ofgem E-Serve Promoting choice and value

for all gas and electricity customers

Offshore Electricity Transmission: Implementing further refinements to the enduring regime

Document type: Consultation

ENERGY

& CLIMATE CHANGE

DECC Ref: URN 10D/977 Ofgem Ref: 137/10

Date of publication: 8 November 2010

Deadline for response: Noon on 29 November 2010, although we request that responses of a material nature are provided by noon on 22 November 2010.

Target audience: Offshore generator developers, Transmission Licensees, prospective Offshore Transmission Owners and all other stakeholders with an interest in Offshore Electricity Transmission.

Overview:

The joint statement of 21 October 2010 by the Department of Energy and Climate Change (DECC) and Ofgem E-Serve set out our intention to develop and implement those changes to the legal and regulatory framework necessary to provide a generator build option as part of the enduring offshore transmission regime and to provide additional clarity on the OFTO build options.

This document consults on proposed amendments to the Connection and Use of System Code (CUSC) and the Grid Code that we consider necessary to implement our proposals. We also consider that changes to the System Operator - Transmission Owner Code (STC) will be required to fully implement our proposals. We intend to publish our proposed STC changes later in the year.

The document also provides an update on our key policy positions and sets out the rationale for the proposed code changes.

Contact name and details: Yvonne Naughton, Ofgem and Kristina Dahlström, DECC

Tel: 0141 331 6006 (Ofgem), 0300 068 5113 (DECC)

Email: yvonne.naughton@ofgem.gov.uk; kristina.dahlstrom@decc.gsi.gov.uk;

Team: Offshore Transmission Policy Team (Ofgem) Future Electricity Networks Team (DECC)

Context

Ofgem and Government have worked together over the past five years to develop a regulatory regime for offshore electricity transmission which provides flexibility and supports the delivery of significant volumes of offshore generation while protecting the interests of present and future consumers. A key part of the regime is that offshore electricity transmission licences will be granted following a competitive tender process run by Ofgem.

In June 2009, the Secretary of State for Energy and Climate Change commenced powers to enable modifications to be made to the industry codes and licences for the purpose of offshore transmission (Go-Active). This enabled the enduring and transitional regulatory regimes for offshore transmission to be put in place. Following Go-Active, Ofgem launched the first transitional tender round under the new regime and subsequently consulted further on detailed aspects of the enduring framework.

The December 2009 consultation¹ set out minded-to positions in respect of key elements of the enduring regime. In response to the consultation generators raised the concern that the regime would increase risk for generators as they would have less control over the design and delivery of offshore transmission assets.

On 26 August 2010², Ofgem and DECC jointly consulted on further refinements to the enduring offshore transmission regime (the August 2010 consultation). The consultation set out our proposal to extend the flexibility of the offshore transmission regime by including a 'generator build' option. The consultation also sought further views on our proposed approach to 'OFTO build' options. Under the proposed framework a generator will be able to choose the work that they, or an Offshore Transmission Owner (OFTO), undertake associated with construction of offshore transmission assets. We considered that the proposals are a pragmatic response to the concerns expressed by stakeholders and have been welcomed by the vast majority of the industry.

We recently published a joint statement³ announcing our intention to implement the changes to the industry codes necessary to deliver a generator build option and to provide additional clarity on the OFTO build options under the enduring regime. This consultation seeks views on proposed amendments to the Connection and Use of System Code (CUSC) and the Grid Code that we consider are necessary to implement our proposals.

Office of Gas and Electricity Markets and the Department of Energy and Climate Change

¹ Offshore Electricity Transmission: Consultation on the Enduring Regime, December 2009. ² Offshore Electricity Transmission: Further consultation on the Enduring Regulatory Regime, August 2010.

³ Providing additional flexibility in the enduring regulatory regime for offshore electricity transmission: Initial joint decision statement, October 2010.

⁴ The Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations 2010

We also consider that changes to the System Operator - Transmission Owner Code (STC) are required to fully implement our proposals and reflect the effect of those changes proposed to the CUSC and the Grid Code. We intend to publish our proposed changes later in the year.

Associated Documents

- Offshore Electricity Transmission: Technical consultation on changes to industry codes for the enduring regime. Annex 1: Connection and Use of System Code
- Offshore Electricity Transmission: Technical consultation on changes to industry codes for the enduring regime. Annex 2: Grid Code
- Providing additional flexibility in the enduring regulatory regime for offshore electricity transmission: Initial joint decision statement
- Offshore Electricity Transmission: Further consultation on the Enduring Regulatory regime, August 2010, Ofgem ref 113/10; DECC ref 10D/786
- Extension of the enduring offshore transmission regime to include the option of a generator building assets, with a competitive tender transferring assets to OFTO, IA No: DECC00012
- Providing additional flexibility in the enduring regulatory regime for offshore electricity transmission – Ofgem/DECC joint statement
- Offshore Electricity Transmission: Joint statement on draft Tender Regulations 2010
- Offshore Electricity Transmission: Joint statement on the Enduring Regime

 Clarification of transmission losses
- Offshore Electricity Transmission: Consultation on the Enduring Regime, December 2009

N.B. Prior to the publications listed above, Ofgem and DECC consulted extensively on the regime. All documents relating to that consultation are available on the Ofgem website.

Table of Contents

Summary	
1. Introduction	
Purpose of the document	4
Background to regime	5
Commencement of the regime	5
Previous consultation on the enduring regime	
Structure of this document	
Responding to this document	
Next steps	8
2. The enduring regulatory regime for offshore electricity	
transmission	
Key issues to ensure consistency across all build options	
Code changes for the generator build option	
Code changes for the late OFTO build option	12
Transfer of assets to the OFTO	
OFTO of Last Resort	
Generator Build	
Abandonment	
The Obligation and its Safeguards	
Cost Guarantee	
Competition Issues	
Other issues	
Tender Regulations, Tender Rules and Licence Conditions	
Co-ordination	
Third Package	
3. Proposed changes to the industry codes	
Overview	
Connection process	
Pre application process approach Full network data approach	25
Equivalent network data approach	
Technical design and information	
Summary of key changes	
CUSC	
Grid Code	
4. Implementation summary	
High level milestones	22
Implementing changes to the industry codes	22
Implementing changes to the Tender Regulations	
Coordinated network development	
Table of Contents: Appendices and Annexes	
Appendix 1 - Consultation Response and Questions	
Appendix 2 - overview of the connection process	
Appendix 3 - Summary of Responses	
Appendix 4 - The Authority's Powers and Duties	
Appendix 5 - Glossary	53

Summary

This consultation follows a series of consultations by Government and Ofgem to establish an enduring regulatory regime for offshore electricity transmission.

The joint statement of 21 October 2010 by DECC and Ofgem E-Serve set out our intention to include an additional 'generator build' option as part of the enduring regime, in which a generator can construct the transmission assets before transferring them to an Offshore Transmission Owner (OFTO) upon completion. We see the inclusion of this option as a pragmatic response to calls from stakeholders to extend the flexibility in the enduring regulatory framework. The decision to extend flexibility was taken on the basis of the generator build option being implemented in a manner that ensures a level playing field of requirements and obligations is maintained across all the build options for offshore transmission assets.

The joint statement also confirmed our intention to implement a number of further refinements to clarify the 'OFTO build' options available under the enduring regime.

This consultation is the next step in this process, and provides:

- an update on our key policy positions;
- the rationale for proposed code changes to the Connection and Use of System Code (CUSC) and the Grid Code that we consider necessary to implement our proposals; and
- an opportunity to comment on the proposed changes.

Our proposals are summarised at a high level below:

- We will make code changes to place obligations on an offshore generator that wishes to undertake activities otherwise undertaken by an OFTO in order to require that generators construct transmission assets to the standards required of all other OFTOs.
- We will make code changes to provide further clarity on the OFTO build options to ensure that generators make informed commercial decisions. We have proposed changes to the CUSC connection process to provide offshore generators with flexibility as to the scope of activities they would wish to undertake under the late OFTO build option.
- We will look into the possibility of extending the life of the powers to make a Property Schemes under Schedule 2A to the Electricity Act 1989 in order to ensure effective, timely and fair transfer of transmission assets from a generator to the successful bidder. DECC is seeking to make an appropriate change to this provision through its forthcoming Energy Security and Green Economy Bill.
- We will extend the OFTO of Last Resort arrangements under the generator build approach, so as to avoid a situation of stranded generation projects. We will not extend the OFTO of Last Resort licence obligation to include OFTO build tenders. However there will still be potential scope for appointment of an OFTO of Last

Resort in the event of abandonment of assets. This may be implemented, again, through an extension of the life of powers to make Property Schemes.

- We intend to extend the OFTO of Last Resort arrangements for failed generator build tenders to all transmission licensees, being mindful of the various safeguards in place when considering the exercise of the Authority's powers.
- We do not propose to extend to the generator build option the guarantees available to transitional projects that provides that the transfer value payable by the OFTO would reflect the higher of 75 per cent of the ex-ante estimate of costs likely to be incurred or 100 per cent of the economically and efficiently incurred outturn costs. This is to ensure that there is a level playing field for OFTO and generator build approaches. Parties will nonetheless receive 100 per cent of efficiently and economically incurred costs as assessed once projects are completed.
- We intend to include mechanisms for ensuring that generators ringfence transmission costs from generation costs when signing procurement contracts.

We also consider that changes to the System Operator - Transmission Owner Code (STC) will be required to ensure that the NETSO can meet the requirements placed upon it by the CUSC and the Grid Code as a result of the inclusion of the generator build option. We intend to publish our proposed STC changes later in the year.

The August 2010 consultation highlighted a number of other issues which will be taken forward through different routes, outlined as follows:

- Detailed issues relating to the early and late OFTO build approaches and connected to the detailed design and operation of the tender process will be implemented through changes to the Tender Regulations, Tender Rules and OFTO licence conditions. Further detail on the implementation of these issues will be set out in a forthcoming decision document and subsequent Ofgem E-Serve consultations on licence conditions and Tender Regulations.
- Further work will be undertaken to consider whether additional measures will be required to deliver coordinated networks through the offshore transmission regime and, if so, what these measures might look like in practice. We envisage further consulting on this issue in 2011.
- Work is already underway to implement the Third Energy Package into UK law and we will continue to work together to ensure that the offshore transmission regime will be fully compatible with relevant EU and UK law.

1. Introduction

Chapter Summary

This chapter outlines the purpose of the consultation document. It sets out the scope of issues that we are consulting on to finalise the enduring offshore transmission regime. It also provides relevant background and highlights key recent developments.

Questions

There are no questions in relation to this chapter.

Purpose of the document

1.1. Government and Ofgem have worked together with industry over the past five years to develop a regulatory regime for offshore electricity transmission. The legal framework for the regime is now in place and Ofgem E-Serve, Ofgem's delivery arm, is currently working within that framework to appoint the first Offshore Transmission Owners (OFTOS).

1.2. The purpose of this document is to provide an update on our key policy proposals and to consult on the detailed changes to the industry codes necessary to ensure that the enduring regime provides a robust framework that can be applied consistently regardless of how design and construction responsibilities are allocated between a generator and an OFTO. We consider that there is merit in allowing a generator build option under the enduring offshore transmission regime and that this option should be based largely on the existing transitional arrangements, further enhanced by:

- introducing obligations for developers to comply with common obligations and technical standards for the design and construction of offshore transmission assets;
- implementing appropriate ring-fencing arrangements for transmission and generation costs; and
- stringent assessment of procurement processes and benchmarking of costs when assessing the transfer value.

1.3. This consultation gives stakeholders an opportunity to comment on the proposed changes to two codes that form part of the suite of industry codes governing the industry (the standard framework) - the Connection and Use of System Code (CUSC) and the Grid Code. Our proposed changes to these industry codes have been developed with National Grid Electricity Transmission (NGET).

