

Government Response to 'Offshore Electricity Transmission – A further Joint Ofgem/DECC Regulatory Policy Update'

FINAL CONSULTATION DOCUMENT

23 March 2009





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Published by the Department of Energy and Climate Change.

The photograph of North Hoyle offshore wind farm on the front cover is by Patrick Fownes-Walpole.

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Mike O'Brien QC MP
*Minister of State for
Energy and Climate Change*

FOREWORD

Britain already has more offshore wind power than any country in the world – and our plans are for four times more than this by 2020.

This is a challenge not just for the technology, and not just for the companies that will be looking to invest in major projects, but for the energy infrastructure and above all, the transmission of power offshore. In total, the investment in grid infrastructure to connect Rounds 1, 2 and 3 of offshore wind could be up to £15 billion.

Success will be a major contribution to a low-carbon Britain. In decarbonising at home, developed countries will be showing the leadership needed for a climate change agreement with every country. That is the only way we can stop catastrophic climate change, and the only way we can avert the greatest challenge the planet faces.

Success with offshore wind power will be a contribution, too, to the British industries of the future. We have the expertise built up in offshore work in the North Sea, the technical research and the entrepreneurial energy to lead the world.

The proposals in this document will reduce the cost of transmission infrastructure and encourage innovation as new players enter this exciting market.

I look forward to hearing your views.

A handwritten signature in black ink that reads "Mike O'Brien". The signature is fluid and cursive, with a long horizontal stroke at the end.

Mike O'Brien QC MP
Minister of State for Energy and Climate Change

EXECUTIVE SUMMARY

This is the final consultation on proposals for a regulatory framework for offshore electricity transmission¹ networks before implementation begins². It is the latest in a series of joint consultations by the Government and Ofgem held to develop and refine our policy proposals. Following the DECC and Ofgem consultation document, published on 20 November 2008, entitled 'Offshore Electricity Transmission – A Joint Ofgem/DECC Regulatory Policy Update' ('the November 2008 Policy Update'); this consultation gives a final opportunity, before implementation, to comment on:

- Proposals for the detailed design of the regulatory regime, made in response to comments received to the November 2008 Policy Update and other engagement with stakeholders;
- The updated changes to standard industry documents that the Secretary of State considers are appropriate for purposes connected with offshore transmission; and
- Aspects of the regulatory regime to be implemented by Ofgem and draft special licence conditions.

Although this is a Government response to the November 2008 Policy Update, sections of the regime will ultimately be implemented by the Authority³ through special conditions and, as such, this document has been prepared by the Government in conjunction with Ofgem.

Following the publication of the November 2008 Policy Update, and taking into account responses to that document, many policy positions are unchanged and are reflected in the annexed draft licence conditions and industry codes which the Secretary of State is consulting on. However, some policy positions have been developed further and views are sought on the updated draft licence conditions and industry code changes which the Secretary of State is consulting on. There are also a few issues highlighted in this document where views are particularly sought on specific aspects of policy proposals which require further development. DECC and Ofgem intend to publish a statement in early June, setting out any changes we have made to our proposals following this consultation.

DECC is the lead department within the Government for the Public Service Agreement (PSA) target to 'Lead the global effort to avoid dangerous climate change'. The Government expects offshore renewable energy generation to make a major contribution to meeting the UK's renewable energy targets and support our efforts to avoid dangerous climate change.

1 Offshore transmission refers to the network assets from the offshore generator (e.g. wind farm) to an onshore connection point.

2 In other words, this is the final consultation before the Secretary of State commences sections 90 and 91 of EA2004 at 'Go Active'.

3 The Gas and Electricity Markets Authority. Referred to as 'the Authority' throughout this document. 'The Authority' and 'Ofgem' are used interchangeably.

Up to 8GW of offshore wind farm generation capacity has already been awarded leases by The Crown Estate under Licensing Rounds 1 and 2 and will be seeking to connect to the GB onshore grid over the next few years⁴. It is expected that more than £2 billion of investment will be needed in new offshore transmission infrastructure to carry this renewable energy ashore.

To help achieve the UK's contribution to meeting the EU's 2020 renewable energy target, which is likely to require a contribution of 30-40% renewable electricity, the Government has announced draft plans for up to a further 25GW of offshore wind generation capacity to be developed. This generation is in addition to the 8GW of capacity already planned. The Government expects to announce its decision on the acceptable level of offshore wind development in Spring 2009.

On 4 June 2008 The Crown Estate launched the leasing process for Round 3 projects to facilitate the delivery of this additional generation. The development of this further offshore generation capacity has the potential to trigger several billion pounds worth of additional investment in offshore transmission networks. In addition, on 16 February 2009 the Scottish Executive and The Crown Estate announced the award of 10 exclusivity awards to build offshore wind farms in Scottish territorial waters. The total award capacity is over 6GW.

Since establishing the high level policy framework for the new regime, DECC and Ofgem have been consulting on the detailed aspects that will underpin its operation.

DECC and Ofgem's November 2008 Policy Update set out updated policy proposals and detailed drafting of the various codes and standard licence conditions that are considered appropriate for implementing the offshore transmission regime. We sought views from stakeholders by 9 January 2009 (with a request for comments of a material nature by 18 December 2008).

DECC and Ofgem received 24 written responses from 16 respondents to the November 2008 Policy Update. A full list of respondents who submitted non-confidential responses is in [Appendix 2](#). Non-confidential responses may be viewed on the DECC and Ofgem websites. [Chapter 8](#) of this document contains a detailed summary of the responses received to the proposals and questions presented in the November 2008 Policy Update. We would like to thank all those who contributed their views. All responses received, views expressed and questions raised during the consultation period have been assessed against the Government's policy aims and have been considered in developing the new regulatory regime.

This consultation provides a final opportunity for stakeholders to comment on the details of the new offshore transmission regime before implementation begins and sets out our joint policy proposals and timetable for implementation. These have been developed in the light of the views expressed by respondents to the November 2008 Policy Update and other engagement with stakeholders.

We believe these proposals will create the right framework for efficient investment in offshore transmission networks, allow scope for technical and operational innovation, and are sufficiently flexible to meet the needs of future offshore generators.

⁴ The 8GW estimate includes the Ormonde project which is leased outside of R1 and R2 and would be included as a transitional project if it meets Ofgem's qualifying criteria.

This consultation also sets out our final proposals for changes to the various codes and licence conditions to implement the regulatory framework. These have been developed in the light of comments on the previous drafts that accompanied the November 2008 Policy Update. We welcome views on these drafting proposals, including on whether they accurately reflect the policy positions contained in this document.

This document sets out policy positions with respect to the proposed regulatory framework and seeks views on the further detail as set out in the consultation. In particular, we are seeking views on our updated policy thinking on a few specific aspects of the regulatory framework.

IMPLICATION OF EUROPEAN UNION UNBUNDLING REQUIREMENTS

In the November 2008 Policy Update we set out the details of the EU Third Package of legislation on the internal EU energy market to regulate Gas and Electricity Markets and potential impacts on the proposed offshore transmission regime. These impacts concerned the ability of generator-developers to bid for, or own, transmission assets and the proposed Offshore Transmission Owner (OFTO) of Last Resort mechanism. We have since developed our understanding in the light of the responses received, other engagement with stakeholders, and developments in the EU. [Chapter 5](#) of this document presents our developed understanding and [Chapter 6](#) includes updated details of our revised OFTO of last resort proposals.

DESIGN OF THE REGULATORY REGIME

The November 2008 Policy Update presented updated proposals on the regulatory regime, including the form of incentives and the treatment of uncertain costs and benefits that arise over the life of the transmission assets. This document sets out proposals for final comment before implementation. These can be summarised as follows:

- The period of the initial revenue stream will normally be 20 years;
- Where there is a demonstrable ongoing generation need for the offshore transmission assets beyond the end of the initial 20-year revenue stream, the Authority will consider, on a case-by-case basis, whether to set a revenue stream for a further period or undertake a further tender exercise to appoint an OFTO;
- We do not intend to introduce pre-defined adjustment for unpredictable and uncertain costs and savings that may emerge over the life of the transmission system;
- An appointed OFTO will, at the discretion of Ofgem, be allowed to undertake efficient incremental investment up to a value of 20% of the initial capital cost of the asset over the life of the offshore transmission systems without being subject to a further tender exercise, provided that the additional investment is generator-led;
- There will be limited predefined adjustment mechanisms for certain predictable but uncertain costs and savings that may emerge over the life of the transmission system;

- We propose to adopt an incentive mechanism for operational availability. Default targets and incentive rates are proposed, with up to 10% of the OFTO's annual regulated revenues exposed to the incentive; and
- We propose that appropriate provisions between the Great Britain System Operator (GBSO) and Offshore Transmission business are created so as to ensure that no party may be commercially advantaged by information held by, or the actions of, the GBSO.

Most issues set out in the policy framework for the price control regime will be implemented in the form of Special Conditions of the transmission licence established as part of Ofgem's tender exercise.

THE TENDER PROCESS

Since January 2008 we have set out in increasing levels of detail how the tender process will work for the granting of OFTO licences, both for the transitional regime and on an enduring basis. The overall design of the process remains unchanged, with the result of the tender process being the identification of a successful bidder and subsequent granting of an OFTO licence.

Stakeholders should note that work dealing with issues relating to the design of the tender process is being taken forward through separate Ofgem consultation and more details of that work stream are set out below. As such, stakeholders should direct comments on issues relating to tenders in response to those documents.

TENDER DOCUMENTATION AND REGULATIONS

We said in the June 2008 Policy Update that Ofgem was working on developing detailed tender documentation, and Ofgem provided a detailed contents list for the documentation in an appendix to the Policy Update. In July 2008, Ofgem published its preliminary draft of the regulations that will underpin the tender process for comment. These regulations are an important piece of secondary legislation and will be made by the Authority ahead of Go-Active in accordance with section 92 of the Energy Act 2004 (EA2004) (which will insert section 6C into the Electricity Act 1989).

Ofgem further developed the tender documentation, and published it for comment in October 2008. That consultation set out the key requirements for bidders in the competition, what Ofgem expected by way of responses and also the key evaluation criteria Ofgem would use in the selection process.

On 5 March 2009 Ofgem published its final consultation document on the tender process and the regulations that outline the Authority's process for conducting tenders. Responses to that document are due by 2 April 2009 for the tender regulations and 16 April for the tender process.

The separate consultation document on the tender process and regulations is entitled 'Offshore Electricity Transmission: Updated Proposals for the Competitive Tender Process'. The consultation is available from the Ofgem website www.ofgem.gov.uk.

STANDARD DEVELOPMENT FRAMEWORK

There are many detailed changes proposed for industry codes, technical standards and standard licence conditions connected with the regulatory regime for offshore transmission. This document provides an update on the key issues in each of these areas and sets out our proposals for the final opportunity to comment before implementation. These are contained in [Chapter 6](#) and in the annexes to this document.

TRANSMISSION CHARGING

The June 2008 Policy Update referred to National Grid Electricity Transmission plc's (NGET) proposed modification to the Transmission Network Use of System (TNUoS) charging methodology and highlighted concerns about the basis of, and justification for, the proposed modification (as set out in Ofgem's formal letter of 30 May 2008 to NGET requesting it to address these concerns). NGET subsequently consulted on revised proposals and on 31 December 2008 submitted its Use of System Methodology Modification Proposal GB ECM-08 to the Authority for consideration.

The proposed modification relates to the introduction of charging arrangements to recover the costs of transmission infrastructure assets required to facilitate the connection from a generating site located in offshore waters to the onshore network. The proposed modification is intended, subject to the Authority's decision, to be effective only when the regulatory regime is fully implemented at 'Go-Live'.

The Authority published an Impact Assessment and Consultation on NGET's proposed modification on 4 February 2009. This closed on 18 March 2009. The Authority has until 30 March 2009 to make its decision. [Chapter 6](#) of this document provides further details.

NEXT STEPS

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

23 March 2009

Publication of this Government response as the final consultation in developing the offshore transmission regulatory regime before implementation begins.

7 April 2009

DECC/Ofgem External communication session.

May 2009

Commencement of section 92 of EA2004 and sections 44(1) and 44(2) of EA2008 to enable the Authority to make regulations to enable the first round of tenders to begin shortly after 'Go-Active'.

Early June 2009

DECC/Ofgem statement on changes to proposals following this final consultation.

24 June 2009

'Go-Active' commencement of sections 90 and 91 of EA2004.

Summer 2009

First tenders commence.

June 2010

'Go-Live'⁵ commencement of sections 89 and 180 of EA2004 and section 44(3) of EA2008.

DECC and Ofgem will hold an external communication session on 7 April 2009 at the BERR Conference Centre, 1 Victoria Street, London SW1H 0ET to discuss this consultation in more detail. Invitations will be issued shortly but if you would like to reserve a place, please send an email to offshore.transmission@decc.gov.uk

⁵ Go-Live is expected to be one year after the Go-Active date.

1 PURPOSE OF THE DOCUMENT

- 1.1 This is the final consultation in a series of consultations to establish a regulatory framework for offshore electricity transmission networks. It represents the final opportunity to submit views on proposals for the new regulatory regime - which have been developed in the light of ongoing engagement with industry - before implementation begins at 'Go-Active'.
- 1.2 DECC and Ofgem are working together to design and implement a regulatory regime for offshore electricity transmission. The objective of the regime is to facilitate connection of significant amounts of renewable offshore generation to the onshore electricity network.
- 1.3 In this document, 'we' should be taken to mean 'the Government and Ofgem' except where it is explicitly stated otherwise or where the context makes it clear the reference is to one body rather than the other.
- 1.4 This document sets out proposals for the design of the competitive offshore transmission regime and contains a consultation by the Secretary of State on the licence and industry code changes that the Secretary of State considers are appropriate for purposes connected with offshore transmission. It also sets out the further consultation by the Gas and Electricity Markets Authority ('the Authority') on the commercial and regulatory framework, including the regulated revenue stream and incentive framework that will apply to each offshore transmission project. These aspects of the regime will be implemented by the Authority through the Special Conditions of the transmission licence and finalised on a case-by-case basis as part of the outcome of the competitive tender process.
- 1.5 Stakeholders should note that the Authority has also recently issued a consultation on the detailed design of the competitive tender process and draft tender regulations.
- 1.6 This is the final opportunity for stakeholders to comment before the Secretary of State commences sections 90, 91, and 92 of the EA 2004 and section 44(1) and 44(2) of the EA 2008 for the regulatory regime to 'Go-Active'. 'Go-Active' is planned for 24 June 2009. We intend for the Secretary of State to commence sections 89 and 180 of the EA 2004 and section 44(3) of the EA2008 in June 2010 (which we refer to as 'Go-Live'). This should give enough time for OFTOs to be appointed for transitional projects. We will determine the exact date of 'Go-Live' when the outcome of the tender process is becoming clearer.

1.7 In particular, we are inviting views of stakeholders on our proposals for:

- Pre-defined adjustments to OFTO revenue streams, as set out in [Chapter 6](#)
- Business separation requirements
- Our revised OFTO of last resort policy
- Changes to the Standard Industry Framework and the accompanying changes to industry codes and licences connected with implementation of the regulatory regime

1.8 DECC and Ofgem intend to publish a statement in early June setting out any changes we have made to the proposals following this consultation.

2 RESPONDING TO THIS CONSULTATION

How to Respond to this Consultation

- 2.1 In order to give interested parties sufficient time to consider the proposals, we are providing a six-week period for consultation responses.
- 2.2 A number of previous consultations, outlined in more detail in [Chapter 8](#), have been held since 2005 to develop and refine the details of our policy proposals and included an initial 12-week consultation period.
- 2.3 If you wish to make any comments, please send them to:

Offshore Transmission Final Consultation
Department of Energy and Climate Change
1 Victoria St
London
SW1H 0ET

or email them to offshore.transmission@decc.gsi.gov.uk

- 2.4 Inquiries may also be directed to Ofgem by contacting:

Mr Sam Cope
Email: offshoretransmission@ofgem.gov.uk
Telephone: 020 7901 7239

- 2.5 The deadline for sending in your comments is 6 May 2009.
- 2.6 The list of interested parties being consulted is available on the DECC website alongside the consultation document at www.decc.gsi.gov.uk.

- 2.7 In line with DECC and Ofgem's policy of openness, at the end of the consultation period, copies of the responses that we receive may be made publicly available. The information they contain – including your name, contact details and any other personal information – may also be published in a summary of responses.
- 2.8 If you do not consent to publication of this information, you must clearly request that your response be treated confidentially. Any confidentiality disclaimer generated by your IT system in email responses will not be treated as such a request. You should also be aware that there may be circumstances in which DECC and/or Ofgem will be required to communicate information to third parties on request, in order to comply with their obligations under the Freedom of Information Act 2000 and the Environmental Information Regulations.
- 2.9 We will summarise all responses and place this summary on our websites at www.decc.gov.uk and www.ofgem.gov.uk.
- 2.10 DECC will appoint a Consultation Co-ordinator shortly. In the meantime, Tunde Idowu of the Department for Business, Enterprise and Regulatory Reform is acting as our interim Department Co-ordinator. If you have comments or complaints about the way this consultation has been conducted, these should be sent to:

Tunde Idowu

Consultation Co-ordinator

Department for Business, Enterprise and Regulatory Reform

Better Regulation Team

1 Victoria Street

London SW1H 0ET

Telephone: 020 7215 0412

Email: Babatunde.idowu@berr.gsi.gov.uk

- 2.11 The Data Protection Act: information provided by respondents to this consultation exercise will be held and used for the purposes of the administration of this current exercise. If you submit comments in response to this consultation exercise, we may keep your name and address on a list to be used for future consultation exercises on related topics.

Consultation Questions

1. We would welcome respondents' views on the supply chain and skills capacity. In particular, we would welcome views on the extent to which Ofgem, when granting OFTO licences, should take into consideration the policies and processes proposed by each bidder for developing and maintaining the appropriate skills necessary for them to discharge their licence obligations.
2. In particular, we would welcome any further views on:
 - a) our approach to dealing with predefined adjustments for 'known unknowns';
 - b) the OFTO of last resort proposals; and
 - c) business separation requirements.

Specifically, we would welcome comments on how clear respondents consider the criteria for an OFTO of last resort direction (as set out in Annex 1) are and whether and in what ways the criteria could be made clearer.

3. Ofgem would welcome respondents' comments on the entirety of the legal text attached at Annex 11, which reflects the policy set out in chapter 6. In particular Ofgem would welcome comments on:
 - Whether the licence text in this annex accurately reflects the policy proposals presented in the main body of the document?
 - Whether the licence conditions provide sufficient certainty from a commercial perspective?
 - Any aspects of the drafting to which respondents consider changes or clarification would be welcome to improve certainty for investors or developers.
4. We would welcome comments on the activities identified in the Offshore Implementation Plan and feedback on any activities that should be undertaken in the Implementation Period that are not included in the Offshore Implementation Plan.
5. We would also welcome nominations for representatives for the Grid Code Review Panel (GCRP) and the System Operator Transmission Owner Code (STC) Committee from prospective OFTOs. Please note that representatives do not have to be an OFTO, provided the nomination is supported by OFTOs. Nominations should be sent to the Secretary, whose contact details can be found on the relevant Committee pages on NGET's website www.nationalgrid.com/uk/Electricity/Codes
6. We propose that the Secretary of State makes the changes set out in the annexes to this consultation, subject to evidence to the contrary. We would welcome respondents' views.

3 INTRODUCTION

CHAPTER SUMMARY

- This chapter describes the overall policy context in which the new regulatory regime for offshore transmission is being devised including the targets and objectives that regulation will help the UK to achieve.
- The chapter goes on to describe the high level design of the policy to date and the principles underpinning the Government's approach.
- This chapter ends with a description of the structure of this consultation document.

