumers to unnecessary or inefficient costs. Only a minority of respondents expressed disagreement with this proposal and we are therefore minded that generators would not be able to recover any costs associated with pre-construction works in the event that their planning consent submission is unsuccessful and leads to cancellation of the tender exercise for their project.

### *Seabed surveys*

- 3.56. We consulted in December 2011 on the best approach for ensuring bidders have access to and confidence in the geophysical surveys and GIS undertaken by the generator. We said that we do not consider that it is cost effective or practical for each bidder to undertake their own seabed investigations during a tender exercise.
- 3.57. We suggested an option might be for an independent party to produce a comprehensive generic survey specification, agreed by generators and potential bidders, against which generators would be required to undertake a seabed survey for each project. Stakeholder views were mixed as to the extent of the benefits of such an approach.
- 3.58. We recognise the tension between developing a survey specification sufficiently generic as to be applicable to multiple projects and one which would be detailed enough to be useful for a specific project. We are also aware that if this was a requirement, the process to reach consensus across relevant parties could be perceived to risk delaying the first expected enduring tender exercises.

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<sup>20</sup>DECC/Ofgem Offshore Transmission Coordination Project Conclusions Report, March 2012:  
<http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=9&refer=Networks/offtrans/pdc/cdr/2012>

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- 3.59. However, we continue to consider that it is important that bidders have an appropriate level of detailed survey information to inform their bids and minimise the level of uncertainty which they factor in. Building on stakeholder responses, we have considered the following alternative approaches from that outlined in paragraph 3.57.

### *Option 1 – Bidder comment*

- 3.60. Bidders could be given an option to comment on the scope of the generator's proposed survey prior to the ITT stage. The survey data submitted by the generator to the data room at the ITT stage would be expected to reflect bidders' comments where possible.
- 3.61. We are concerned that this option could create project delays as the generator would need time to make any necessary changes following receiving bidders' comments before undertaking the final stages of their surveying work ahead of the ITT stage. There could also be cost implications associated with additional survey work requested by some bidders. We do not, therefore, intend to develop this approach further at this stage.

### *Option 2 – Bidder second opinion*

- 3.62. Bidders could be given an option to seek a second opinion of the seabed survey data during the ITT stage.
- 3.63. This option may risk bidders needing to commission their own survey work. As set out in paragraph 3.56, we are not convinced that this would be a cost effective or logistically practical approach.

### *Option 3 – Minimum level of seabed investigative data*

- 3.64. Ofgem could specify a minimum level of geophysical and geotechnical work to have been undertaken by the generator and included in the data room for the ITT stage.
- 3.65. We consider that this option may ensure that the generator is required to supply sufficient information to allow bidders to submit fixed price bids with a minimum premium, but does not introduce any additional risk of delays to a tender exercise.
- 3.66. Consequently, we are minded to set out the minimum level of seabed investigative data to be submitted by the generator to the data room by the ITT stage for each tender exercise (option 3 above). We propose that this data should include the information set out in Table 1 below:

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Category	Information	Source
<b>Available by PQ stage</b>		
Seabed information	General geological and sea bed information	Desk study report
	Geophysical information along cable corridor	Geophysical survey report
Cable burial information	Cable route option appraisal	Cable route selection study
Metocean information	Wave height and current data	Metocean study
<b>Available by QTT stage</b>		
Seabed information	Geophysical information along cable corridor	Geophysical survey report
<b>Available by ITT stage</b>		
General information	EIA supporting documents	Planning application and supporting documents
	Locations (Offshore Substation Platforms (OSPs), grid connection, cable routes, cable crossings)	Planning application and supporting documents
Cable burial information	Cable route option appraisal	EIA, cable route selection study
	Review of cable installation techniques	EIA
Seabed information	Seabed mobility data	EIA, mobility report
	Offshore geotechnical information (Cone Penetration Testing (CPT), vibracores, thermodynamic properties)	Offshore geotechnical report
Onshore information	Onshore GI data	Onshore geotechnical report
	EIA supporting documents	Planning application and supporting documents
	Locations (OSPs, grid connection, cable routes, cable crossings)	Planning application and supporting documents
Cable burial information	Cable route option appraisal	EIA, cable route selection study
	Review of cable installation techniques	EIA
Seabed information	Seabed mobility data	EIA, mobility report

Table 1 – Minimum level of seabed investigative data to be submitted by the generator to the data room, by tender stage

3.67. We recognise that generators have, to date, tended to carry out the GIs after consents have been granted. Given our proposals for tender stages and timings for OFTO build, this would mean the GIs would be unlikely to be completed in time to inform ITT bids. We are not aware of any reason why generators should not be able to compress the timeframe of the

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seabed investigations so that the GI information is available for the ITT stage. However, we would be interested in your views.

- 3.68. In addition, as discussed under Generator build (see paragraph 2.17), we consider that there is a need for industry consistency and consensus on robust standards for geophysical studies, GIs and cable route assessments. Some respondents to our December 2011 consultation expressed interest in the development of such standards or principles. We consider that that these would be particularly important under OFTO build where bidders will be reliant upon generator-led seabed investigations to inform their bids. We would, therefore, welcome industry led development of minimum standards for seabed surveys and cable installation.

### **Q3.4 Do you have any comments on our proposals for seabed surveys, including the level of information generators will be expected to supply and the timing for providing that information?**

#### *Transfer value of pre-construction works*

- 3.69. As proposed in our December 2011 consultation, in order to inform bids at the ITT stage of a tender exercise, and determine the transfer value of the pre-construction works to be transferred to the OFTO, it will be necessary to establish the economic and efficient costs incurred by the generator associated with undertaking pre-construction works. We will require the generator to provide the necessary information to allow determination of the transfer value.
- 3.70. We consulted on whether the generator should be reimbursed for their efficiently incurred pre-construction costs at the point at which transmission construction works were completed by the OFTO. This was to enable repayment to align with the point at which the OFTO revenue stream would commence. While there was some support for this, stakeholder feedback was generally more in favour of the generator being reimbursed when the assets were transferred to the OFTO. We agree that there are benefits to this approach. We are minded, therefore, that the generator will be reimbursed for their economically and efficiently incurred pre-construction costs at the point of asset transfer to the OFTO.

#### **Supply chain and procurement**

- 3.71. We stated in December 2011 that our preferred option is for an approach whereby all supply chain procurement is undertaken by the OFTO through the tender process. However we also explored alternative approaches in light of potential supply chain constraints such as potentially long lead times associated with the manufacture and delivery of some key offshore transmission assets.
- 3.72. A range of views were expressed by respondents. Some respondents were not in favour of the proposal that OFTOs undertake all procurement, with key concerns raised relating to risk of delays in procuring long lead time

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items, and an expected lack of willingness or capacity for suppliers to engage in parallel procurement processes with multiple OFTOs. However, other respondents were in favour of OFTOs carrying out all procurement, to drive efficiency, competition and innovation.

- 3.73. We consider that the best outcome for consumers will be achieved through the opportunities for efficient and economic procurement practices that a competitive tender process can deliver. However in determining our position we have taken into consideration the consultation responses. We also recognise that the supply chain needs to be engaged in time to ensure project delivery timescales are met. Our proposed process therefore maps the OFTO supply chain engagement and procurement activities onto the overall project delivery programme.
- 3.74. As set out in Diagram 3 following paragraph 3.36, prior to consent submission the generator would undertake concept design work to inform that submission. During this period we anticipate the generator will discuss outline technical data and obtain indicative costings from suppliers. Our view is that this activity can be undertaken by the generator without compromising the OFTO's ability to undertake full competitive procurement of its supply chain; for example, the generator may choose to carry out much of the concept design in-house or potentially engage suppliers by paying a retainer for their consultancy services. The economic and efficient costs incurred in undertaking any such work, where it falls within our definition of pre-construction works (as set out in paragraph 3.52) would be considered as part of the process for determining the transfer value of the pre-construction works (also see paragraphs 3.69-3.70).
- 3.75. To ensure that the generator does not effectively close the project to other suppliers at this early stage, we consider it important that the generator does not sign any contracts with potential suppliers in anticipation that these contracts would transfer to the OFTO, or in anticipation that the costs associated with the contracts would be reimbursed to the generator through the transfer value. We also expect that the concept design, which will form part of the tender specification, will not include any aspects which materially limit future supply chain competition.
- 3.76. Our aim is to put in place an OFTO tendering process which enables efficiencies throughout the process to be realised, including in relation to the supply chain. Potential supply chain engagement and procurement activities undertaken by bidders throughout the tender process are set out in paragraphs 3.42 – 3.45. We consider that OFTO bidders will be incentivised to generate efficiencies throughout their bid in order to maximise their chances of success. As the bidders will be required to carry out the detailed supply chain engagement and procurement we consider that they will therefore be incentivised to maximise efficiencies in relation to the supply chain to deliver the most competitive bid that they can.
- 3.77. It is possible that supply chain efficiencies could be realised in a number of different ways, eg through efficiencies gained from detailed design solutions, through bidders competing for suppliers, or through bidders

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forming alliances and long-term relationships with suppliers to drive synergies and economies of scale. Our view is that by putting in place an OFTO build option which fosters competition throughout the process, including in relation to the supply chain, the market will, through the need to compete, deliver efficiencies and consequently consumer savings.

- 3.78. Our expectation is that bidders may develop a number of different approaches to supply chain procurement and risk management, for example from OFTOs entering into Engineering, Procurement and Construction (EPC) contracts with their principal suppliers at licence grant, to consortia solutions, through to in-house solutions.

### **Q3.5 Do you have any thoughts on how to ensure the generator's supply chain activities on a given project do not result in the supply chain for that project being effectively closed off to any suppliers?**

#### **Structure of revenue entitlement and risk allocation**

- 3.79. As stated previously, a prospective OFTO under OFTO build will bid their approach to the construction, financing, operation, maintenance and decommissioning of the transmission assets, and a TRS value that includes the costs associated with carrying out these activities.
- 3.80. In December 2011 we asked stakeholders whether there were any aspects of the current arrangements for transitional tender exercises or within the proposals for OFTO build, including revenue term, bid requirements and risk profile, which may prevent access to certain sources of finance under the enduring regime. There were mixed responses to this question with no consensus reached. We consider that the proposals outlined in this publication should help address any concerns over potential difficulties in securing financing for OFTO build.
- 3.81. Our policy positions and options relating to the structure of revenue entitlement and specific risk sharing elements under OFTO build are set out in the remainder of this section.

#### *Duration of revenue stream*

- 3.82. We maintain our view that the OFTO's revenue stream would commence once the transmission construction works are completed.
- 3.83. 'Completion' of the construction works (being the trigger for payment of the TRS and the point at which the conditions relating specifically to the operation phase in the OFTO licence come into effect) will be defined as the date on which the plant and apparatus that form the offshore transmission system are commissioned and accepted and made available

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for operational service and configuration by NGET under the relevant industry codes<sup>21</sup>.

- 3.84. As outlined in paragraph 2.33, we consider that there is value in continuing to review the revenue term under the Generator build. We envisage that under the OFTO build option there may be additional reasons for extending the revenue term on a case by case basis. This is given the enhanced ability of bidders to price efficiently over the longer term where they have themselves designed, procured and built assets, as opposed to taken over as-built assets under Generator build. We therefore envisage that on a project by project basis, depending on the design proposals for the assets, it may be appropriate for the revenue term to be extended to 25 years or more. We will provide further information as part of our OFTO licence consultation later in 2012.

### *TRs indexation*

- 3.85. As outlined in paragraphs 2.36 – 2.38, we will provide further detail on our proposals on indexation later in the year.

### *Refinancing*

- 3.86. As outlined in paragraphs 2.39 – 2.41, we will provide further detail on our proposals on refinancing later in the year.

### *End of revenue stream*

- 3.87. Please see the discussion within the Generator build chapter, paragraphs 2.42 – 2.45. We are minded that the same arrangements should apply under OFTO build as under Generator build.