1.4. The CUSC and the Grid Code set out the obligations and requirements that users of the transmission system must satisfy. Changes to the CUSC and the Grid Code are required to facilitate the introduction of the generator build option and to clarify the options available under a late OFTO build option. The detailed texts of the CUSC and the Grid Code are set out in separate annexes to this document.

1.5. We also consider that changes to the System Operator - Transmission Owner Code (STC) will be required to implement our proposals in full. The STC governs the commercial and technical relationship beween the NETSO and other transmission licensees. We consider that many of the amendments relate to operational and planning requirements that are consequential to or affected by the proposed changes to the CUSC and the Grid Code. In light of the challenging timescales, we consider that it is appropriate to develop the STC amendments in light of the proposed changes to the CUSC and the Grid Code published as part of this consultation. As such, we expect to publish the proposed STC amendments later in the year.

1.6. Following this consultation, we anticipate that the relevant changes to the codes will be made by the Secretary of State for Energy and Climate Change under the powers set out in Sections 90 and 91 of the Energy Act 2004 before such powers expire on 18 December 2010. DECC is exploring the extension of these powers in the forthcoming Energy Security and Green Economy Bill.

1.7. We recognise that this timetable is challenging. However this option was favoured by most respondents to our previous consultation. Moreover Ofgem and DECC are committed to delivering a generator build option in a robust and timely manner. Therefore in order to meet the 18 December deadline, this consultation will be open for a period of three weeks.

1.8. In addition to changes to the industry codes, Ofgem will seek to further develop and consult on the competitive tender process and associated Tender Regulations over the coming months to be implemented early next year.

Background to regime

Commencement of the regime

1.9. In June 2009, following extensive consultation, the Secretary of State for Energy and Climate Change commenced powers to enable modifications to be made to relevant industry codes and licences for the purposes of offshore transmission (Go-Active). This enabled Ofgem to begin the process of identifying Offshore Transmission Owners (OFTOs) through competitive arrangements under Tender Regulations⁴. This framework also extended National Grid's System Operator obligations and functions offshore, thereby supporting the coordinated development of the entire transmission system.

1.10. On 23 July 2009, Ofgem commenced the first transitional tender round for 9 offshore wind projects with transmission assets worth £1.1 billion. There has been strong competition in these tenders and Ofgem received bids from five firms at the Invitation to Tender stage, demonstrating significant investment appetite. On 5 August 2010, Ofgem announced that three preferred bidders (Balfour Beatty Capital Ltd, Macquarie Capital Group Ltd and Transmission Capital Partners) had been selected to own and operate the first £700 million worth of transmission links to seven offshore wind projects. More recently, Ofgem has announced that Transmission Capital Partners have been selected to own and operate the £100 million transmission link to the Ormonde offshore wind project.

1.11. Ofgem estimates that the savings from the competitive tender process is around £350 million on the first £1.1 billion of offshore transmission assets. This demonstrates the strength of the offshore regime in securing benefits for generators and consumers.

1.12. The second transitional tender round is expected to commence shortly, after which all future projects will fall within the scope of the enduring regime.

Previous consultation on the enduring regime

1.13. Following a number of previous consultations, the December 2009 consultationset out a number of proposals in relation to the enduring regulatory regime for offshore electricity transmission.

1.14. In response to concerns raised as a result of the December 2009 consultation, DECC and Ofgem published a joint consultation setting out further refinements to the enduring regime. The August 2010 consultation (amongst other things):

- set out in greater detail the characteristics of OFTO built transmission assets, including early and late OFTO build options;
- considered how an option in which a generator constructs transmission assets could be structured (the generator build option);

⁴ The Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations 2010 (Tender Regulations) facilitate the making of a determination on a competitive basis of the person to whom an offshore electricity transmission licence is to be granted.

- considered the implementation challenges associated with delivering the generator build option; and
- sought views on whether further steps should be taken to facilitate the development of a co-ordinated transmission network.

1.15. This consultation is informed by responses to the August 2010 consultation and discussions with stakeholders.

Structure of this document

1.16. This document is divided into chapters, appendices and annexes. Each chapter in this document sets out for comment the latest position, our proposed approach, questions on particular areas where views are being sought from stakeholders, and how work will be taken forward. This document has four chapters:

- Chapter 2 sets out our latest thinking and key decisions on the enduring regulatory regime for offshore electricity transmission.
- Chapter 3 provides an overview of issues and the process for developing changes to industry codes. A more detailed description of the changes and the proposed drafting of the CUSC and the Grid Code is being published as separate annexes.
- Chapter 4 outlines the remaining steps and work programme to implement the further refinements to the offshore transmission regulatory regime.
- 1.17. The document contains a series of appendices:
- Appendix 1 provides more detail on responses being sought through this consultation
- Appendix 2 provides an overview of the connection process
- Appendix 3 summarises responses to the August 2010 Consultation
- Appendix 4 sets out the Authority's powers and duties
- Appendix 5 provides a glossary of terms.

1.18. The document also contains two annexes containing the detailed draft amendments to the CUSC and the Grid Code. We are seeking views on whether the proposed amendments to the CUSC and the Grid Code, contained in the separate annexes, accurately reflect the policy positions that we have taken. We will seek views on the proposed amendments to the STC later in the year.

Responding to this document

1.19. Ofgem and DECC would like to hear the views of interested parties in relation to any of the issues set out in this document. In particular we invite views from respondents on a number of specific questions set out in chapter 3. A summary of all questions asked and details of how to respond can be found in Appendix 1.

1.20. All responses should be received no later than noon on 29 November (although we request that responses of a material nature are provided by noon on 22 November) and should be sent to:

Yvonne Naughton Ofgem Cornerstone 107 West Regent Street Glasgow G2 2BA Email: <u>yvonne.naughton@ofgem.gov.uk</u>

Kristina Dahlström, Department of Energy and Climate Change 4th Floor Area D 3 Whitehall Place London SW1A 2AW Email: offshore.transmission@decc.qsi.gov.uk

Next steps

1.21. We recognise the importance of developing robust modifications to the industry codes, as the means for implementing further refinements to the enduring offshore transmission regime. We recognise that we have provided a large volume of documentation which needs to be reviewed and revised. We encourage industry parties to actively participate in the forthcoming consultation process so that changes to the enduring regime can be implemented in a timely manner, including by providing comments of a material nature as early as possible during the consultation.

1.22. We expect to publish our final decision document in December before the powers set out in Sections 90 and 91 of the Energy Act 2004 expire on 18 December. This decision document will set out the changes the Secretary of State will make to the industry framework.

2. The enduring regulatory regime for offshore electricity transmission

Chapter Summary

This chapter considers the key areas that have been developed to facilitate the generator build option and further clarify the late OFTO build option. We set out those areas where changes will need to be put in place to the regime set out at Go-Active. These changes aim to ensure that there is a level playing field across all build options. We also provide an update on other areas of policy highlighted in the August 2010 consultation.

Respondents should note that detailed changes to the industry codes required to fully implement our proposals are set out in the separate annexes. The Secretary of State is minded to implement the proposed changes set out in these annexes, subject to respondents' views to ensure that the final changes best reflect our policy intent.

Questions

There are no questions in this chapter.

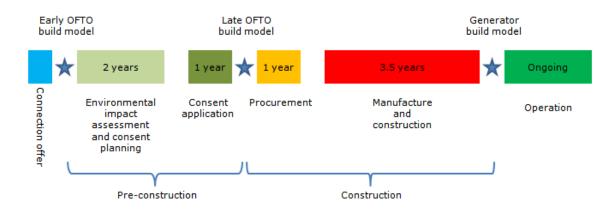
2.1. Ofgem and DECC have worked together to develop a regulatory regime for offshore electricity transmission which provides flexibility and supports the delivery of significant volumes of offshore generation. Under the existing enduring regulatory framework a generator has the flexibility to choose to undertake pre-construction works or for these works to be undertaken by an Offshore Transmission Owner (OFTO). However, the OFTO retains responsibility for all procurement and pre-construction activity.

2.2. In response to Ofgem's December 2009 consultation, generators have raised the concern that the existing regime would increase risk as they would have less control over the design and delivery of their transmission assets. They also argued that a generator would have more at stake than an OFTO should delivery be delayed. Generators also claimed that financiers of generation projects would respond to the perceived risk profile by levying a higher premium which would ultimately increase costs to consumers.

2.3. On 26 August 2010⁵, Ofgem and DECC jointly consulted on further refinements to the enduring offshore transmission regime (the August 2010 consultation). The consultation set out our proposal to extend the flexibility available to offshore generators by including a generator build option. Through the consultation we have

⁵ Offshore Electricity Transmission: Further consultation on the Enduring Regulatory Regime.

used three models - 'build options' - to illustrate the broad range of options that we propose to make available to an offshore generator. These build options are illustrated below.



- 2.4. The diagram shows that:
- The widest scope of activities for an OFTO would occur if they were appointed following initial scoping work by the generator (which avoids a duplication of effort and cost) and were responsible for all aspects of pre-construction, consenting, procurement, construction and operation of transmission assets. For ease, we term this an early OFTO appointment.
- A late OFTO appointment would see an OFTO appointed to deliver the procurement of the transmission assets and construction phases of the build programme, after a generator had obtained the necessary consents for the transmission works.
- A generator build option would enable a generator to design and construct (in accordance with a series of common standards) transmission assets with a transfer of ownership to an OFTO (appointed via competitive tender) taking place after the generator had completed construction.

2.5. By providing this enhanced choice, we consider that the regime provides maximum flexibility for generators to progress their projects, in a way that is compatible with the competitive regime and the desire to deliver large amounts of offshore wind. Ultimately, this flexibility within the competitive framework should ensure the best outcomes are delivered for consumers. To ensure that generators take effective decisions, we consider that a consistent set of principles and processes should, as far as possible, apply to all build options.

2.6. In the October 2010 joint statement, we set out our intention to implement the changes necessary to deliver a generator build option. This decision has been taken on the basis of the generator build model being implemented in a manner that ensures that a level playing field of requirements and obligations is maintained across all the build options being proposed. The joint statement also set out that we

intend to implement further refinements to provide additional clarity on the OFTO build options under the enduring regime.

2.7. We have set out that we are seeking to create a regulatory regime which reflects the needs of generators, while protecting the interests of present and future consumers and facilitating the delivery of offshore generation. We consider that the enduring regime should now provide a robust framework that can be applied consistently regardless of how design and construction responsibilities are allocated between generator and OFTO.

2.8. The section below sets out the key areas which we consider need amendment to ensure a level playing field across all the build options. Other policy issues, including coordinated networks, the Tender Regulations and the Third Package are discussed separately.

Key issues to ensure consistency across all build options

Code changes for the generator build option

2.9. We consider that significant changes to aspects of the industry codes will be necessary to implement the generator build option. As set out in the August 2010 consultation, without changes to the industry codes, there is not a default mechanism to require offshore generators to design and build offshore transmission assets that meet the minimum standard of offshore transmission system performance and design.

2.10. There are various concerns should this not be addressed:

- The lack of default arrangements would be likely to result in non-compliant offshore infrastructure that is not fit for purpose. Transmission assets built by generators would not necessarily be compliant with technical rules and may be unable to connect (without derogation from Ofgem).
- The national electricity transmission system operator (NETSO) may be unable to efficiently operate or coordinate the infrastructure.
- Assets may also be less attractive to potential bidders (as there would be a risk that they would need to be made compliant), which could reduce competitive pressure during tender processes.

2.11. We recognise that it is in generators' interests to ensure that assets are designed and constructed to the appropriate requirements, however we consider that a robust framework of obligations will ensure that consumers are not exposed to undue cost or risk. It is generally accepted that standard aspects of contractual arrangements between the NETSO and its customers should be available in public documents.