POLICY CONTEXT

- 3.1 The Government is introducing a new regulatory regime for offshore electricity transmission to facilitate the connection of significant amounts of renewable offshore generation to the onshore electricity network. Since taking powers in the EA2004 the Government (DECC) has been consulting jointly with Ofgem on the detail of the new regime to regulate offshore electricity transmission.
- 3.2 A significant increase in the amount of the UK's electricity that is generated from renewable sources will be required to meet the UK's contribution to the EU's 2020 renewable energy targets. As a result, between 30–40% of the UK's electricity is expected to have to come from renewable sources. Currently, the contribution of electricity from renewable sources to the UK's generation mix stands at just over 5%, so up to an eight-fold increase is likely to be needed over the next 11 years.
- 3.3 The Government expects that offshore wind generation will have a key role to play in achieving the UK's renewable energy targets. An offshore transmission regime that connects new generating stations in offshore waters to the GB onshore grid in the most efficient and secure manner will therefore be an important element in the successful achievement of those targets.

- 3.4 The Government is putting in place a policy framework to facilitate the development of generation of electricity from offshore renewable energy sources. The Government expects significant amounts of offshore renewable generation will be necessary to contribute to the UK's targets and aspirations for increasing the proportion of the country's electricity supply from renewable sources. There are currently plans to develop about 8GW of offshore wind in UK waters under Round 1 and Round 2 of the offshore wind leasing rounds.

OFFSHORE TRANSMISSION

- 3.5 The Government and Ofgem have consulted at length on the design of the new regulatory regime for the provision of offshore electricity transmission infrastructure and have reached minded to positions on all the issues set out in the November 2008 Policy Update. In many areas, we have reaffirmed the views that we set out in that document.
- 3.6 However, there are some areas where we have refined our positions in the light of responses to the November 2008 Policy Update and other engagement with our stakeholders.
- 3.7 To enable new generation projects to connect to the GB onshore grid, the Government has decided that the principles behind the regulation of the GB onshore electricity transmission network should be extended offshore, except where the specific circumstances of offshore generation mean that changes should be made.
- 3.8 In practice this means:
- That transmitting electricity offshore at 132kV and above will be a prohibited activity without a licence;
 - That the safe and secure transmission of electricity offshore will be achieved through amendments to the existing system of licences, codes and agreements that govern onshore electricity transmission;
 - NGET, as GBSO, will be responsible for operating and co-ordinating plans for both onshore and offshore grid connections; and
 - That the costs of building and operating the new offshore transmission assets will be recovered from generators and customers via NGET's charging methodology.
- 3.9 The Government's policy for the UK energy market includes introducing competition where appropriate and only regulating where necessary. Since this will be a new licensing regime for offshore transmission networks and provides an opportunity for new companies to enter the energy sector, the Government has also concluded that there should be competitive tenders to decide the appointment of licensed OFTOs to provide and maintain specific offshore transmission assets.

- 3.10 The EA2004 provides powers for the Secretary of State to make changes to the codes, agreements and licences for the purposes of regulating offshore electricity transmission and distribution.
- 3.11 Since taking powers in the EA2004, the Government has been working with Ofgem to establish an offshore transmission licensing regime to regulate the conveyance of electricity along high voltage lines offshore (defined in the EA 2004 as those with a nominal voltage of 132kV or more) and associated plant and equipment which connect offshore generating stations to the onshore electricity grid.
- 3.12 Under the new regime, Ofgem, as the regulator of the gas and electricity markets in Great Britain, will be responsible for regulating offshore transmission licensees as it does for onshore transmission network companies.
- 3.13 In April 2006⁶ the Government decided that the appropriate model for the regulation of offshore electricity transmission was through a regulated price control approach and that, in establishing this framework, it would be appropriate to extend the principles of the onshore regulatory framework to the regulation of offshore transmission networks. The rationale for this approach is to:
- Ensure consistency with the regulatory arrangements onshore;
 - Provide assistance to offshore developers by recovering the costs of building offshore grid connections through NGET's charging methodology – thus spreading the costs they would pay to connect to the onshore grid over a number of years, as happens onshore;
 - Mean that the responsibility for development of the offshore transmission network would not fall to generators alone, and instead the risks and costs of developing offshore grid connections would be shared by the System Operator and OFTOs and, ultimately, consumers; and
 - Ensure a co-ordinated approach to the development of the offshore network, providing an additional environmental benefit, by reducing the unnecessary duplication of transmission assets.
- 3.14 After the commencement of sections 89, 90, 91, 92 and 180 of the EA 2004, the participation in the transmission of electricity from generating stations in offshore waters at voltages of 132kV and above will be prohibited without a licence.

6 <http://www.berr.gov.uk/files/file27137.pdf>

- 3.15 In developing the regime, the Government announced in August 2006 that NGET's role as GBSO⁷ would be extended offshore⁸. As a result, NGET will have clear licence obligations as System Operator for the whole of the GB transmission system, including those networks constructed within the renewable energy zone offshore. These new obligations will formally take effect once the relevant parts of the EA2004 are commenced and appropriate modifications made to NGET's licence for those purposes. Until then, NGET is acting as offshore GBSO designate and is assisting in the development of the new regime.
- 3.16 The Government considers that these proposals create the right framework for efficient investment in offshore networks, allow scope for innovation, and are flexible enough to meet the needs of future offshore generators. The Government's proposals for the new offshore transmission regime have been the subject of extensive consultation, during which a number of alternative approaches have been carefully considered.
- 3.17 Following consideration of the responses from industry and other stakeholders, the Government has concluded that a regulated regime based on the principles of the onshore regulatory framework but with the competitive appointment of offshore transmission companies is the best option for all stakeholders collectively. This approach will enable new companies to compete in the market to deliver cheaper and timelier connections than the alternative approaches considered, and will be more focused on generators' needs. Having considered and consulted on alternative approaches, the Government continues to support the decisions taken to date on the overall shape of the regime and the final policy proposals presented here.
- 3.18 Further information on all the consultations to date is also available on the Offshore Transmission: Consultations webpage on the DECC website⁹.

7 The term 'GB Transmission System' has been replaced by the term 'National Electricity Transmission System' in the relevant documents. This is because Great Britain only extends to the GB landmass and internal waters; it does not include offshore waters.

8 <http://www.berr.gov.uk/files/file32874.pdf>

9 <http://www.berr.gov.uk/whatwedo/energy/sources/renewables/policy/offshore-transmission/consultations/page42095.html>

STRUCTURE OF THIS DOCUMENT

3.19 This document is divided into chapters, appendices and annexes. Each chapter in this document sets out for comment the latest position, key proposals (where appropriate), updated proposals, questions seeking views from stakeholders on particular areas and how work will be taken forward.

3.20 This document has 9 chapters:

It opens with a **foreword** by the Minister of State for Energy and Climate Change.

There follows a high-level **executive summary** of the policy proposals, their rationale and information about what happens next on implementation.

Chapter 1 covers the **purpose** of this document.

Chapter 2 gives details of the **consultation process**.

Chapter 3 is the **introduction** and describes this document, placing it at the end of a series of consultations developing the policy positions in greater detail and giving opportunity for comment before the regime is enacted.

Chapter 4 describes the **background and policy context** by which this set of policy proposals has been developed, the key decision points along the way and refers to the principles which have guided Government decision-making along the way.

Chapter 5 gives further information on the **EU Third Package** of Energy Liberalisation Measures and the interaction with our policy proposals.

Chapter 6 contains the Authority's proposals for an offshore transmission **regulatory regime**.

Chapter 7 contains the changes to the **standard industry framework** being proposed in connection with offshore transmission.

Chapter 8 is a **question by question analysis** of the responses to the questions posed in the November consultation document.

Chapter 9 explains **what happens next**.

A set of appendices are included at the end of this document.

As with the November 2008 Policy Update, a number of documents are being published as annexes to this document (See **appendix 5** for a full list of annexes that have been published). These annexes are detailed documents containing proposed amendments to industry codes and the transmission licence conditions connected with the new regime. We are seeking views on whether the draft texts are appropriate and accurately reflect the policy positions taken.

There is a **glossary** at the end of this document.

4 BACKGROUND AND POLICY CONTEXT

CHAPTER SUMMARY

- The first section of this chapter describes the development of the offshore transmission regulatory regime. It focuses on the key questions which were consulted on and gives the rationale for Government decisions and refinement of the Government's policy proposals.
- The chapter goes on to consider the current policy landscape and highlights changes to the environment in which the policy proposals have been developed. These include the 'credit crunch' in financial markets and the recent announcement of exclusivity awards for potential offshore wind farms in Scottish territorial waters.

Development of the Offshore Transmission Regulatory Regime

- 4.1 The EA2004 provides powers for the Secretary of State to make changes to the codes, agreements and transmission or distribution licences for purposes connected with offshore electricity transmission or distribution.
- 4.2 Since taking the EA2004 powers, the Government has been working with Ofgem to establish an offshore transmission licensing regime to regulate the conveyance of electricity along high voltage lines offshore and associated plant and equipment which connect offshore generating stations to the onshore electricity grid.
- 4.3 The November 2008 Policy Update formed part of the ongoing process by DECC and Ofgem to put in place a regulatory regime for the connection of significant amounts of renewable offshore generation to the onshore electricity network, in a timely and cost-effective manner, whilst maintaining the integrity of the system as a whole and achieving best value for electricity customers.

- 4.4 Under the new regime Ofgem, as the regulator of the gas and electricity markets in Great Britain, will be responsible for regulating offshore transmission licensees, as it does for onshore transmission network companies.
- 4.5 In March 2006, following a 12-week consultation, the Government decided that the appropriate model for the regulation of offshore electricity transmission was through a regulated price control approach, extending the principles of the onshore regulated price control approach into the offshore sector.
- 4.6 The Government concluded that extending the principles that govern the regulation of onshore electricity transmission offshore was the correct approach to take for licensing offshore transmission, because it would:
- Ensure consistency with the regulatory arrangements onshore;
 - Provide assistance to offshore developers by recovering the costs of building offshore grid connections through NGET's charging methodology – thus spreading the costs they would pay to connect to the onshore grid over a number of years, as happens onshore;
 - Mean that the responsibility for development of the offshore transmission network would not fall to generators alone, and instead the risks and costs of developing offshore grid connections would be shared by the System Operator and OFTOs; and
 - Ensure a co-ordinated approach to the development of the offshore network, providing an additional environmental benefit, reducing the unnecessary duplication of transmission assets.
- 4.7 The Government also decided that offshore transmission should be a regulated activity. The Government took powers in the Energy Act 2004 such that following commencement of sections 89, 90, 91, 92 and 180, participation in the transmission of electricity offshore at voltages of 132kV and above will be prohibited without a licence.
- 4.8 In developing the regime, the Government announced in August 2006 that NGET's role as GBSO would be extended offshore¹⁰. As a result NGET will be GBSO both onshore and offshore, once the relevant parts of the EA 2004 have been commenced and appropriate modifications have been made to NGET's licence for those purposes. Until then, NGET is acting as offshore GBSO designate and is assisting in the development of the new regime.

10 www.berr.gov.uk/files/file32874.pdf

- 4.9 In November 2006 the then Department of Trade and Industry (DTI) published an Open Letter to industry clarifying the regulatory position of high and low voltage offshore connections¹¹. In the same month, the DTI also published a consultation document which gave notice of, and invited views on, a proposal for the exemption by class of offshore electricity distributors from the requirement to hold a distribution licence¹². Also, in November 2006 the DTI and Ofgem jointly held a six-week consultation on the options for licensing those providing the offshore transmission connections between the generators located in offshore waters and onshore electricity networks¹³. The document invited views on two possible models for licensing OFTO activities under a price control regime. The two options were (i) multiple non-exclusive licenses issued for the offshore area with competition for the right to build, own and operate offshore transmission assets ('non-exclusive approach')¹⁴, or (ii) awarding licences by competitive tender for specific areas offshore, with the OFTO responsible for connecting all projects in that area ('exclusive approach').
- 4.10 On 1 March 2007 the Government announced its decision to grant a class exemption for offshore electricity distributors from the requirement to hold a distribution licence¹⁵.
- 4.11 Later in March 2007, the Government announced its decision on the model of licensing for offshore transmission. The Government announced that it had concluded that a non-exclusive approach was the most appropriate model for licensing offshore transmission.
- 4.12 The day after publication of the March Government response, Ofgem published a scoping document providing a detailed overview of how it intended, in partnership with the Government and industry, to develop and deliver an offshore regulatory regime.
- 4.13 The Ofgem document set out a framework to deliver the appropriate changes in accordance with the Government's aims. Essentially it set out a proposed model or 'straw man' for the proposed offshore regulatory regime. That straw man was further developed through discussion with industry through workshops and a series of work groups.
- 4.14 That process of discussion and development led to the publication by BERR and Ofgem of the July 2007 Policy Statement which set out initial proposals for a licensing and regulatory regime that would apply to offshore electricity transmission networks. That document included the following key proposals:
- That an OFTO would be responsible for designing, building, financing and maintaining the offshore transmission network. The OFTO would be selected by competitive tender and granted a transmission licence. It would receive a regulated revenue stream for meeting its licence obligations over a pre-determined regulated period. The OFTO would be incentivised to meet specified performance requirements during this period.

11 www.berr.gov.uk/files/file35598.pdf

12 www.berr.gov.uk/files/file35593.pdf

13 www.berr.gov.uk/files/file35530.pdf

14 See further the proposals of the July 2007 Policy Statement, Paragraphs 1.18 and 4.2.

15 www.berr.gov.uk/files/file38027.pdf

- The competitive tender process would include an annual tender application window for coordination purposes. Any person meeting the prequalification criteria could tender for an OFTO licence covering offshore transmission assets. The tender process would be triggered by a generator (or generators) making an application for connection to the onshore network. The Authority would make key selection decisions and manage a tender process, which would result in the grant of a licence to the successful OFTO.
- That there would be transitional arrangements for projects where the generator is already constructing or undertaking steps towards constructing the offshore transmission assets. The transitional arrangements would apply to projects that met certain pre-defined criteria. To assist the transition to the enduring arrangements, there would be a two-stage process to enactment of the new regime. These two stages would be (i) a 'Go-Active' date for the new regime to enable appropriate modifications to be made to licenses, codes and agreements so that tenders can be held, and (ii) a 'Go-Live' date from which point unlicensed participation in the transmission of electricity offshore at voltages of 132kV and above would be a prohibited activity.

4.15 BERR and Ofgem published the January 2008 Policy Statement on 10 January 2008 confirming decisions as a result of the responses to the July 2007 Policy Statement and other stakeholder engagement. In particular, it set out:

- That Ofgem would be the body that runs the competitive tender process to determine who will be appointed as new licensed OFTOs;
- That the Government would seek additional powers in the then Energy Bill (subsequently the Energy Act 2008 - EA2008) to enable the Authority to recover its costs of running the tender process, and ensure sufficient commitment to the tender process, from parties participating in the tender (in most cases the generator and potential OFTOs);
- That the Government would also seek time-limited powers in the EA 2008 to enable the Authority, once an OFTO licence has been granted, to make a property transfer scheme in order to ensure that the property is transferred from the asset owner to the successful OFTO in a fair, timely and effective manner. The Authority would only have the power to do so in certain circumstances (which it is envisaged will arise when commercial negotiations fail) and upon application;
- That the new regime would Go-Active as soon as reasonably practicable after commencement of the EA 2008 provisions; and
- If the date of Go-Active was delayed, then the date of Go-Live would also be delayed to allow one year for tenders to allow sufficient time for developers meeting criteria for transitional projects to have comfort that relevant OFTOs would be appointed before the new regime came into effect.

- 4.16 Ofgem's January 2008 Policy Update was published on 14 January 2008 in which it sought views on the following:
- updated proposals on the design of the regulatory regime for offshore electricity transmission;
 - updated proposals on how Ofgem envisages running the competitive tender process for both enduring regime and transitional arrangements; and
 - an update on implementation of the regime, including development of the various code, licence and agreement amendments to accommodate the offshore regime.
- 4.17 On 13 June 2008 Ofgem and BERR held a further six-week consultation on the June 2008 Policy Update. It presented and sought views on updated policy proposals and, for the first time, presented for comment detailed drafting proposals on changes to the various codes, licences and agreements to accommodate the offshore regime. It also recognised that reviewing and revising the codes, licences and agreements, was an important task and that they constituted a large volume of documentation. It therefore announced that an extra consultation would be added to the previous work programme to enable sufficient time for this to be carried out effectively.
- 4.18 On 6 October 2008 Ofgem published a consultation document on the tender process entitled 'Offshore Electricity Transmission: Competitive Tender Process'. The consultation documentation set out the key requirements for bidders in the competition, Ofgem's expectations by way of responses and also the key criteria Ofgem would use in the selection process.
- 4.19 On 20 November 2008 Ofgem and DECC published a further six-week consultation on a Joint Regulatory Policy Update. This set out further updated proposals for the design of the competitive offshore transmission regime in response to comments received to the June 2008 Policy Update and other engagement with stakeholders. It explained that following the June Policy Update, minded to positions had been reached on the majority of the issues and that this Policy Update reaffirmed those views. Key proposals for the regulatory regime included:
- To grant a transmission licence that would remain in force until it had been revoked;
 - To provide a revenue stream to fund the offshore transmission licensees for an initial period of 20 years, with limited regulatory intervention;
 - That Ofgem would consider undertaking formal regulatory reviews of the revenue stream where the competition had been ineffective (such as where an OFTO of last resort had been appointed);
 - That, at the end of the initial 20-year period, Ofgem would consider, on a case-by-case basis, setting a revenue stream for a further period by either undertaking a regulatory review or undertaking a further tender exercise;

- That, in accordance with the likely requirements for the separation of electricity generation and/or supply from electricity transmission activities arising from the EU Third Package legislation on EU Gas and Electricity Markets, generator affiliates might not be permitted to own offshore transmission assets;
- To introduce an asymmetric incentive for operational performance for failing to deliver against the target level of performance. Targets would be determined on a project-by-project basis to reflect the function specification that had been determined by the offshore generator;
- To allow incremental investments in offshore assets of a value of up to 20% on initial capital cost; and
- To establish regulatory reporting and ring fencing requirements which reflect better regulation principles.

4.20 Stakeholder views were particularly sought on three issues of importance to Ofgem's development of the detailed tender documentation and associated licence conditions for both enduring and transitional projects:

- The detailed design of certain specific predefined adjustments to the regulated revenue stream;
- The detailed design of the proposed operational availability incentive; and
- The approach to dealing with the possible abandonment of projects, particularly during the construction of assets.

The Current Policy Landscape

'CREDIT CRUNCH' IN FINANCIAL MARKETS

- 4.21 Despite the credit crunch, we believe the UK remains a good place to invest in green energy and associated industries. The credit crunch will affect availability and cost of capital to all firms involved in building new energy capacity and infrastructure, not just renewables.
- 4.22 The Government and Ofgem consider that the regulatory regime for offshore transmission addresses the challenge of securing finance in the current credit market conditions, by:
- Reducing the capital requirement of offshore renewable developers by transferring the financing requirement of transmission assets to an OFTO;
 - Seeking capital from other sources by encouraging the entry of new investors, for example infrastructure funds, by providing a number of new investment opportunities that are competitively tendered;
 - Providing a long-term stable regulatory environment of relatively low risk for OFTOs, which we believe will make the new regime more attractive to investors.
- 4.23 While the regime seeks to address credit crunch-related risks in this way, we acknowledge that raising capital in the current market poses additional challenges for investors. Nevertheless, as a regulated asset class, offshore transmission involves a long-term low risk profile that we consider will be attractive to a significant number of investors, including new entrants.

RENEWABLE ENERGY POLICY DEVELOPMENT

- 4.24 Since starting the process of developing the new regime to licence offshore electricity transmission, the targets for the deployment of renewable electricity generation in the UK have increased significantly and the scale of offshore wind development envisaged has also expanded.
- 4.25 The majority of responses to the November 2008 Policy Update continued to support the broad approach to licensing offshore transmission being taken, and provided further comments on the detailed proposals set out. However, the changing policy background meant that some of the responses from industry questioned whether the regime would deliver the Government's ambitions for offshore wind in the most effective way, particularly in connecting Round 3 projects.