### *Risk allocation*

- 3.88. As set out in paragraph 3.43, bidders will bid a fixed TRS at the ITT stage. We consider that bidders will have sufficient certainty at this stage to be able to make fixed price bids without including a disproportionate risk premium. However, we identified in December 2011 that there may be some areas for which a risk sharing approach would increase the value to consumers and consulted on two possible areas: delay to licence grant and weather related delay. We anticipate providing further detail on these two areas when we consult on the OFTO licence later this year; however, we have summarised our current proposals below.

#### Delay to licence grant

- 3.89. We recognise that bidders may have some fixed capital costs with a price validity date attached. In cases where there was a delay to licence grant

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<sup>21</sup> This is currently captured under STC Procedure 19-4.

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through no fault of the preferred bidder which meant the licence was granted after the price validity date had expired, we proposed allowing an adjustment based on an indexation mechanism at the ITT stage. Most stakeholders who commented on this proposal were broadly in acceptance of a process to manage cost escalation relating to licence grant delays, although respondents emphasised the importance of avoiding any delays to licence grant.

- 3.90. We agree that it is important to avoid delays as much as possible. However, should a delay to licence grant occur, we propose that allowing some cost sharing for cost escalation to capital costs for certain items may maximise overall value for money for consumers. If there was a delay to licence grant which impacted on items' validity periods, we may then permit the preferred bidder to propose revised prices. As a principle, this would only be applicable where a delay to licence grant occurred through no fault of the preferred bidder, and resulted in them missing their price validity dates for the items in question. We will ensure that any such process reflects both the cause of any relevant delays but also the need to avoid and minimise those delays wherever possible.

### **Q3.6 What are your views on how we ensure any process relating to delay to licence grant maintains transparency and parity across bidders?**

Weather related delay

- 3.91. We also consulted in December 2011 on whether we should introduce a contingency mechanism to share weather risk in certain circumstances. Respondents were generally supportive of the introduction of such an approach if it were to reduce TRS bids. However, concerns were raised that generators should not be unreasonably exposed to weather risk.
- 3.92. We recognise that bidders should consider the risk of weather related delays as part of their contract negotiations and therefore should be expected to manage the majority of the risk. However, we consider that in certain circumstances, there may be value in sharing the impact of an OFTO's construction costs increasing as a result of unexpected weather delays. Any such mechanism would be informed by current contracting arrangements between parties relating to the management of weather risk. We would welcome your views on examples of mechanisms to manage weather related delays which you think would be useful to inform our approach.

### **Q3.7 Do you have any examples of mechanisms to manage weather related delays which you think would be useful to inform our approach?**

Other areas of risk

- 3.93. We also asked for respondents' views as to whether there are any other areas of risk which could be more efficiently managed for consumers through a risk sharing mechanism rather than solely through bids. No

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additional areas of risk were consistently identified by respondents as being unreasonable for OFTOs to carry. We have considered the areas raised by respondents elsewhere in this document, including the treatment of decommissioning, project delays and seabed conditions (see also paragraphs 3.115 – 3.123 on OFTO licence pass throughs and delivery incentives). We consider that the combination of the approaches we have outlined for these areas and the existing pass throughs in the OFTO licence provide the best value for consumer by balancing the need for fixed price bids against the need to reduce the contingencies priced in by bidders where possible. We are therefore minded not to introduce any further risk sharing mechanisms at this stage.

### **Bid evaluation**

3.94. As stated in December 2011, we will set out the bid requirements and evaluation criteria against which we will evaluate all bids in the tender documentation published at each stage of a tender exercise. The bid requirements and evaluation criteria will cover both financial and technical aspects.

#### *Evaluation focus*

3.95. For OFTO build, the evaluation criteria we expect to apply will build on the current financial and technical criteria used for transitional tender exercises, but will also include design and construction criteria. We will publish detailed criteria in due course, but expect these criteria to cover:

- the deliverability and acceptability of technical proposals
- the quality of technical designs
- the quality of procurement and construction management plans
- the approach to managing project risks and other contractual elements
- compliance with health and safety, and environmental requirements.

3.96. For deliverability and acceptability of the technical proposals we expect to set criteria to evaluate the benefits and risks associated with the proposals, the extent to which there is evidence that the proposals are deliverable, and the extent to which the proposals comply with the tender specification provided by the generator.

3.97. For quality of technical designs, we will expect bidders to demonstrate clearly how and why they have chosen design solutions. We set out in December 2011 that we may take factors such as transmission losses into account alongside other elements of the bid, including O&M and capital costs. We will continue to consider the consequences of transmission

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losses within offshore transmission assets and intend to carry out further work in this area during the course of the year.

- 3.98. For procurement and construction management, we expect to set out criteria that will evaluate the extent to which bids provide clear and robust plans, including procurement strategies, project management arrangements, asset construction and installation plans, and liability arrangements during the construction phase.
- 3.99. For the approach to managing major project risks we expect to set criteria that will evaluate the robustness, deliverability and value to the consumer of any specific commercial terms governing how major project risks will be managed. This evaluation will have particular regard to proposed approaches to managing interface risks.
- 3.100. We recognise that health and safety is a key consideration for operating in an offshore environment and with transmission assets. It will be vital that prospective OFTOs demonstrate an appropriate understanding of their obligations and have robust methodologies in place to manage these.
- 3.101. We expect that the criteria for evaluating the financial deliverability aspects of bids will be similar to those applied to transitional tender exercises and as such will focus on factors such as the extent to which financing is committed, the approach to due diligence and the approach to complying with the relevant licence conditions.

### **Q3.8 Do you consider the proposed design and construction criteria to be appropriate and sufficient, and if not, what other criteria would you consider relevant?**

#### *Evaluation process*

- 3.102. At the ITT stage we expect to adopt a similar evaluation process to that used for transitional and Generator build tender exercises.
- 3.103. As detailed within paragraph 2.47, under the Generator build option we propose to maintain the financial/technical evaluation weighting applied for transitional tender exercises at the ITT stage to determine an overall weighted score. However, under the OFTO build option bidders will be required to submit viable and deliverable designs for the transmission assets in addition to robust financial and technical plans for owning and operating the assets. In order to reflect these additional responsibilities under OFTO build, we consider that it would be appropriate to apply an increased focus on the deliverability, robustness and underlying assumptions that the bidder has used to determine their proposed TRS, including the design and construction elements of the bid. We expect to set out further details on the financial/technical evaluation weighting for OFTO build ahead of the first OFTO build tender exercise.

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3.104. In December 2011, we discussed and sought views on a potential role for the NETSO and the generator in providing comment on certain key technical aspects of all bids received at the ITT stage so as to inform our evaluation. Our minded-to positions on their involvement are set out below.

### *NETSO involvement in evaluation*

3.105. Regarding involvement of the NETSO, some respondents were in favour, citing the need to ensure compliance with the Grid Code and the STC as well as the enhanced technical expertise this could provide. However, some respondents were of the view that this expertise could be provided by independent technical advisers, and that involvement of the NETSO may not be necessary. Some respondents also raised the issues of potential bias, conflicts of interest and breaches of confidentiality, although we note that there are current ringfencing arrangements set out in the Tender Regulations.

3.106. It is our view, given the NETSO will be involved in a range of aspects inside and outside of the tender process for each project<sup>22</sup>, that their potential involvement in bid evaluation could instead be undertaken by independent technical advisers appointed by Ofgem. The independent technical advisers could confirm the compliance of bid proposals with the tender specification provided by the generator and may highlight any areas of non-compliance with relevant industry codes and standards, which could be queried with the bidder. We are therefore minded not to directly involve the NETSO in bid evaluation, although we may however seek expert advice from the NETSO on certain key aspects of bids if required.

### *Generator involvement in evaluation*

3.107. Potential generator involvement in evaluation of technical aspects of bids received broad support from respondents who considered the technical expertise of the generator and the risk the generator bears in the OFTO build process to warrant their involvement. Some respondents however raised issues of potential bias, conflicts of interest and breaches of confidentiality, and the need to mitigate such issues.

3.108. It is our view, due to the relatively wide scope of key technical aspects of bids of relevance to generators under the OFTO build option, that there is benefit in involving the generator in the technical evaluation of certain aspects of bids under OFTO build. The scope of generator involvement would however exclude those areas where there may be potential conflicts of interest, eg in relation to proposals relating to O&M. We are therefore minded to involve the generator in the bid evaluation process under OFTO

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<sup>22</sup> For example through agreeing the BCA with the generator, through interactions with the preferred bidder once they are appointed and then with the OFTO once the OFTO licence has been granted and they have acceded to the STC and have a Transmission Owner Construction Agreement (TOCA) in place.

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build. This involvement will be in addition to generator engagement in all stages of the tender exercise, as detailed in Diagram 2 in Chapter 2.

- 3.109. All information received by the generator would be anonymous and subject to a confidentiality agreement between the generator and bidder (which would be addressed through refinements to the existing process for handling confidentiality agreements under the transitional regime), and would not include any cost information. The generator would be invited to comment on technical aspects of all bids received at the ITT stage against certain specific evaluation criteria. The generator's comments would not feed directly into our scoring of bids, nor would they hold any formal weighting in the overall evaluation of bids. Rather, the generator's comments would be used to highlight material concerns about technical aspects of bids. For the avoidance of doubt, the generator would not have any delegated decision-making powers, but would instead be providing commentary on appropriate elements of bids.
- 3.110. As under Generator build, we confirm that all decisions in all stages of an OFTO build tender exercise, including selection of a preferred bidder and granting a licence to a successful bidder, will be taken by Ofgem.

### *Variant bids*

- 3.111. We set out previously that in general our preference is to maximise certainty throughout the bidding process and therefore our expectation is for fixed price bids wherever possible. However we wish to ensure that innovation is not restricted and therefore expect to retain a degree of bidding flexibility throughout the tender process.
- 3.112. As detailed in our August 2010 and December 2011 consultations, our final decision is that we will not allow parties to submit variant bids for a tender exercise where there is a substantial change in design that either undermines the tender specification developed by the generator or undermines the planning consent submission, as it could cause delays in connection.
- 3.113. However, there may be advantages in permitting variant bids on selected elements within the scope of the tender specification. Where variant bids are being considered, we recognise the need to engage in discussion with the generator as part of the ongoing tender exercise for a project before setting out the scope of any permitted variants. We would like your views on the key elements within the tender specification, as set out in the draft template within Appendix 4, on which there may be advantages in considering a variant bid.

**Q3.9 Do you have any views on the key elements within the tender specification, as set out in the draft template within Appendix 4, on which there may be advantages in considering a variant bid?**

### **OFTO licence**

3.114. We will be consulting on the OFTO licence to be granted under the OFTO build option later in the year. However, details on our proposals for a number of specific aspects of the OFTO licence and incentives for the OFTO build option are set out below.

### **Pass through costs**

3.115. We consider that during the operational phase of the transmission assets, as the OFTO's responsibilities will be the same, the pass through items included in the OFTO licence should be the same under OFTO build as under Generator build – see paragraph 2.30 for further details on pass through costs under Generator build. We therefore propose to include those pass through items in the OFTO licence to be granted under the OFTO build option.

3.116. We propose that these pass throughs will be applicable once the OFTO begins receiving its TRS. We also propose that the income adjusting term will apply during the construction phase. If the Authority deemed the event to be an income adjusting event however, the OFTO would only be able to claim the pass through once their TRS commenced. We will provide further information on pass through costs and income adjusting events in our consultation on the OFTO licence later this year.

3.117. Also see paragraph 3.80 which provides details on risk sharing mechanisms which may be included alongside existing pass through items in the OFTO build licence granted under the OFTO build option.

### **Delivery incentives**

3.118. In December 2011 we set out a summary of the current delivery incentives for OFTOs under the OFTO build option and asked whether respondents considered that any additional delivery incentives are necessary.

3.119. Some respondents considered that there should be additional delivery incentives in the form of penalties or Liquidated Damages (LDs), to reflect the losses incurred by generators if the OFTO is late in completing construction. However other respondents stated that no such additional delivery incentives are required.