2.12. As such, we consider that it is necessary to place obligations on an offshore generator that wishes to undertake activities otherwise undertaken by an OFTO in order to require that generator to construct transmission assets to the standards required of all other OFTOs.

2.13. In the August 2010 consultation document we set out our initial thoughts that amendments to the CUSC, the Grid Code and the STC would be required to implement a generator build option, including developing a consistent framework of obligations and requirements across all build options. The August 2010 consultation also set out our thoughts on the initial scope of the changes that we considered would be required. Respondents to the consultation recognised the need for changes to the industry codes to implement a generator build option and expressed support for the creation of a consistent framework of obligations and technical requirements.

2.14. During the consultation period, Ofgem engaged with all code owners to identify, in detail, the impact of our proposals on each of the industry codes. This process has confirmed that changes to the CUSC, the Grid Code and the STC would be required to implement our proposals. We have been working wth National Grid Electricity Transmission (NGET) to develop appropriate drafting to amend each of these codes. Our approach to drafting these changes is set out in Chapter 3.

2.15. Detailed changes to the CUSC and the Grid Code to facilitate the generator build option are provided in the annexes to this document. The Secretary of State is minded to implement the proposed changes set out in these annexes, subject to respondents' views to ensure that the final changes best reflect our policy intent.

Code changes for the late OFTO build option

2.16. We previously invited views on the detailed aspects of the late OFTO build model. Respondents broadly supported our proposals, although a spectrum of views was expressed at a detailed level. Several stakeholders commented that mechanisms should be flexible and warned of being overly prescriptive in our approach as each project will have inherent issues that make it distinct.

2.17. We consider that robust OFTO build arrangements are necessary to provide effective choice to generators. We consider that there is merit in providing further clarity on the OFTO build options to ensure that generators make informed commercial decisions. In light of the responses to the August 2010 consultation, we have proposed changes to the CUSC connection process to provide offshore generators with flexibility as to the scope of activities they would wish to undertake under the late OFTO build option.

2.18. Our approach to drafting these changes is set out in Chapter 3. The annexes to this document set out the detailed changes to these codes to clarify the late OFTO build option. As with the changes required for generator build, the Secretary of State is minded to implement the proposed changes set out in these annexes, subject to respondents' views to ensure that the final changes best reflect our policy intent.

Transfer of assets to the OFTO

2.19. We highlighted in the August 2010 consultation that a significant issue for consideration is whether action is needed under the generator build option to ensure effective, timely and fair transfer of transmission assets from the generator to the successful bidder.

2.20. Schedule 2A of the Electricity Act 1989 enables the Authority, once a successful bidder has been identified, to make a property scheme if required in order to ensure that the property is transferred from the asset owner (which may be the generator or other parties) to the successful bidder in a fair, timely and effective manner. These powers are available until 2013, or 2016 if extended by order.

2.21. We expect it would be in the relevant parties' interest, under the generator build option, to reach a commercial agreement as to the terms of the transfer. However, the property scheme was put in place as a last resort measure, to give generators and successful bidders an avenue for expediting the transfer of assets where commercial agreement could not be reached. It was designed to provide certainty and reassurance to tender participants for transitional projects that the transfer of assets can be achieved. This included helping to ensure that generators and successful bidders were not placed under undue pressure by a third party seeking unreasonable commercial advantage.

2.22. In the August 2010 consultation we asked for views as to whether further action was required in this area. Respondents were almost unanimous in their support for an extension of the Property Scheme as the best means of ensuring a fair transfer of transmission assets from the generator to the successful bidder on an enduring basis under the generator build model.

2.23. As such we believe that it is appropriate to look into the possibility of extending the life of the powers to make a Property Scheme. DECC is seeking to make an appropriate change to this provision through its forthcoming Energy Security and Green Economy Bill, to allow the powers to be available until 2025.

OFTO of Last Resort

2.24. In developing the regime we recognised that where an existing OFTO business fails or is unable to continue with its obligations and its licence is revoked, or where there is a failure to appoint an OFTO for a transitional project, it may be necessary to appoint a replacement OFTO quickly to minimise the impact on the existing users of the offshore network.

2.25. Against this background, the Secretary of State put in place an "OFTO of Last Resort" obligation within all transmission licences. The OFTO of Last Resort obligation provides for the Authority to make an OFTO of Last Resort direction where there is a significant risk of a generator becoming stranded or suffering delays to connection of the offshore wind farm.

2.26. The OFTO of Last Resort obligation was included in the standard licences of Transmission Owners (TOs) by the Secretary of State at Go Active. Each TO has a requirement to undertake this activity, when directed, as set out in its transmission licence. The licence provisions connected with the OFTO of Last Resort mechanism are standard conditions B18 (existing onshore transmission owners) and E21 (future OFTOs). Ofgem is required to include these conditions in any future transmission licences that are awarded. The effect of these licence conditions is to allow Ofgem to make an OFTO of Last Resort direction where:

- a transitional tender exercise has been unable to determine a person to be granted an offshore transmission licence;
- the Authority intends to revoke the transmission licence of an offshore transmission owner; or
- the Authority intends to revoke an OFTO of Last Resort direction given to another transmission licensee.

2.27. No OFTO of Last Resort arrangements were provided for in order to deal with failed tender exercises as part of the enduring regime. However, as part of the August 2010 consultation process we considered whether this policy decision needed to be revisited in light of the additional flexibility proposed with the generator build option.

2.28. Under the current OFTO of Last Resort arrangements, where an initial transitional tender process failed to receive significant market interest, Ofgem would refine the bidding proposal, in consultation with the generator, and then re-launch the tender. If this second tender process failed, Ofgem would then be able to consider directing a TO, onshore or offshore, to become the OFTO of Last Resort.

2.29. The August 2010 consultation considered whether it was appropriate to extend the OFTO of Last Resort arrangements to the enduring regime. In particular we considered whether the OFTO of Last Resort arrangements should be provided under the generator and OFTO build models. We also asked whether these arrangements should be extended to all transmission licensees. We now set out our decisions on these matters.

Generator Build

2.30. We consider that the same arguments apply to offshore transmission assets delivered through the generator build approach as previously applied to the transitional arrangements. These are:

 That it would be unduly risky for generators (and project investors) not to have the safeguard of an OFTO of Last Resort for projects where the generator takes forward construction of the transmission assets. This is because there would be a a significant risk of a generator becoming stranded or suffering delays to connection of the offshore wind farm in the event that an OFTO could not be selected to adopt the transmission assets in question.

Applying the OFTO of Last Resort arrangements to the transitional tenders was
reasonable because, in the event of a failed transitional tender exercise, the
OFTO of Last Resort would only be required to adopt complete and commissioned
assets (i.e. construction would not be required).

2.31. The vast majority of respondents to the August 2010 consultation supported the inclusion of an OFTO of Last Resort under the generator build model. As such, we have decided that the OFTO of Last Resort arrangements will be extended under the generator build model, so as to avoid a situation of stranded generation projects.

OFTO Build

2.32. As we have noted previously, the failure of an OFTO build tender process may demonstrate that the market does not see an economic case for investment in a transmission project. Appointing an OFTO of Last Resort in such circumstances would likely involve a significant risk premium being required to compensate the TO directed as OFTO of Last Resort. This is because the TO directed as OFTO of Last Resort in these circumstances would also effectively have to construct the relevant transmission assets, as well as operating such transmission assets. In these circumstances, we do not consider this additional premium to represent good value for generators or consumers, since there would not be a significant risk of a generator's investment becoming stranded or suffering delays to connection of the offshore wind farm. As such we will not extend the OFTO of Last Resort licence obligation to include OFTO build tenders.

2.33. We are mindful that without an option available to generators to progress their projects in the case of a failed tender, they may not choose to enter an enduring OFTO build tender - preferring the additional security of the generator build model, with its OFTO of Last Resort provisions. As such we have decided that, in the event of an OFTO build tender process failing to appoint an OFTO, the generator should be free to take the project forward through the framework being put in place for the generator build model.

2.34. If the generator does decide to build the transmission assests following a failed OFTO build tender and then the subsequent tender process for the ownership and operation of the subsequently constructed assets fails to garner sufficient market interest, then the option of appointing an OFTO of Last Resort to adopt the completed transmission assets would remain available. We believe that this additional flexibility ensures a sufficiently level playing field between the different options.

Abandonment

2.35. We note that there will still be potential scope for appointment of an OFTO of Last Resort in the event of abandonment of assets (such as financial failure of an

OFTO) where, in order to provide continuity of service to generators, the Authority would consider appointing a party to undertake such functions.

The Obligation and its Safeguards

2.36. As part of the August 2010 consultation we asked whether any enduring OFTO of Last Resort obligation should be extended to all transmission licensees. There were mixed views in response to this question. Some respondents felt that any obligation should be extended to all TOs - to ensure a wide range of potential parties to adopt assets. Others expressed a preference for any such enduring obligation to only sit with OFTOs. The main reason given by most respondents who favoured limiting the obligation, was that they believed that established OFTOs would be best placed in terms of necessary skills and experience to become the OFTO of Last Resort.

2.37. In this regard we note that the OFTO of Last Resort obligation will only relate to failed generator build tenders and in cases of abandonment.

2.38. We note that over time OFTOs will become established in the operation and maintenance of these assets (which will be the critical capabilities for an OFTO of Last Resort appointed in the case of a failed generator build tender). However, we also note that the onshore TOs already have the transitional OFTO of Last Resort obligation in their licences and so should be able to take on a similar obligation for generator built assets under the enduring regime. We recognise that this is potentially a more onerous obligation given the greater number of projects to which this obligation may apply.

2.39. In this regard, we also note that the transitional OFTO of Last Resort arrangements were developed with a considerable range of safeguards to protect against the risk of material detriment for any onshore TO or OFTO directed to become an OFTO of Last Resort. These include:

- The Authority will consider directing an OFTO to become OFTO of Last Resort before an onshore TO, unless there are exceptional circumstances. Existing onshore TOs, while of sufficient operational capacity to take assets on as OFTO of Last Resort, will not have actively 'signed-up' to the obligation as a new OFTO will have, by virtue of bidding for and winning a licence. Therefore, on a point of equity, we considered that OFTOs (including OFTO entities of onshore TOs) should be prioritised in the selection of an OFTO of Last Resort over onshore TOs.
- The criteria used by the Authority in deciding which TO to select as OFTO of Last Resort are set out in the transmission standard licence conditions. The criteria include that a direction would not materially prejudice the licensee's ability to continue its existing activities pursuant to its licence and fulfil its existing contractual obligations under any relevant Codes.
- The Authority needs to be satisfied of a number of further criteria before directing a licensee to become OFTO of Last Resort including that the licencee is able to

operate the assets in an efficient and economic manner (which includes the recovery of a reasonable rate of return).

 The licence specifies that five years following the making of the direction is the maximum period at which it is appropriate to review the arrangements and this review would include consideration of the continuing appropriateness of the revenue stream. In addition, prior to the end of this period, the OFTO is able to request that the Authority review the arrangements if there has been a material prejudicial change in circumstances.

2.40. As these safeguards will remain in place, on balance we consider that it is reasonable to extend the OFTO of Last Resort obligation for failed generator build tenders to all transmission licensees.

Implementation

2.41. We do not intend to make changes to licences to implement this extension of OFTO of Last Resort. Under Condition E21 of the OFTO Licences and Condition B18 of the onshore TO licences, the Authority is able to issue OFTO of Last Resort Directions to licensed parties requiring them to provide transmission services in certain circumstances (see paragraph 2.26 above). These circumstances include where a transitional tender exercise has been unable to determine a person to be granted an offshore transmission licence.