- 4.26 The Government continues to believe that the new regime will ensure connection to the GB onshore grid in a timely and cost-effective manner whilst maintaining the integrity of the system as a whole and achieving best value for electricity consumers. It is the Government's view that the extension of the regulated approach to the provision of new transmission infrastructure offshore will be an important enabler to support delivery of the up to 33GW of offshore wind currently planned in UK waters, and will secure new indigenous generation capacity for UK consumers in an affordable manner. The injection of additional competition for the delivery of that new infrastructure should also support timely and cost-efficient grid connections for offshore developers (and, as discussed above, share the capital burden among a greater number of transmission owners). Preliminary discussions that DECC and Ofgem have held with potential investors in the new offshore transmission assets have confirmed the suitability of the regulatory regime to attract the significant investment that will be needed.
- 4.27 In March 2006 the Government announced that it had concluded that extending the regulated price control approach for the provision of new offshore transmission infrastructure would best meet its energy policy objectives. In reaching that decision the Government concluded that this should also ensure a co-ordinated approach to the development of that offshore infrastructure. The Government therefore believes that the decisions it has already taken to extend the principles behind the regulation of the GB onshore grid offshore and to extend the role of the GBSO offshore will provide a number of benefits. These include ensuring consistency with onshore arrangements, providing assistance to offshore developers by spreading the costs they would pay to connect to the GB onshore grid over a number of years, sharing existing developer risk between developers, OFTOs and the GBSO, and ensuring a co-ordinated approach to offshore network development by reducing unnecessary duplication of transmission assets. The reasons why the Government remains of this view are discussed further in this document.
- 4.28 We recognise that the new regime will require changes to be made to existing or planned operating practices. We are seeking to ensure that such changes do not incur unnecessary costs and burdens on industry and are grateful for stakeholder input into how this might be achieved. The proposals for a new offshore regime will extend the same principles that govern the GB onshore grid offshore, except where the specific circumstances of offshore generation justify changes being made. This means offshore developers will be able to access the grid on similar terms to onshore generators. We acknowledge that changes will need to be made by existing projects to ensure that there is separation of transmission and generation assets but believe that there are practical means of ensuring this does not disrupt existing or planned operations or lead to unnecessary extra costs. As the proposals for the regime have developed, we have better understood the balance of risk between developers, OFTOs and consumers. This document contains proposals for ensuring that the risks rest with those best placed to manage them under the new regime.

- 4.29 Further details on the more specific concerns raised by respondents to the November 2008 Policy Update and how these have been addressed are included throughout this document, in Ofgem's latest Tender Process Consultation and, in particular, in Chapter 8 of this document. The Impact Assessment accompanying this document also sets out the costs and benefits of our proposals.

STRATEGIC ENVIRONMENTAL ASSESSMENT

- 4.30 The Government announced on 10 December 2007 the commencement of an Offshore Energy Strategic Environmental Assessment (SEA) which is considering a draft plan of achieving up to 25GW of new offshore wind generation by 2020, on top of the 8GW already planned under Rounds 1 and 2. DECC published the Environmental Report on 26 January 2009, setting out the possible impacts - environmental, economic, and social - of the draft plan for a 12-week consultation. The Government expects to announce its decision on the acceptable level of new offshore wind development in Spring 2009, taking into account consultation responses. This will enable The Crown Estate to grant offshore wind development rights (lease options) to the market, within the scale and locational boundaries set by the Government's decision.

THE CROWN ESTATE ROUND 3 OF OFFSHORE WIND

- 4.31 In order to expedite the process, The Crown Estate is running its Round 3 offshore wind leasing competition in parallel with the Offshore Energy SEA process. Expressions of Interest closed on 4 September 2008; with the publication of the Invitation to Negotiate on 29 September 2008. Consortia were required to register with The Crown Estate by February 2009, with bids submitted on 3 March 2009. However, a decision on awards by The Crown Estate will only be made following the Government's SEA decision.
- 4.32 Under Round 3, potential partners are being invited by The Crown Estate to bid for Development Zones. These Development Zones as proposed by The Crown Estate cover larger areas of the seabed than in Rounds 1 and 2, they do not represent wind farms but areas where there may be the potential to develop more than one wind farm site. The Crown Estate has published a number of indicative maps to assist potential partners in identifying opportunities; however, any final decisions on the location of the final Development Zones will be made following the Government's SEA decision. The Crown Estate has also offered to make a joint investment alongside the Partners to fund up to 50% of total investment for the development of the Zone.
- 4.33 Successful bidders will acquire exclusive rights to develop wind farms in specified zones for a time-limited period. This will enable a more strategic approach to the expansion of offshore wind under Round 3, by increasing the developers' flexibility to choose the best sites, minimise impacts, explore strategic mitigation measures and enable strategic planning, such as electricity grid infrastructure investment.

- 4.34 The zonal developer will be able to consider what kind of electricity transmission infrastructure will be most economic and efficient to its long-term plans and signal its requirements. Tenders for offshore transmission assets can then be run on the basis of the long-term commitments provided by the developer and should assist in ensuring the co-ordinated development of the offshore grid. Further details on the tender process in the enduring regime are contained in Ofgem's Offshore Electricity Transmission Competitive Tender Consultation document. DECC and Ofgem will continue to work with The Crown Estate to ensure that the approach to the development of offshore renewables and associated grid infrastructure is compatible and delivers the most economic and efficient network infrastructure from offshore renewable generation.
- 4.35 Continuing concerns expressed by some developers in response to previous consultation centred on the ability of the regime to deliver grid connections beyond the 'point to point' connections that are currently envisaged for the majority of individual Round 1 and 2 projects, and the possibility that more extensive transmission systems connecting a number of offshore developers will be needed under Round 3. In addition, a number of respondents questioned whether we also need to ensure that the offshore infrastructure is in place to anticipate demand and ensure that renewable generation is brought in as quickly and as effectively as possible.
- 4.36 Our policy proposals have been designed so that Round 1 and Round 2 projects will transition into the new regulatory regime. The Government and Ofgem have outlined proposals for projects fitting within the transitional regime in previous consultation documents. We note that the design of the transitional regime has provided certainty for developers to proceed with their investments. We believe that the regulatory regime will accommodate delivery of Round 3 as well as Rounds 1 and 2.

CO-ORDINATED NETWORK DEVELOPMENT IN ROUND 3

- 4.37 There are key roles for NGET and The Crown Estate overseeing the development of offshore wind generation.
- 4.38 The Government is extending NGET's role as GBSO to include offshore waters. NGET, as GBSO, has an obligation under the Electricity Act 1989 'to develop and maintain an efficient, co-ordinated and economical system of electricity transmission'. We will seek to ensure that the GBSO is proactive in its approach to facilitating offshore network development. A key aspect of the GBSO's role in the offshore transmission regime will be ensuring its regular planning statements are appropriate to assist developers, OFTOs and other stakeholders in planning for future development. We will monitor the GBSO's performance in its extended role.

- 4.39 Under our proposals, generators will approach NGET for a connection offer. NGET can offer offshore connections in a number of ways including:
- A connection designed for a single project between the onshore grid and the offshore connection point;
 - A connection designed for a single project on a phased development basis – i.e., a phased increase in cables over a defined period.
 - A connection designed for a group of separate projects. This connection could be phased as well.
- 4.40 The Crown Estate's role as landowner is also key as it will lease the sea bed for both the wind farms and the cables connecting them, providing the opportunity for strategic planning. The Crown Estate will work with NGET to co-ordinate an efficient build of offshore transmission lines for Round 3 projects. DECC and The Crown Estate have established an Offshore Wind Delivery Board, which includes Ofgem, to co-ordinate the development of Round 3 projects, including grid connections.
- 4.41 The current onshore Connection and Use of System Code (CUSC) framework for network connections operated by the GBSO already facilitates a forward-looking approach to transmission network development, and it is important that this feature be retained for Round 3 projects.
- 4.42 At present, the proforma connection application form (CUSC Exhibit B) allows for a wide range of connection request types, ranging from demand to power station connections, and from single connection point to larger multiple-connection point, phased developments. Under the CUSC arrangements, onshore generators have been able to request a connection for capacity requirements that reflect a defined, phased programme of generation commissioning (e.g. wind farm sites with multiple stages of turbine commissioning).
- 4.43 We have proposed, in amendments to CUSC Exhibit B, that this approach be extended offshore, and consider that extending the current flexibility will facilitate the development of offshore transmission infrastructure to meet offshore user requirements (now and in the future).
- 4.44 In Round 3, the zone development partner will be able to work with the GBSO to establish its high-level connection requirements, which, if approved by the GBSO, will be set out in a bilateral connection agreement. The design of connections offered to individual applicants is dependent on the timing of applications received by NGET. This is also the case onshore.
- 4.45 Tenders can then be run on the basis of these requirements, ensuring that co-ordinated network development is provided for, where it is specifically sought by developers. The tender process will be geared towards the requirements, including timing requirements, of generators.

- 4.46 Given The Crown Estate's zonal development approach in Round 3, it is likely that generator requirements in particular geographic areas will emerge at around the same time, which will provide opportunity for developers to work collectively to develop integrated connection requirements.
- 4.47 We recognise that developers and other parties may wish to undertake offshore transmission pre-construction work (e.g. conducting sea-bed studies, obtaining planning consents, and designing networks) in advance of connection applications and tender processes. The Ofgem tender process has been designed such that efficient pre-construction costs may be recovered from a successful tender process. Furthermore, Ofgem proposes that the tender process for enduring projects should also include time for detailed technical designs and associated construction proposals to be completed by the final group of competing bidders. This strongly supports efforts by interested parties to design timely, efficient and integrated networks for generators in a particular development area.

OFFSHORE WIND IN SCOTTISH TERRITORIAL WATERS

- 4.48 On 16 February 2009 The Crown Estate announced the award of 10 exclusivity awards for potential offshore wind farms in Scottish territorial waters. The total award capacity is over 6GW. This will allow the project developers to commence with further site surveys and investigations prior to the outcome of the Scottish Executive's Strategic Environmental Assessment (SEA) of offshore wind in Scottish territorial waters. This was announced in January 2009 and is expected to take around 12 months to complete. Depending on the outcome, The Crown Estate would then award lease options to these developers and consent applications could be submitted under s36 of the Electricity Act 1989.
- 4.49 These offshore wind farms will fall within the remit of the offshore transmission regulatory regime if they are connected at 132kV or above. Ofgem expects to run tenders to appoint OFTOs for these projects in the same timeframe as Round 3.

RENEWABLE ENERGY STRATEGY

4.50 On 26 June 2008 the Government published its Renewable Energy Strategy (RES) Consultation document. The consultation considered a number of measures that have the potential to achieve the delivery of 15% of our energy consumption from renewables by 2020 (the UK's share of the 20% EU-wide target). The measures aim to stimulate the market to deliver the necessary investment in the most cost-effective way by providing a clear long-term framework and removing the obstacles to increasing renewable generation while ensuring that sustainability concerns are minimised. One of the questions posed by the RES consultation was 'Taking into account decisions already taken on the offshore transmission regime and the measures set out in the Transmission Access Review (TAR), what more could the Government or other parties do to reduce the constraints on renewable development arising from grid issues'. The closing date for responses was 26 September 2008, and a summary of responses was published in February 2009 and can be found at www.berr.gov.uk/renewableconsultation. The responses will help shape the UK RES which will be published in Spring 2009.

OFFICE OF RENEWABLE ENERGY DEPLOYMENT

4.51 In September 2008 the Government announced in the Manufacturing Strategy the intention to set up an Office for Renewable Energy Deployment (ORED) as the RES is finalised.

4.52 ORED will provide a one-stop shop for the private sector and other stakeholders in renewables to engage the Government on deployment issues. The proposed functions of the ORED are likely to include:

- Strengthening the UK supply chain capacity, including by tackling specific supply chain blockages and facilitating inward investment, in partnership with RDAs, UKTI¹⁶ and others;
- Encouraging innovation that delivers new technical solutions, such as for radar and vessel traffic management;
- Providing planning advice and guidance for all those involved in the planning community and consent applications for renewable projects;
- Helping identify and deliver improvements to the electricity grid infrastructure and access for renewables;
- Working with Devolved Administrations, RDAs, UKTI, local authorities and other stakeholders including the Renewables Advisory Board (RAB) which advises Ministers on renewables matters, as well as developers and investors, to develop realistic plans for renewable deployment;
- Promoting public awareness of renewable energy deployment;
- Monitoring of progress against targets and informing further policy development within the Government.

TRANSMISSION ACCESS REVIEW

- 4.53 The Government understands the need to ensure an efficient interaction between the development of the offshore grid and the GB onshore grid, where significant new investment is also likely to be needed to accommodate significant amounts of electricity from offshore wind and other essential generation.
- 4.54 Again, the Government believes that its decision to extend the principles behind the regulation of the GB onshore grid offshore and essentially create one grid network with a common regulatory system will achieve this.
- 4.55 In the 2007 Energy White Paper: Meeting the Energy Challenge, the Government announced a review, led jointly by DECC and Ofgem, of the framework for connecting renewable generation to the grid.
- 4.56 The review examined the technical, commercial and regulatory framework for the delivery of new transmission infrastructure and the management of the grid to ensure that they remain fit for purpose as the proportion of renewable generation on the system grows. Over the period of the review, the scope widened to recognise the vital contribution that other low carbon and conventional forms of generation will play in ensuring security of supply in a world where more than 30% of electricity comes from intermittent sources.
- 4.57 The final report of the TAR was published on 26 June 2008 to coincide with the Government's Renewable Energy Strategy Consultation.
- 4.58 The measures set out in the TAR Final Report, when taken together, will remove or significantly reduce grid-related access barriers. There are three key areas for action set out in TAR:
- **Faster connections in the short-term**

Given the current delays in grid connection, urgent steps need to be taken to connect new generation more quickly and ahead of the implementation of a reformed grid access regime. This means that for an interim period there should be a form of 'connect and manage' to accelerate new connections. This has already resulted in NGET offering earlier connection dates to 450MW of renewable projects, with requests for a further 1.6GW of renewable projects currently being considered.
 - **Enduring grid access arrangements**

Fundamental changes to the way generators gain access to the grid are necessary to connect the significant volume of new renewable electricity generation needed to meet the UK's EU 2020 renewable energy target and to ensure security of supply. This will be achieved through reforms to the formal codes and licences that govern grid access. NGET and industry have undertaken work to develop these reforms, which have been packaged into six distinct proposals. These proposals have been submitted to Ofgem for detailed assessment, and a final decision is expected in the summer of 2009.

- **Delivering new infrastructure**

The large amount of renewable offshore electricity generation that is planned and will be seeking connection to the GB onshore grid will present a significant challenge to the onshore network. The TAR GB onshore grid changes are therefore likely to also have important consequences for offshore electricity generation and transmission.

4.59 Following the publication of TAR and the Government's Renewable Energy Strategy consultation in June 2008, the Electricity Networks Strategy Group (ENSG), a senior cross-industry group chaired by DECC and Ofgem, was asked to develop a vision of the transmission network needed to achieve the Government's 2020 renewable energy target and connection of other forms of low-carbon and essential generation, and to advise the Government and Ofgem on the necessary steps to deliver it.

4.60 The ENSG has now completed the transmission investment study and a final report was published on 4 March 2009¹⁷. The grid reinforcements identified in the report take into account the significant changes anticipated in the generation mix between now and 2020. In particular, the scenarios examine the potential transmission investments associated with the connection of large volumes of onshore and offshore wind generation required to meet the 2020 renewables target, whilst, at the same time, facilitating the connection of other essential new generation, such as new nuclear that will be needed to reduce carbon emissions and maintain continued security of supply.

STRATEGIC INVESTMENT

4.61 Ofgem is now developing proposals for a new enhanced investment incentives scheme that will allow TOs to invest sooner to expand capacity and so ensure timely delivery of new grid infrastructure. This approach is needed onshore because some transmission lines can take longer to construct than generating stations (due partly to planning constraints and environmental concerns). There are fewer of these constraints offshore and transmission assets can usually be laid at the same time that the offshore wind farm is constructed. This is why the Government is working proactively to ensure that onshore reinforcements are ready in time for the planned expansion in offshore renewable generation capacity.

4.62 The issue of how onshore TOs can be incentivised to invest ahead of demand, so that the onshore infrastructure is in place to connect offshore wind when it is ready to connect, will therefore also be highly relevant to the successful development of offshore wind. However, it is important to ensure that consumers are also protected from inappropriate, underused investment, and Ofgem, in developing new incentives for early investment, will identify proposals to deal with this issue.

4.63 Ultimately, it is for the onshore Transmission Owners to put forward specific investment proposals to Ofgem.

17 Our Electricity Transmission Network: A Vision for 2020 – report by the Electricity Networks Strategy Group (http://www.ensg.gov.uk/assets/1696-01-ensg_vision2020.pdf).

SUPPLY CHAIN AND SKILLS IMPLICATIONS

- 4.64 This section outlines the issues surrounding supply chain and skills requirements in offshore transmission. We are particularly concerned with the ability of suppliers in the UK and other countries to deliver the UK's needs at a time when we expect a high worldwide demand for the relevant materials and skills.
- 4.65 Any assessment of the UK's ability to carry out new transmission infrastructure construction has to consider the issues surrounding the supply chain and the availability of skilled people industry will need. Key factors include:
- The need for skills and supply chain capacity to support the offshore transmission sector;
 - The general shortage currently of experience and expertise with high-voltage DC networks;
 - The global demand for, and capacity to provide, key construction components such as cables;
 - Availability of general and specialised skills and components needed to construct offshore transmission infrastructure;
 - The UK's investment in specialised skills and R&D.
- 4.66 This is one of the issues under consideration by the Electricity Networks Strategy Group (ENSG). The ENSG is a high-level industry-led group which considers issues such as the future size and shape of the network and the investment needed to get us from where we are now to 2020 taking into account our renewable energy targets and wider climate change goals.
- 4.67 The Chairman's Report¹⁸ from the Transmission Working Group highlights the importance of this issue.
- “Skills: The availability of the suitably skilled people needed deliver these network projects represents a major risk, as many of the people with the necessary skills are approaching retirement. Moreover, the lead time through training to full competence is long - 5 years or more. On top of this, there is a limited capacity to train people. The sector will need to attract new people that have the necessary skills, education and training. The Working Group recommends that the ENSG draw this to the attention of the EU Skills and the National Skills Academy for Power that is currently under development.”
- 4.69 Research into the current workforce in the electricity networks, being undertaken as part of the planning process for the National Skills Academy shows that retirement from the industry will rise steadily through the 2010s, peaking in the early 2020s. Against this background, the overall workforce will need to grow to deliver the necessary investment. This presents a significant challenge for the training infrastructure.

18 http://www.ensg.gov.uk/assets/ensg_pwg_chairmans_report_final.pdf

4.70 The Government and Ofgem recognise that this is a key issue. We are raising it now, at the end of our consultation on proposals for an offshore transmission regulatory regime, to flag that we consider this to be one of the issues which needs to be kept to the forefront as we move into the implementation stage. This is an issue which will gain in importance as we move beyond the initial tenders to appoint OFTOs for transitional projects and into the enduring regime.

QUESTION

Question 1.

We would welcome respondents' views on the supply chain and skills capacity. In particular, we would welcome views on the extent to which Ofgem, when granting OFTO licences, should take into consideration the policies and processes proposed by each bidder for developing and maintaining the appropriate skills necessary for them to discharge their licence obligations.

5 EU THIRD PACKAGE & UNBUNDLING

CHAPTER SUMMARY

- This chapter updates stakeholders on the current state of play of the 'unbundling' requirements of the EU Third Package of Energy Liberalisation Measures¹⁹. It goes on to provide further details, where we are able to do so, following feedback and requests for further information given in response to the November 2008 Policy Update. We clarify that generators will be able to bid to become OFTOs, at least initially, but that all OFTOs will have to make sure they are compliant with the relevant EU legislation when this is transposed into UK law.
- This chapter goes on to respond to questions raised over the appropriateness of the non-exclusive, asset-based approach in the light of the likely unbundling requirements and explains why the Government and Ofgem continue to believe this approach is preferable to the alternatives suggested.