3.120. To summarise, the following delivery incentives for OFTOs are already in place:

- the OFTO's TRS will not commence until the assets have been completed

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- under the standard provisions in the industry codes OFTOs are liable to pay LDs to NGET in the event of construction delay
- OFTOs are required, under the industry codes, to provide security equivalent to 20% of the construction works cost plus the OFTO's LDs liability.

3.121. Our approach in relation to OFTO delivery incentives under the enduring regime has consistently been based on a general intent that offshore transmission arrangements should, wherever possible, extend the arrangements applied onshore. We have also taken the following factors into consideration in determining our approach:

- the extent to which the OFTO could bear additional delivery incentives
- the extent to which any such incentives could be of a magnitude akin to any potential loss for the generator
- the impact of any such additional incentives on the cost of transmission asset construction.

3.122. In light of the above, we do not consider that additional delivery incentives in the form of additional penalties/LDs would provide best value for the consumer. We consider that the LDs arrangements in the industry codes compare favourably for generators with the contractual damages available from sub-contractors in the normal course of business. We are also of the view that the delivery incentives summarised above, will act as sufficient incentive to ensure the works are completed in a satisfactory and timely manner by the OFTO.

3.123. We are therefore minded not to add any further delivery incentives in the form of penalties or additional LDs for the OFTO under OFTO build.

### **Availability incentive**

3.124. We envisage that the availability mechanism would be broadly the same under OFTO build and Generator build options. Please see paragraphs 2.65 – 2.79 for further detail on our proposals in relation to the availability incentive.

### **Transmission losses**

3.125. We noted in December 2011 that transmission losses may be an important factor in the design and operation of an offshore transmission system.

3.126. We recognise that ensuring that transmission losses are managed in a cost efficient way is important for ensuring a cost efficient transmission system.



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Our policy analysis in this area is ongoing, and we will therefore set out further detail later in the year.

### **Decommissioning**

3.127. Please see the discussion on decommissioning in paragraphs 2.80 – 2.84, which applies equally to the OFTO build option.

## 4. Phased or staged construction of transmission assets

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### Chapter Summary

This chapter sets out the findings of an analysis of a range of scenarios for running tender exercises for phased and/or staged projects. It proposes, based on the findings of this analysis, a set of principles for treating staged and phased projects under the enduring regime, and explores possible implications for the Tender Regulations and the OFTO licence.

### Question box

Q4.1 What are your views on the findings relating to potential impact of the baseline approach on the technical aspects of projects?

Q4.2 What are your views on the findings relating to potential impact of the baseline approach on commercial and tender process aspects of projects?

Q4.3 What are your views on the proposed principles for treating staged projects under the enduring regime?

Q4.4 What are your views on the proposed approach for treating phased projects under the enduring regime?

Q4.5 What are your views on the possible implications of phased projects for the OFTO licence, and in particular for the current incremental capacity incentive?

### Definition of terms

- 4.1. Our December 2011 consultation defined key terms associated with the construction and tendering of transmission assets that are likely to be constructed incrementally in phases and/or stages over the course of several years. There was general agreement from respondents that the definitions we proposed are practically relevant, so we use those terms as follows within this chapter (also see illustration in Diagram 4):
- 'site/zone' - the transmission assets within a site or zone licensed by the Crown Estate<sup>23</sup>.
  - 'phase' - a grouping of transmission assets to be built out over a period of time, where the grouping is defined by certainty on build out

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<sup>23</sup> We refer to both sites and zones because enduring tender exercises are likely to be required for transmission assets within both sites (in relation to Crown Estate Round 2 sites, Round 2.5 and Scottish territorial waters), and zones (in relation to Crown Estate Round 3).

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(for example in relation to a Final Investment Decision (FID) and/or key contractual commitments). A phase may include stages.

- 'stage' - transmission assets built out incrementally in a discrete group within a phase.

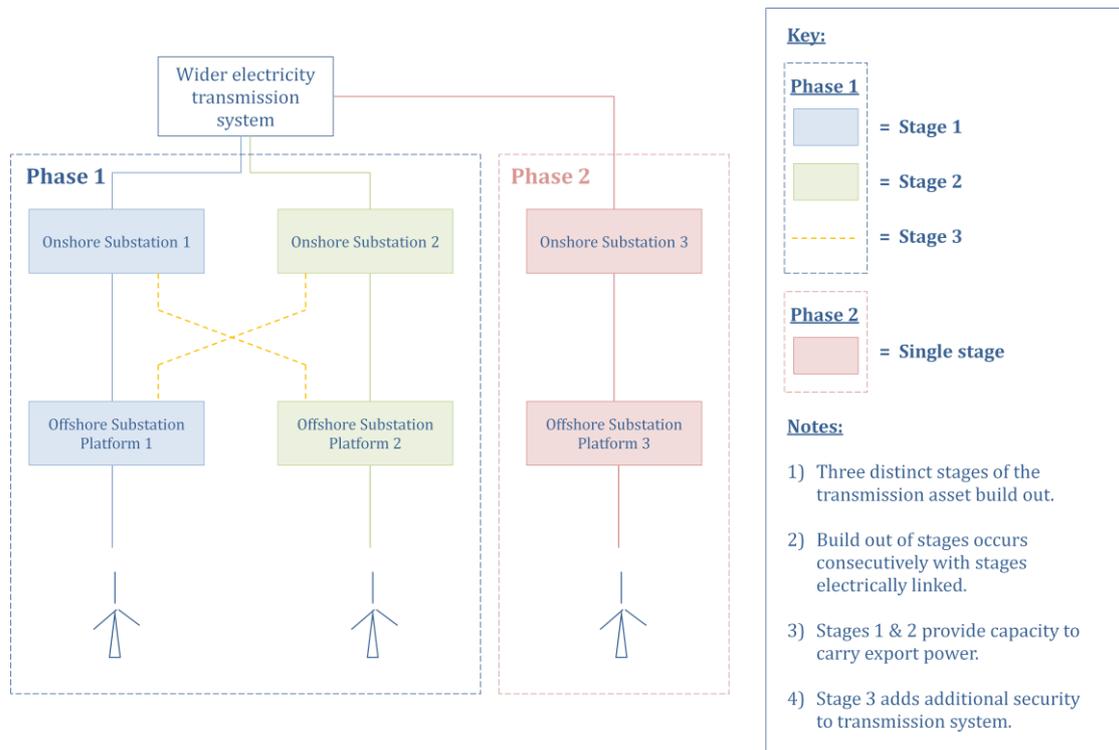


Diagram 4 – Representations of phase, stage and site/zone. This diagram shows a single site/zone, with two phases. Phase 1 includes three stages, whereas phase 2 includes a single stage.

### Positions set out in December 2011

- 4.2. We set out, with regards a staged project (which we define here as a project consisting of a single phase that includes two or more stages), that we would determine on a case by case basis whether the objectives of the offshore regime were better served by grouping all the stages within a single tender exercise, or by splitting the stages into separate tender exercises.
- 4.3. We set out, with regards phased projects that, given the very long timescales expected for some windfarm developments, the objectives of the offshore regime would likely best be met by running a separate tender exercise for each committed phase (or potentially phases, if they are concurrent) within a site/zone. This would ensure an ongoing competitive process for determining an OFTO, with each tender exercise attracting favourable funding terms and best value bids by being run once there is increased certainty of the transmission assets within the site/zone either

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being consented (under OFTO build) or constructed (under Generator build).

- 4.4. Some responses to the consultation raised concerns about whether the above approach would always be appropriate, particularly for multi-phased projects. Respondents set out that running a separate tender for each phase may lead to: reduced savings from economies of scale; the potential need for more or larger assets if separate OFTOs are in place; increased environmental impacts due to multiple OFTOs; and difficulty in assigning multiple wayleaves and land agreements to multiple OFTOs. However, many respondents also acknowledged that Ofgem will need to take account of the degree of certainty that a phase will go ahead when determining the scope of a tender exercise.

### **Analysis of a range of scenarios for running tender exercises for staged and/or phased projects**

- 4.5. In light of the consultation responses detailed above, Ofgem and our external technical advisers have undertaken further detailed analysis to consider the extent to which, for certain broad types of exemplar project, certain baseline assumptions on the tender process arrangements would support delivery of our objectives for the enduring regulatory regime.
- 4.6. The following tender process arrangements were used as baseline assumptions for the analysis:
- For a staged project, the baseline assumption was that all assets would be included within a single tender exercise.
  - For 'simple' phased and 'integrated' phased projects, the baseline assumption was that a separate tender exercise would be run for each phase.
  - Generator build and OFTO build tender exercises would be run under the arrangements set out in Chapters 2 and 3 of this document.
- 4.7. The analysis considered, for a number of exemplar types of phased and staged projects, the potential broad technical, commercial and tender process impact of the baseline assumptions. The analysis also considered the effect of varying the build option used (ie Generator build or OFTO build) and of the generator varying the timescale between planned delivery of assets across stages or phases.
- 4.8. In order to take account of the expected range of projects likely to qualify for tender exercises under the enduring regime, the analysis considered

## Offshore Electricity Transmission: Updated proposals for the enduring regime

the following different types of exemplar projects<sup>24</sup> – as illustrated within Appendix 5:

- staged
- 'simple' phased
- 'integrated' phased.

4.9. Findings from the analysis are summarised in the sections below.

### **Potential impact on technical aspects**

4.10. The analysis considered the potential impact of the baseline approach on the following technical aspects of projects:

- the need for additional equipment, for example isolation and switching equipment
- access considerations and interfaces, including O&M
- the extent to which there is a need for the generator to obtain and transfer multiple consents and property rights.

#### *Need for additional isolation and switching equipment*

4.11. Key findings are that under the baseline approach, it is not envisaged that additional isolation and switching equipment will be required to be designed or constructed (either by the generator or the OFTO – under Generator build or OFTO build respectively) above what would normally be required for safe operation of the system. For simple phased and integrated phased projects, although the electrical system may become quite complex with greater integration of phases, it is likely to remain a fully integrated system and no additional equipment is likely to be required to facilitate interconnections between multiple OFTOs. From a practical point of view, as each phase would be subject to independent separate financial decisions with the risk that later phases would not progress, the electrical design of each phase may therefore be largely independent. Complexity may be created by the large quantity of equipment and its interconnections; however this complexity is likely to be introduced and addressed by the generator in the concept design phase and would not likely be significantly affected by either Generator build or OFTO build options.

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<sup>24</sup> In order to preserve the confidentiality of commercially sensitive information the analysis did not use actual project information; however, it used designs similar to those being adopted for future projects in order to ensure validity of approach.

## Offshore Electricity Transmission: Updated proposals for the enduring regime

- 4.12. For a multi-phased project (ie a project with three or more phases), potentially having multiple OFTOs in place would mean multiple interfaces, with the likelihood of common assets across OFTOs. Careful upfront concept design of the transmission system could however significantly reduce, or remove, the need for shared assets. Furthermore, interface considerations with all but the most complex designs may generally be limited to onshore substations, which may not be constructed separately for each phase (ie phases may share an onshore substation). Where there are shared assets across OFTOs, agreement would need to be reached on who is responsible for those assets; however, this would represent an extension of the process that already occurs, and has been resolved, between OFTO and TO, and OFTO and generator for transitional projects.

### *Access considerations and interfaces, including O&M*

- 4.13. In relation to access considerations across potentially multiple OFTOs, key findings are that having multiple phases may require more interface management with respect to O&M (under both build options). Each OFTO may have their own site and O&M strategy, and their own local facilities and crew transport boats. Consequently, multiple OFTOs (unless they coordinate their activities) may result in more traffic movements at any one time at ports than for a single OFTO. However, the total number of movements may not differ significantly as there are likely to be similar overall levels of equipment requiring similar amounts of maintenance. This may also be negated to some degree where each OFTO contracts their O&M to a common provider. Furthermore, the bulk of the O&M is more likely to be undertaken by the generator on the generation assets, so OFTO O&M may only represent a small proportion of the total vessel movement associated with the windfarm. For larger projects further offshore, this may be further mitigated by the possibility of the generator adopting an offshore fixed or floating O&M strategy for their generation assets, thus reducing traffic movements and freeing up port space for the OFTO O&M. Irrespective of the strategy employed access considerations may therefore not be significant and may be most dependent on OFTO parties coordinating their movements.
- 4.14. Under the OFTO build option, construction interfaces would depend on number of phases and any overlaps in phases – with potential space constraints within ports where multiple phases overlap. However, where phases offshore are largely discrete, each OFTO could be given responsibility for their own area of work, much as on a large onshore infrastructure program. Additionally, as the time between phases increases, construction interfaces are likely to reduce due to reduced numbers of interactions between parties.