2.42. The concept of a transitional tender exercise relies on the application of the definition under Schedule 2A to the Electricity Act 1989. At present, Schedule 2A cannot endure beyond 2016. The Government is exploring the possible extension of the life of the powers to make Property Schemes under Schedule 2A, to ensure the effective, timely and fair transfer of assets under the generator build option. Extending these primary powers will also extend the concept of a transitional tender exercise and consequently extend the OFTO of Last Resort arrangements to include all generator build projects.

Cost Guarantee

2.43. The transitional arrangements provide parties with a guarantee that they are able to recover the higher of 75 per cent of the ex ante cost estimate or 100 per cent of the efficiently incurred ex post cost from the OFTO. For the transitional projects, Ofgem decided that it was appropriate for consumers to assume the risk of a developer being renumerated for inefficient expenditure (i.e. if the assessment of efficiently incurred ex post costs fell below 75 per cent of the ex ante assessment).

2.44. This decision was taken in light of the infancy of the market and the uncertainty over elements of the regulatory regime which, in Ofgem's view, justified providing comfort to generators and funders (recognising that this increases the risk for consumers). The guarantee was put in place as a transitional measure and no similar arrangement was provided for under the enduring regime for OFTOs constructing offshore transmission assets.

2.45. As part of the August 2010 consultation we set out that we did not consider that an extension of the 75 per cent ex ante cost guarantee was appropriate for the generator build option. In particular, we highlighted the need to ensure a level playing field between the different build options. In this regard, it is important to note that under the OFTO build options there will be no guaranteed cost recovery for OFTOs beyond the revenues set through their transmission licence. OFTOs will therefore be strongly incentivised to deliver transmission assets at an economic and efficient cost. We also believe that providing an extension of the 75 per cent guarantee under the new generator build model would create perverse incentives for generators progressing their projects under this option.

2.46. In their responses to the August 2010 consultation, most though not all generators set out that they thought that a 75 per cent ex ante cost guarantee should be included under the generator build model. Some generators claimed that the market remains in its infancy and the 75 per cent guarantee could be useful for attracting investment. Other generators agreed that the recovery of 100 per cent of the economically and efficiently incurred ex post costs was more important than the ex-ante guarantee, and called for increased transparency of Ofgem processes, including the the publication of information relating to the cost assessments. The potential OFTOs were in favour of removing the ex ante cost guarantee.

2.47. While we note that the guarantee is likely to prove attractive for investors, we have not found or been presented with any compelling evidence to demonstrate that the removal of the guarantee would create any barrier to investment in the regime. The original decision to include the 75 per cent guarantee was taken on the basis of helping to create regulatory certainty during the development of the regulatory regime and given the infancy of the market for offshore transmission. We note that since this decision was taken during 2007 there have been considerable developments in terms of the shape of the regulatory regime, including the commencement of Go-Active and Go-Live, and the development of the market, including the commencement and timely progression of the first transitional tender round.

2.48. We also consider that:

- even without the 75 per cent ex ante guarantee, generators will remain able to recover all efficiently and economically incurred costs as part of the transfer value as defined by Ofgem's ex-post cost assessment. As such generators and investors have certainty that they will be able to recover these costs;
- should generators consider the Ofgem cost assessment to be unreasonable, the transitional regime allows them to formally request a Property Scheme under the provisions of Schedule 2A of the Electricity Act 1989. The terms of transfer, including the transfer value, determined by the Authority under these statutory powers may then be referred to the Competition Appeals Tribunal (CAT) in the event of a continuing dspute. DECC is seeking to extend the life of the Schedule 2A powers to make Property Schemes through the forthcoming Energy Security and Green Economy Bill. This will provide generators with a route of appeal to the CAT if they disagree with Ofgem's cost assessment decisions;

- as part of the cost assessment process Ofgem will be publishing cost assessment reports for each of the projects that have been tendered through the transitional tender round. We would expect to continue such publication of cost assessments undertaken through the enduring regime (under the generator build model); and
- were the 75 per cent cost guarantee to remain there may be an opportunity for generators to distort the cost assessment process in future tender rounds. In particular we note that there is a significant asymmetry of information at the point an ex ante assessment is made. For example, this could be a concern where contracts are let (and valued as part of the ex ante assessment) but which, due to subsequent variation, assume lower values.

2.49. As set out above, we are seeking to implement an enduring regime that provides a level playing field for OFTO and generator build approaches. A cost guarantee that only applies to generator build would detract from this aim. We do not consider it in the interest of the consumer to include a cost guarantee which provides generators a route to transfer inefficiently incurred costs to the consumer. For example, this could be through pushing generation costs or inefficiently incurred transmission costs into their transmission charges (which would allow elements of these costs to be socialised and the payment of such costs to be delayed). For the above reasons, we intend to remove the cost guarantee for enduring generator build tenders.

Competition Issues

2.50. In the August 2010 consultation, we set out that an important objective of the regulatory regime is to create effective competition in the provision of transmission services.

2.51. We have previously highlighted that generator procurement of transmission works raises some competition concerns when compared to the OFTO build approaches. We continue to consider how these issues could be resolved in order to create a level playing field between OFTO and generator build options.

2.52. For example, there is the potential for a generator to cross subsidise by identifying generation costs as transmission costs. By cross subsidising, the generator can transfer immediate capital expenditure in generation assets to transmission assets, which will be paid back to the generator by the OFTO on asset transfer. These costs will instead be paid for over twenty years through transmission charges. This is not possible under an OFTO build approach.

2.53. To prevent this, we proposed a requirement for generators to ringfence transmission costs from generation costs when signing procurement contracts. Some respondents to the consultation suggested that procuring transmission and generation assets together would decrease overall cost. However, the majority of respondents supported the proposal.

2.54. Given the support for the proposal in responses, we propose including mechanisms for ensuring that generators ringfence transmission costs from generation costs.

Other issues

2.55. As well as key issues for consistency across the various build options, the August 2010 consultation highlighted a number of other areas of policy. These are set out below. These areas of policy are being taken forward through different routes. In each case we set out how the issue is being dealt with.

Tender Regulations, Tender Rules and Licence Conditions

2.56. Through both Ofgem's December 2009 consultation and the subsequent joint August 2010 consultation, we consulted on a number of detailed issues relating to the early and late OFTO build approaches. These were connected to the detailed design and operation of the tender process. Decisions in these areas will not be implemented through the Secretary of State's powers. Rather, implementation will be through the Tender Regulations, Tender Rules and OFTO special licence conditions. As such, decisions will not be outlined in this consultation. Further detail on the implementation of these issues will be set out in the forthcoming decision document in December and subsequent Ofgem E-Serve consultations on special licence conditions and Tender Regulations.

2.57. These areas included:

- Pre-construction costs we set out that developers will be allowed to recover certain, efficiently incurred pre-construction costs, and defined on a case by case basis.
- Contingencies we recognised that contingencies may sometimes be the most efficient option for managing cost uncertainty and construction risk. We outlined an approach by which contingencies are determined on a case by case basis before the commencement of a tender process.
- Generator role in evaluation we considered allowing generators a role in commenting on technical aspects of bids and evaluation criteria.
- Ofgem's role in transfer of property rights we outlined a role for Ofgem in developing a standard framework to facilitate transfer for all projects and assessing pre-construction costs.
- Basis of bids we considered how to define the basis on which parties are asked to bid under the early and late OFTO approaches.
- Structure of tender process we have previously said that there may be the need for an extended tender process under OFTO build to reflect the greater scope of activities being undertaken by an OFTO. The timing and structure of

each tender process will be determined on a case by case basis in the Pre-Qualification document.

Co-ordination

2.58. We recognise the importance of developing a coordinated offshore and onshore transmission network and the benefits this can bring. This was a major driver in the decision to create the NETSO by extending NGET's onshore System Operator responsibilities offshore and placing a licence obligation on the NETSO to develop an Offshore Development Information Statement (ODIS).

2.59. The August 2010 consultation invited views on whether the offshore transmission regime provided appropriate opportunities for co-ordinated development of offshore transmission infrastructure. We also invited views on whether there were circumstances where additional offshore infrastructure development would be in the wider interest of the NETS and whether there are any issues in respect of interoperability or standardisation which may prohibit the coordinated delivery of transmission assets.

2.60. Stakeholders have expressed strong support for the principle of a long term coordinated approach to offshore network development and recognised the additional benefits that co-ordination can bring. Most respondents were of the view that while the offshore regulatory regime would not create barriers to co-ordination, nor are current incentives sufficient to bring about significant levels of co-ordination in practice. Several respondents commented that a lack of incentives to encourage anticipatory investment was a material factor. A number of responses also supported the appointment of a single party responsible for the design of a coordinated offshore transmission system. Nevertheless, most respondents did not provide detailed proposals on what the further steps required to deliver co-ordination might look like. Those who did differed in views as to the best approach.

2.61. On the basis of the responses received, Government and Ofgem intend to undertake further work to consider whether additional measures will be required to deliver co-ordinated networks through the offshore transmission regime and, if so, what these measures might look like in practice. We envisage further consulting on this issue in 2011.

Third Package

2.62. The EU Third Energy Package must be implemented by March 2011. 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 Third Energy Package is ownership unbundling – the separation of transmission interests (ownership and operation of transmission systems) from generation activities - and consequently it specifies the roles and responsibilities of transmission owners in terms of network operation, maintenance and development.

2.63. Work is already underway to implement the Third Energy Package into UK law by the required timescale. DECC has consulted on the implementation of the Third Energy Package and expects to publish its response by early 2011. We will continue to work together to ensure that the offshore transmission regime will be fully compatible with the requirements of the Third Energy Package.

3. Proposed changes to the industry codes

Chapter Summary

This chapter considers the key areas that have been developed to introduce the generator build option and further clarify the late OFTO build option. It explains the key changes we have made to the CUSC and the Grid Code. It is intended to be helpful to those stakeholders less familiar with the Codes.

A more detailed description of the proposed changes for CUSC and the Grid Code are set out in Annexes 1 and 2. Those who require a fuller understanding should read these annexes. The proposed changes for the STC will be published later in the year.

Questions

Q3.1 Do you consider that the scope of the proposed changes to the Codes achieves our policy intent?

Q3.2 Do you consider that there are areas of the Codes where you consider that further amendments are required to deliver our proposals?

Q3.3 Do the proposed changes to the Codes create unintended barriers to phased development of offshore projects?

Q3.4 Do you consider that the timescale of 28 days, being proposed in clause 17 of Schedule 2, Exhibit 3A of CUSC (the Construction Agreement), for an offshore generator to provide its programme for the construction of the OTSDUW and its proposed onshore connection point is reasonable?

Q3.5 Do you consider that Clause CC.6.3.2 in the Connection Conditions in the Grid Code accurately reflects the system design at the Interface Point?

Q3.6 We note that section K does not place an obligation on an OFTO to contribute to frequency control but that a change to CC6.3.6 a) (vi) is being proposed to require this where the generator chooses to construct its transmission assets. Do you consider that this requirement is applicable to an offshore transmission system constructed by an offshore generator?

Q3.7 We note that the OFTO has an obligation under the STC to ensure an offshore transmission system stay connected to the NETS through faults and disturbances and that this obligation should apply to all offshore transmission systems regardless of the party that has constructed them. Do you consider that the changes being proposed in section CC6.3.15 of the Connection Conditions in the Grid Code reflect these requirements on an offshore transmission system constructed by an offshore generator?

Q3.8 Do you consider that the changes in CC.6.5 are applicable to an offshore transmission system constructed by an offshore generator? We note that the proposed changes to CC.6.5 place slightly more specific requirements on an OFTO

than those placed on a TO by the STC, in that the STC requires the TO and the NETSO to agree the communications plant to be delivered (STC section D, part two, 10).