IMPLICATIONS OF EUROPEAN UNION UNBUNDLING REQUIREMENTS

- 5.1 EU Ministers agreed a Third Package of legislation on EU Gas and Electricity Markets at the EU Energy Council meeting on 10 October 2008. We anticipate that the measures will be adopted in the summer of 2009 following agreement with the European Parliament. The unbundling requirements within the Third Package will need to be implemented two and a half years following entry into force of the Directive, which means that Member States will probably need to ensure compliance with the requirements by the end of 2012.
- 5.2 The Government and Ofgem strongly support the Third Package, which aims to develop a more competitive EU energy market. We particularly welcome the provisions on ownership unbundling, enhanced powers and independence for National Regulatory Authorities (NRAs), the establishment of an Agency for the cooperation of NRAs and extensive transparency requirements.
- 5.3 The UK's experience shows that competition benefits both consumers and the economy. By giving clear investment signals to market players, competitive energy markets are the best way of maintaining secure and sustainable energy supplies, increasing efficiency and improving services for customers.

19 http://ec.europa.eu/energy/gas_electricity/third_legislative_package_en.htm

'UNBUNDLING'

- 5.4 One of the areas covered by the Third Package is unbundling, which involves the separation of electricity generation and/or supply from transmission activities. The Government and Ofgem support the European Commission's preferred option of full ownership unbundling. In broad terms, this means that an electricity transmission owner could no longer exercise control of an electricity generation or supply company, and vice versa.
- 5.5 Independently operated networks are needed in order to promote competition in EU energy markets and increase security of supply, with energy prices being set by market forces, investments being in line with market needs and energy flowing to those that value it most. Well-functioning EU energy markets will also promote investments to bring to market the low-carbon technologies the EU needs to meet its carbon reduction targets.
- 5.6 As flagged in previous policy statements and regulatory updates, the offshore electricity transmission regulatory regime the Government is developing jointly with Ofgem will have to comply with EU legislative requirements. As we outlined in the November 2008 Policy Update, now that the EU Energy Council has reached political agreement and discussions with the European Parliament are well advanced the probable requirements for enhanced business separation are clearer (although the exact provisions remain subject to final agreement between the European Parliament and the EU Energy Council). These developments have implications for the proposed enduring offshore transmission regulatory regime but, as we flagged in the November 2008 Policy Update, have more significant implications for the transitional regime and our previous OFTO of last resort proposals. Both implications are discussed further in this chapter and our updated OFTO of last resort proposal is outlined in [Chapter 6](#).

RESPONSES TO THE NOVEMBER 2008 POLICY UPDATE

- 5.7 Several respondents to the November 2008 Policy Update gave feedback on the proposals outlined in this chapter of the consultation document and sought further information.
- 5.8 There were two main requests - further information on the three models envisaged in the EU Energy Council's common position; and clarification on whether generators would be able to bid to own transmission assets (with the understanding that they may need to divest themselves of the assets later to comply with EU legislation). Both of these requests are addressed below.
- 5.9 In addition, some respondents said that the Government should reconsider the decision to adopt a non-exclusive approach to licensing. We have reviewed these arguments and concluded that the non-exclusive approach remains the better option. Our reasons are set out below.

IMPLICATIONS FOR OFFSHORE TRANSMISSION REGULATORY REGIME

- 5.10 The European Parliament's position in the first reading was to require undertakings with generation and supply assets and transmission assets to divest either the generation and supply assets or transmission assets. However, the EU Energy Council agreed that Member States should have the following three options:
- Require undertakings to divest either their generation and supply assets, or transmission assets (known as 'full ownership unbundling'); or
 - Permit a separately owned Independent System Operator to take over operational control of the transmission assets of a vertically integrated undertaking, i.e., one which owns generation, supply and transmission assets (known as 'Independent System Operator model'); or
 - Allow undertakings to remain vertically integrated but ensure the independence of the transmission operator by complying with a series of conditions (known as 'Independent Transmission Operator model').
- 5.11 Ministers also agreed a derogation whereby undertakings may remain vertically integrated if they can demonstrate to the NRA and Commission that the arrangements in place guarantee more effective independence of the transmission system operator than the Independent Transmission Operator model.
- 5.12 Further detailed information on these three models follows.

Full Ownership Unbundling

Under full ownership unbundling, transmission assets are both owned and operated by companies which do not control generation and/or supply businesses.

Independent System Operator Model

Under this model, vertically integrated companies retain ownership of transmission assets and own generation/supply businesses but operational control of the transmission assets is handed over to a separately owned Independent System Operator. This option is only available to companies which are vertically-integrated undertakings when the Electricity Directive comes into force (expected in the summer of 2009).

Independent Transmission Operator Model

Under this model, vertically integrated companies retain both ownership and operational control of the transmission assets as well as ownership of generation/supply businesses, but must comply with a number of conditions. These conditions are designed to ensure that the transmission system is operated independently of the generation and supply businesses. The conditions place limits on who can sit on which boards, how information is passed between different constituent parts of the company and how decisions are taken, e.g. investment decisions.

- 5.13 Once the Third Package is adopted, the Government will consult on how it plans to achieve implementation. The Government does not intend to restrict the number of unbundling options open to companies provided they are compliant with the legislation by the relevant dates.

GENERATORS BIDDING

- 5.14 Some of the respondents to the November 2008 Policy Update asked for greater clarity on whether generators would be able to bid to become OFTOs even if, in the longer term, the EU unbundling requirements might prevent them from continuing to own the assets indefinitely.
- 5.15 The Government and Ofgem have considered whether generators would be eligible to bid given the current drafts of the Third Package legislation and whether, as a matter of policy, it is desirable to permit generators to bid to become OFTOs. Our revised position is set out below.
- 5.16 Our understanding of the Third Package requirements as currently drafted is that generators would still be eligible to bid to become OFTOs, at least until the date by which the unbundling requirements in the Third Package must be implemented (anticipated for the end of 2012). Until that point, we expect that it will be permissible for generators to bid to become OFTOs and to own, operate and maintain transmission assets. Under this scenario though, some developers would have to divest themselves of the transmission assets (or their generation assets) in good time before transposition takes place, depending on whether they were part of a vertically-integrated undertaking when the directive came into force.
- 5.17 We have also considered whether, as a matter of policy, it is desirable to permit generators to bid to become OFTOs. There are arguments in favour of allowing generators to bid until they are unable to do so under the Third Package requirements. Some developers have said that they would like to retain this option. Clearly, there is a risk for them that, if they are granted an OFTO licence for a project, they will need to divest themselves of the transmission asset (or their generation assets) in order to comply with the Third Package Electricity Directive when this is transposed into UK law. However, we consider that developers are in the best position to assess the risks involved and come to a commercial decision for their projects. It seems reasonable to allow them to exercise this option unless there are compelling reasons not to.
- 5.18 There are arguments against permitting generators to bid to become OFTOs even if the timing of Third Package implementation would technically permit this for a period of one or two years. As flagged in the November 2008 Policy Update, some potential OFTOs have expressed concerns that allowing generators to bid might distort the competitive process. Ofgem are aware of these issues and will take steps to ensure that the competitive tender process is effective and that the appointment of an OFTO represents best value for consumers. In addition, it could be argued that permitting generators to bid to become OFTOs runs counter to the overarching UK Government policy to encourage early implementation of the package.

5.19 Having considered the arguments, we do not consider that those against generators bidding to become OFTOs are strong enough to merit a prohibition. We therefore propose to allow generators to bid to become OFTOs in the initial tender rounds. This is on the understanding that any successful bidders will have to fully comply with the Third Package 'unbundling' requirements when these come into effect.

NON-EXCLUSIVE APPROACH (ASSET-BASED APPROACH)

5.20 As previously stated, once the relevant sections of the Energy Act 2004 are commenced, the transmission of electricity offshore at voltages of 132kV and above will be prohibited without a licence. On 20 November 2006 the Government issued an Open Letter to Industry that set out the regulatory position of high and low voltage offshore connections. The letter explained that all projects connecting to shore via high voltage lines will be regulated under the new offshore transmission regime. High voltage lines will be 132kV and above, i.e. the definition applicable to relevant offshore lines when s.180 of the EA2004 and section 44(3) of the EA2008 are commenced.

5.21 On 20 November 2006 the DTI and Ofgem also jointly published a consultation document on the licensing of offshore electricity transmission. The document invited views on two possible models for licensing transmission owner activities under a price control regime. The two options were:

- Non-exclusive licences: where multiple, non-exclusive licences would be issued for the offshore area, with licensees free to compete with each other through a common tender process for the right to build, own and maintain offshore electricity transmission connections; and
- Exclusive licences: based on onshore electricity transmission network arrangements whereby a single transmission owner would be exclusively responsible for responding to all future connection requests from generators in a defined geographical area offshore. These area-based licences would also be awarded by competitive tender.

5.22 In March 2007, following consideration of the consultation responses, the Government announced that it had concluded that a non-exclusive approach of a common tender was the most appropriate model. In January 2008 the Government confirmed its decision that Ofgem would manage and run the tender process. This meant that there would be no need for pre-licensing of OFTOs as licences would be granted at the end of the tender process. In announcing its decision in March 2007, the Government said it believed a non-exclusive approach would:

- Deliver cheaper and more timely offshore grid connections;
- Encourage innovation through competition and enable new entrants to compete in the market;
- Be more focussed on generators' requirements than the onshore system or an exclusive approach; and
- Enable generators to bid to own their own transmission assets if they wish (subject to unbundling requirements compliant with EU legislation), making the adoption issue easier to solve and creating more certainty for generators.

5.23 We have reviewed the arguments for a non-exclusive approach in the light of the likely unbundling requirements. In the November 2008 Policy Update we said that we continue to believe that a non-exclusive approach remains the better option for licensing offshore electricity transmission for the majority of the reasons set out above. We have considered the arguments put forward by those who support an exclusive approach but do not consider that any compelling arguments have been put forward to suggest that we should change our position. An exclusive approach whereby a bidding OFTO would not know the ultimate commitment in terms of number and size of projects in that zone (which could be higher/larger than The Crown Estate leases made under Round 3 for a zone) would likely lead to higher bids to cover that risk. In contrast, a non-exclusive approach will provide flexibility for the zonal developer to put forward one, some or all of the projects in a zone for competitive tender. This will therefore reduce risks for developers and potential OFTOs as well as delivering the benefits of greater competition. We believe that there remains a sufficient pool of interested parties that currently meet likely unbundling requirements to ensure meaningful competition for the first tender exercises. In addition, as implementation of the Third Package progresses and parties choose whether or not to divest themselves of generation or supply interests, the number of potential OFTOs is likely to increase.

5.24 One reason for choosing a non-exclusive approach initially was that it made concerns about 'adoption' easier to address because generators could bid to become an OFTO. We recognise that the EU unbundling requirements, as drafted, are likely to result in a generator not being able to own its own transmission assets (unless it is able to adopt the ISO or ITO model or make use of the derogation). However, as stated above, we remain of the view that a non-exclusive approach remains the better option. In light of this, we are proposing an alternative OFTO of last resort mechanism, as set out in [Chapter 6](#), with the aim of finding a way to provide greater certainty to generators that their assets would not become stranded.

6 THE REGULATORY PROPOSALS

CHAPTER SUMMARY

- This chapter sets out the proposals for the offshore transmission regulatory regime. It describes the Authority's policy proposals for the regulatory framework and tender process, and the Government and Ofgem's joint policy on OFTO of last resort.

Before entering the detail of our policy proposals, we believe that it is useful to set out the different legislative instruments that would be used to enact the different aspects of our policy proposals:

- The competitive tender process for the grant of offshore transmission licences will be set out in statutory regulations made by the Authority under section 6C(1) of the Electricity Act 1989 and approved by the Secretary of State.
- The regulatory regime (e.g. revenue entitlements, pre-defined adjustment mechanisms and reporting requirements) that will be set out in the Special Conditions of the Transmission Licence by the Authority on a project-by-project basis.

KEY PROPOSALS:

- To grant a transmission licence that will remain in force until it has been revoked;
- To provide a revenue stream to fund the offshore transmission licensees for an initial period of 20 years, with limited regulatory intervention;
- That, at the end of the initial 20-year period, the Authority would consider, on a case-by-case basis, setting a revenue stream for a further period by either undertaking a regulatory review or undertaking a further tender exercise;
- To introduce an incentive for operational performance. Targets will be determined on a project-by-project basis to reflect the functional requirement of the offshore generator;
- To allow incremental investments in offshore transmission assets of a value of up to 20% of the initial capital cost of the asset; and
- To establish regulatory reporting and ring fencing requirements that reflect better regulation principles.

QUESTIONS

Question 2.

In particular, we would welcome any further views on:

- a) our approach to dealing with predefined adjustments for 'known unknowns';
- b) the OFTO of last resort proposals; and
- c) business separation requirements.

Specifically, we would welcome comments on how clear respondents consider the criteria for an OFTO of last resort direction (as set out in Annex 1) are and whether and in what ways the criteria could be made clearer.

Question 3.

Ofgem would welcome respondents' comments on the entirety of the legal text attached at Annex 11, which reflects the policy set out in chapter 6. In particular Ofgem would welcome comments on:

- Whether the licence text in this annex accurately reflects the policy proposals presented in the main body of the document?
- Whether the licence conditions provide sufficient certainty from a commercial perspective?
- Any aspects of the drafting to which respondents consider changes or clarification would be welcome to improve certainty for investors or developers.

The Regulatory Regime

INTRODUCTION

6.1 This section sets out the Authority's key proposals for the regulatory regime for offshore transmission. In particular, it sets out the proposed approach for setting the revenue stream and the performance incentives that would apply to OFTOs. These proposals will be implemented in the form of project-specific obligations and rights that will be included as conditions of the transmission licence of each OFTO.

6.2 A licence granted by the Authority is formed of three elements, being:

- The terms (set by the Authority),
- The Standard Conditions (which may be common to all licensees, or certain classes of licensee), and
- Special Conditions (which are conditions specific to each individual licensee).

6.3 Each of these elements is explained further below.

6.3.1 Terms

The terms of the licence typically refer to, among other things, the geographical area in which the licence applies and its duration. The terms are set by the Authority upon grant of the licence and may not be subsequently altered, except as provided for by specific primary legislation.

6.3.2 Standard Conditions

Standard conditions typically cover the obligations of licensees. In the transmission licence, for example, they include such obligations as for licensees to comply with an industry code, known as the System Operator - Transmission Owner Code (STC) that sets out certain contractual obligations that exist between different transmission licensees and obligations in respect of financing and business structure.

Changes connected with the implementation of the offshore electricity transmission regime would be implemented by the Secretary of State.

6.3.3 Special Conditions

A special condition is a condition that applies only to one individual licensee. Typically, such conditions cover matters that are specific to the licensee, such as a restriction on the geographic limit of its transmission area, the manner in which it is remunerated (typically, price control conditions), and any performance obligations it may have, such as the quality of service it provides. Such conditions may be inserted, withdrawn or amended by bi-lateral agreement between the licensee and the Authority²⁰.

²⁰ In the absence of the licensee's agreement, the Authority may refer the matter to the Competition Commission.

- 6.4 On the basis of this, it will be the special conditions of the OFTO licence that provide for the revenue recovery mechanism and the performance incentives. As set out in [Chapter 6](#), we propose that some elements of these conditions will be left open during the tender process and will only be finalised once the Preferred Bidder has been identified.
- 6.5 The draft special conditions to support the offshore transmission regulatory regime are in Annex 11. These include special conditions for OFTOs, to give effect to (among other things) their revenue stream entitlements and performance incentives.
- 6.6 The detailed design of the regulatory regime needs to reflect the way that certain risks are shared between the main stakeholders for offshore transmission, i.e., the OFTO, the offshore generator, and consumers/network users (via the GBSO). The allocation of risk has been subject to extensive consultation and we have received and considered various views regarding the risk impacts of our proposals. In considering stakeholder comments, we have sought to strike an appropriate balance in the allocation of risk that recognises the parties best placed to manage those risks.
- 6.7 Respondents to the November 2008 Policy Update were generally supportive of the updated proposals, with some respondents asking for further details about certain aspects of the proposals. In particular, there were several requests for further information about the Third Package unbundling requirements (which we present in Chapter 5) and our revised proposal on the OFTO of last resort mechanism (which we present in this chapter). A full summary of responses is presented in Chapter 8.
- 6.8 As a result of the consultation process to date, most policy positions are well developed and represent our finalised proposals. The intention here is to give a final opportunity to comment before implementation. We do not intend to revisit each individual policy in detail in this update. Therefore, wherever a policy position is unchanged from the November 2008 Regulatory Policy Update and where we have received no new compelling evidence from respondents to justify a change in our proposals, we restate our position and refer the reader back to that document for full detail.
- 6.9 Further details on responses received to the November 2008 Policy are in [Chapter 8](#).
- 6.10 This section of the document is divided as follows:
- Final policy proposals;
 - Final proposals where we are particularly seeking views on specific aspects of the proposals; and
 - Elements of the regime that we propose to be varied on a case-by-case basis during the tender process.

FINAL POLICY PROPOSALS

6.11 Our policy proposals for the regulatory regime for offshore electricity transmission are now presented to give a final opportunity for comment before implementation.

Initial Regulated Revenue Entitlement

6.12 Our proposals regarding the initial revenue stream remain unchanged from those set out in the November 2008 Regulatory Policy Update. An OFTO, selected by competitive tender, would receive an initial regulated revenue stream for a period of 20 years. As previously set out, by aligning the initial revenue stream to the anticipated life of the offshore generating station, we consider that we are able to strike the appropriate balance between protecting consumers from the impacts of stranded assets and providing long-term certainty to investors. There would be limited exception to this position:

- Where a tender process does not involve robust competition, the Authority may seek to appoint the bidder with the most efficient and economic proposal as the OFTO, but to review the level of the winning revenue stream at predefined intervals over the 20-year revenue period (i.e., adopt a price control review approach); or
- Where an OFTO of last resort mechanism is used.

Profile of Revenues and Indexation

6.13 Ofgem proposes to require that bidders for an offshore project should bid a flat revenue stream that has a flat real profile. Ofgem has two main reasons for this proposal:

- A flat profile would provide generators with greater cost certainty for their projects and aid a more efficient competitive process; and
- A flat profile ensures that the OFTO has sufficient revenues committed to the asset in the later years of the revenue stream. This would help to enable Ofgem's proposed performance incentives to remain effective throughout the duration of the revenue stream.

6.14 We also consulted in November on the suitability of indexing all or part of the revenue stream to a cost index. We received a range of responses on this issue, but having considered these views, Ofgem proposes that this profile would be fully indexed to the retail price index (RPI).

6.15 We note that the revenue stream will be defined in the Special Licence Conditions and will be set at the discretion of the Authority, also taking into account the prevailing economic conditions at the time of tender. Stakeholders should note that, in order to provide certainty for investors, the profile of the revenue stream would be defined ex-ante to the specific tender exercise and would not be applied retrospectively for licences previously granted by the Authority.

Revocation of the Licence

- 6.16 In the November 2008 Policy Update we set out the circumstances in which we anticipated that the Authority would have the power to revoke an OFTO licence. These powers would be set out ex-ante in Schedule 2 of the transmission licence (a term of the licence).
- 6.17 Respondents to the November 2008 Policy Update recognised the need for revocation provisions to be included in the licence and were broadly supportive of their inclusion.
- 6.18 Following further development of our policy on abandonment during construction (see below), we have added another condition that we anticipate the Authority would include when making Schedule 2 of the licence. This relates to revocation of the licence in instances where the OFTO has abandoned the project.
- 6.19 Therefore, we anticipate that the powers for the Authority to revoke the licence would be limited to circumstances of:
- Insolvency;
 - Failure of the licensee to meet its licence obligations, including those relating to operational performance, and compliance with an enforcement order;
 - The licensee requesting licence revocation;
 - Breach of competition law;
 - By the Authority giving a minimum of 18 months notice of revocation to the licensee, to take effect no earlier than the end of the revenue stream period; and
 - The licensee abandoning a project.
- 6.20 We believe that these revocation provisions provide certainty both for OFTOs and other network users.