### *Obtaining and transferring multiple consents and property rights*

- 4.15. In relation to the extent that there is a need for the generator to obtain and transfer multiple consents and property rights under the baseline approach, the potential impact of the tender process is judged to be low across all types of project. Under both build options the generator will have the responsibility for determining how to structure its consent

## Offshore Electricity Transmission: Updated proposals for the enduring regime

submission(s) in relation to phases and any decision is likely to be driven by the timeline and overarching design solution for the overall project (ie generation and transmission assets), rather than the number of Generator build or OFTO build tender exercises. For multi-phased integrated projects, due to the overall delivery timescale and uncertainty over later phases, a single consent submission may not cover all phases and consent submissions may cover one or two phases only.

- 4.16. In relation to transfer of consents, the DECC and Ofgem Offshore Transmission Coordination Project Conclusions Report (March 2012) set out that there should be no barrier to the transferability of development consents, provided that the DCO is drafted effectively, and the generator makes clear in submissions to the Infrastructure Planning Commission (IPC)/Secretary of State the range of possible future transfer scenarios so that these can be properly considered during the examination process and provided for in the final DCO. The legal mechanisms used to transfer the consents and property rights may need to take account of potentially multiple OFTOs within multi-phased projects; however, for such projects this may be mitigated by consenting submissions being linked to one or two phases only and hence potentially one or two OFTOs.

### *Overview of findings - technical aspects*

- 4.17. An overview of the findings above is that the baseline arrangements set out within paragraph 4.6 for running tender exercises for staged and phased projects appear on balance to be appropriate across all technical areas. The potential impact of repeat tender exercises under Generator build and OFTO build options was seen to be low for simple phased projects. For integrated phased projects, the potential impact was also seen as low under repeat Generator build exercises as the generator would determine the high level concept design and consenting approach, so consideration would centre on O&M, which was not seen as having a significant impact. For integrated phased projects, the potential impact was seen as medium under repeat OFTO build exercises for projects with multiple phases, where these phases overlap, due to potential space constraints in ports due to construction activity by potentially multiple OFTOs; however, this is also a constraint that would need to be addressed where multiple generators operate out of a similar geographical area.

### **Q4.1 What are your views on the findings relating to potential impact of the baseline approach on the technical aspects of projects?**

#### **Potential impact on commercial and tender process aspects**

- 4.18. The analysis considered the potential impact of the baseline approach on the following commercial and tender process aspects:
- the degree to which an OFTO could realise economies of scale across phases, and whether the first OFTO would have significant advantages bidding for future phases

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- commercial and legal interfaces between parties
- implementation viability and costs of running multiple tender exercises.

*The degree to which an OFTO could realise economies of scale across phases, and whether the first OFTO would have significant advantages bidding for future phases*

- 4.19. In relation to the degree to which an OFTO could realise economies of scale across phases, key findings are that this is likely to differ across project type and across Generator build and OFTO build options. In general, larger projects with more phases may in theory have more opportunities for economies of scale across financing, design, construction and O&M, than smaller simple projects. However, for larger multi-phased projects the time duration between phases and the uncertainty that future phases will go ahead or lack of financial commitment to future phases, may significantly undermine synergies which may otherwise exist.
- 4.20. Under Generator build the generator would undertake design, procurement and construction, so any potential OFTO economies of scale across phases would relate to financing and operational costs, eg provision of O&M. Potential financing benefits may increase with increasing size of a phase, but not necessarily with increasing number of subsequent phases, where there is no firm commitment from the generator to those phases. In relation to operational costs, any potential economies of scale associated with using the same O&M provider for example are likely to be subject to the constraints detailed above in relation to an OFTO not having certainty that a generator will commit to future phases, and therefore not being able to commit in advance.
- 4.21. Under OFTO build, there may be potential economies of scale for an OFTO associated with common detailed design of the transmission assets across phases, although these may be mitigated to some extent by the generator undertaking the high level concept design of the assets. Economies of scale for an OFTO from detailed design related activities, such as lessons learnt and common design, may also not be material compared to the capital expenditure for purchasing components. For example, the savings created by negotiating a reduced cost of cable at the point at which exact details are known of the length and design of cable required, may be significantly greater than savings through common detailed design. As a result, purchasing power and financing once there is certainty that a phase will go ahead may be larger factors than repeat business or design manhour savings.
- 4.22. In relation to financing and construction under OFTO build, the uncertainty that future phases may progress, increased timing between phases, and the uncertainty in project configuration, may significantly reduce or even negate any potential economies of scale across phases by preventing longer-term commitment to contracts and materials and access to finance. An OFTO bidder under OFTO build may be more likely to realise potential

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economies of scale by constructing multiple assets at the same time across different concurrent projects in different sites/zones, rather than across multiple subsequent phases within the same site/zone.

### *Implementation viability and costs of running multiple tender exercises*

- 4.23. Running a tender exercise per phase would require appropriate resourcing from bidders in particular; however, based on the costs associated with running transitional tender exercises, these costs are likely to be low in relation to capital expenditure on assets included within a phase. Additionally, the costs for bidders and generators are likely to be small compared to the benefit of repeat competition and pricing certainty at the time bids are required. Resourcing challenges may also be mitigated by increased time between phases and/or delay in consenting (OFTO build) or construction (Generator build). Potential economies of scale in tender costs and resourcing across phases are also possible where there is a steady pipeline of tender exercises under the enduring regime (as looks likely given current project development plans).
- 4.24. As projects gain phases, with increasing levels of integration in design, this may raise some potential implementation challenges in relation to running multiple tender exercises, in particular under the OFTO build option where the duration of a tender exercise is longer and there is therefore more potential overlap between tender exercises. There may also be practical implementation challenges in running certain combinations of OFTO build and Generator build options for consecutive phases – particularly where the time period between consecutive phases is short and the phases are electrically interconnected. In such a scenario it may be more challenging to follow a Generator build tender exercise for one phase with an OFTO build tender exercise for the next phase because construction of the assets by the successful OFTO following the OFTO build tender exercise may need to occur before the Generator build tender exercise starts. However, as above, these challenges would be mitigated by potential increased time between phases and/or delays in consenting (OFTO build) or construction (Generator build).

### *Overview of findings - commercial and tender process aspects*

- 4.25. An overview of the findings above is that the baseline arrangements set out within paragraph 4.6 for running tender exercises for staged and phased projects appear on balance to be appropriate.
- 4.26. The potential implementation challenges associated with running multiple tender exercises, particularly under the OFTO build option, appear to be less significant than the risks associated with reduced levels of competition and lower pricing certainty for future phases if fewer tender exercises were run. In addition, many of the potential implementation and construction interface challenges become less significant if the time period between phases increases and/or the risk of future phases not being delivered rises. There may however be value in considering an increase to the scope of what might be included within an OFTO build tender exercise for certain

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multi-phased, integrated projects, particularly where the time period between phases is short – although in order to realise the most competitive, highest price certainty bids, the scope would need to be tied to phases which the generator is committed to taking forward.

### **Q4.2 What are your views on the findings relating to potential impact of the baseline approach on commercial and tender process aspects of projects?**

#### **Principles for treating staged and phased projects under the enduring regime**

- 4.27. Based on the findings detailed above, we propose below a set of high level principles for running tender exercises for staged and phased projects under the enduring regime. We propose to apply these principles, once finalised, to each staged or phased project likely to qualify for a tender exercise under the enduring regime in order to determine the most appropriate, economic and efficient approach to running tender exercises for the relevant transmission assets.
- 4.28. We consider, based on the above findings, that the most significant benefits for consumers are likely to be realised by running separate tender exercises at appropriate times for those transmission assets that are most likely to be taken forward and needed. This is because it is likely to realise the benefits of the greatest degree of competition amongst OFTO bidders, with bids based on the most certain financial terms. It will also reduce the possibility of tender exercises being run for transmission assets that are subsequently not needed, or only needed much later than originally planned.
- 4.29. **We are therefore minded that the key overarching principle is to link the scope of a tender exercise to a committed project phase.** Given that our definition of a phase is a grouping of transmission assets defined by certainty on build out, this will ensure that the scope of a tender exercise focuses on those transmission assets that are most likely to be taken forward and needed. This aligns with the approach we originally set out in our December 2011 consultation.
- 4.30. In order to run tender exercises in line with this principle we intend to establish a set of criteria for determining certainty on build out in relation to a tender exercise, ie to determine what transmission assets will be captured by the definition of a phase, and hence by the scope of a tender exercise. It is possible that these criteria could be different under the OFTO build and Generator build options due to the different points in the overall project timeline at which tender exercises will be held under these build options. Under both build options however, we anticipate that the scope of assets captured within a tender exercise will be directly informed by the relevant generator's plans and decisions in relation to project design, consenting and financial commitment.

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- 4.31. In line with the arrangements set out earlier in this document<sup>25</sup>, we are minded that the qualifying project requirements within the Tender Regulations for Generator build and OFTO build options will be the most appropriate mechanism for determining what transmission assets should be captured within the scope of a tender exercise.

### Staged projects

- 4.32. In addition to the overarching principle detailed within paragraph 4.29, the findings of the above analysis enable us to propose an additional principle for running tender exercises for a (single phased) staged project, namely: **we would include all stages/assets within a single tender exercise.**
- 4.33. Under the OFTO build option, we expect that the standard OFTO build arrangements (as described in Chapter 3) would apply, with licence grant occurring in time to allow the OFTO to commence construction of the first stage, and with the OFTO's TRS commencing once the first stage was completed and operational. We intend to determine over the coming months how the OFTO's TRS under the OFTO build option would be structured in relation to the stages; however, we propose at a high level that the OFTO would start receiving an increment of their TRS once the first stage was complete and operational, with the TRS increasing incrementally upon completion of each subsequent stage. The OFTO would receive their full TRS once the final stage was complete. We intend to consider this matter further over the coming months and expect to set out our proposals within our consultation on the OFTO licence later in 2012.

### Q4.3 What are your views on the proposed principles for treating staged projects under the enduring regime?

#### Phased projects

- 4.34. For phased projects we consider that the overarching principle detailed within paragraph 4.29 will ensure the most appropriate approach for the substantial majority of such projects under the enduring regime.
- 4.35. However, in line with the findings of the above analysis there may be a limited number of instances, for certain projects (most likely multi-phased, integrated projects), where we could consider the following variations to that approach:
- in certain circumstances there may be advantages to grouping two or more phases within a single OFTO build tender exercise. This would be subject to the generator providing sufficient commitment that the relevant phases will go ahead and subject to planned delivery of these phases being over a sufficiently short period of time.

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<sup>25</sup> Under the Generator build option details are set out in paragraph 2.8 and under the OFTO build option details are set out in paragraph 3.6.

## Offshore Electricity Transmission: Updated proposals for the enduring regime

- there may be practical implementation challenges in running certain combinations of OFTO build and Generator build options – particularly where the time period between consecutive phases is short and the phases are electrically interconnected.

4.36. Due to the likely variations in project design and delivery timescales across projects that are likely to require tender exercises under the enduring regime, we do not consider that it would be possible, or appropriate, to commit at this point to where we would adopt the variations set out above. We propose instead to discuss each phased project with the relevant generator in advance of running each tender exercise in order to determine the best approach. We will use our objectives for competitive tenders under the enduring regime (as set out in paragraph 1.13) as the basis for determining the most appropriate final approach.