Q3.9 Do you consider that the changes being proposed in section PC.8 of the Planning Code are relevant to the Grid Code, or whether these changes are more appropriate in the CUSC?

Overview

3.1. The majority of respondents to the August 2010 consultation supported the use of the Secretary of State's existing powers to implement the relevant industry code changes. Nonetheless, several responses noted the extremely challenging timetable for developing and implementing these changes before the relevant powers lapse on 18 December 2010. Ofgem and DECC are committed to delivering a generator build option in a robust and timely manner. We intend to develop and implement changes this year, where feasible.

3.2. It is important that the changes are sufficiently robust and we are mindful of the need to consult the industry and consider views. We reiterate the importance that stakeholders engage constructively and respond early to this consultation with material comments to support the delivery of these changes in a timely manner. In addition to changes to the industry codes, robust implementation of a generator build option will require further development of the licensing framework, competitive tender process and associated tender regulations. We expect to develop changes in these areas over the coming months to be implemented early next year.

3.3. Sections 90 and 91 of the Energy Act 2004 allow the Secretary of State, amongst other things, to make modifications to the transmission licence conditions and industry codes which he considers appropriate for purposes connected to offshore electricity transmission. These powers expire on 18 December 2010.

3.4. To develop the changes implemented at Go-Active we sought, wherever possible, to extend the current onshore arrangements defined in the relevant documents⁶. In defining the arrangements for the generator build option and clarifying the late OFTO build option we continue to consider that it is appropriate to build on the current arrangements defined in the CUSC, the Grid Code and the STC, wherever possible.

3.5. This section of the document considers the key areas that have been developed to facilitate the generator build option and further clarify the late OFTO build option.

⁶ In this document, "relevant documents" means the BSC, CUSC, Grid Code, STC, Distribution Code, DCUSA, NETS SQSS and the transmission licence.

Connection process

3.6. Any generator wishing to connect to the National Electricity Transmission System (NETS) must make an application in writing to the National Electricity Transmission System Operator (NETSO), under the CUSC.

3.7. The proposed changes in this consultation provide an offshore generator seeking a connection to the NETS a number of options when considering its connection offer. The options are:

- early OFTO build, where the offshore generator is responsible for construction of generator assets only;
- late OFTO build, where the generator undertakes any or all of the activities otherwise undertaken by an OFTO up until the point of constructing the transmission assets; and
- generator build option, where the generator undertakes the design, procurement and construction of transmission assets before transferring them to an Offshore Transmission Owner (OFTO) upon completion.

3.8. We consider that these options should be sufficiently flexible to enable phased development of transmission assets according to the requirements of each project.

3.9. In developing our proposals for the connection process we considered a number of approaches. Further detail of the rationale behind this approach and other options considered are set out below.

Pre application process approach

3.10. Under this approach an offshore generator would receive data in advance of its connection application. The data would allow the generator to decide whether it wished to design, procure and construct transmission assets or undertake some of these activities otherwise undertaken by an OFTO to connect its generating station to the onshore transmission system. Under this approach, the generator would make its choice of option before submitting its connection application.

3.11. However, there are a number of factors associated with this approach which detract from its suitability as our preferred approach. These include the following factors:

- this approach would result in duplication of the work required to make a formal offer for connection to the NETS;
- this approach would require specific governance arrangements to explain the validity period of the data provided to the generator; and

 it could result in the introduction of a delay to a generator progressing to connection application stage.

Full network data approach

3.12. Under this approach, the offshore generator would, on submission of its connection application, be provided with the same information currently available to an OFTO through the STC. This information would be provided with the connection offer and the generator would make its choice of option in the post offer stage.

3.13. As with the approach above, there are a number of factors associated with this approach which detract from its suitability as our preferred approach. These include the following factors:

- there are manufacturer sensitivities relating to certain types of data about wind turbines and the NETSO is unable to share this data with a generator under agreed confidentiality arrangements with turbine manufacturers. As these manufacturers are not required to comply with the standard framework we consider that this approach is unviable; and
- a Transmission Owner (TO) would have pre-established network modelling applications that contain data relating to its transmission system that it would utilise the data provided by the NETSO to produce the optimal design model for the relevant connection. An offshore generator would not be expected to provide such applications in order to facilitate generator build. For these reasons we have discounted this as a valid approach.

Equivalent network data approach

3.14. Under this approach, an offshore generator is required to indicate disinterest in generator build/late OFTO build option when making its connection application. Unless the generator expresses disinterest, an offer based on generator build will be made and the scope of the activities to be undertaken by the generator will be determined in the post offer period.

3.15. The generator can choose to construct the transmission assets under generator build or to define the scope of the activities it wishes to undertake under late OFTO build (short of constructing the transmission assets). The NETSO will provide a generator that has not expressed disinterest in these options with equivalent network model data as would be provided to an OFTO. We have introduced a new Appendix F to the Planning Code in the Grid Code that sets out the network data that the NETSO will provide and the timing of this. This would provide the offshore generator with sufficient information to make an informed choice as to whether it wished to undertake some or all of the activities normally undertaken by an OFTO.

3.16. This is our preferred approach as it provides the generator with all of the information it would need to make an informed choice without the need for the

generator to have access to pre-established network modelling and without limiting the full scope of activities a generator can choose to undertake.

3.17. We note that a number of responses to the August 2010 consultation requested a process that did not limit the scope of late OFTO build. We have developed the connection process and the changes to the codes with this approach in mind. We also note that this approach introduces minimal change in a generator's ability to submit a competent connection application.

3.18. In order for this approach to work successfully, we welcome the NETSO's willingness to:

- accept an application that does not require the generator to choose an option at the application stage; and
- make offers that provide sufficient information to enable the offshore generator to decide which option to choose during the offer acceptance period.

3.19. To enable a generator to model the NETS we have placed an obligation on the NETSO to provide the generator with network data (equivalent network models mentioned in the the full network data approach described above) through the Planning Code (PC) in the Grid Code.

3.20. We have defined the arrangements for the scope and timing of data provision requirements applicable to NGET to ensure that the generator has sufficient information about the NETS to make a decision about the options on offer and be able to develop offshore transmission system designs and/or infrastructure (through changes in the Planning Code in the Grid Code) . We consider that the NETSO should only be expected to provide the relevant network datasets where the offshore generator has indicated that it may be interested in undertaking some or all of the activities normally undertaken by a TO. We have also defined the timing of the scope of data to be provided to NGET by the generator to ensure it has sufficient information to populate the connection agreement and operate the NETS safely and efficiently (a new Clause 17 has been introduced to the CUSC to place a requirement on a generator undertaking generator build to provide information relating to the transmision assets to NGET).

3.21. All requirements relating to the construction of the transmission assets will be set out in the Construction Agreement, as they currently are today (Schedule 2 Exhibit 3A of CUSC). We consider this is the most appropriate approach as the Construction Agreement is not designed to place enduring obligations on the parties, and falls away on completion of the construction timetable. It also aligns with our approach to extend the arrangements currently in place except where there is justification for a different approach.

3.22. Where the generator has chosen to undertake some (or all) of the activities otherwise undertaken by an OFTO these activities will be clearly identified in the

Construction Agreement and are known as "Offshore Transmission System Development User Works" or "OTSDUW".

3.23. The Construction Agreement will include assumptions about the OTSDUW. These assumptions will be agreed by the parties during the post offer stage and be included in the agreement. We would expect the design of the transmission assets to progress in line with these assumptions. The parties will also be required to agree the timeline for construction of the transmission assets.

3.24. A generator has three months from the day it receives its connection offer to accept or reject that offer. We have not proposed any change to this three month timeline. We note that the parties can agree to extend this period.

3.25. We note that CUSC allows for but does not require a two stage connection process. We consider that the ability to vary a connection agreement should continue to be available where both parties agree that the changes to that agreement are not of a material nature. We have amended section six of the CUSC to clarify that changes to an agreement of a material nature are treated as a modification application. Should a generator wish to amend its connection agreement from late OFTO build to generator build or vice-versa, we would expect this to be treated as a material change and result in a modification application.

3.26. We have provided an overview of the connection process showing the key changes to that process to introduce generator build and to clarify late OFTO build in Appendix 2.

Technical design and information

3.27. Under its licence an OFTO is obliged to design its transmission system to a standard criteria set out in the national electricity transmission system security and quality of supply standard (NETS SQSS). We consider that the same criteria should apply to a generator wishing to construct its transmission assets.

3.28. We have therefore amended the Grid Code (Connection Conditions CC.6.2.1.1) to place a requirement on a generator that wishes to undertake OTSDUW to meet the Licence Standards as set out in NETS SQSS. We have amended the Connection Conditions in the Grid Code to extend the minimum technical, design and operational criteria that the OFTO must comply with to OTSDUW.

3.29. We do not consider that any requirements should be placed on a generator that has chosen to construct transmission assets or to undertake some of the activities otherwise undertaken by an OFTO, which are additional to those placed upon an OFTO under the STC or the Grid Code. We expect that an offshore generator will comply with the minimum standards for transmission system development where it has chosen the generator build approach.

3.30. We note the requirements placed on an OFTO by its licence and the STC that provide for the sharing of information to facilitate the planning and development of the NETS. We consider that these requirements should also be relevant to a generator that is constructing transmission assets. We have amended the Grid Code (Planning Code) to require the NETSO and the generator to provide each other with information necessary to assist each other in the performance of each other's construction works.

3.31. We consider that the process for numbering and nomenclature at shared sites (i.e. shared between the generator and the Transmission Licensee) where OTSDUW are located should be consistent to ensure a safe and effective operation of the NETS. We have extended the principles set out in the Grid Code (OC11) to apply to transmission assets being constructed by an offshore generator.

3.32. In amending the CUSC and the Grid Code, we have placed additional obligations on the NETSO. For example, we have placed an obligation on the NETSO to provide network data along with the connection offer (in the Planning Code in the Grid Code). This network data will enable the generator to make an informed choice as to the option most compatible with its commercial position. We also note that the NETSO has obligations under the STC that it must be able to continue to meet under the generator build option. As such, we consider that changes are required to the STC to introduce the generator build option and clarify the late OFTO build option. As mentioned before, we expect to consult on the proposed changes to the STC later in the year.

3.33. We note the requirements in CC.6.1.5 of the Grid Code (Connection Conditions) with regards to Voltage Waveform Quality and Harmonic Content and that the Grid Code does not set out how the generator will comply with these requirements, but only sets out the requirements themselves. We consider that the current rules in relation to the management of harmonic filtering and the Engineering Recommendation G5/4 should continue to apply as they do today. We do not consider that the introduction of a generator build option results in a change to the application of the rules in place today and expect a generator that is undertaking generator build to ensure that it constructs its generation assets in such a manner that these assets meet the requirements of the Grid Code.

3.34. We consider that the changes to the Grid Code CC.6.1.5 do not result in a change to the application of the rules for the management of harmonic filtering and the Engineering Recommendation G5/4 and would welcome views to the contrary. We would also welcome any comments on any further changes that respondents consider are required to this section of the Grid Code to clarify the application of this section.

Summary of key changes

CUSC

3.35. We have amended the CUSC connection process to:

- Introduce minimal change to the connection application and the generator's ability to submit a competent application.
- Allow a generator to decide which of the three options it wishes to proceed with as part of its connection agreement through discussion with NGET in the post offer period and for that choice to be reflected in the Bilateral Connection/Construction Agreement. We have provided an overview of the connection process in Appendix 2.
- Continue with the current arrangements that allow a generator to accept or reject a connection offer.
- Reflect the option selected by the generator in the construction agreement, where late OFTO build or generator build is selected.
- Set out the process for sharing updated information between the generator and the NETSO as detailed design, construction and commissioning work is completed: including technical data; programme plan information; commissioning plan information; responsibility schedules and other operational diagrams. (NB: this information is equivalent to that which an OFTO would be obliged to provide under the TO Constructon Agreement in the STC).
- Allow the offshore generator and the NETSO to enter into an agreement that clearly defines (or can be developed to clearly define) the terms of the new transmission system connection, including clarity on allocation of rights and responsibility for pre-construction and construction works.