End of Regulated Revenue Stream

- 6.21 As set out in the November 2008 Policy Update, at the end of the 20-year revenue stream the OFTO assets would be fully depreciated and revenues to the OFTO would cease. At this point, the Authority would need to make a further decision on the ongoing regulation of the connection.
- 6.22 Our proposal remains that the Authority would determine the most sensible course of action towards the end of the revenue stream, taking into account the ongoing demand for the asset and its statutory duties at the time. As set out in the November 2008 Policy Update, the options available to the Authority would be:
- The extension of the licence with a revised revenue stream (i.e., a traditional price-controlled approach), subject to an incremental capacity threshold;
 - A tender; or
 - Revocation of the licence.
- 6.23 For a more detailed description of these issues, please refer back to the November 2008 Policy Update.

Delivery Incentives

- 6.24 In the November 2008 Policy Update we set out our position that there be no additional delivery incentive on the OFTO. This was because an OFTO's costs will naturally increase in the event of late delivery. OFTOs will be heavily incentivised to complete construction because they have significant financing costs which can only be serviced by receipt of the revenue stream on successful completion of the asset. A key cost for the OFTO is the price of interest during construction. In the event of delay, the OFTO will not be able to recover the incremental financing costs because its capacity charges will already have been fixed in the tender process.
- 6.25 However, some respondents pointed to an apparent inconsistency between our policy position, and the drafting presented in the STC/TOCA, which contains a provision for the OFTO to pay liquidated damages (LDs) to NGET for late delivery. We can clarify that our proposal that there be no additional delivery incentive on the OFTO took into account the existing onshore transmission arrangements on LDs which we consider should be extended offshore (see also [Chapter 7](#)).
- 6.26 The November 2008 Policy Update also recognised that the danger of incurring additional financing cost also applied in the event of delays due to the actions of an onshore TO/DNO (i.e., the scenario whereby the OFTO completes its works on time, but the onshore TO/DNO is late in delivery of the necessary onshore reinforcements).
- 6.27 We therefore proposed that this risk would be better managed through a liquidated damages (LD) provision, which would give the OFTO comfort that compensation would be forthcoming when such delays occur. We updated our proposed drafting of the STC to reflect such a provision and sought views from stakeholders on the revised version of the STC in Annex 7 of the document. Some respondents noted that this would significantly increase the risk faced by onshore transmission licensees and would require the current transmission price controls to be reopened. However, we consider that the proposed requirements in the TOCA would mitigate the risk of an unexpected extended delivery of transmission assets and therefore the likely exposure to additional risk.
- 6.28 We have now reviewed our proposal in the light of these considerations and now propose that onshore transmission licensees' exposure to LD payments to an OFTO should be limited to £1m. Further details are in [Chapter 7](#).

Adjustment for 'Unknown Unknowns'

- 6.29 We provided updated proposals in the November 2008 Policy Update on potential adjustments that could be made to the OFTO revenues to address post-construction risks faced by licensees. They may be represented in terms of:
- 'Unknown unknowns' i.e., unpredictable and uncertain costs and savings that may emerge over the licence period; and
 - 'Known unknowns' i.e., predictable but uncertain costs and savings that may emerge over the licence period.

- 6.30 All respondents to the November 2008 Policy Update who commented on this issue supported the use of revenue adjustments, but a variety of views were expressed on the specific areas where such adjustments should be applied. In the light of responses, we have further developed our proposals on adjustments to the revenue stream which are set out below.
- 6.31 Our proposals regarding the treatment of 'unknown unknowns' remains unchanged. We do not consider that it is appropriate to introduce pre-defined mechanisms such as event-specific re-openers, to adjust the regulated revenue stream (either up or down) to deal with unexpected changes in costs triggered by exceptional and unpredictable events. In general, these risks may be insurable or mitigated by licensees through operating practices, and we remain of the view that it is appropriate to address events when they occur, if necessary, on a case-by-case basis and in a manner consistent with the licence issued and Ofgem's statutory duties and functions at the time²¹.

FINAL PROPOSALS ON WHICH WE ARE PARTICULARLY SEEKING SPECIFIC VIEWS

Adjustments for 'Known Unknowns'

- 6.32 As explained above, we have previously consulted on the treatment of known but unpredictable costs within the regulatory framework ('known unknowns').
- 6.33 The proposed 20-year revenue stream provides strong incentives to manage costs efficiently, but also increases the exposure of licensees to regulatory and macro-economic risk. We consider that, in some cases, OFTOs may not be best placed to manage such risks and therefore we need to consider how risks might be optimally allocated.
- 6.34 We consider that there may be merit in providing mechanisms to reallocate risks for a small number of known but unpredictable factors. The following section summarises our revised positions on such mechanisms.

Refinancing

- 6.35 In the November 2008 Policy Update we consulted upon our proposal to include an adjustment mechanism to share the benefits of gains from post-construction refinancing between the OFTO and the network users. However, we sought further views from respondents on the most suitable level of sharing of such gains.

21 Of relevance here is Ofgem's recent consultation document, 'Arrangements for responding in the event that a network company experiences deteriorating financial health', available at: <http://www.ofgem.gov.uk/Networks/Policy/Documents1/Position%20Paper%20-%20Responding%20to%20deteriorating%20financial%20health%20FINAL.pdf>

- 6.36 Several respondents supported a refinancing mechanism, with several noting that it is important to leave the OFTO with sufficient financial incentive to refinance. This may suggest that a 50:50 sharing mechanism between the OFTO and network users provides an appropriate balance of incentives and rewards. Nevertheless, a number of respondents expressed the view that OFTOs would respond to such a mechanism by adding a premium to their bids to capture back the benefit of any clawback, potentially increasing costs to the network user.
- 6.37 We believe that OFTOs may realise significant post-construction refinancing gains. However, we note comments that in an efficient market, bidders would be expected to reflect potential refinancing in their bids. In the light of these comments, the Authority intends to consider the merits in introducing such a mechanism before the start of each tender exercise, taking account of current market feedback.
- 6.38 Stakeholders should note that, in order to provide certainty for investors, any refinancing mechanism (including the level of sharing) would be defined ex-ante to the specific tender exercise and would not be applied retrospectively for licences previously granted by the Authority without such a sharing mechanism.

Incremental Capacity Increases

- 6.39 Our proposals on the treatment of requests for incremental capacity are broadly unchanged from the position set out in the November 2008 Policy Update, where such requests require new investment to be undertaken. We propose that an appointed OFTO be allowed to undertake incremental investment up to a value of 20% of the initial capital cost²² over the life of the offshore transmission systems without being subject to a further tender exercise. In return for this investment, the OFTO would be paid, by uplift to its revenue stream, an amount sufficient to remunerate the efficient costs of providing the additional infrastructure to meet the capacity requirement.
- 6.40 It will be for the Authority to determine whether or not the investment requirement to deliver the additional capacity falls within this threshold.
- 6.41 Respondents were generally supportive of the proposal, although some requested that further details be set out on the functioning of the mechanism. We propose that any assets incrementally installed by the OFTO will be assumed to be depreciated over 20 years from the point of delivery.
- 6.42 We note that, in some instances, it is possible to deliver additional capacity without investing in new assets. Instead, additional capacity may be delivered by changing the way in which the network is operated. Given the significant costs of installing offshore assets, there is merit in providing incentives to encourage the OFTOs to utilise existing assets before undertaking costly further investments.

22 For the transitional projects, this would be the transfer value.

6.43 The proposed mechanism in the November 2008 Policy Update did not address the incentives to encourage better utilisation and we therefore note that OFTOs may face distorted incentives. In light of these concerns, we consider that it might be appropriate to include a revenue driver that would enable a revenue uplift to be given for utilising assets more intensively. This could be in the form of a £/kW amount set on a case-by-case basis as an outcome of the tender process.

Decommissioning

6.44 The OFTO will be liable for its decommissioning obligations. We note that these obligations are set by the Government and, as such, the OFTO will need to form a view on their likely costs of compliance. We note that several interested parties have commented that OFTOs will have limited control over the additional costs of complying with changes to the decommissioning obligations that arise during the 20-year period. These unpredictable costs have been identified as a risk by potential investors.

6.45 We consider that it is appropriate that bidders reflect the expected costs of their current decommissioning liabilities but that it is appropriate that OFTOs are able to recover their efficient cost of complying with any additional decommissioning obligations (set by the Secretary of State), thus sharing the risk with network users. This will be achieved through a conditional pass-through mechanism that will allow these costs to be passed through where the Authority is satisfied that the OFTO has taken reasonable steps to minimise these costs.

Other Volatile and Unpredictable Costs

6.46 In the November 2008 Policy Update, we stated that a number of known yet unpredictable costs, such as business rates and licence fees, should be treated as pass-through items. Our position on all these items remains unchanged, although we would add that we expect these arrangements would allow the winning bidder to pass through its share of the Authority's tender costs.

6.47 One respondent to the November 2008 Policy Update suggested that costs involved in complying with changes to codes should be considered as a pass-through item. We note that both the Scottish TOs have a symmetrical adjustment mechanism in their price controls to allow a revenue adjustment where their costs materially change as a result of proposed changes to the STC. Given the onshore precedent, coupled with the longer period of the revenue stream, we consider that it would be appropriate to provide a similar mechanism for OFTOs. As such, we propose that there is a mechanism to allow for revenues to be adjusted where changes to the STC result in material changes in the costs borne by the OFTO.

Excluded Services

- 6.48 In the onshore regulatory regime, each licensee can carry out 'excluded services' or *de minimis* activities. There are those services or activities which are not related to running the transmission businesses. Onshore, these activities are limited to 2.5% of allowed revenue, and the associated costs and revenues are excluded from the price control.
- 6.49 There are other services which are related to the transmission business but that are outside the definition of transmission (asset) owner activity. Where the costs of such services are separately identifiable, they will be excluded from the price control. If the costs are indistinguishable, the associated price control base revenues will be netted off overall allowed revenues.
- 6.50 We believe that OFTOs may carry out certain activities outside their price control on which they should be able to earn revenues (for example, carrying out maintenance of another OFTO's asset, i.e., subcontracting). We believe it appropriate to allow such activities to be undertaken by OFTOs as excluded services.

ELEMENTS ABLE TO BE MODIFIED ON A CASE-BY-CASE BASIS

Performance Obligations

- 6.51 The November 2008 Policy Update provided updated positions on our proposed performance obligations. We received a variety of views on our proposals for the operational incentive. These views and our final proposals are set out below.

Operational Incentives

- 6.52 Respondents agreed that there is a need for an availability incentive to ensure the prompt restoration of the connection in the event of an outage. As such, our position remains to implement a performance incentive. The November 2008 Policy Update sought views on the suitability of the incentive scheme set out in Appendix 5 of that document.

Summary of Views

- 6.53 Our proposed straw man was broadly supported by respondents. Many respondents offered detailed suggestions for improving the design of the mechanism. Comments were made in the following areas:
- *Dealing with seasonality and energy market volatility* - Respondents pointed to the higher price of energy on the wholesale market over winter. They commented that, under the straw man presented, the incentive would not be any 'sharper' during these periods of higher price. As such, some respondents asked whether there should be a link between the exposure faced by the OFTO and the market price.

- *Availability or reliability* – Some respondents questioned whether the target should be based on availability or reliability²³.
- *Symmetric or asymmetric* – In response to earlier consultations, industry gave the view that any performance incentive should be asymmetric. However, in response to the November 2008 Policy Update, some respondents expressed support for a regime that rewards the delivery of performance in excess of the defined availability target.
- *Credits or direct financial reward* – Some respondents questioned whether excess performance should be rewarded by a direct and immediate financial payment, rather than through credits for a banking mechanism.
- *The effect of amassing credits* – Some respondents expressed a concern that the banking mechanism could allow for the OFTO to amass a large number of credits in the later years of the 20-year revenue stream, thus creating a perverse incentive, and hence suggested that the credits earned should be time-limited.
- *Data on availability* – In the November 2008 Policy Update we presented availability data on a range of interconnectors, which we used to inform our view on achievable availability on sub-sea cables. One respondent noted that this data should be treated with caution as the interconnectors do not require offshore substations for which access restrictions can occur due to poor weather.

Updated Proposals

- 6.54 Respondents' views have highlighted the divergence in commercial drivers that would exist between the OFTO and the generator without a well-designed performance incentive. When considering what exposure should be placed on the OFTO in the event of poor performance, the incentive should recognise both the cost of a loss of connection for the generator but, also, the size of the OFTO relative to the generator.
- 6.55 Furthermore, we recognise that offshore generators may place different values on availability dependent on their location, technical capabilities and energy contracting strategy. This is reflected in the mixed views of respondents in terms of the need for symmetry in the availability incentive.
- 6.56 Because of this, we propose that default targets are set for the incentive (as set out in the straw man published in the November 2008 Policy Update), but that we should also allow some degree of flexibility in the tender process for alternative parameters to be defined by the Authority. Such variation in targets would be informed by the generator's preference as to these parameters. However, for transitional projects, the Authority would also seek and consider the view of Ofgem's technical advisors on what level of availability the asset is capable of achieving.

23 For the reader's clarity, we believe it useful to distinguish between availability and reliability - Availability measures the percentage of the year for which the offshore wind generator is able to use the cable and thus takes into account both planned and unplanned outages. Reliability measures the percentage of the year that the cable is available once planned outages have been deducted and so only depends on unplanned outages.

For example, an offshore network that has a planned outage of 3 days and unplanned outages of 5 days would have an availability of 97.8% [=1-(3+5)/365] and a reliability of 98.6% [=1-5/(365-3)]. It would, therefore, be possible to have either an availability incentive or a reliability incentive plus a maintenance incentive.

6.57 Stakeholders should also refer to the model OFTO performance incentive special condition drafting, which is presented in Annex 11. Ofgem would welcome views on that drafting.

Ensuring the Effectiveness of the Performance Incentive toward the End of the 20-year Revenue Stream

6.58 As designed, penalties for poor performance would be paid in the years subsequent to the poor performance. We recognised in the November 2008 Policy Update that this design, though beneficial for the OFTO's management of outage risk, may reduce the incentive for the OFTO to effectively manage the maintenance of its assets in the latter years of the revenue stream.

6.59 In order to deal with this potential problem, we sought views on a proposal to require the OFTO to commit capital that would be at risk in the last years of the concession period. This would be done through a requirement for the OFTO to place a 'performance bond'. The conditions in this case would relate to the satisfactory maintenance of the assets in the latter years to the concession period.

6.60 In order to implement this policy, a Special Licence Condition would be added to all OFTO licences. The condition would require the OFTO to post a performance bond with an independent financial institution (e.g. a bank, a specialist in securities, etc.). The terms on which the bond would be posted by the OFTO would also be set out in the Special Licence Condition, as defined by the Authority, and would match the conditions designed as part of our ongoing development of the performance incentive.

6.61 Respondents were generally supportive of this approach, although some concern was expressed that if the size of the bond were too large, it could encourage abandonment by the OFTO in the latter years of the 20-year concession, prior to the bond being posted.

Exposure of the OFTO to the Performance Bond

6.62 The size of the bond needs to be sufficiently large so as to maintain the incentive for network reliability in the latter years of the concession period, but not so large as to impact significantly on the financeability of the OFTO. We also note that the size of OFTOs will vary considerably and so the size of the bond should vary correspondingly. Because of this, we believe the bond should simply replicate the at-risk element of the performance incentive. Rather than expose the OFTO to any additional penalties, the performance bond will ensure that monies are available at the end of the revenue stream to pay for any poor performance in the latter years of the initial revenue entitlement.

6.63 Whilst we believe that the performance bond will be essential in the latter years of the concession, we also believe that it would not be reasonable to expect the OFTO to post the bond for the entirety of the concession - as we believe that the performance incentive will provide adequate incentive for that period.

- 6.64 As such, we propose that the bond should be posted at year 15. We also note respondents' concerns about the impact of an excessive bond and, as such, the OFTO would be required to post a sum of 10%²⁴ of annual revenues each year from year 15 up to the end of the concession (i.e., up to a total of 50%). This level of exposure is equivalent to that which would be at risk to the performance incentive over the same period.
- 6.65 Any performance debt not met at the end of the period under the performance incentive mechanism would be paid for out of this bond, with the remainder returned to the OFTO.

Continued Poor Performance

- 6.66 The banking arrangements and performance bond described above provide financial incentives for the OFTO to deliver high availability levels, but in extreme cases these measures may not be sufficient to ensure that all OFTOs choose to maintain acceptable performance standards over the period of the revenue stream.
- 6.67 We consider that it is important that the licence contains adequate protections against persistent poor performance of the offshore network. In the November 2008 Policy Update we stated that, in extreme circumstances, it may be appropriate for the Authority to seek to revoke the licence of an OFTO whose network was demonstrating persistently poor performance. Such action would be taken in order to ensure that the offshore generator connected to the network was not unduly disadvantaged.
- 6.68 The circumstances under which the Authority would consider revoking a licence would be clearly set out ex ante, so that they can play a part in incentivising the OFTO (and its owners/ investors) to take action (e.g. through investors exercising their step-in rights) before the Authority withdraws the licence through revocation procedures.

Abandonment

- 6.59 We have recognised in previous consultation documents that a risk for generators is the possibility of abandonment by the OFTO either during construction or operation of the assets. It is important that offshore generators have confidence that these risks are managed effectively.
- 6.60 Ofgem's evaluation of bidders as part of the tender process will look to assess technical competence and financial standing in order to provide confidence that the OFTO that is appointed is able to deliver and continue to operate the offshore transmission assets. In addition, we propose that OFTOs should be subject to ongoing financial ring fence obligations to ensure that signs of financial distress are identified at an early stage.

²⁴ Refers to yearly allowed revenue as at time of licence grant (i.e., does not include any adjustments for performance target failure or other adjustments), although this would be inflated in line with RPI.

6.61 Nevertheless, the risk of abandonment can never be completely removed. Accordingly, it is important that the impacts of abandonment are also minimised. In the November 2008 Policy Update we outlined the regulatory instruments that might apply in the event of OFTO abandonment and sought views. These were:

- Administration (including Special Administration)
- Appointment of a new licensee
- Transfer of existing licence to a replacement
- Construction securities

6.62 We do not intend to explain these mechanisms in detail again, but we now give further explanation of how we expect to implement the construction security as our thinking has developed in this regard.

The Construction Security

6.63 We have set out in previous consultation documents that, for enduring projects, the selected OFTO would be required to place a construction security. The security would provide an increased incentive to ensure that the OFTO does not abandon the project during construction and also manages the impact of any such an abandonment should it occur by giving a pot of money that can be used to ensure delivery of the assets by a replacement OFTO and that any other contractual liabilities, such as LDs, are met.

6.64 Respondents were generally supportive of this proposal, although there were mixed views as to the appropriate financial commitment required by such a mechanism (a construction security of between 10 to 30% of the capital cost of the project had been proposed in the November 2008 Policy Update). We now set out our proposal on the level of the security and also set out how this mechanism would be implemented.

Use of the Security

6.65 As explained, we have previously considered that the construction security should be used to help fund replacement OFTO costs and cover all the costs of Ofgem's additional tender costs.

6.66 We still consider it appropriate for the security to be used to fund replacement OFTO costs. However, upon further consideration we have identified that the security should also now be made available to cover the costs of NGET in meeting:

- any liquidated damages costs not recoverable from the OFTO²⁵;
- other contractual liabilities arising under the STC contract as a result of the abandonment of the original OFTO.