### **Q4.4 What are your views on the proposed approach for treating phased projects under the enduring regime?**

#### **Possible implications of phased projects for the Tender Regulations and the OFTO licence**

##### *Tender Regulations*

- 4.37. As set out within paragraph 4.31, we are minded that the qualifying project requirements set out in the Tender Regulations for the enduring regime will be the most appropriate mechanism for determining what transmission assets will be captured within the scope of a tender exercise for staged and phased projects.
- 4.38. We intend however to test the appropriateness of the proposed qualifying project requirements against examples of a range of phased projects in order to determine whether these ensure the most appropriate grouping of transmission assets within a tender exercise. In order to further inform these tests we also invite generators to share with us further details on their proposed phased projects. We intend to undertake this work in advance of our consultation on Tender Regulations for the enduring regime in late summer or early autumn 2012.
- 4.39. There may also be value in establishing linkages between the qualifying project requirements and any future processes developed as part of the work on network coordination (as explored within our March 2012 consultation) as any such processes may help provide additional information on the likelihood of future phases being taken forward. We will consider this further as work on network coordination progresses.

##### *OFTO licence*

- 4.40. We consider that our proposals in relation to the availability incentive mechanism, as set out within paragraphs 2.65 – 2.79 will ensure that this mechanism is appropriate for the substantial majority of projects

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qualifying under the enduring regime. However, we intend to undertake further work in the coming months to consider how the structure of the availability incentive mechanism relates to a range of possible phased project scenarios, including for multi-phased projects with integrated designs. This will allow us to determine whether we may need to consider refinements to the availability incentive for certain specific types of phased project.

- 4.41. Finally, for certain phased projects it may be worth considering introducing greater flexibility into the current incremental capacity incentive under the OFTO licence. The incremental capacity incentive as currently set out in the OFTO licence reimburses OFTOs for capital costs incurred (being no more than 20% of the original investment cost) where the licensee has provided additional capacity to a generator. In the case of major capital expenditure, the OFTO is required to submit to Ofgem the revenue adjustment that it considers is required to remunerate the costs incurred with providing the additional capacity. Ofgem then determines the revenue adjustment that the OFTO reasonably requires, taking into account the information provided by the OFTO<sup>26</sup>.
- 4.42. For some phased projects, for example where the value of a subsequent phase is significantly smaller than that of the original phase, but is still a significant proportion (ie is above 20% of the value of the first phase), there may be benefits to providing greater flexibility within the additional capacity incentive in order to allow a wider choice of potential options for subsequent phases. Such greater flexibility could involve:
- allowing the incumbent OFTO the option of proposing to Ofgem the revenue adjustment it considers is required to remunerate the costs incurred with providing the additional capacity for the subsequent phase
  - allowing Ofgem to either determine and agree the revenue adjustment the incumbent OFTO reasonably requires, or instead run a competitive tender exercise for the subsequent phase.
- 4.43. As with the other areas outlined above, if we were to consider introducing such greater flexibility into the current additional capacity incentive under the OFTO licence, we would only be likely to consider it for certain projects on a case by case basis, depending on the project design. We intend to consider this further over the coming months, but would welcome respondents' views at this time.

### **Q4.5 What are your views on the possible implications of phased projects for the OFTO licence, and in particular for the current incremental capacity incentive?**

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<sup>26</sup> Under the licence, the OFTO can refuse to offer terms for additional capacity if the additional expenditure is greater than 20% of the original investment costs. In the event of the OFTO refusing to provide this capacity, Ofgem would run a tender exercise for those assets.

## 5. Next steps and implementation

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### Chapter Summary

This chapter sets out the next steps we expect to undertake and the documents we intend to publish over the course of 2012 and early 2013 in order to refine the enduring regime. It also provides an early indication of potential interdependencies between work on coordinated network development for offshore transmission and the tender process under the enduring regime.

### Question box

Q5.1 What are your views on changes that may need to be made to the industry codes and frameworks going forward in order to support the arrangements set out in this document?

Q5.2 What are your views on the possible interdependencies between the development of a coordinated offshore network and the offshore transmission tender process?

Q5.3 Are there any other possible interdependencies we should consider?

### Tender process development and implementation

5.1. We will review and assess stakeholder feedback received in response to this document and publish a summary of responses received to this document, in late summer 2012. We may also publish a brief policy statement summarising key positions for tender exercises under the enduring regime later in 2012, if we feel that doing so would provide further clarity to the stakeholder community.

### Tender Regulations

5.2. We intend to consult on draft revised Tender Regulations for the enduring regime in late summer or early autumn 2012.

### OFTO licence and industry codes/standards

5.3. We intend to consult on OFTO licences for Generator build and OFTO build options in late 2012 – early 2013, with a view to making draft OFTO licences available to bidders in time for commencement of the first tender exercise under the enduring regime. The draft OFTO licences will be informed by the positions set out within this document and by stakeholder feedback received in relation to this document and to our December 2011 consultation.

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- 5.4. Our initial view is that the implications of our minded-to positions and policy proposals on the industry codes and frameworks will be minimal. However, we would welcome your views on any changes that you see as needing to be made to the industry codes and frameworks.

### **Q5.1 What are your views on changes that may need to be made to the industry codes and frameworks going forward in order to support the arrangements set out in this document?**

#### **Tender documentation**

- 5.5. We will ensure that relevant tender documentation is prepared and made available for tender participants in advance of the first tender exercise under the enduring regime.

#### **Measures to support efficient network coordination**

- 5.6. We intend to continue to consider possible interdependencies between the development of a coordinated offshore network and the offshore transmission tender process, including where a party other than a generator may undertake pre-construction works. We consider that such interdependencies might include, but not be limited to the following:
- Triggering the tender and commitment to a tender exercise – to reflect that a party other than a generator may trigger a tender exercise, and that this party would need to be sufficiently incentivised to ensure that the tender process proceeds efficiently.
  - Tender specification – to reflect that a party other than a generator may develop the tender specification and make it available to bidders via the project data room.
  - Pre-construction works – to reflect that a party other than a generator may undertake pre-construction works.
  - Bid evaluation – to reflect on the nature and extent of the role of any third parties in bid evaluation.
  - Cost assessment process – to reflect that the process for determining the economic and efficient costs associated with undertaking pre-construction works, and the process by which that party recovered those costs, may be different.
  - Asset transfer – to ensure that the party transferring pre-construction works to the incoming OFTO is sufficiently incentivised to do so in the most economic and efficient manner.



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- Business separation – to ensure that the competitive tender process continues to be fair and transparent. This would be likely to require clear business separation requirements between bidders and any party undertaking pre-construction works.

**Q5.2 What are your views on the possible interdependencies between the development of a coordinated offshore network and the offshore transmission tender process?**

**Q5.3 Are there any other possible interdependencies we should consider?**

## Appendices

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## Appendix 1 – Consultation response and questions

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- 1.1. Ofgem would like to hear the views of interested parties in relation to any of the issues set out in this document.
- 1.2. We would especially welcome responses to the specific questions which we have set out at the beginning of each chapter heading and which are replicated below.
- 1.3. Responses should be received by 17 July 2012 and should be sent to:

Giedre Kaminskaite-Salters  
Offshore Enduring  
9 Millbank, London, SW1P 3GE  
020 7901 7493  
[Offshore.Enduring@ofgem.gov.uk](mailto:Offshore.Enduring@ofgem.gov.uk)

- 1.4. Unless marked confidential, all responses will be published by placing them in Ofgem's library and on its website [www.ofgem.gov.uk](http://www.ofgem.gov.uk). Respondents may request that their response is kept confidential. Ofgem shall respect this request, subject to any obligations to disclose information, for example, under the Freedom of Information Act 2000 or the Environmental Information Regulations 2004.
- 1.5. Respondents who wish to have their responses remain confidential should clearly mark the document(s) to that effect and include the reasons for confidentiality. It would be helpful if responses could be submitted both electronically and in writing. Respondents are asked to put any confidential material in the appendices to their responses.
- 1.6. Any questions on this document should, in the first instance, be directed to:

Giedre Kaminskaite-Salters  
Offshore Enduring  
9 Millbank, London, SW1P 3GE  
020 7901 7493  
[Offshore.Enduring@ofgem.gov.uk](mailto:Offshore.Enduring@ofgem.gov.uk)

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With the exception of the questions outlined below, there are no questions in relation to other chapters in this document.

### **CHAPTER: Two**

Q2.1 Are there any areas of the OFTO of Last Resort process on which you feel further clarity is needed?

Q2.2 Do you agree that option 2 is the most appropriate enhancement for the availability incentive to incentivise OFTOs to plan outages with regard to maximising exported energy? If not, which option offers the optimal way forward for the enduring regime?

### **CHAPTER: Three**

Q3.1 What are your views on the anticipated costs an unsuccessful bidder may incur in developing an OFTO build bid at the ITT stage, and how Ofgem might approach calculating an allowance for costs?

Q3.2 Do you have any comments on our proposals for:

- i) qualifying project requirements, including the potential to require one or more additional qualifying project requirements in order to provide additional assurance that a project will be taken forward by a generator?
- ii) tender entry conditions?

Q3.3 Do you have any comments on whether our proposed approach to the tender specification provides the necessary information for a bidder to develop a design proposal which meets the generator's requirements?

Q3.4 Do you have any comments on our proposals for seabed surveys, including the level of information generators will be expected to supply and the timing for providing that information?

Q3.5 Do you have any thoughts on how to ensure the generator's supply chain activities on a given project do not result in the supply chain for that project being effectively closed off to any suppliers?

Q3.6 What are your views on how we ensure any process relating to delay to licence grant maintains transparency and parity across bidders?

Q3.7 Do you have any examples of mechanisms to manage weather related delays which you think would be useful to inform our approach?

Q3.8 Do you consider the proposed design and construction criteria to be appropriate and sufficient, and if not, what other criteria would you consider relevant?

Q3.9 Do you have any views on the key elements within the tender specification, as set out in the draft template within Appendix 4, on which there may be advantages in considering a variant bid?

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### **CHAPTER: Four**

Q4.1 What are your views on the findings relating to potential impact of the baseline approach on the technical aspects of projects?

Q4.2 What are your views on the findings relating to potential impact of the baseline approach on commercial and tender process aspects of projects?

Q4.3 What are your views on the proposed principles for treating staged projects under the enduring regime?

Q4.4 What are your views on the proposed approach for treating phased projects under the enduring regime?

Q4.5 What are your views on the possible implications of phased projects for the OFTO licence, and in particular for the current incremental capacity incentive?

### **CHAPTER: Five**

Q5.1 What are your views on changes that may need to be made to the industry codes and frameworks going forward in order to support the arrangements set out in this document?

Q5.2 What are your views on the possible interdependencies between the development of a coordinated offshore network and the offshore transmission tender process?

Q5.3 Are there any other possible interdependencies we should consider?

## Appendix 2 – Summary of responses to ‘Consultation on tender exercises under the enduring regime’, December 2011

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### Introduction

- 1.1. The Ofgem consultation on tender exercises under the enduring regime closed on 17 February 2012. It gave respondents the opportunity to comment on proposals for OFTO build and Generator build tender exercises under the enduring regime. It also presented our initial thinking on phased projects.
- 1.2. This appendix provides an overview of the key themes arising from the 25 responses received to the consultation. Copies of all non-confidential responses are available from the Ofgem website<sup>27</sup>.
- 1.3. Summaries of responses in respect of each of the themes of the consultation document are set out below.

### OFTO build

#### Proposal not to prioritise early OFTO build

- 1.4. There was general agreement with the view that it is better to focus on late OFTO build (where the OFTO takes responsibility for construction of the assets but not for obtaining consents) in order to ensure that the delivery of fully workable Generator build and (late) OFTO build options is prioritised.
- 1.5. However a number of stakeholders expressed a view that if a more coordinated offshore network design starts to emerge then the early OFTO build option (where the OFTO also takes responsibility for obtaining consents) should not be ruled out for some types of asset.