3.36. We have amended the CUSC to:

- Clarify that a material change to a connection agreement will be treated as a modification application.
- Introduce new definitions necessary for the introduction of the generator build option and clarification of the late OFTO build option.
- Extend the modification application/offer and notification to include changes to OTSDUW.

Grid Code

3.37. We have amended the Grid Code to:

 Introduce a requirement on the NETSO to provide network data to the offshore generator to ensure the offshore generator has sufficient information to assess the viability of each option, only where the generator does not indicate disinterest in generator build or late OFTO build.

- Provide a consistent approach to the numbering and nomenclature of assets at sites shared by the offshore generator and the Transmission Licensee, to ensure the safe and effective operation of the NETS.
- Change the scope of data and timing of data provision requirements applicable to the NETSO to ensure that the offshore generator has sufficient information about the NETS to make a decision between the range of options available ie early OFTO build, late OFTO build and generator build and be able to develop an offshore transmission system design.
- Define explicit obligations with which the offshore generator has to comply when constructing transmission assets, to ensure that the minimum standards of NETS can be maintained.
- Change the scope of data and timing of data provision requirements applicable to the offshore generator to ensure that the NETSO:
 - has sufficient information to populate bilateral agreements that it will be required to enter into;
 - can operate the NETS (and plan for the operation of the new infrastructure as part of NETS); and
 - comply with the obligations placed upon it under the STC.
- We have reflected the obligations set out in section K of the STC (that are based on the obligations set out in the Grid Code) in section 6 of the Connection Conditions within the Grid Code. These obligations will apply at the Interface Point for Offshore Transmission System development User Works (or OTSDUW). We note the small differences between Section K 2.2 of the STC and Grid Code CC6.3.2 (c) and would welcome respondents' views on whether the obligations are being appropriately placed on a generator that chooses to construct its transmission assets (see question 3.5).

4. Implementation summary

Chapter Summary

This chapter explains how we intend to implement the proposals that we have outlined in this document. It also provides an outline of our timetable for delivering these proposals.

Questions

There are no questions in this chapter.

High level milestones

4.1. We anticipate the key high-level milestones and dates to be as follows:

November 2010	Publication of this Consultation Document and associated annexes.
	Deadline for responses to the joint consultation documents.
December 2010	Final decision document published, including amendments to the CUSC and the Grid Code.
	Publish proposed STC amendments.
	Secretary of State's Powers to make codes and licence changes for offshore transmission expire.
Early 2011	Publish Tender Regulations Consultation
2011	Joint Ofgem/DECC consultation on coordinated network development

Implementing changes to the industry codes

4.2. The Government has set out its intention to implement the necessary changes to the industry codes to implement these further proposals using the Secretary of State's powers under sections 90 and 91 of the Energy Act 2004, which expire on 18 December 2010. Under Section 90, the Secretary of State is able to modify codes and agreements to reflect changes that he considers appropriate for purposes connected with offshore transmission.

4.3. We reiterate our commitment to an enduring regime that facilitates the timely delivery of offshore generation while ensuring value for money for present and future consumers. We consider that the use of the Secretary of State's existing powers is the most effective way to implement our further proposals. Nevertheless, we

recognise that the timetable is challenging and we encourage industry parties to actively participate in this consultation process so that the enduring regime can be implemented in a timely manner.

4.4. We recognise that further development of the industry codes may be necessary after the Secretary of State's existing powers have expired. We are considering how these further refinements might be delivered if required.

Implementing changes to the Tender Regulations

4.5. The Authority has made Tender Regulations to implement the tender process for selecting to whom to award offshore transmission licences. We recognise that these regulations will need to be developed further to reflect our policy proposals. Ofgem will develop and consult on further Tender Regulations in the coming months, before seeking the Secretary of State's approval to make the changes necessary to implement generator build.

4.6. Ofgem will also engage with stakeholders on the role of the offshore generator in the tender process.

Coordinated network development

4.7. We recognise the importance of developing a coordinated offshore and onshore transmission network and the benefits this can bring. DECC and Ofgem intend to undertake further work to consider whether additional measures will be required to deliver coordinated networks through the offshore transmission regime and, if so, what these measures might look like in practice. We envisage further consulting on this issue in 2011.

Table of Contents: Appendices and Annexes

Index

Appendix	Name of Appendix	Page Number
1	Consultation responses and questions	34
2	Overview of connection process	36
3	Summary of responses to August 2010 consultation	39
4	The Authority's Power and Duties	50
5	Glossary	52
6	Feedback questionnaire	55

Annex	Name of Annex	Page Number
1	Proposed changes to CUSC	Separate document
2	Proposed changes to Grid Code	Separate document

Appendix 1 - Consultation Response and Questions

1.1. Ofgem and DECC 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 set out at the beginning of chapter 3 which are replicated below.

1.3. Responses should be received by noon on 29 November 2010, although we request that responses of a material nature are provided by noon on 22 November 2010. Responses should be sent to:

Yvonne Naughton Offshore Transmission Ofgem E-serve Cornerstone 107 West Regent Street Glasgow G2 2BA 0141 331 6006 yvonne.naughton@ofgem.gov.uk

and

Kristina Dahlström, Department of Energy and Climate Change 4th Floor Area D 3 Whitehall Place London SW1A 2AW 0300 068 5113 offshore.transmission@decc.gsi.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. Respondents may request that their responses are kept confidential. We 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. Next steps: Having considered the responses to this consultation, we intend to ask the Secretary of State to implement the proposed changes set out in the annexes, subject to respondents' views.

Chapter 3 - Questions

Q3.1 Do you consider that the scope of the proposed changes to the Codes achieves our policy intent?

Q3.2 Do you consider that there are areas of the Codes where you consider that further amendments are required to deliver our proposals?

Q3.3 Do the proposed changes to the Codes create unintended barriers to phased development of offshore projects?

Q3.4 Do you consider that the timescale of 28 days, being proposed in clause 17 of Schedule 2, Exhibit 3A of CUSC (the Construction Agreement), for an offshore generator to provide its programme for the construction of the OTSDUW and its proposed onshore connection point is reasonable?

Q3.5 Do you consider that Clause CC.6.3.2 in the Connection Conditions in the Grid Code accurately reflect the system design at the Interface Point?

Q3.6 We note that section K does not place an obligation on an OFTO to contribute to frequency control but that a change to CC6.3.6 a) (vi) is being proposed to require this where the generator chooses to construct its transmission assets. Do you consider that this requirement is applicable to an offshore transmission system constructed by an offshore generator?

Q3.7 We note that the OFTO has an obligation under the STC to ensure an offshore transmission system stay connected to the NETS through faults and disturbances and that this obligation should apply to all offshore transmission systems regardless of the party that has constructed them. Do you consider that the changes being proposed in section CC6.3.15 of the Connection Conditions in the Grid Code reflect these requirements on an offshore transmission system constructed by an offshore generator?

Q3.8 Do you consider that the changes in CC.6.5 are applicable to an offshore transmission system constructed by an offshore generator? We note that the proposed changes to CC.6.5 place slightly more specific requirements on an OFTO than those placed on a TO by the STC, in that the STC requires the TO and the NETSO to agree the communications plant to be delivered (STC section D, part two, 10).

Q3.9 Do you consider that the changes being proposed in section PC.8 of the Planning Code are relevant to the Grid Code, or whether these changes are more appropriate in the CUSC?

Appendix 2 - overview of the connection process

Connection Application stage

1.1. We have amended the Connection Application to allow the Applicant to express disinterest in generator build/late OFTO build in its application for connection to the NETS. This is the only change to the applicant's ability to submit a competent application.

1.2. Please note that this does not preclude the parties from undertaking preapplication discussions or preclude any applicant from expressing its choice of option at the application stage, where it wishes to do so ie early OFTO build, late OFTO build or generator build.

Connection offer and post offer stage

1.3. NGET continues to be obliged to issue a connection offer within three months of receipt of a competent application.

1.4. Where disinterest in generator build/late OFTO build is expressed the connection application will be treated in the same manner as it is today and the offer will be made based on the 'early OFTO build' option. This means that the offer will be made based on the arrangements in place today where the generator constructing its generation assets and the TO constructing the transmission assets.

1.5. The requirements in relation to the construction for the transmission assets (by the TO) will be set out in the Construction Agreement, that the generator agrees to as part of its Bilateral Connection Agreement. Assumptions will be made about the design of the offshore transmission assets until the OFTO is appointed and will be set out in the Construction Agreement.

1.6. The CUSC allows the Bilateral Connection Agreement and the Construction Agreement to be varied when the OFTO is appointed to reflect the requirements of that OFTO and the offshore transmission system.

1.7. Where disinterest is not expressed:

- The connection offer will be based on the full generator build.
- Full generator build assumes that the generator will design, procure and construct the high voltage assets that will connect the generation assets from the Connection Point to the onshore transmission system at the Interface Point, known as Offshore Transmission System Development User Works or OTSDUW.

- The scope of activities to be undertaken by the generator will be agreed between the generator and the NETSO in the post offer period. The parties will consider the options available and agree, within three months (or longer where both parties and the Authority agree to extend the period) whether the generator will undertake any, some or all of the activities otherwise undertaken by a TO and the scope of these activities. For example, this could be limited to the generator obtaining consents for the offshore transmission works, the generator designing the offshore transmission system or the generator undertaking the design procurement and construction of the offshore transmission system.
- The final scope of the generator activities will be reflected in the Construction Agreement. The Construction Agreement has been amended to reflect the changes we have introduced to the connection process⁷.
- The offer will also include network model data to assist the applicant in making its decision on which of the option to choose.

Late OFTO build

1.8. Where the generator chooses to undertake only some of the activities otherwise undertaken by an OFTO (late OFTO build), the requirements in relation to the construction for the transmission assets (by the TO) will be set out in the Construction Agreement, that the generator agrees to as part of its Bilateral Connection Agreement.

1.9. Assumptions will be made about the design of the offshore transmission assets until the OFTO is appointed and will be set out in the Construction Agreement. The CUSC allows the Bilateral Connection Agreement and the Construction Agreement to be varied when the OFTO is appointed to reflect the requirements of that OFTO and the offshore transmission system.

Generator build

1.10. Where the generator chooses to construct the transmission assets (generator build) the Construction Agreement may contain assumptions about the offshore transmission systems as the generator may not fully have developed the design or construct of its transmission system. It may also reflect the appointment of the OFTO or the expected tender process the development will be considered under.

1.11. It is expected that the parties will agree the timeline for finalising the design of the transmission assets during the post offer period and that the design of the transmission assets will be developed in line with the assumptions made in the post offer stage and set out in the Construction Agreement. Any material change from the

⁷ The Construction Agreement is provided in Schedule 2 Exhibit 3A of CUSC

assumptions could be considered a modification to the Construction Agreement and will be treated as such under section 6 of the CUSC.

1.12. We have continued to allow for the Construction Agreement and Bilateral Connection Agreement to be varied on the appointment of the OFTO, under generator build. However, we note that this is not a requirement but is an option should it be required for any reason.

Acceptance stage

1.13. The generator continues to retain the ability to accept or reject the connection offer at the end of the three month period, or later where the parties agree.

Post acceptance stage

1.14. The parties will continue to develop the OTSDUW in the post acceptance period and the construction agreement will reflect the design as it progresses. The CUSC expects the generator and the NETSO (and any other relevant party) to keep each other informed of progress against the agreed timeline.