²⁵ As GBSO, NGET would have entered into a contractual relationship with the generator to provide transmission services from a certain delivery date onwards. In the event that the offshore transmission system delivery prevents NGET from meeting its contractual obligations to the user, NGET would pay the generator LDs (under CUSC contract). We would anticipate that NGET would have backed off such liabilities with the OFTO, but abandonment by the OFTO may leave NGET exposed to compensating the generator without being able to recover these costs.

6.67 Furthermore, we do not now consider it appropriate for the security to cover Ofgem's tender costs, as these would be recovered from parties in the usual way using cost recovery powers in the Energy Act 2008.

Level of the Security

6.68 We have previously considered that a direct percentage of the construction costs of the asset should set the level of the security (i.e., a set percentage of construction costs). Further consideration of the issues attached to this policy leads us propose an alternative definition for the level of the security.

6.69 We are now proposing that the construction security will be used to pay NGET any non-recoverable costs for LD payments for the generator. LDs are a fixed value (currently LDs are capped at £5 million). Because of this, a direct percentage definition for the construction security may disproportionately impact on larger projects without any benefit.

6.70 As such, we believe it may be more appropriate to define this as:

Construction Security = LD + CC

LD = Liquidated damages (fixed component)

CC = 20% of the expected construction cost (variable component)

6.71 We note that this proposal is also flexible to any change in the definition of LDs brought about through changes raised by normal governance processes. This change is reflected in amended drafting to the STC.

Implementation of the Construction Security

6.72 A condition has been proposed in the amended STC drafting which would require the OFTO, on acceptance of a TO construction offer, to provide a construction security of a percentage of the forecast construction cost of the project. The current proposal for the STC mechanism is based on a similar mechanism that exists in the CUSC²⁶ which deals with onshore security provisions.

Triggering the Disposal of the Construction Security

6.73 We believe that there are two scenarios that would trigger the disposal of a construction security to the parties set out in Section 3.

6.74 Firstly, where an OFTO is being wound up, such that the existing licensee will no longer be constructing and running the offshore transmission system. In order to wind up the business, the licensee (or, more likely, the administrator) would need to revoke the licence by application to the Authority.

²⁶ The CUSC mechanism requires a user to secure the costs of construction of transmission assets required to meet that specific user's request, to be secured until works are complete.

- 6.75 Secondly, we can envisage a highly unlikely scenario where a solvent OFTO may cease construction of the assets, but not ask the Authority to revoke its licence. This could occur in the case that the costs of completion escalated, but the assets in the business (e.g. the landing point) exceeded the liabilities faced by the OFTO (e.g. NGET contracts to recover late delivery penalties) for failing to deliver the project.
- 6.76 Were this event to occur, the OFTO could remain in situ without any intention of completing the works, thus leaving the generator stranded. To mitigate this risk we anticipate that the Authority would add an additional revocation provision to Schedule 2 of the transmission licence. This provision would allow the Authority to revoke an OFTO's licence in the event that this situation is seen to arise. This provision would include a series of escalation procedures to allow the OFTO's investors to exercise their step-in rights. However, we note the Authority also has compliance procedures to address licence breaches (e.g. where an OFTO is not delivering in accordance with a TOCA) and this may be used to apply pressure on the OFTO prior to any revocation action.
- 6.77 In both of these cases, the trigger point for the process of release of the construction security to parties other than the original OFTO would be the revocation of the licence of the original OFTO.

Disposal of the Security

- 6.78 Depending on the abandonment scenario, the extent of payment to the parties set out above would vary. Furthermore, the point at which payments could be made to the different parties would likely run over several years. Because of this uncertainty, it is not possible to define prescriptive rules within the codes that could cover every scenario under which NGET might be expected to administer claims against the construction security following revocation.
- 6.79 As such our proposal is that NGET would be able to seek guidance from the Authority in determining claims against the construction security on a case-by-case basis. This may include, for example, where NGET required information from the Authority to determine the validity of a claim.

BUSINESS SEPARATION AND REPORTING REQUIREMENTS

Business Separation Requirements

- 6.80 The November 2008 Policy Update set out our proposals for enhanced business separation between the GBSO and a National Grid OFTO business. This included a new prohibition on NGET (and any NGET subsidiary companies) from bidding for an offshore transmission licence. We noted that, as the contractual interface with users of the GB transmission system (an NGET role that is proposed to be extended offshore), NGET would have information that would be advantageous to any party that was preparing a bid for an offshore transmission licence.

- 6.81 Our position remains that we do not consider that it would be proportionate to prohibit National Grid or any of its other subsidiary companies (except NGET) from bidding to become an offshore transmission licensee. We consider that the level of transparency in National Grid's business structure that is required to ensure confidence in the role of NGET as GBSO, could be achieved through business separation.
- 6.82 The Authority therefore proposes to seek to implement these obligations as special conditions to NGET's transmission licence, using the Authority's powers under Section 11 of the Electricity Act 1989. The proposed new special conditions are substantially based on existing business separation obligations in the gas transmission licence and other transmission licensees' electricity transmission licences. The Authority will publish the Section 11 consultation shortly.
- 6.83 It is also important that OFTOs are subject to robust business separation requirements. Ofgem therefore intends to implement special conditions for OFTOs once licences are granted.

Regulatory Reporting Requirements

- 6.84 As presented in [Chapter 5](#) of this document, our intention has been that generator affiliates would be able to bid to be OFTOs provided that a separate legal entity was set up, which would be subject to financial ring fencing. However, we also noted that the regulatory regime will be subject to the requirements of EU legislation. As it looks likely that the EU Energy Council agreement on the Third Package may well lead to the requirement for ownership unbundling, generator affiliates would be prohibited from owning offshore transmission assets.
- 6.85 We also stated that OFTOs would have to comply with similar regulatory reporting requirements as onshore transmission owners, although given the simpler nature of OFTO businesses, together with the 20-year revenue stream (as opposed to the usual requirements of the 5 yearly price review), Ofgem's approach would be lighter than onshore. This remains our view.

GBSO Regulatory Reporting Requirements

- 6.86 Ofgem will monitor the performance of the System Operator under the offshore transmission regime, with a view to ensuring the onshore and offshore system operator arrangements are effective, but also to ensure that they are appropriate for the development of the new regime, particularly Round 3.

Tender Process

INTRODUCTION

- 6.87 The design of the offshore transmission regulatory regime has been consulted on since 2005 and, over that time, the Government has taken a number of decisions that have shaped its direction. This has included that offshore electricity transmission licences will be granted by way of a competitive tender process, and that the Authority would be the body that runs these tenders.
- 6.88 In light of the Government's decisions to date, Ofgem have, over the past year, set out in increasing levels of detail how the tender process will work for the granting of OFTO licences, both for the transitional²⁷ regime and on an enduring²⁸ basis.
- 6.89 This Chapter outlines how we intend to run the competitive tender process.
- 6.90 Ofgem published updated proposals on the tender process on 5 March 2009²⁹, including its selection and evaluation process for tenders in the transitional regime. Readers are directed to that document for information on the detailed operation of the tender process; the discussion below provides a broad overview of the key features of the process.

OVERVIEW OF THE COMPETITIVE TENDER PROCESS

- 6.91 The key features of Ofgem's proposed approach for running competitive tenders in the transitional regime are set out below:
- Each tender will follow a number of distinct stages:
 - A two-stage pre-qualification stage, which will enable Ofgem to select those parties (including consortia) that it will invite to bid for each project in the invitation to tender stage on detailed responses to a Pre-Qualification Questionnaire and a Qualification to Tender stage;
 - An invitation to tender stage, during which bidders will have the opportunity to put forward their detailed proposals for providing transmission services, including their firm bid revenue stream for the 20-year regulatory period;

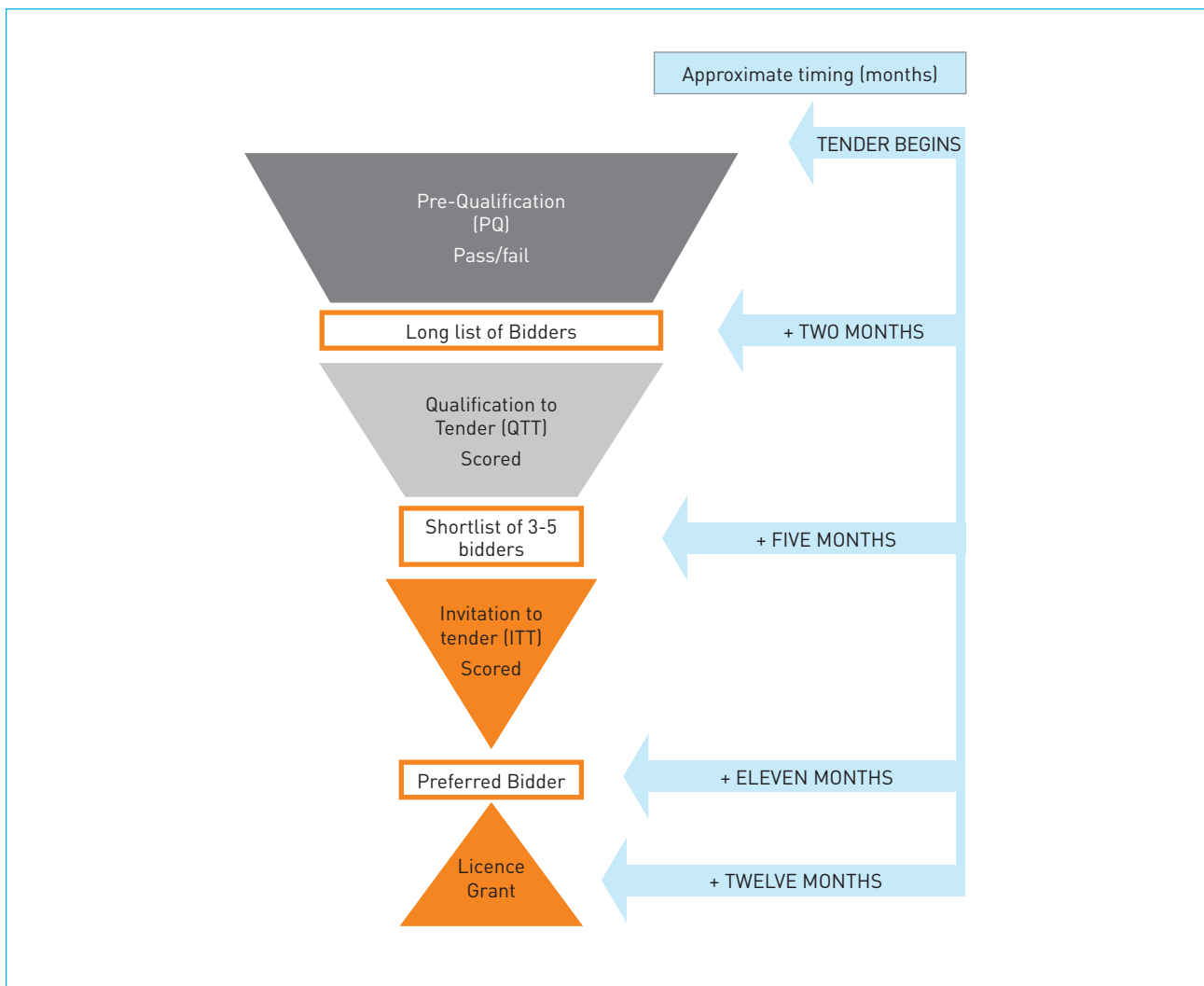
27 For these purposes, we call transitional projects those which are either already built, are expected to be under construction or achieve financial close before the regime reaches the Go-Active or Go-Live dates.

28 Enduring projects are projects that do not meet the criteria for transitional projects, and will require OFTOs to design, build, finance and maintain transmission assets.

29 *Offshore Electricity Transmission: Updated Proposals for the Competitive Tender Process*, March 2009.

- An optional best and final offer stage, where a small number of bidders will have the opportunity to put forward an improved final bid;
 - The identification of the preferred bidder stage; and
 - The licence grant stage, where the Authority will grant the offshore electricity transmission licence to the preferred bidder, subject to it satisfactorily completing any outstanding issues required by the Authority.
- Ofgem will advertise projects in advance, in relevant national and international publications;
 - The process will be sufficiently flexible to allow bidders to bid for more than one OFTO licence;
 - There will be increasing amounts of information available about the projects at each stage of the tender process;
 - Ofgem will publish standardised tender documentation to support the tender process; and
 - The competitive process will be strengthened by business separation requirements on the GBSO, meaning any future National Grid OFTO must be distinct from the system operator function.

6.92 The following diagram sets out the process:



TENDER REGULATIONS

- 6.93 The offshore electricity transmission regime will largely be implemented through the commencement of a number of sections of the Energy Act 2004.
- 6.94 In particular, Section 92 of the Energy Act 2004 when commenced, will insert Section 6C into the Electricity Act 1989. Section 6C will enable the Authority to make regulations which facilitate the making of a determination on a competitive basis of the organisation to which an offshore transmission licence is to be granted. These regulations will effectively provide the legal framework for running the competitive tender process.
- 6.95 In July 2008, Ofgem published its preliminary draft of these regulations. Ofgem received 12 responses to the draft regulations. After carefully considering the responses, it has amended the tender process policy positions and the draft tender regulations where appropriate.
- 6.96 In March 2009, Ofgem published its final consultation of the draft final regulations alongside a final consultation document on the tender process. The deadline for responses is 2 April 2009.

NEXT STEPS

- 6.97 The channel by which the tender process and associated regulations are being refined is Ofgem's consultation document. Respondents are asked to address consultation questions in that document and provide comments to Ofgem (offshoretransmission@ofgem.gov.uk) by 2 April 2009 for the tender regulations and 16 April 2009 for the tender process.

OFTO of Last Resort

BACKGROUND

- 6.98 The Government and Ofgem outlined an OFTO of last resort mechanism in the July 2007 consultation document³⁰, and later elaborated on it in the January 2008 publication³¹. Broadly, the proposal was that where an initial transitional tender process failed to receive significant market interest, Ofgem would consider refining the bidding proposal, in consultation with the generator, and then re-launch the tender. If this second tender process failed, Ofgem would then appoint the developer as OFTO for the transmission assets.
- 6.99 In confirming this position in the June 2008 consultation document³², we stated that generator affiliates would nevertheless need to comply with any unbundling requirements introduced in the EU Energy Third Package, which at the time was still under development.
- 6.100 On 10 October 2008 the EU Energy Council reached political agreement on the Third Package (see Chapter 5 for further details). The Council's decision had clear implications for the OFTO of last resort proposal, in that generator affiliates may not be able to own transmission assets under the Third Package, and therefore they may be unable to act as OFTO of last resort.

UPDATED POSITION IN NOVEMBER 2008 CONSULTATION DOCUMENT

- 6.101 The position developed for the previous consultation was that current and future transmission licensees (onshore and offshore) should have an obligation to become OFTO of last resort, if directed to do so by the Authority. This approach was based on the supplier of last resort mechanism in the retail market, which aims to ensure that energy customers encounter minimal disruption and inconvenience in the event that their supplier goes out of business. This mechanism would be implemented by using the Secretary of State's powers to modify transmission licences, for purposes connected with offshore transmission, under section 90 of the Energy Act 2004.

30 *Offshore Electricity Transmission - A Joint Ofgem/BERR Policy Statement*, July 2008, available at: <http://www.ofgem.gov.uk/Networks/offtrans/pdc/cdr/cons2007/Documents1/Offshore%20Policy%20statement%20FINAL.pdf>

31 *Offshore Electricity Transmission - Regulatory Policy Update*, January 2008, available at: <http://www.ofgem.gov.uk/Networks/offtrans/pdc/cdr/cons2008/Documents1/Offshore%20Electricity%20Transmission%20-%20Regulatory%20Policy%20Update.pdf>

32 *Offshore Electricity Transmission - A Joint Ofgem/BERR Regulatory Policy Update*, June 2008, available at: <http://www.ofgem.gov.uk/Networks/offtrans/pdc/cdr/cons2008/Documents1/Offshore%20Electricity%20Transmission%20-%20A%20Joint%20Ofgem%20BERR%20Regulatory%20Policy%20Update.pdf>

- 6.102 The licence provisions connected with this new OFTO of last resort mechanism – standard conditions B18 (existing transmission owners, or TOs) and E21 (future OFTOs) – were set out in Annex 1 to the November 2008 consultation document. These conditions require a licensee to comply with an OFTO of last resort direction made by the Authority, and set out requirements on the Authority in making a direction.
- 6.103 In practice, we stated that before a direction was made, Ofgem would contact all licensed TOs to seek their proposal for taking on the assets. On the basis of this information, Ofgem would establish which licensee is best placed to take on the asset, and recommend that the Authority make a formal direction to this party.
- 6.104 We noted that, because the appointment of an OFTO of last resort would not be as competitive as a successful tender, a direction (including the revenue stream component) would need to be reviewed at a point in the future, to be determined by Ofgem. Our suggested review point was five years following the commencement of the direction. We observed that, at this point, adjustments to terms and the revenue stream may be required, either to claw-back windfall gains made by the OFTO of last resort, or to increase the revenue stream in light of higher than expected efficient costs.
- 6.105 The Government and Ofgem's position in that document was that the OFTO of last resort mechanism should only apply to transitional projects, and as an option at the Authority's disposal in cases of abandonment by OFTOs.
- 6.106 We therefore did not propose that the OFTO of last resort mechanism be applied for failed competitive processes in enduring tender rounds; as we have noted previously, the failure of an enduring tender process may demonstrate that the market does not see an economic case for investment.
- 6.107 Based on consultation responses (see below), this remains our position. We have, however, given more details on how the mechanism will operate in practice.

DEVELOPMENTS SINCE PUBLICATION OF THE NOVEMBER 2008 CONSULTATION DOCUMENT

Consultation Responses

- 6.108 In response to the updated position in the November consultation document, ten parties provided comments, with the majority – including both developers and prospective OFTOs – being generally supportive of the proposed approach.
- 6.109 A number of respondents did, however, seek clarification on how the mechanism would operate in practice. Specifically, a developer noted concern that the OFTO of last resort process would be less rigorous than the tender process, which might lead to TOs attempting to bypass the tender process. Further, some TOs questioned the likelihood and business impacts of being called on to become an OFTO of last resort.

- 6.110 Some developers saw the OFTO of last resort mechanism providing a level of uncertainty, and that this justified alternative arrangements, including the Government exempting their projects from the requirement to obtain a transmission licence.
- 6.111 In response to the use of OFTO of last resort for cases of abandonment, four of the five respondents on this issue were supportive. However, some sought further details on the extent to which the mechanism would apply in enduring projects.
- 6.112 The Government has taken these concerns into account in further developing the OFTO of last resort mechanism. We note that key concerns expressed by respondents relate to the detailed operation of the mechanism, and we provide updated positions below which set this additional detail out.

Further Development of Process and Criteria

- 6.113 In addition to considering responses to the November 2008 consultation, the Government and Ofgem have developed additional features of the OFTO of last resort mechanism. These refinements are aimed at:

- Making clearer the basis on which the Authority may make an OFTO of last resort direction; and
- Explaining how the process will work in practice and take account of the views of affected TOs.

- 6.114 These refinements are detailed in revised Standard Licence Conditions B18 and E21, in Annex 1. They are also summarised below.

- 6.115 Specifically, we propose that:

- **Safeguards will be included to protect against material detriment for OFTOs of last resort**

The licence conditions consulted on in the November 2008 document prevented the Authority from making a direction that 'significantly' prejudices a TO's ability to continue its existing activities and comply with contractual obligations. On reflection, we consider that this did not adequately limit the prospect of detriment.

We therefore have re-drafted the condition to state that the Authority must not make a direction where it will 'materially' constrain a TO's activities and obligations. This enhances the protection against detriment afforded to an OFTO of last resort, as it requires the Authority to demonstrate, to a higher degree than previously proposed, that a direction will have limited adverse impact on the TO's business activities.