#### Overview of OFTO build option

- 1.6. Most generator respondents considered that the proposed OFTO build option has considerable uncertainty associated with it, not all of which they consider can be mitigated. In particular some generator respondents were concerned about:

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<sup>27</sup> Responses to Offshore Electricity Transmission: Consultation on tender exercises under the enduring regime, December 2011, Ref (178/11):  
<http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=42&refer=Networks/offtrans/pdc/cdr/Cons2011>

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- the risk of delay to project construction
  - the increased cost of finance to the generator associated with generation assets (due to risk on the delivery of transmission assets)
  - the risks associated with project-financed OFTOs (due to lower availability of finance and at higher rates of interest)
  - the level of flexibility around procurement approaches (please see later section on supply chain and procurement for more detail).
- 1.7. The view of the majority of bidder respondents was that the OFTO build approach largely works, but a minority expressed concern that the incentives for generators to choose OFTO build may not be sufficient.

### **Triggering the tender and commitment to tender exercise**

- 1.8. There was broad agreement with the proposal that a generator triggers a tender exercise by making a written request to Ofgem. However some respondents were of the view that the tender process should:
- start earlier
  - be tailored to particular project timescales
  - be triggered by the level of progress in procurement activity and investment decisions.
- 1.9. On generator security, a minority of generator respondents were happy with continuing the transitional arrangements where a generator is liable to forfeit a proportion of their security, based on tender costs incurred, if a tender is cancelled. In general generator respondents wished to be able to switch from OFTO build to Generator build with the cost of doing this reflecting only the reasonable costs incurred in the tender process up to that point and taking into account factors outside of the generator's control when determining the level of security to be forfeited.
- 1.10. All bidders who responded considered that the generator should be liable to provide security, and that bidders should receive some form of reimbursement (to cover tender costs incurred) if the tender is cancelled due to the actions of the generator.

### **Tender specification**

- 1.11. The majority of respondents considered that the information set out in the consultation to be included within the tender specification was broadly appropriate. Two respondents suggested the addition of Front End Engineering Designs (FEED).

## Offshore Electricity Transmission: Updated proposals for the enduring regime

- 1.12. Several respondents mentioned that the scope of the design of the transmission assets may be tightly constrained by the planning consent obtained. One respondent stated that the tender specification should clarify which aspects of design the bidder can influence.

### **Pre-construction works, data room and seabed surveys**

- 1.13. There was broad approval of the proposed scope of pre-construction works listed in the consultation. Two generator respondents raised concerns around the warranties they may be asked to provide for pre-construction works.
- 1.14. The majority of respondents made no suggestions for additional information required in the data room. Specific suggestions made centred around requests for more detail on the design of the assets and ongoing construction progress.
- 1.15. There was little appetite for a generic seabed survey specification for OFTO build due to concerns that developing the specification may delay project timelines and the view that a survey must be project specific. Alternative suggestions included peer review of generator surveys, requesting third parties undertake all surveys and creating principles for seabed surveys which can be applied to each project.

### **Supply chain and procurement**

- 1.16. The majority of generator and supplier respondents were against the proposal that bidders undertake all procurement through the tender process, with key concerns raised relating to risk of delays in procuring long lead time items, the need for the generator to engage with the supplier at an early stage, and an expected lack of willingness for suppliers to engage in parallel procurement processes with multiple bidders. There was also a view that collaborative procurement approaches will deliver lower costs and there was an unwillingness to accept that bidders will be any better at negotiating terms with the suppliers.
- 1.17. Bidder respondents were generally in favour of the proposal, although one bidder did suggest generators should have the opportunity to place "factory orders" and pay any necessary deposits ahead of financial close in order to lock in the manufacturing timetable.
- 1.18. Other respondents were generally in favour of bidders carrying out all procurement in order to drive efficiency, competition and innovation; however several reiterated the concern that suppliers may struggle to deal with multiple procurement processes on each project.
- 1.19. Alternative approaches to procurement were set out in the consultation which suggested that generators could undertake some non-binding, non-exclusive supply chain activities to enable suppliers to prepare for potential contracts. Most respondents were not in favour of any of the alternative

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approaches, with the reasons for this being that the alternative approaches would create uncertainty for the supply chain, and most respondents did not consider that non-binding non-exclusive options would enable reservation of manufacturing capacity.

- 1.20. Overall, the majority of generator respondents were of the view that they need to have more involvement in procurement and be allowed to engage with the supply chain during the design and specification stages of the projects. Some generator respondents considered that the bidders should accept the procurement choices made by the generator.
- 1.21. On the topic of supply chain constraints there was general agreement that there are supply chain constraints for offshore transmission components particularly in the High Voltage Direct Current (HVDC) cable market. It was noted by one respondent that growth in the European and global transmission market may exacerbate these problems.

### **Interaction between parties**

- 1.22. Most respondents were broadly happy with the transitional arrangements for interactions between bidders and generators. A significant number of generator respondents stated that they would like to see an increase in contact between bidders and generators during the tender process to aid understanding of the work that the generator does. One generator respondent suggested a question and answer facility in the data room.
- 1.23. A small minority of respondents expressed concerns about the possibility of suppliers forming exclusivity agreements with bidders, thus constraining the number of bidders who could take part in a tender exercise. One bidder respondent suggested limiting the number of bidders at ITT to two to mitigate this risk.

### **Basis of bids**

- 1.24. The majority of respondents considered that 20 years would provide a good basis for the duration of the TRS, however the majority also suggested that this should be either kept under review or made flexible to enable adjustment for project specific circumstances. Some respondents suggested a longer TRS period may more closely match the lifetime of the asset.
- 1.25. There were mixed views on the proposal for a risk sharing mechanism for licence grant delay but generally respondents were in favour. However some generator respondents stated that they would not wish to pick up the cost of the risk sharing mechanism as they would already be directly adversely affected by any delay.
- 1.26. Respondents were generally in favour of a weather risk sharing mechanism if it reduced the TRS.

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- 1.27. On the topic of recovering bid costs following an OFTO build tender, some generators considered the transitional regime approach to be appropriate for recovery of bid costs under OFTO build. Other generator respondents, however, thought there could be benefits to reviewing the approach, including as a method of encouraging competition. Bidder respondents were in favour of some or all bid costs being reimbursed to all bidders. One supplier respondent stated that suppliers would expect to receive a proportion of whatever bid costs the bidders are reimbursed.

### **Refinancing gain share mechanism**

- 1.28. There were mixed responses, but the majority of respondents were not in favour of a refinancing gain share mechanism.
- 1.29. Some generator respondents were in favour, as they considered that they (and ultimately the consumer) should benefit in a successful refinancing as they also bear risks arising from OFTO performance.
- 1.30. Those against a gain share mechanism stated that an expectation of a future refinance is likely to be built into most bidders' financial projections and equity pricing. Therefore any reduction in the refinancing gains OFTOs could realise may reduce bidding appetite and/or push up pricing.
- 1.31. There was less appetite for an asymmetric mechanism (eg one where refinancing gains are shared but refinancing losses are not) compared to a mechanism through which gains and losses are shared, particularly in light of current lending market developments with funders being increasingly unwilling to lend long-term.

### **Tender stages and timings**

- 1.32. In general there was agreement from respondents that grouping projects into tender rounds is a sensible approach. Respondents showed no clear preference between the option whereby a generic PQ stage is run in tender windows with pre-qualification being for a defined time period, or the option whereby a generic PQ stage is run after a group of projects have qualified for a tender round. There was consensus that the PQ stage should only be run if there is reasonable certainty of one or more projects commencing during the PQ validity period.
- 1.33. The majority of generator respondents supported the grouping of projects, but stated that the process would need to be flexible to accommodate individual generators' timescales and would need to commence early enough to reduce potential to impact adversely on the overall project timescale. They suggested that PQ has a validity period of no more than 12 months.
- 1.34. Some bidder respondents suggested longer validity periods of up to three years. They also suggested an annual opportunity for new entrants to join the PQ panel.

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- 1.35. For the ITT stage the majority of respondents who expressed a preference had a preference for option 2 (a single ITT stage with bidders submitting bids no earlier than three months before anticipated consent decision. Preferred bidder appointment would occur no earlier than the date of planning consent decision). A minority of generator respondents and one supplier respondent expressed a preference for option 1 (single ITT stage with bidders having a maximum of one month post planning consent decision to submit their ITT bid). No respondents had a preference for option 3 (a split ITT stage).
- 1.36. Two respondents considered that none of the three options would meet the needs of Round 3 projects and the process needs to happen earlier than any of the suggested approaches.

### **Bid evaluation and variant bids**

- 1.37. There was broad agreement amongst respondents that the generator should play a role in bid evaluation. Only one bidder respondent objected to generator involvement. A number of non-generator respondents stated the need for fair and transparent treatment of bids and an open and flexible process if the generator is involved.
- 1.38. There was support from a small majority of respondents for the NETSO to have role in evaluation in order to evaluate onshore implications and to ensure codes and standards are complied with. However some respondents mentioned the importance of bid confidentiality.
- 1.39. There was support for variant bids across industry especially regarding technical variations. There were suggestions that variant bids would support innovation and competition.

### **Cost assessment (recovery of generator pre-construction costs)**

- 1.40. There was an almost unanimous view from generator respondents (and also from one bidder respondent) that it would be preferable for the generator to be able to recover pre-construction costs upon OFTO appointment rather than when the OFTO has completed construction of the assets, as suggested in the consultation. If costs are reimbursed later, then they should include interest.
- 1.41. Three generator respondents stated that if a planning application is turned down, the generator should be entitled to compensation as part of the tender process in the same way that onshore TOs are compensated for such costs.
- 1.42. Responses from bidder respondents generally stated that the proposals for recovery of preconstruction works were acceptable.

### **OFTO licence – design incentives**

- 1.43. The majority of respondents were of the view that the incentives should broadly stay the same, with half of these suggesting they could be improved upon to better align generator and OFTO incentives. The majority of responses suggested including the expected level of transmission losses as an assessment criterion in the tender process evaluation rather than as a separate incentive as suggested in the consultation.

### **Delivery incentives**

- 1.44. Most generator respondents considered that there should be additional delivery incentives, as the risks of financial losses faced by generators unable to generate would be much greater than the financial losses faced by an OFTO who is late. One generator respondent considered that generators should not be exposed to, or disadvantaged by, poor performance and performance failures of the OFTO, TO or Transmission System Operator (TSO).
- 1.45. Bidders who responded were in general agreement that no additional delivery incentives would be required.

### **Revenue entitlement – approach to indexation**

- 1.46. Some respondents considered that the current approach (annually increasing the tender revenue in line with RPI) to be appropriate, with the key benefits including the fact that it is well understood by the market, is attractive to investors and the RPI hedging approach adopted makes the OFTO a low risk investment. As a result the current arrangements provide value for money to consumers through reduced cost of capital.
- 1.47. Some respondents suggested that the TRS could be subject to proportional indexation. The key benefits would be that it could allow the removal of the RPI swap, and give greater certainty for the costs borne by the consumer (because not all of the TRS is subject to indexation). If proportional indexation is permitted, for the bids to be comparable, the financial value of the bids should be evaluated on a Net Present Value (NPV) basis rather than on a day-one TRS basis. A potential disadvantage of this approach that was noted by one respondent is that the capital markets may prefer a fully indexed revenue stream.

### **Decommissioning**

- 1.48. There was general agreement of the need for greater clarity on the wider end of revenue/decommissioning process after the revenue stream has finished.

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- 1.49. There was a fairly even split between responses arguing for decommissioning to remain as part of the bidding process and those suggesting all costs are passed through.

### **Generator build**

#### **High level construct/process**

- 1.50. There was a view from most generator respondents that OFTO build should not be prioritised over Generator build. A number of generator respondents also sought further clarity on commissioning, coordination and OFTO of last resort arrangements.

#### **Seabed survey specification**

- 1.51. As with OFTO build, the vast majority of generator respondents were against having a generic seabed survey specification for Generator build as they considered that it will not be feasible to agree on and that surveys need to be project specific. Two bidder respondents thought that generators should work to an agreed specification.