1.15. As stated before, we expect that that the design of the OTSDUW will be developed in line with the assumptions made in the post offer stage and set out in the connection agreement.

1.16. The Construction Agreement allows for the development of activities related to the offshore transmission system (consents/design etc) and amendments to the construction agreement as a result of this, by agreement of the parties and subject to the modifications requirements.

OFTO appointment stage

1.17. On appointment of the OFTO, any consents that relate to the transmission assets, transmission assets constructed by the generator or any other assets provided for under late OFTO build or generator build that otherwise would have been provided by an OFTO will transfer to that OFTO and the requirements set out in the Construction Agreement in relation to the OTSDUW will cease to apply in relation to that generator (subject to any compliance requirements provided for in CUSC).

Appendix 3 - Summary of Responses

Introduction

1.1. The recent Ofgem/DECC consultation on the Enduring Regulatory Regime closed on 29 September. It gave respondents the opportunity to comment on:

- the framework for OFTO build;
- proposals for allowing a generator build option and the issues around the implementation of such an approach; and
- if any further action is necessary to facilitate the development of a co-ordinated onshore and offshore network within the offshore transmission regulatory regime.

1.2. During the consultation period, we received contributions from 38 stakeholders in the form of 31 full responses and 18 initial responses of a material nature received by 9 September. Copies of all non-confidential responses have been published on Ofgem's website⁸.

1.3. This chapter provides a short overview of the key issues arising from the responses and includes a question by question analysis of the responses that impact on or have informed the proposed changes to the CUSC, Grid Code and STC.

Key themes

1.4. The key points raised by respondents which impact or inform the proposed changes to the standard framework are:

- Respondents were strongly supportive of the inclusion of a generator build option in the enduring regime.
- Most respondents felt changes were necessary to the standard framework to facilitate the generator build option and clarify the late OFTO build option.
- An OFTO of Last Resort mechanism was felt by a majority of respondents to be essential for both the generator build and late OFTO build options. Some respondents suggested a developer should be allowed to switch to a generator build approach in the instance of a failed OFTO tender bid.

⁸http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=20&refer=Networks/offtrans/p dc/cdr/Cons2010

 Views on routes to implementation were varied, though most respondents stressed the need for speedy implementation. Most respondents supported the use of the Secretary of State's powers to implement the required changes and did not support the use of normal governance. A number of respondents suggested that implementing the necessary changes to the standard framework by 18 December is very challenging, and extending the Secretary of State's powers should be considered.

Responses to individual questions

Q3.1 Do you agree with the proposed scope of activities defined as preconstruction works?

1.5. The majority of respondents welcomed a flexible approach to pre-construction works. Four respondents suggested that the proposed scope was reasonable, but eight others suggested that the scope should be broader. One generator suggested that generator negotiated supply contracts should be allowed to be included as transferrable pre-construction works.

Q3.2. What are the appropriate mechanisms for ensuring that contingencies are managed efficiently?

1.6. There was support for defining contingencies on a case by case basis. A number of generators suggested that generators should have a role in defining OFTO contingencies on a case by case basis. One generator said that contingencies should be at the discretion of the OFTO, one said that contingencies will not work. Two generators suggested that contingencies should take the whole development into account, not just the offshore assets.

1.7. In terms of mechanisms:

- Four respondents suggested rewards to incentivise efficient contingency values.
- Three were in favour of capping, two in favour of a sharing mechanism.
- Two generators suggested that a mix is required.

Q3.3. What are your views on allowing generators a role in informing the evaluation criteria for technical issues or enabling generators to comment on the technical sections of the bid submissions?

1.8. There is very strong support for a generator role in commenting on technical aspects of evaluation criteria. However some respondents, including potential OFTOs and a generator, said that this should only be allowed if it does not lead to competition concerns through generator bias. A number of generators suggested that

the generator role should be greater than proposed, including commenting on design and costs.

1.9. Two generators also suggested that there should be a role for NETSO in evaluation.

Q3.4. What should be Ofgem's role in the transfer of property rights and consents to the OFTO?

1.10. Respondents were in favour of an Ofgem defined standard framework for the transfer of property rights and consents to the OFTO.

1.11. Three generators felt that there should be a statutory transfer scheme for preconstruction works

Q3.5. Should we extend OFTO of last resort arrangements to include failed OFTO build tenders (noting a generator could construct their own assets should the tender process fail to identify an OFTO under those appointment options), and if so should the obligations be extended to all transmission licensees?

1.12. 12 respondents advocated extending the OFTO of last resort arrangements to include failed OFTO build tenders. Of these 12 respondents, eight suggested the generator should be permitted to choose the generator build option as an alternative to the OFTO of last resort. One respondent disagreed with allowing the generator to build the transmission assets following a failed OFTO build tender and one respondent sought clarity on whether a generator would be allowed to abort an OFTO build tender in favour of a generator build tender during the process.

1.13. Two respondents suggested allowing the generator to operate while the OFTO of last resort was selected.

Q3.6. What are the appropriate mechanisms for ensuring that there is effective competition across the supply chain under OFTO build options?

1.14. Two members of the supply chain and a generator were against any mechanisms affecting OFTO relationships with the supply chain. Two respondents suggested that joint procurement of services and equipment should be considered. One respondent was of the view that exclusive arrangements could be in the best interest of consumers, but two generators suggested that exclusive arrangements would be anti competitive. One suggested excluding any OFTO with a key component supplier as part of its consortium at the PQ stage.

1.15. Four respondents said that existing legislation is sufficient and three suggested that the tender process should focus on OFTO competition, not supply chain competition.

Q3.7. How feasible are fixed price bids under an early OFTO appointment tender process? Is a bid based on approaches to procurement and financing possible?

1.16. Nine respondents said that fixed price bids are unfeasible under an early approach. Some respondents consider the early approach challenging.

1.17. One respondent said that it was not compatible with IPC process as the generator must consent generation and transmission assets together, while another said that it was not feasible from a time and cost perspective for OFTOs to coordinate the consenting process.

1.18. Some alternatives were suggested:

- One generator suggested a wide assessment of the capabilities of the OFTO which would evaluate their experience in undertaking planning and engineering and their financial standing. This was the approach used by The Crown Estate in assessment of offshore renewable energy tenders
- Another generator suggested appointing bidders with a given budget for preconstruction costs. They would then be distinguished based on required return over the 20 year revenue stream. Limiting contingency on construction costs and capping final outturn costs would incentivise efficiently managed construction. A respondent said that bids based on equity returns would not be in the interest of consumers.
- A potential OFTO said that it would be possible to evaluate on approaches to procurement, financing and pre-construction activities, then benchmark construction costs post detailed design (with a target price pain/gain sharing mechanism).

1.19. Two respondents highlighted a risk to evaluating approaches to procurement and financing.

Q3.8. To what extent can design innovation be realised under an early OFTO appointment approach, given the restraints imposed by the connection offer and technical codes and standards?

1.20. One generator said that OFTOs will not be any more innovative than the generator. Five respondents said that there is limited scope for design innovation, while four others said that the early model has the best chance realising design

innovation of the three approaches. One generator said that innovation should not be at generators' risk. Two parties said that innovation was only possible through a co-ordinated approach.

Q3.9. What are your views on the proposal to align stages of the tender process to milestones within the planning process?

1.21. There was general support for the proposal to align stages of the tender process to milestones within the planning process. However, three respondents highlight risks if there are unforeseen delays in the planning process. Four respondents were supportive but suggest that the proposal should be kept under review due to potential changes to planning legislation. However, one respondent noted that the IPC process does not apply in Scotland. Some generators were opposed as it will put the tender process on the critical path for a longer time and potentially cause delays to project delivery. One respondent said that the benefits do not justify the complexity and risk of delay.

Q3.10. Are changes to the standard framework required to deliver an effective late OFTO appointment approach?

1.22. Respondents held mixed views on whether changes to the standard framework were required to deliver an effective late OFTO build approach. Six respondents thought changes were required and sought clarity on the nature of the changes needed. Three respondents felt no further changes were required to the standard framework.

1.23. We received a number of suggestions to how the standard framework could be adapted to facilitate OFTO build. We have described the connection process and our design requirements in chapter three. Detailed changes to the codes are provided in the annexes to this consultation to clarify the late OFTO build option.

Q3.11. Which approach to engaging with the supply chain of the three suggested under a late OFTO appointment enables the greatest level of competition?

1.24. Respondents did not agree on the most appropriate basis of bid under a late model. A potential OFTO and member of the supply chain felt that bidding on indicative costs was the best approach. A number of respondents, including a potential OFTO, were in favour of not restricting OFTOs and leaving all of our suggested options open.

1.25. One respondent said that OFTOs should have firm relationships with suppliers. Two respondents said that the shortage of suppliers should be dealt with through attracting new entrants, not restricting activities.

Q3.12. Do the form and nature of arrangements for asset transfer under a late OFTO appointment need to differ substantively from an early OFTO appointment?

1.26. Respondents said that they do not need to differ.

Q4.1. Should a generator build approach be included in the enduring regime?

1.27. The vast majority of respondents were strongly in favour of a generator build option in the enduring regime. Most respondents, including all generators, were supportive of including the generator build model on an enduring basis.

1.28. Existing onshore TOs support a short term inclusion of generator build before moving towards the more integrated, co-ordinated solution proposed by National Grid. Two potential OFTOs are in favour of the inclusion of generator build in the short term before moving to a purely OFTO build regime.

Q4.2. Are changes needed to the connection application process to reflect the different scope of information available at each stage for NETSO offers under a generator build option?

1.29. Responses were mixed to this question. Five respondents felt no changes were necessary to the connection process whilst three felt guidance is needed on when it is appropriate to trigger the connection process. We note that it is for the offshore generator to decide when it wishes to apply for connection to the NETS - it is not our intention that the connection process should change to remove this choice. Two further respondents felt it was not necessary to include a two stage connection process, but allows for it if the developer and NETSO deem it to be necessary. Two further responses suggested developers should have the flexibility to switch between the different build options. We have therefore provided clarity within the CUSC that material changes to a Bilateral Connection Agreement would be considered a modification to that agreement. We have also signalled that we consider the option to vary an agreement should be available where both parties are of the view that the changes are not of a material nature.

Q4.3. Do you agree with our initial assessment of required amendments to the standard industry framework? Have you identified further areas that may require amendments?

1.30. We received a number of suggestions to how the standard framework could be adapted to facilitate generator build with 11 respondents stating changes to the standard framework were necessary.

1.31. Two respondents raised concerns over the need for derogations. One was of the view that the derogations required in the transitional regime were as a result of the overly restrictive requirements of the standard framework. The other stated that derogations should not form part of the enduring regulatory regime. One respondent was of the view that a derogation may be the right answer.

1.32. Firstly, we note industry may propose amendments to the obligations set out in the standard framework through the normal governance procedure, where they view them to be overly prescriptive. In addition, we have set out our approach to drafting the proposed changes to facilitate the offshore regime where we have extended the onshore arrangements except where there was justification for different treatment of offshore parties.

1.33. Secondly, we expect that generators who chose to construct transmission assets will do so in line with obligations set out in the CUSC and the Grid Code, and as such, there should not be a need for derogations to be granted. However, we note that a licensee has the ability to request a derogation under its licence and we do not intent to remove this ability as part of the work we are undertaking to invoke the generator build option.

1.34. One respondent considered that design compliance of the transmission assets would be best achieved through changes to the CUSC rather than the Grid Code. However, we feel the standard obligations for design compliance of offshore transmission assets are best placed in the Grid Code, with any site specific requirements being set out in the construction agreement in the CUSC.