Additionally, we wish to make clear that the same provision for treatment of 'unknown unknown' events as is proposed for OFTOs generally, will apply to OFTOs of last resort. That is, these events will be addressed, if necessary, on a case-by-case basis, in a manner consistent with the licence issued and the Authority's statutory duties and functions at the time.

- **The criteria used by the Authority in deciding which TO to select as OFTO of last resort will be set out in the transmission standard licence conditions**

We propose that the criteria be 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;

6.116 And that:

- The Authority needs to be satisfied that the licensee directed to become OFTO of last resort is the best able to operate the assets in an efficient and economic manner³³.

6.117 In addition, we will set these criteria out in the Guidance Notes for OFTO of last resort, which Ofgem will consult on and finalise prior to 'Go-Active'.

- **Period for review of a direction**

In the November 2008 consultation document, we stated that, due the limited nature of competition involved in an OFTO of last resort process, a direction will be reviewed at a relatively early stage, for example five years hence. However, we stated that the Authority should determine the timescale for review at the time it is making the direction.

We now consider that, to deliver TOs and potential OFTOs an additional level of certainty about the mechanism, the timescale for reviewing a direction should be spelt out in the transmission licence. We consider that five years following the making of the direction is the maximum period at which it is appropriate to review the arrangements and confirm that this review will include consideration of the continuing appropriateness of the revenue stream. In addition, prior to the end of this period, the OFTO should be able to request that the Authority review the arrangements if there has been a material change in circumstances.

- **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 consider that OFTOs (including OFTO entities of onshore TOs) should be prioritised in the selection of an OFTO of last resort over onshore TOs.

This prioritisation will be subject to a condition – that there are no exceptional circumstances that will prevent the Authority from making a direction to an OFTO rather than to an onshore TO.

³³ Subject to the provision outlined later in this section that Ofgem will consider directing an OFTO to become OFTO of last resort before an onshore TO, unless there are exceptional circumstances.

In particular, where an OFTO's financial capacity would limit its ability to comply with a direction, the Ofgem would exclude this OFTO from the process and consider other OFTOs. Where the Ofgem considered that no OFTO could comply with a direction without encountering financial distress, it would then assess which of the onshore TOs is best placed to take the asset on.

- **A consultative approach to selecting an OFTO of last resort**

The Government and Ofgem believe that it would be preferable to obtain the agreement of a selected OFTO of last resort, prior to making a direction. However, the Authority also has a statutory duty to act in the interests of consumers and of sustainable development. Hence, there may be circumstances where, notwithstanding the absence of consent, the Authority's duties require it to make a direction.

- **Right to appeal a direction**

The Government and Ofgem intend that right of appeal will be open to whoever is selected to become an OFTO of last resort. The Government and Ofgem are considering whether a right of appeal will be open to TOs selected to become an OFTO of Last Resort in addition to the right to a judicial review of any direction and, if so, what the appeal mechanism would be.

Utilising the Authority's Powers to Grant Licences upon Application

6.118 A further issue that Ofgem considered alongside the previous consultation responses was the applicability of the Authority's powers to grant licences by application (under section 6A and 6B of the Electricity Act 1989) to the offshore transmission regulatory regime.

6.119 Potentially, these powers could be used to supplement the competitive tender process, including where tenders have failed to result in the appointment of an OFTO, prior to commencing an OFTO of last resort process. For example, following the failed tenders, Ofgem could accept applications from interested parties for adopting the assets. If this process did not attract market interest, Ofgem could then commence an OFTO of last resort process.

6.120 After assessing the case for using these powers, we have concluded that they would undermine the competitive approach to offshore transmission development by presenting 'gaming' opportunities for prospective OFTOs. Therefore, we intend to specifically dis-apply the regulations for licence applications³⁴, preventing their use, except for limited circumstances. These limited circumstances are where an OFTO has abandoned an asset after an offshore transmission licence has been granted (i.e., where it has entered into administration or there has been a commercial decision taken that has meant the asset is effectively abandoned) and the Authority considers that modification of the terms in a transmission licence would be the most effective means of putting in place a new OFTO for the relevant transmission assets.

34 Ref *The Electricity (Applications for Licences, Modifications of an Area and Extensions and Restrictions of Licences) Regulations 2008*, available at: http://www.opsi.gov.uk/si/si2008/pdf/uksi_20082376_en.pdf

NEXT STEPS

6.121 As is the case for the supplier of last resort mechanism, Ofgem will publish and consult on formal guidance notes detailing the process and criteria for the appointment of an OFTO of last resort. To provide certainty for investors in offshore transmission about the full nature of the process, we intend to have consulted on and finalised this document by Go-Active in June 2009. If you wish to be on the circulation list for this consultation, please contact Ofgem (offshoretransmission@ofgem.gov.uk).

Charging

6.122 This section provides an update on the work being progressed by NGET in the development of offshore transmission charging proposals.

6.123 On 31 December 2008 NGET submitted its Use of System Methodology Modification Proposal GB ECM-08 to the Authority for consideration.

6.124 The proposed modification relates to the introduction of charging arrangements to recover the costs of transmission infrastructure assets required to facilitate the connection from a generating site located in offshore waters to the onshore network. The proposed modification is intended, subject to the Authority's decision, to be effective only following the commencement of the forthcoming regulatory regime for offshore transmission³⁵.

6.125 Under the governance arrangements for changes to NGET's charging methodology statement, the Authority does not have a direct approval role but does have rights to veto modification proposals in certain circumstances. The Authority's decision is based on a consideration of whether the modification would better facilitate the relevant methodology objectives and taking account of the Authority's statutory duties.

6.126 The Authority published an Impact Assessment and Consultation³⁶ on NGET's proposed modification on 4 February 2009. The purpose of this document is to set out its initial view of the impact of the proposed modification and to provide an opportunity for parties to provide views on the impacts of the proposed modification to inform our decision. The closing date for responses is 18 March 2009. The Authority has until 30 March to make its decision on whether to veto.

6.127 Further information on the consultation process and NGET's final proposals can be found on NGET's website³⁷.

35 The offshore transmission network will not come into existence until the commencement of sections 89 and 180 of the Energy Act 2004, i.e., the 'Go-Live' date (June 2010).

36 <http://www.ofgem.gov.uk/Networks/Trans/ElecTransPolicy/Charging/Documents1/090204GBECM08IA.pdf>

37 <http://www.nationalgrid.com/uk/Electricity/Charges/modifications/uscmc/>
The two terms (GBSO and NETSO) are used interchangeably throughout this document.

7 THE STANDARD FRAMEWORK PROPOSALS

- 7.1 This Chapter sets out the proposed changes to the standard industry framework documents that will be implemented by the Secretary of State.
- 7.2 The standard framework, essentially the Standard Conditions of the Transmission Licence (including GB Security and Quality of Supply Standard) and industry codes (BSC, CUSC, DCUSA, Distribution Code, Grid Code, and STC), will be implemented by the Secretary of State under powers granted to him under sections 90 and 91 of the 2004 Energy Act.

INTRODUCTION

- 7.3 This chapter describes the standard framework for transmission arrangements and the development considered appropriate for implementing the proposed offshore transmission regime. The standard framework is defined by the standard conditions of the transmission licence (including the security and quality of supply standard GB SQSS³⁸) and the industry codes³⁹. In this document, the transmission licence, GB SQSS and industry codes are collectively known as the 'relevant documents'.
- 7.4 Section 90 of the Energy Act 2004, allows for the Secretary of State, among other things, to make modifications to the transmission and distribution standard licence conditions and industry codes which he considers appropriate for purposes connected to offshore electricity transmission. Section 91 of the Energy Act 2004, allows for the Secretary of State, among other things, to make modifications to the Special conditions of the transmission licence.
- 7.5 In developing change proposals for the transmission arrangements, we have sought, wherever possible, to extend the current onshore arrangements that are defined in the relevant documents. Noting that offshore transmission systems may connect to onshore distribution systems, changes to DCUSA and Distribution Code were considered appropriate for the offshore transmission and change proposals developed.

38 The term 'GB Transmission System' has been replaced by the term 'National Electricity Transmission System' in the relevant documents. This is because Great Britain only extends to the GB landmass and internal waters; it does not include offshore waters.

39 The industry codes consist of the BSC, CUSC, Grid Code, STC, Distribution Code and DCUSA.

- 7.6 We consulted on draft of change proposals to all the relevant documents in June 2008 (June 2008 Policy Update⁴⁰) and again in November 2008 (November 2008 Policy Update⁴¹). Both the June 2008 Policy Update and the November 2008 Policy Update included draft change proposals for each of the relevant documents as a set of annexes. We have received and considered various views on the proposed changes to the relevant documents. Further details on responses to the November 2008 Policy Update can be found in [Chapter 8](#).
- 7.7 The November 2008 Policy Update highlighted five key areas where we have proposed different treatment offshore that need to be reflected across more than one relevant document:

- 1) a two-stage connection process: we set out our proposals for a two-stage connection process in the June 2008 Policy Update and our minded to position in the November 2008 Policy Update. We did not receive any responses to the November 2008 Policy Update which made new or sufficiently persuasive cases for us to amend our position.

A number of respondents raised concerns with NGET's ability to terminate a connection agreement where the Authority confirms that a tender process is not going ahead. Respondents were of the view that any changes proposed by NGET to the connection agreement entered into at the first stage of the connection process as a result of any differences between NGET's assumptions about the scope of the Offshore Works and the OFTO's detailed design of the offshore transmission system should be reasonable. Respondents views are discussed further in [Chapter 8](#).

We have made minor changes to the drafting of the change proposals to the relevant documents that define or refer to the proposed two-stage connection application process that were included in our November 2008 Policy Update. The revised change proposals are provided in the annexes to this document.

- 2) an incremental capacity increase: where we propose to allow the appointed OFTO to undertake incremental investment capacity, up to a value of 20% of the initial cost of capital investment over the lifetime of the offshore transmission system. We have also proposed an obligation for such an OFTO to offer terms to the GBSO for such a change to its offshore transmission system when requested. In practical terms, any offer made by the OFTO would need to be subject to the Authority's agreement that the additional OFTO investment is within the 20% threshold as the OFTO would require an adjustment to its regulated revenue stream before undertaking additional investment.

40 <http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?file=Offshore%20Electricity%20Transmission%20-%20A%20Joint%20Ofgem%20BERR%20Regulatory%20Policy%20Update.pdf&refer=Networks/offtrans/pdc/cdr/cons2008>

41 <http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?file=Offshore%20Electricity%20Transmission%20-%20A%20Joint%20OfgemDECC%20Regulatory%20Policy%20Update.pdf&refer=Networks/offtrans/pdc/cdr/cons2008>

We note the request in response to the November 2008 Policy Update for clarity on whether the 20% limit was to apply to one-off increases of 20% or to a cumulative total over the lifetime of the offshore transmission system. We have made changes to the drafting of the proposed limit in the relevant documents to define that the 20% limit applies to a cumulative total (in real terms) of expenditure needed for capacity increases over the lifetime of the offshore transmission system.

- 3) Transmission access (including compensation arrangements): we set out our proposal that the existing CUSC access product, Transmission Entry Capacity (TEC), should be adapted for offshore generators, in the June 2008 Policy Update. We note the interaction between the current transmission access review CUSC amendment proposals (developed under normal governance arrangements) and our proposed changes for the offshore transmission regime. We further reviewed this position in light of responses to the June 2008 Policy Update and changes to normal governance and set out our minded to position in the November 2008 Policy Update and provided drafting of the CUSC and STC to reflect this. We will keep this under review as decisions are reached on changes proposed under normal governance arrangements.
- 4) Commercial treatment of OFTO provided reactive power: we set out our intent to develop proposals for the commercial treatment of OFTO provided reactive power in the November 2008 Policy Update. We have now considered current arrangements for compensation payments for generators when instructed to provide reactive power services by the GBSO.

We note that generators may be able to provide reactive services from generating unit capability but we are also aware that for some types of generating units (notably wind turbines), it is usual for the generator to also install separate reactive power compensation equipment to meet the Grid Code requirements that apply at the point of connection with the transmission system. We acknowledge that under CUSC, the default reactive power payment rate is intended to compensate a generator for additional costs incurred when instructed by NGET to provide reactive services to the transmission system.

Under current arrangements, the generator incurs all costs associated with the provision of reactive services from generator-owned equipment. The current CUSC arrangements are intended for balancing services payments to be made by NGET to the generator when the generator is instructed to provide reactive services using generator-owned equipment.

NGET has provided us with indicative information about the costs associated with the provision of reactive services using reactive power compensation equipment. We note that there are two main cost components:

Variable – reactive power compensation equipment losses when used to provide reactive power services.

Fixed – costs of auxiliary supplies to reactive power compensation equipment and maintenance.

From the indicative information provided, we note that the variable costs are significantly higher than the fixed costs when the reactive service is being utilised.

We note that losses associated with transmission licensee owned equipment are currently⁴² recovered under the BSC from all transmission users on a non-locational basis. We therefore note that there would be a significant difference in the costs to an offshore generator when OFTO-provided reactive services are utilised by NGET, compared to the costs to an onshore generator when it is instructed to provide reactive services to NGET. We do not consider that it would be appropriate to extend the current CUSC arrangements for payment for reactive services to OFTO-provided reactive power compensation equipment.

However, we consider that offshore generators should be compensated for costs associated with the OFTO-provided reactive power compensation equipment that they incur on a specific basis. As these costs will be of a fixed nature under current arrangements, we consider that there would be merit in NGET developing proposals for a capability based balancing services payment for offshore generators. Ofgem has asked NGET to investigate further and anticipates that NGET will bring forward detailed proposals under normal governance arrangements.

We have amended our change proposal to ensure that NGET is not precluded from making payments to an offshore generator for associated OFTO-provided reactive power services.

- 5) the treatment of 132kV connected licence exempt offshore generators: the November 2008 Policy Update set out our proposed approach to the treatment of 132kV connected licence exempt offshore generators and provided proposed drafting changes to the CUSC, BSC, DCUSA, Distribution Code and Grid Code. We explained that following the implementation of the proposed offshore transmission regime, 132kV connected offshore generators will be connected to an offshore transmission system which will form part of the GB transmission system. We note that there is a standard framework (including CUSC, Grid Code and BSC) which applies to transmission connected parties, irrespective of any requirement for those parties to be licensed. We also note that 132kV connected generators in Scotland were required to enter into agreements with the GBSO in line with the requirements of the standard framework when BETTA⁴³ was implemented.

We note that two respondents to the November 2008 Policy Update considered that 132kV connected licence exempt offshore generators that are connected via an onshore distribution network should continue to be treated as embedded generators after the proposed offshore transmission regime is implemented.

42 We note that BSC Modification P229 is considering a change to the Transmission Loss arrangements in the BSC. This modification proposal can be viewed at <http://www.elexon.co.uk/ChangeImplementation/modificationprocess/modificationdocumentation/modProposalView.aspx?propID=254>

43 British Electricity Trading and Transmission Arrangements.

We explained in our November 2008 Policy Update some of the changes that would be needed to existing contractual arrangements for 132kV connected licence exempt offshore generators. This was not intended as a comprehensive list. We note that 132kV connected licensed offshore generators are currently required to comply with CUSC, Grid Code and BSC. However, we acknowledge that there will also be a need for changes to existing contractual arrangements for 132kV connected licensed offshore generators as part of the implementation of the proposed offshore transmission regime.

We observe that any CUSC Party (it is a condition of connection offers made by NGET to be a CUSC Party) is obliged by the CUSC to comply with the BSC. We note that all current transmission connected generators are required to be a BSC Party and comply with the BSC. The BSC defines rules and requirements for the trading of electrical energy. In line with our previous comments, we do not consider that there is justification as part of our offshore transmission proposals to introduce different treatment within the category of transmission connected generation.

FURTHER POLICY DEVELOPMENT

Security Requirements Proposed for Offshore Transformer Equipment

7.8 We sought views on the analysis results that supported our proposal to amend the threshold forming part of the minimum security criteria for transformers on an offshore platform from 120MW to 90MW in the November 2008 Policy Update. We highlighted the limited availability of information about offshore plant and cables and requested views on the appropriateness of the assumptions that were used in the analysis work. We particularly requested information that had been used to inform actual design decisions. We did not receive further information or comments on this part of our change proposals. The GB SQSS has been updated to reflect this threshold.

Security Requirements Proposed for Busbars Forming Part of an Offshore Transmission System

7.9 We acknowledged concerns regarding our proposed minimum security criteria for busbars on an offshore platform (that form part of an offshore transmission system) in the November 2008 Policy Update. We highlighted the limited availability of information about offshore plant and cables and requested views on the appropriateness of the assumptions that were used in the analysis work. We particularly requested information that had been used to inform actual design decisions. As previously noted, we did not receive additional information from respondents. However we note the comments received that demonstrated that respondents remain concerned about this part of our GB SQSS change proposals.

- 7.10 We asked NGET to carry out further sensitivity analysis and to take full account of both physical and commercial restrictions on the operation of an offshore wind farm. We note that some of the restrictions on the operation of an offshore wind farm arise from the requirements of other industry codes (mainly the proposed limit on the extent of an offshore wind farm that a generator would be able to register as an offshore power park module and therefore trade as a single balancing mechanism unit).
- 7.11 We have assessed the additional information presented by NGET and note that when the proposed commercial restrictions are taken into account there was no justification to support the proposals set out in our November 2008 Policy Update. We have amended our proposal such that busbar redundancy is no longer a minimum security criterion in the GB SQSS. We note that the standard framework would not preclude an offshore transmission system design with busbar redundancy if such a design choice was supported by a project-specific economic analysis.

Termination of Connection Agreements

- 7.12 The proposed changes to the Connection and Use of System Agreement (CUSC) on the November 2008 Policy Update provided for the termination of a connection agreement where the Authority had confirmed that the tender process was not going ahead. A number of respondents raised concerns with this proposal. Ofgem has further developed its thinking on the tender process and notes that it is very unlikely that a further tender process would not be run if an earlier tender process for that offshore project was not successful in identifying an OFTO. In light of this proposed policy position and respondents' views, we have removed the proposed termination rights specific to offshore connection agreements from the CUSC and replaced them with a proposal that allows NGET to amend the Completion Date where an OFTO has not been appointed by the date assumed in the initial Construction Agreement entered into with the offshore generator.

Limitation of Liabilities

- 7.13 Two respondents noted the disparity between liabilities under the DCUSA, where liability is limited to £1m and liabilities under the CUSC, where liability is limited to £5M. Under the proposed changes to be introduced for the offshore regime, NGET will be the Party to the DCUSA where an offshore generator is seeking connection to the distribution system. We recognise that this results in possible exposure for NGET and the OFTO to a higher liability under STC and CUSC than faced by NGET and a distribution licensee under DCUSA. This was not the intention of the proposed offshore changes. We have amended Section 6.12.1 of the CUSC and Section G4 of the STC to limit the liability of NGET, the OFTO and the offshore generator where an offshore transmission system is connected via an onshore distribution network, to £1m in relation to an event on a distribution system that causes an issue offshore and in relation to an event offshore that causes an issue on a distribution system. We consider that this proposal addresses the concerns raised by the two respondents.

7.14 This proposal reflects the liability that an offshore generator would face today in its connection agreement with the distribution network operator under the DCUSA.

Liquidated Damages

7.15 The November 2008 Policy Update set out our proposal that an onshore transmission licensee should be liable to pay liquidated damages to an OFTO if an offshore transmission system cannot be completed due to late delivery by the onshore transmission licensee. Respondents noted that this would significantly increase the risk faced by onshore transmission licensees and would require the current transmission price controls to be reopened. We recognise that the OFTO is exposed if there is a delay to the onshore works since the OFTO will not otherwise receive an income stream until the offshore transmission system has been completed and is energised.

7.16 We note that as part of our proposals we have sought to strengthen the obligations for transmission licensees to share information and coordinate construction works. We consider that the proposed requirements in TO Construction Agreements would mitigate the risk of an unexpected, extended delivery of transmission assets and therefore the likely exposure to additional risk.