#### **Tender stages and timings**

- 1.52. In general there was agreement that grouping projects into tender rounds is a sensible approach, however most generator respondents also noted the need to maintain flexibility to allow tender rounds to be as frequent as necessary to meet individual generators' critical paths (ie to ensure no project would run the risk of significant delays due to the lack of other projects to participate in a tender round).
- 1.53. In terms of further improvements to the current tender process there was a recommendation for early communication between bidders and generators and a request for greater clarity over the cost assessment process, asset valuation and transfer process and timing.
- 1.54. One respondent suggested ensuring that information provided by the generator is appropriate and that the process is aligned with commissioning and completion of construction so as to minimise the preferred bidder period.

#### **Bid evaluation**

- 1.55. The majority of respondents who answered this question supported generator involvement in the evaluation process. The majority of this support was from generator respondents. Three bidder respondents were against this proposal.

### **Data Room**

- 1.56. There was general agreement that the data room is broadly fit for purpose for a Generator build tender exercise; however some suggestions for improvement were made including increasing the size limit of files that can be uploaded, improving the folder structure within the data room and developing a series of Frequently Asked Questions (FAQs) based on experience from previous tender exercises.

### **Asset transfer**

- 1.57. A number of suggestions were made on how the process to close could be improved. One respondent suggested that all parties should provide early clarity on their requirements prior to asset transfer. Another response requested guidance from Ofgem on the timing of the asset transfer process.
- 1.58. A significant majority of respondents were in favour of a process which allows for share sales as well as asset transfers.

### **OFTO licence and revenue entitlement**

- 1.59. Most respondents were content with the current pass throughs in the licence. Two respondents suggested broadening the scope of the decommissioning pass through. Two respondents suggested remediation or reburial of the cable or rock berms as an additional pass through. One respondent suggested that insurance increases and deductibles should be pass through items.
- 1.60. On the refinancing gain share mechanism the responses were broadly similar to the equivalent question under OFTO build, though some respondents noted that in their view there will be less opportunity for refinancing under the Generator build option as the OFTO will not have to finance construction.

### **Phased projects**

- 1.61. There was general agreement that the definitions of phase and stage set out in the December 2011 consultation are practically relevant.
- 1.62. On the topic of whether a stage or phase qualifies for a single tender exercise there was a general view that:
- Ofgem should not be overly prescriptive in terms of what is included in a tender exercise

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- the approach needs to be flexible enough to deal with complex coordinated solutions (examples of how Ofgem would split projects into tender exercises would be helpful)
  - stages should always be covered by a single tender exercise (not split).
- 1.63. Most generator respondents and several other respondents also set out that the generator should determine the split of what should be tendered together. Some respondents commented that Ofgem should avoid splitting tender exercises where there is any element of shared asset (eg shared onshore substation, or assets that are electrically linked).
- 1.64. On the topic of whether Ofgem should run a separate tender exercise for each phase within a site/zone, many respondents (particularly generators) were of the view that running a separate tender exercise for each phase is likely to lead to:
- potential for project delays due to tender process being on the critical path
  - reduced savings from economies of scale and the potential need for more or larger assets if separate OFTOs are in place
  - increased environmental impacts due to multiple OFTOs
  - difficulty in assigning multiple wayleaves and land agreements
  - unsuitability of approach to supporting the coordination project objectives.
- 1.65. There was a general view that Ofgem should take account of the degree of certainty that a phase will go ahead when deciding the scope of a tender exercise.

## Appendix 3 – Outline of availability incentive options

- 1.1. This appendix further outlines the proposals, as set out in Chapter 2, paragraphs 2.65 – 2.79, for enhancing the availability incentive for enduring tender exercises. Note that this is a high level summary, based on a number of assumptions and is intended only to illustrate the broad principles of the mechanisms proposed. The duration of the outages shown above are for indicative purposes and could range from minutes to days or longer.

### Current incentive mechanism

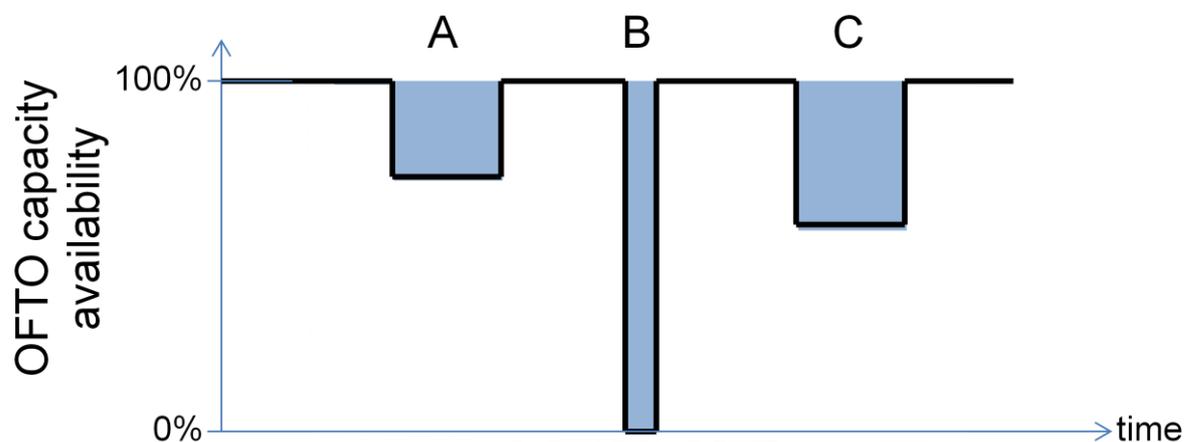


Diagram 5 – Graphical representation of different outages on the OFTO transmission assets

- 1.2. The above graph shows the OFTO's capacity availability over time, where 100% capacity availability indicates that the assets are fully available. A, B and C represent outages on the transmission system. The shaded areas represent the size of the penalty on the OFTO because under the current availability incentive mechanism the penalty is calculated from the MWh (capacity unavailability multiplied by time) of the outage. Since the shaded areas for outage A and outage B are the same size, they result in the same level of penalty on the OFTO.

**Weighted availability incentive**

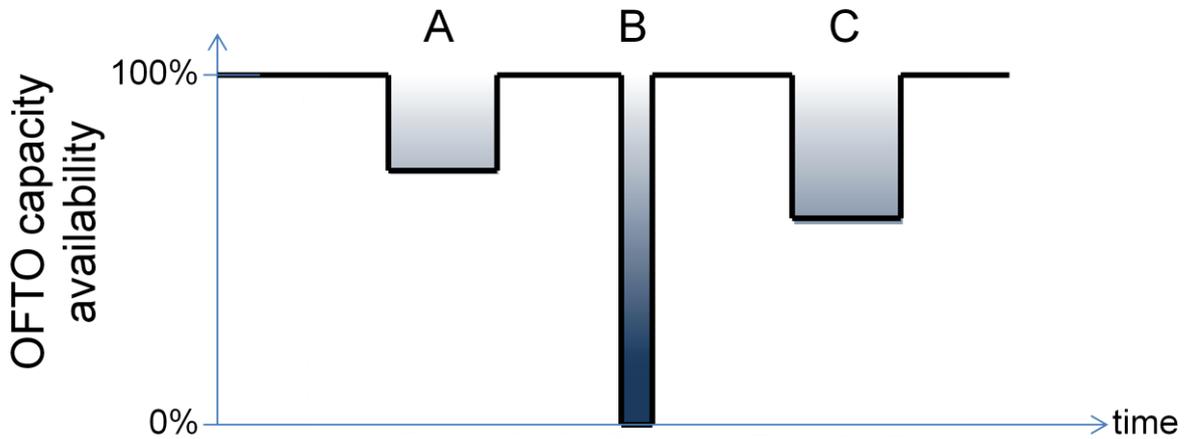


Diagram 6 – Graphical representation of different outages on the OFTO transmission assets

1.3. This graph shows the same outages, but under the weighted availability incentive mechanism outage B would result in a larger penalty than A because it is a larger capacity outage, even though they are the same size in MWh. This is to reflect the fact that most of the time the windfarm will generate at below 100% capacity, so that outage B is likely to have a greater impact on the generator’s ability to export than outage A. Note that this mechanism does not depend on generation levels in order to calculate the level of the penalty on the OFTO.

**Availability-based incentive with bonus mechanism**

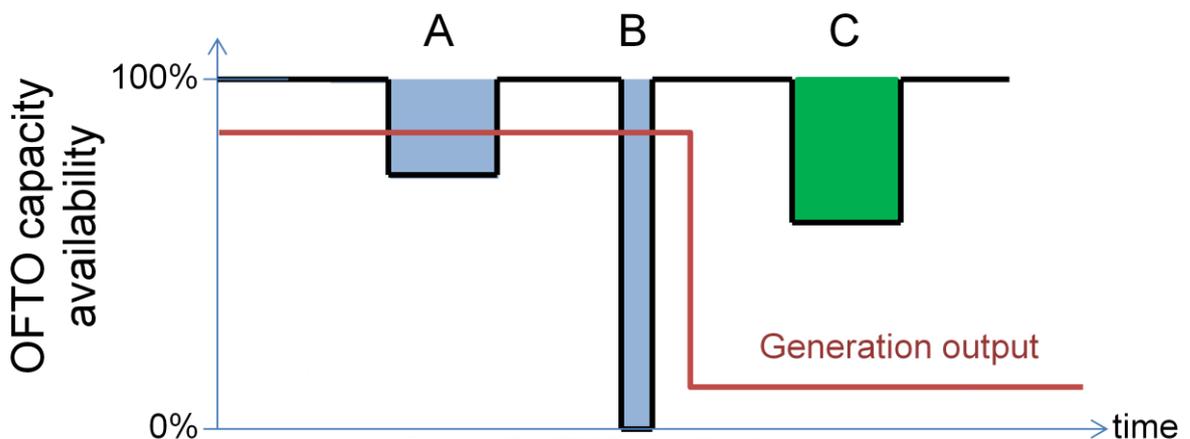


Diagram 7 – Graphical representation of different outages on the OFTO transmission assets and the impact on generation output



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- 1.4. Diagram 7 shows the same outages as in the previous two graphs, but also shows the generation output, or, where the red line goes above the black line, the generation that would have been exported were the transmission assets fully available. The OFTO outages only impact on the generator's ability to export where the black line drops below the red line.
- 1.5. The bonus mechanism would apply on top of the current availability incentive mechanism. It would negate (where the outage had no impact on generation) or reduce (where the outage had very little impact on generation) the impact of any unavailability penalties on the OFTO that occurred during times of low or no generation. We note that adopting such an approach would be predicated on the OFTO being able to respond to the incentive in how they manage outages.
- 1.6. In the example above, outages A and B impact on the ability of the generator to export power, so no bonus payments are paid, and the penalty deductions are applied as they are under the current availability incentive mechanism, shown shaded in blue. However, outage C does not impact on the generator's ability to export power. Therefore a bonus payment is made to negate the penalty, shown above in green.