1.35. One respondent was of the view that the standard framework should be amended to allow communication between the generator and the OFTO during operations. Ofgem's approach to amending the framework is to undertake only those changes necessary to introduce generator build and clarify the late OFTO build. We note that the current standard framework places an obligation on the NETSO to manage the operation of the NETS. We do not intend to nor do we have the powers to review the role of the NETSO as part of the development of the enduring offshore transmission regime.

Q4.4. Do you agree that there is now sufficient understanding of the offshore transmission market and arrangements for cost assessments to remove the need for an ex-ante cost guarantee?

1.36. Generators were very strongly against the removal of the ex-ante cost guarantee. They said that the offshore transmission market is still difficult to forecast and the inclusion of the guarantee is vital for maintaining investor certainty. Some generators suggested that Ofgem should publish the differences between ex-ante and ex-post assessments from the first transitional tender round. Two potential OFTOs said that the guarantee should be removed.

1.37. Some generators suggest increasing the cost guarantee, while two generators suggested reducing it gradually over time as understanding increases. There is general agreement that recovery of 100 per cent of efficiently incurred costs should be guaranteed. Some generators suggested that this guarantee was more important than the 75 per cent guarantee.

Q4.5. Do you think that action is required to ensure fair and timely asset transfer from the generator to the OFTO, given that the property transfer scheme only applies to transitional projects?

1.38. There is strong support from potential OFTOs and generators for the inclusion of an enduring statutory asset transfer scheme. One generator was in favour of extending the existing transitional scheme to 2016 to allow the development of an enduring transfer scheme. One respondent suggested that there should be no expiry date to the transfer scheme, but if necessary should be no earlier than 2022.

Q4.6. Are OFTO of last resort arrangements required under the generator build approach and if so, should the obligations be extended to all transmission licensees?

1.39. Fourteen respondents called for the inclusion of an OFTO of last resort. They argued that the mechanism is essential to provide certainty for financing under both the OFTO and generator build options.

1.40. Most respondents felt the obligations should fall on OFTOs and not onshore TOs. However, one suggested that OFTOs are generally not in the position to take on OFTO of last response responsibilities as they are generally project financed.

Q4.7. What are the appropriate mechanisms for ensuring that generators ringfence transmission costs from generation costs when competitively procuring under a generator build approach?

1.41. A number of generators and RenewableUK supported our proposals to ensure that generators ringfence transmission costs from generation costs when procuring under a generator build approach. Two respondents suggested that, if this is not possible, then there should be as much transparency as possible to prevent cross subsidisation. However, four generators felt that it is not appropriate as there is a need to minimise costs across the whole project. They suggested that procuring transmission and generation assets together will reduce costs.

Q5.1. What is the most appropriate route to implement the required amendments to the standard industry framework to deliver the generator build option?

1.42. Nine respondents supported using the Secretary of State powers under Sections 90 and 91 of the Energy Act 2004 to amend the relevant codes and licences. Of these nine respondents, three suggested after the powers expire it would be appropriate to "fine tune" the framework using the standard governance arrangements. 1.43. One respondent suggested that a statement of intent should be produced if the required changes were not been finalised by the 18 December 2010.

1.44. One respondent supported using the normal governance process rather than the Secretary of State powers and another proposed using additional powers for implementation such as the transmission access powers in the Energy Act 2008 or the Energy Security and Green Economy Bill. We note, it is not viable to use the transmission access powers to implement the necessary changes to the standard framework.

1.45. Five respondents provided views on the feasibility of the timetable to deliver an enduring regime before the Secretary of State's powers expire. These respondents stated the timetable was challenging but feasible with industry support.

1.46. We acknowledge the timescales for delivering the regime using the Secretary of State's powers are challenging, however there are many specific elements of the regime that we consider can be achieved before these powers expire. We therefore consider using the powers the most appropriate route to implementing the required amendments to the standard industry framework.

Q5.2. Views on the feasibility of the timetable to deliver an enduring regime by 19 December 2010 (when the Secretary of State's powers expire)

1.47. Most respondents considered that it was desirable to use the Secretary of State's existing powers noting that the timetable is challenging, but feasible with industry support.

1.48. Three respondents considered the timetable to be very challenging.

Q6.1. Do our proposals create sufficient opportunities for co-ordinated development of offshore transmission infrastructure?

1.49. Co-ordination was a key theme raised by all respondents. All respondents are in favour of a coordinated approach to the development of offshore transmission infrastructure, as long as the development of such infrastructure does not cause delays to generation projects. A majority of respondents suggest that the proposed regime cannot facilitate co-ordinated offshore development. Many respondents felt that the regime will not deliver co-ordination as there is no incentive for generators to take on the risk of anticipatory investment. There is also support for an individual party responsible for the design of offshore development. Generally, views on why this is the case were divided into two groups.

1.50. The first group argued that, due to difficulties in co-ordinating onshore and offshore planning, a co-ordinated approach offshore requires a single licensed entity responsible for the co-ordination of onshore and offshore development. They argue that, while the ODIS provides information about future offshore developments and opportunities for co-ordination, it is produced without pre-construction engineering

works and there is no requirement for generators or OFTOs to follow its designs. A respondent also claimed that building according to a third party design (such as through the ODIS) carries significant project risk for OFTOs and generators.

1.51. Because of these issues, one respondent suggested a "hybrid" of the competitive OFTO regime and extension of onshore TOs for delivery offshore transmission assets. The onshore TO would be responsible for shared or anticipatory assets, or those that have significant onshore interaction. OFTOs would be responsible for those assets for single users or when parties signal a willingness to co-operate.

1.52. The second group argued that it is not realistic for generators to financially secure the full value of co-ordinated assets. They argue that a shared asset can only be built if some risk of asset stranding is shared by consumers. They argue that there needs to be a way of consenting and commencing construction of assets ahead of full user commitment. This would require changes to the connection application process, charging, NETSO's role, and compulsory purchase powers.

1.53. A number of respondents suggested anticipatory approaches that give overall design responsibility to a third party ahead of contractual commitment by generators. Some risk of stranding would be passed to the consumer The OFTO or generator would then build the asset in time for the first generator's connection. Respondents also noted that such a role would require increased measures to ensure business separation of the TO and SO responsibilities of NGET.

1.54. Two respondents were supportive of appointing OFTOs on a zonal basis to improve co-ordination. However, RenewableUK felt that such an approach is less transparent and generators have no ability to predict or influence asset delivery.

Q6.2. Are there circumstances where additional offshore infrastructure development would be in the wider interest of the NETS?

1.55. A number of parties suggested that there are likely to be circumstances where additional offshore infrastructure development would be in the wider interest of the NETS. Two respondents said it should happen when onshore benefits or additional security outweigh offshore costs.

Q6.3. Do you consider there to be any issues in respect of interoperability and standardisation?

1.56. There is strong support for standardisation in offshore transmission. Some respondents suggested that standards should be agreed across industry, the supply chain and with NETSO and put into industry codes.

Q6.4. We would welcome views on the materiality of issues surrounding interfacing with other regimes.

1.57. A number of respondents stated that the regime needs to be compatible with the interconnector regime, North Sea developments and planning regimes.

1.58. One respondent raised concerns that the regime is not compliant with Articles 9 and 12 of the Third Package. A few respondents were also concerned as to how the unbundling requirements of the Third Package will affect the commissioning of assets by generators under the generator build option and whether the unbundling requirements would allow them to operate offshore transmission assets while awaiting the appointment of an OFTO of Last Resort.

Appendix 4 – The Authority's Powers and Duties

1.1. Ofgem is the Office of Gas and Electricity Markets which supports the Gas and Electricity Markets Authority ("the Authority"), the regulator of the gas and electricity industries in Great Britain. This Appendix summarises the primary powers and duties of the Authority. It is not comprehensive and is not a substitute to reference to the relevant legal instruments (including, but not limited to, those referred to below).

1.2. The Authority's powers and duties are largely provided for in statute, principally the Gas Act 1986, the Electricity Act 1989, the Utilities Act 2000, the Competition Act 1998, the Enterprise Act 2002 and the Energy Act 2004, as well as arising from directly effective European Community legislation. References to the Gas Act and the Electricity Act in this Appendix are to Part 1 of each of those Acts.⁹

1.3. Duties and functions relating to gas are set out in the Gas Act and those relating to electricity are set out in the Electricity Act. This Appendix must be read accordingly¹⁰.

1.4. The Authority's principal objective when carrying out certain of its functions under each of the Gas Act and the Electricity Act is to protect the interests of existing and future consumers, wherever appropriate by promoting effective competition between persons engaged in, or in commercial activities connected with, the shipping, transportation or supply of gas conveyed through pipes, and the generation, transmission, distribution or supply of electricity or the provision or use of electricity interconnectors.

1.5. The Authority must when carrying out those functions have regard to:

- the need to secure that, so far as it is economical to meet them, all reasonable demands in Great Britain for gas conveyed through pipes are met;
- the need to secure that all reasonable demands for electricity are met;
- the need to secure that licence holders are able to finance the activities which are the subject of obligations on them¹¹;
- the need to contribute to the achievement of sustainable development; and
- the interests of individuals who are disabled or chronically sick, of pensionable age, with low incomes, or residing in rural areas.¹²

⁹ Entitled "Gas Supply" and "Electricity Supply" respectively.

¹⁰ However, in exercising a function under the Electricity Act the Authority may have regard to the interests of consumers in relation to gas conveyed through pipes and vice versa in the case of it exercising a function under the Gas Act.

¹¹ Under the Gas Act and the Utilities Act, in the case of Gas Act functions, or the Electricity Act, the Utilities Act and certain parts of the Energy Act in the case of Electricity Act functions. ¹² The Authority may have regard to other descriptions of consumers.

1.6. Subject to the above, the Authority is required to carry out the functions referred to in the manner which it considers is best calculated to:

- promote efficiency and economy on the part of those licensed13 under the relevant Act and the efficient use of gas conveyed through pipes and electricity conveyed by distribution systems or transmission systems;
- protect the public from dangers arising from the conveyance of gas through pipes or the use of gas conveyed through pipes and from the generation, transmission, distribution or supply of electricity; and
- secure a diverse and viable long-term energy supply.

1.7. In carrying out the functions referred to, the Authority must also have regard, to:

- the effect on the environment of activities connected with the conveyance of gas through pipes or with the generation, transmission, distribution or supply of electricity;
- the principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed and any other principles that appear to it to represent the best regulatory practice; and
- certain statutory guidance on social and environmental matters issued by the Secretary of State.

The Authority has powers under the Competition Act to investigate suspected anticompetitive activity and take action for breaches of the prohibitions in the legislation in respect of the gas and electricity sectors in Great Britain and is a designated National Competition Authority under the EC Modernisation Regulation14 and therefore part of the European Competition Network. The Authority also has concurrent powers with the Office of Fair Trading in respect of market investigation references to the Competition Commission.

¹³ Or persons authorised by exemptions to carry on any activity.

¹⁴ Council Regulation (EC) 1/2003

Appendix 5 - Glossary

A

Authority

The Gas and Electricity Markets Authority

С

CAT

Competition Appeals Tribunal

CC

Grid Code Connection Confitions

CUSC

Connection and Use of System Code

D

DECC

Department of Energy and Climate Change

Ν

NETS

National Electricity Transmission System

NETSO

National Electricity Transmission System Operator

NGET

National Grid Electricity Transmission plc

0

Ofgem and Ofgem E-Serve

Office of Gas and Electricity Markets

OFTO

Offshore Transmission Owner

OTSDUW

Offshore Transmission System Development User Works

Ρ

PC

Grid Code Planning Code

S

STC

System Operator - Transmission Owner Code or SO - TO Code

т

то

Transmission Owner

Appendix 6 - Feedback Questionnaire

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