## Appendix 4 – Draft tender specification template

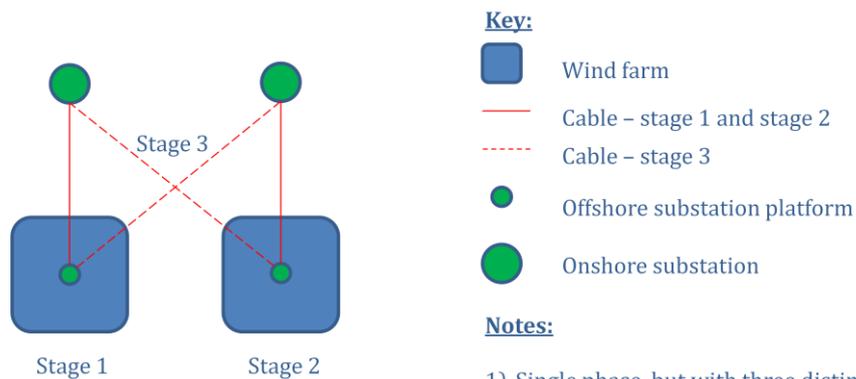
Area	Tender Specification Requirement	Source of/reason for requirement
General	Planned windfarm delivery program (where interaction)	Windfarm delivery requirement
	Required completion date	Windfarm delivery requirement
	Number of platforms	EIA
	Location of platforms	EIA
	External details of platforms	EIA
	Onshore substation location	Town and Country Planning Act application/ EIA
	External details of onshore substation	Town and Country Planning Act application/ EIA
	Details of transmission cable corridor (onshore and offshore)	EIA
Electrical Design	Rating and number of turbines	Needed for harmonic design
	Number of cable arrays per platform (or capacity per platform)	Needed for platform design
	Details of generator reactive support to be provided	Needed for reactive power design
	Details of onshore and offshore interface points	Needed for general asset design
	Voltage requirements at interface points	Needed for general asset design
	Required Transmission Entry Capacity (TEC)	BCA
	Site specific specifications from BCA	BCA
	Other technical requirements from BCA	BCA
	Windfarm Supervisory Control and Data Acquisition (SCADA) requirements	Needed for SCADA/ cable offshore design
	Ownership boundary of OFTO plant and apparatus at onshore substation	BCA
Other	Cable crossing requirements (where available)	EIA/ Needed for cable installation assessment

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Area	Tender Specification Requirement	Source of/reason for requirement
	Details of technical codes and standards to which assets must be built (Grid Code etc, structural, etc)	Needed for general asset design
	Required life span of assets	Needed for general asset design
	Onshore landing point	Town and Country Planning Act application/ EIA
	Other requirements from the EIA including, working methods and material types	EIA
Limitations from Environmental Impact Assessment (EIA)	Cable burial depth	EIA
	Cable burial techniques	EIA
	Heat production at sea	EIA
	Drilling on landing	EIA
	Visual impact from onshore substation and offshore platform	EIA
	Onshore foundations	EIA
	Offshore foundations	EIA

## Appendix 5 – Examples of staged and phased projects

- 1.1. Illustrations of different types of exemplar staged and phased projects considered as part of the analysis of a range of scenarios for running tender exercises for staged and/or phased projects:



**Notes:**

- 1) Single phase, but with three distinct stages of transmission asset build out.
- 2) Build out of stages occurs consecutively with stages electrically linked.
- 3) Stages 1 and 2 provide capacity to carry export power from wind turbines.
- 4) Stage 3 provides additional security to transmission system.

Diagram 8 – Illustrative staged project

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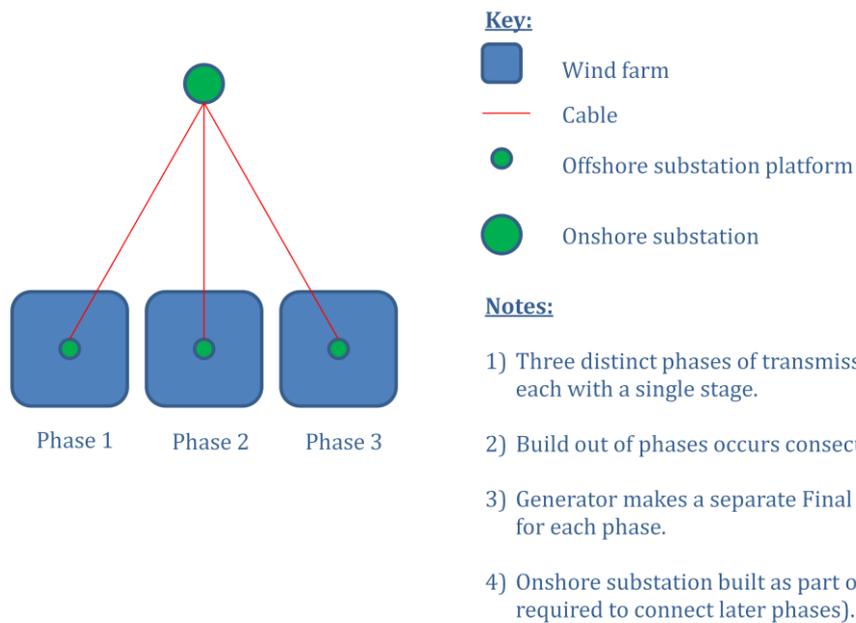


Diagram 9 – Illustrative 'simple' phased project

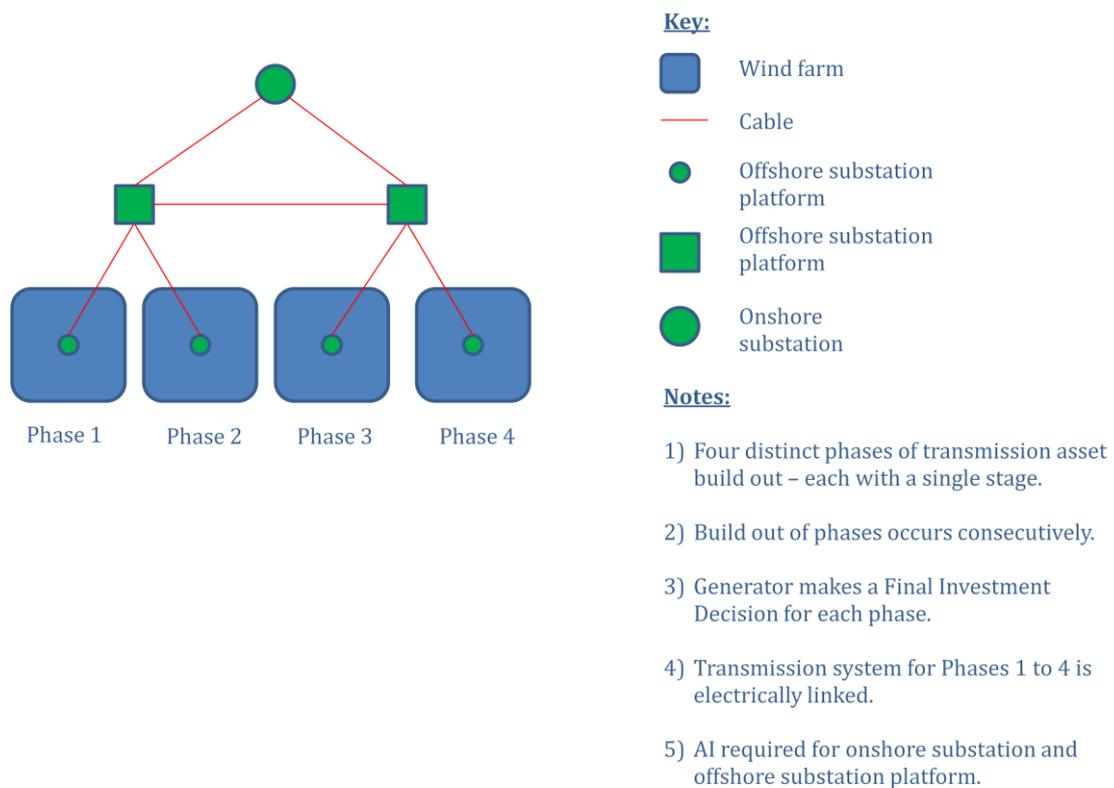


Diagram 10 – Illustrative 'integrated' phased project

## Appendix 6 – Glossary

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### **A**

#### AI

Anticipatory investment – this refers to the definition we used in our March 2012 consultation: ‘capital expenditure that supports anticipated future network requirements, rather than the immediate needs of a single offshore generation phase’

#### Authority

The Gas and Electricity Markets Authority

### **B**

#### BAFO

Best and Final Offer

#### BCA

Bilateral Connection Agreement

### **C**

#### CPO

Compulsory Purchase Order

#### CPT

Cone Penetration Testing

#### Critical Path

The timeline of individual activities on which the overall project timeline is dependent

#### CUSC

The Connection and Use of System Code

### **D**

#### DCO

Development Consent Order

#### DECC

Department of Energy and Climate Change



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### [December 2011 consultation](#)

Offshore Electricity Transmission: Consultation on tender exercises under the enduring regime, December 2011, Ref (178/11)

### **E**

#### [EIA](#)

Environmental Impact Assessment

#### [EMR](#)

Electricity Market Reform

#### [EPC](#)

Engineering, Procurement and Construction

#### [EU](#)

European Union

### **F**

#### [FAQs](#)

Frequently Asked Questions

#### [FEED](#)

Front End Engineering Design

#### [FID](#)

Final Investment Decision

### **G**

#### [GB](#)

Great Britain

#### [GI](#)

Geotechnical Investigation

#### [Grid Code](#)

The Grid Code covers technical aspects relating to connections to and the operation and use of the national electricity transmission system



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[GW](#)

Gigawatt

**H**

[HVDC](#)

High Voltage Direct Current

**I**

[IM](#)

Information Memorandum

[IPC](#)

Infrastructure Planning Commission

[ITT](#)

Invitation to Tender

**J**

[JR](#)

Judicial Review

**L**

[LD](#)

Liquidated Damages

**M**

[March 2012 consultation](#)

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

[Metocean](#)

Meteorology and oceanography

[MWh](#)

Megawatt hour



## Offshore Electricity Transmission: Updated proposals for the enduring regime

### **N**

#### **NETS**

National Electricity Transmission System

#### **NETSO**

National Electricity Transmission System Operator

#### **NGET**

National Grid Electricity Transmission

#### **NPV**

Net Present Value

### **O**

#### **ODIS**

Offshore Development Information Statement

#### **Ofgem**

Office of Gas and Electricity Markets

#### **OFTO**

Offshore Transmission Owner

#### **O&M**

Operations and maintenance

#### **OSP**

Offshore Substation Platform

#### **OTCG**

Offshore Transmission Coordination Group

#### **OTCP**

Offshore Transmission Coordination Project

## Offshore Electricity Transmission: Updated proposals for the enduring regime

### **P**

#### Phase

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

#### PIM

Preliminary Information Memorandum

#### PQ

Pre-Qualification

#### Preferred Bidder

The bidder chosen to own the transmission assets following the Invitation to Tender stage of the tender process

#### PTRA

Post Tender Revenue Adjustment

### **Q**

#### QTT

Qualification to Tender

### **R**

#### RIIO

Revenue = Incentives + Innovation + Outputs

#### RPI

Retail Price Index

### **S**

#### SCADA

Supervisory Control and Data Acquisition

#### Site

The transmission assets within a site licensed by the Crown Estate, in relation to Crown Estate Round 2, Round 2.5 and Scottish territorial waters

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### Stage

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

### STC

System Operator – Transmission Owner Code

### T

### TCA<sub>t</sub>

Tender Fee Cost Adjustment Term

### TEC

Transmission Entry Capacity

### Third Package Regulations

Electricity and Gas (Internal Markets) Regulations 2011

### TO

Transmission Owner

### TO Construction Programme

The agreed programme of works to be carried out by National Grid Electricity Transmission and the user as set out in their construction agreement

### TOCA

Transmission Owner Construction Agreement

### Transmission Assets

Transmission assets are defined in Paragraph 1 (3)(a) of Schedule 2A to the Electricity Act 1989 (the 'Electricity Act') 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'*. The transmission system is expected to include subsea export cables, onshore export cables, onshore and offshore substation, and any other assets, consents, property arrangements or permits required by an incoming OFTO in order for it to fulfil its obligations as a transmission operator

### TRS

Tender Revenue Stream

### TSO

Transmission System Operator



## Offshore Electricity Transmission: Updated proposals for the enduring regime

### **U**

UK

United Kingdom

### **Z**

Zone

The transmission assets within a zone licensed by the Crown Estate, in relation to Crown Estate Round 3

## Appendix 7 – Feedback questionnaire

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1.1. Ofgem considers that consultation is at the heart of good policy development. We are keen to consider any comments or complaints about the manner in which this consultation has been conducted. 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 consultation?
2. Do you have any comments about the overall tone and content of the report?
3. Was the report easy to read and understand, could it have been better written?
4. To what extent did the report's conclusions provide a balanced view?
5. To what extent did the report make reasoned recommendations for improvement?
6. Please add any further comments.

1.2. Please send your comments to:

**Andrew MacFaul**

Consultation Co-ordinator

Ofgem

9 Millbank

London

SW1P 3GE

[andrew.macfaul@ofgem.gov.uk](mailto:andrew.macfaul@ofgem.gov.uk)