7.17 We have reviewed our proposal in light of respondents' views and consider that onshore transmission licensees' exposure to liquidated damages payments to an OFTO should be limited to £1m. The STC has been updated to reflect this.

7.18 In line with onshore arrangements, we note that offshore generators would have rights to claim liquidated damages from NGET for the late delivery of a transmission system connection through the CUSC. We note the arrangements in the STC for NGET to back off this liability (if NGET is not the licensee responsible for the construction works).

Delivery Incentive for OFTOs

7.19 The November 2008 Policy Update set out our minded to position that there was not a requirement for an additional delivery incentive on the OFTO. This position was based on our general intent that onshore transmission arrangements should, wherever possible, extend offshore.

7.20 We proposed as part of Annex 3 (CUSC) of the November 2008 Policy Update to extend the onshore arrangements for mitigating the consequences for a generator of late delivery of a transmission connection (i.e., the generator's contractual rights for liquidated damages payments from the GBSO that form part of any bilateral construction agreement entered into under CUSC), offshore. We also proposed as part of Annex 7 (STC) of the November 2008 Policy Update to extend offshore the current arrangements which back off the GBSO's liabilities for liquidated damages payments where another transmission owner is responsible for the construction works.

7.21 We do not consider that there is justification for a different approach offshore and are therefore not proposing further changes to the relevant documents.

Financial Security of OFTOs

7.22 In the November 2008 Policy Update we recognised that an OFTO will be entirely reliant on payments from the GBSO⁴⁴ and that a late payment from the GBSO could have a significant impact on an OFTO's financial position. As such, we sought views on the need for a mechanism as part of the STC to require NGET to provide security cover for OFTOs. A number of respondents did not support this proposal which they considered to be unnecessary. In light of respondents' comments and the fact that the GBSO has achieved and maintains a high level of compliance (in terms of accuracy and timeliness) with the robust mechanism for payments between STC Parties, we have decided not to go ahead with this proposal.

Construction Securities

7.23 The November 2008 Policy Update proposed that a construction security of between 10 and 30% of the capital cost of the project would have to be placed as security against the abandonment of a project during construction. We specified that the monies from the security would be used to pay for Ofgem to re-run a tender process to replace the OFTO.

7.24 Further consideration of this issue has led us to the identification of a possible change to the definition of the level of security. As set out in [Chapter 6](#) we are proposing to broaden the use of securities to include covering NGET costs associated with the liability for liquidated damages payments to the offshore generator.

7.25 We are still consulting on the level of the construction security. Our further thinking on this proposal is set out in [Chapter 6](#).

Purpose and Scope of Further Drafting

7.26 We have reviewed responses to the November 2008 Policy Update.

7.27 We have also taken account of changes under normal governance that have been implemented since our previous consultation. These changes are reflected in the baseline version of text used in each of the Annexes.

7.28 We have considered how and when changes proposed should take effect, particularly with respect to implementation of the changes between Go Active and Go-Live. Further details on our proposals for implementation are set out below.

⁴⁴ This is because Great Britain only extends to the GB landmass and internal waters; it does not include offshore waters.

7.29 We have undertaken an overall review of the consistency of the proposed changes to the relevant documents. This has resulted in a number of changes to the defined terms within the relevant documents, including an amendment to the term 'GB Transmission' to 'National Electricity Transmission'. For example, 'GB Transmission System' has changed to 'National Electricity Transmission System' and 'GB System Operator' has changed to 'National Electricity Transmission System Operator'. Proposed changes as a result of our consistency check are provided in the annexes to this document.

7.30 The changes that we are proposing to the relevant documents are published as a series of annexes to this document. Each annex contains:

- A summary of the key differences from our initial change proposals for the relevant document;
- A list of the changes made under normal governance that have not yet been reflected in the baseline text; and
- The proposed amendments to the relevant document, marked up on a defined baseline version of that relevant document.

7.31 The table below sets out the relevant documents to which changes are proposed, the document owner, and the reference number of the relevant annex.

Relevant Document	Document Owner	Annex Reference Number
Transmission Licence Standard Conditions	Ofgem	Annex 1
BSC	Elexon	Annex 2
CUSC	NGET	Annex 3
DCUSA	DCUSA Limited	Annex 4
Distribution Code	Distribution Licensees	Annex 5
Grid Code	NGET	Annex 6
STC	NGET, SPT and SHETL	Annex 7
GB SQSS	NGET, SPT and SHETL	Annex 8
Transmission Owner Special Licence Condition	Ofgem	Annex 9
Relevant document conditions that are connected with the implementation of the offshore regime	Various	Annex 10

CHANGES TO THE TRANSMISSION LICENCE SPECIAL CONDITIONS

7.32 As explained in [Chapter 6](#), the regulatory regime will be implemented through a series of Special Licence Conditions which will be included in the offshore transmission licence. These conditions will be developed by Ofgem in time for the first licence granting for the first transitional projects.

- 7.33 However, there are some limited changes to the special conditions in the licences of the NGET, SP Transmission and SHETL that are also required to implement the offshore transmission regime in full, and these changes will be implemented by the Secretary of State through the powers provided for under section 91 of EA2004.
- 7.34 The changes are required to extend the GBSO's role to the territorial sea and REZ. This includes amending the licence to enable NGET to fulfil the GBSO's function in setting charges of the National Electricity Transmission System to collect from users the revenue entitlement for all TO businesses including the OFTOs. It also includes consequential modifications to the licences of Scottish Power Transmission Limited (SPTL) and Scottish Hydro-Electric Transmission Limited (SHETL) to ensure that their rights and obligations are not unintentionally extended offshore. These proposals are set out below.

Revenue Restrictions

- 7.35 The revenue restrictions in the licence of NGET set out the overall revenue entitlement against which NGET sets GB transmission charges and recovers income for itself and other transmission owners.
- 7.36 Currently, the revenue restriction enables SPTL and SHETL to notify NGET of their revenue entitlements and for NGET to reflect this within the overall revenue cap against which it sets transmission charges. Similarly, SPTL and SHETL have rights to make claims to NGET where a transmission user terminates its CUSC agreement before it begins using the transmission system. Such claims are to recover the cost of investment undertaken by them to connect the user. However, the security provided by the user may not be sufficient to cover NGET's liabilities to SPTL and SHETL. As such, the revenue restriction allows NGET to recover any difference in transmission charges.
- 7.37 Our principle is to extend the onshore arrangements offshore unless there is justification for a different treatment. On this basis, the commercial framework set out in the industry codes places similar obligations and entitlements to NGET with respect to revenue recovery and termination claims for OFTOs. In light of this, the revenue restriction's conditions need to be updated.

Schedule 1

- 7.38 The November 2008 Policy Update (Annex 9) set out our proposed changes to Schedule 1 of NGET's licence to extend its geographic scope to enable the extension of NGET's role as GBSO to the territorial sea and the REZ. We received one minor drafting comment on this proposal. Annex 9 sets out our revised legal text.

Consequential Amendments to the Transmission Licences of NGET, SPTL and SHETL

7.39 In implementing the offshore transmission regime and extending the role of GBSO offshore, it has been necessary to introduce new licence definitions to define the national electricity transmission system to which NGET's role will apply and is the basis for many licence and code obligations. As a consequence of this newly defined term of the transmission licence, we have identified a small number of consequential amendments that are required to the special conditions of the three transmission licensees that are needed to avoid unintentionally changing their rights and obligations. These proposed changes are also set out in Annex 9.

IN SUMMARY, THE CHANGES WE ARE PROPOSING ARE:

Transmission Licence

7.40 The main changes from the November 2008 Policy Update are:

- Amend Standard Licence Condition C8 to clarify that NGET is not obliged to make offers for connections which require a transmission licensee where a transmission licensee does not exist and the services could not be provided by an OFTO.
- Amend Standard Licence Condition B18 and E21, OFTO of Last Resort.
- Amend Standard Licence Condition C25 to clarify the information and assistance that the Authority will require from NGET.

7.41 Further details are provided in Annex 1.

BSC

7.42 The main changes from the November 2008 Policy Update are:

- Changes to sections H3.2.1c) and K5.4.8a) and the definition of External System have been removed, as they are not considered necessary or appropriate for offshore transmission.
- Include a new definition of 'National Electricity Transmission System Operator Area'.
- Amend the definition of Great Britain.

7.43 Further details are provided in Annex 2.

CUSC

7.44 The main changes from the November 2008 Policy Update are:

- Update the baseline text.
- Amend the definition of Great Britain.
- Update section 6.12 to limit NGET's liability to £1m where an incident on an Onshore Distribution System has an impact on an ET Offshore Transmission System (and vice-versa).
- Propose an amendment to the definition of Force Majeure.
- Amend the Connection Application to align with the Tender regulations and require the applicant to hold (as a minimum) an option on a Crown Estates Lease.
- Amend section 2.13.7 to limit this section to onshore connections only.
- Amend section 2.13.11 to make it clear that restrictions on availability will apply except where the connection meets the design criteria set out in section 2.5 to 2.13 of GB SQSS.
- Remove termination clauses specific to offshore connections from section 2.13.10, the Offshore Construction Agreement.
- Inclusion of proposed new clauses in Section 3, Section 4 and Section 6 to reflect charging arrangements and amendments to the definition of 'Obligatory Reactive Power Services' and 'Mandatory Ancillary Services Agreement'.
- Amend section 17 of Exhibit B to set out the relationship between the GBSO – DNO – offshore generator.
- Amend section 2.13.8 and the Offshore Construction Agreement to clarify that the Offshore Construction Agreement will include the assumptions made about the Offshore Connection.
- Amend section 2.2 of the Offshore Construction Agreement to allow work on consents to begin before the OFTO has been appointed where agreed by the Parties.
- Amend the definition of Offshore Construction Works to clarify the work to be carried out on any part of the Offshore Transmission System.
- Remove the need for section 36 consents to be held before the generator can enter the tender process.

7.45 Further details are provided in Annex 3.

DCUSA

7.46 The main changes from the November 2008 Policy Update are:

- Update the baseline text to version 3.

7.47 Further details are provided in Annex 4.

Distribution Code

7.48 The main changes from the November 2008 Policy Update are:

- Update the baseline to version 10.
- Update the definition of Great Britain.
- Include a new definition of 'Offshore'.

7.49 Further details are provided in Annex 5.

Grid Code

7.50 The main changes from the November 2008 Policy Update are:

- Update the baseline text to Issue 3, Revision 32.
- Amend the definition of Great Britain.
- Add a reference to standard condition E16 to the definition of 'Licence Standard'.
- Include a new definition of 'National Electricity Transmission System Operator Area'.
- Update PC Appendix E E1.2(iii) to change 'Technical Standards' to 'Electrical Standards'.
- Update PC Appendix D to clarify that equipment needs to be of an acceptable standard for the environment in which it is being used.
- Update PC Appendix D table to clarify Electrical Standards for power quality which apply at the Interface Point.
- Amendments made to PC.A.2.1.1 and PC.A.3.2.2 (c) to ensure consistency with the DRC and requirements for Embedded Transmission.
- Update section CC6.3.2 (e) (ii) to clarify that 5% tolerance applies and for consistency with CC6.3.2 (e) (ii).
- Ensure that obligations for existing offshore generators with cable circuits to shore of less than 132kV are not amended by the offshore transmission change proposals.
- Update CC6.3.15 to clarify that the offshore generator would be expected to choose their preferred option (as set out in CC6.3.15 (i) or (ii)) at the final offer stage, i.e., once the OFTO had been appointed.
- Extend the definition of Offshore Transmission Licensee to include parties which are progressing through the tender process before an Offshore Transmission Licence has been granted.
- Minor changes to OC8.4.1 and 8.4.2 and GC.4.3(xi).

7.51 Further details are provided in Annex 6.

STC

7.52 The main changes from the November 2008 Policy Update are to:

- Update the baseline to take account of the implementation of STC amendment proposal CA030.
- Update the technical requirements proposed for offshore transmission systems in Sections D and K.
- Clarify the power quality obligations that apply at the interface between offshore transmission and onshore systems.
- Allow OFTOs to seek detailed information from the GBSO when developing a TO Construction Offer.
- Explain the applicability of the STC if the GBSO is required to be an Offshore Transmission Owner of Last Resort.
- Amend the definition of Great Britain and make consequential changes to terms that include GB.
- Define the construction securities required from an OFTO and the charges that NGET may be liable for and charge to an OFTO in the event of default by that OFTO.
- Distinguish between a DNO as a user of the GB transmission system and as a provider of a distribution connection for an offshore transmission system.
- Update Schedule 9 section 10 to address construction securities and to define when NGET can draw on construction securities.
- Rename NEW Offshore Interface Agreement as Schedule 15.

7.53 Further details are provided in Annex 7.

GB SQSS

7.54 The main changes from the November 2008 Policy Update are to:

- Amend the minimum security requirements for busbars on an offshore transmission system.
- Correct corrupt cross-references and numbering.

7.55 Further details are provided in Annex 8.

7.56 We consider that the changes proposed in the annexes are robust and accurately reflect the policy position set out in the consultation documents. We are minded to ask the Secretary of State to implement the proposed changes set out in the annexes subject to evidence to the contrary and would welcome respondents' views.

Code Subsidiary Documents

7.57 Changes to the CUSC and BSC to implement the offshore regime will result in a need for changes to the Code Procedures of the STC and BSC (STCPs and BSCPs). The Authority does not have a role under the normal governance arrangements for code procedures. Section 2.11.2 of BSC and 7.2.10.4 of STC require the Panels or Relevant Parties to make such changes to code procedures as are necessary to give effect to an approved change to that code, by the date the changes to that code are to be implemented. We expect NGET and ELEXON to take forward the changes required to STCPs and BSCPs during the implementation period for implementation at Go-Live. We have not identified any need for changes to code procedures to be implemented prior to Go-Live. We note that NGET, with the assistance of the STC Committee has started to develop STC change proposals. Draft documents are available on NGET's website.

Implementation

7.58 We have considered how and when changes proposed should take effect, particularly with respect to the transition between the introduction of changes at Go Active and the full implementation of the regime at Go-Live. This period is known as the Implementation Period.

7.59 We expect that parties will be required to undertake a number of activities during the implementation period. These will include:

- activities that need to be completed before Go-Live
- expected interactions between Parties
- a timetable for each activity, and
- the rights and obligations that can be placed on Parties to enable them to undertake activities in the implementation period.

7.60 The activities we expect each party to undertake are set out in the table below, the Offshore Implementation Plan. This Plan is a working document and will be developed as we move towards the Implementation Period. The Offshore Implementation Plan will be published on Ofgem and DECC's website and updated as appropriate.

Implementation of the Offshore Transmission Regime – Offshore Implementation Plan

7.61 SoS action will make changes to standard framework documents at Go-Active, extending these documents offshore. However, extended and revised obligations will not fully take effect until Go-Live as offshore electricity transmission will not be prohibited without a licence before that date.

7.62 This table summarises the activities that we expect will need to begin before Go-Live and the time that those activities will be needed from/by.

Relevant Party	Relevant Activity	Timetable	Relevant Obligation
Ofgem	RAV Assessment for qualifying projects - preparatory work for initial tender process round	Ex-ante assessment before Go-Active	Within scope of offshore transmission project for transitional projects
	Tender process	From Go-Active	Tender Regulations (dependent on commencement of s.92 of EA2004)
	Ex post RAV assessment	From completion of assets to form an offshore transmission system	Within scope of offshore transmission project for transitional projects
	Define terms of transfer (if offshore generator and OFTO fail to agree)	From selection of preferred bidder + [X] months	Property Transfer Scheme
	Agree terms of OFTO licences	From selection of preferred bidder until award of OFTO licence	Within scope of offshore transmission project for transitional projects
	Award OFTO licences	To be effective from Go-Live (for date required by specific projects)	Section 6 of the Electricity Act
	Require parties (DNOs and, in some cases, GBSO) with existing contracts with 132kV connected offshore generators to offer to put in place replacement contracts	From Go-Active	CUSC Section 6 (notification from DNO or GBSO)
	Dispute resolution - determination (initial stage GBSO contract with offshore generator)	From offer of replacement agreements (Go-Active + 6 months)	Standard condition C9 of the transmission licence
	Dispute resolution - determination (DNO contract with GBSO)	From offer of replacement agreements (Go-Active + 6 months)	Standard condition 7 of the electricity distribution licence
	Dispute resolution - determination (agreement to vary GBSO contract with offshore generator)	From offer of replacement agreements (Go-Active + 6 months)	Standard condition C9 of the transmission licence
Dispute resolution - determination (GBSO contract with OFTO - new contract)	From offer of replacement agreements (Go-Active + 6 months)	Section H of the STC	

Relevant Party	Relevant Activity	Timetable	Relevant Obligation
Ofgem (continued from previous page)	Decisions on derogation requests (in respect of offshore transmission system related compliance issues)	From receipt of requests - minded to decisions from Go-Active (derogations need to be effective from Go-Live)	Standard conditions E13 (STC) and E16 (GB SQSS) of the electricity transmission licence
	Decision maker for changes proposed under normal governance to standard framework documents	From Go-Active	Standard conditions B12 (STC), C17 and D3 (GB SQSS), C14 (Grid Code), C3 (BSC), C10 (CUSC), C5 (Use of system charging methodology) and C6 (Connection charging methodology) of the transmission licence and standard conditions 22 (DCUSA) and 21 (Distribution Code) of the electricity distribution licence.
Ofgem/DECC	Review standard framework to assess compatibility with changing scope of offshore generator projects and identify any further changes appropriate for offshore transmission regime	From Go-Active with public statement 6 months after Go-Active	Section 90 of Energy Act 2004 (EA04)
	Develop proposals for any changes needed to the transmission licence or industry codes for offshore transmission regime that are not appropriate to manage via normal governance	From Go-Active until decisions are designated	Section 90 of Energy Act 2004 (EA04)
DECC	Further designation decisions - changes needed to the transmission licence or industry codes for offshore transmission regime that are not appropriate to manage via normal governance	Up to 18 months from Go-Active	Section 90 of Energy Act 2004 (EA04)
Generator	Enter into replacement bilateral agreements with GBSO	By Go-Active + 6 months	Tender Regulations (dependent on commencement of s.92 of EA2004)
	Agree arrangements to terminate existing contracts not compatible with offshore transmission regime	By Go-Active + 6 months	Requirement of replacement contracts offered by GBSO
	Submission of information for RAV assessments	Pre Go-Active	Specific information requests issued
	Offer terms for transfer of assets (transitional projects)	Pre Go-Active	Tender Regulations (dependent on commencement of s.92 of EA2004)

Relevant Party	Relevant Activity	Timetable	Relevant Obligation
Generator (continued from previous page)	Provide information to Ofgem for use in tender process	Before Go-Active and during tender process	Requirement defined in Tender Regulations (dependent on commencement of s.92 of EA2004)
	Accede to CUSC and BSC (if not already a party)	By time offer of replacement agreement is accepted	Requirement of replacement contracts offered by GBSO
	Set up trading interface with Elexon	By Go-Active + 9 months	In accordance with BSC Registration process
	Set up operational interfaces with GBSO	To be effective by Go-Live (including time for testing) or by later time (reflect project-specific requirements)	Requirement of contract with GBSO
	Demonstrate compliance with technical capability requirements defined in the Grid Code	Needs to satisfy GBSO before generator can export onto GB transmission system	Requirement of contract with GBSO
	For new projects, apply to GBSO for connection to GB transmission system for an offshore connection point (for new schemes this is recommended due to construction lead times)	From Go-Active	Standard condition C8 of the transmission licence defines generator right to an offer of terms from GBSO.
Offshore Transmission Owner	Submit information (pre-qualification questionnaire, invitation to tender and best and final offer) to tender process	From Go-Active - tender-specific timetable defined by Ofgem	Requirements defined in Tender Regulations (dependent on commencement of s.92 of EA2004)
	Nominate representatives for Grid Code Review Panel (GCRP) and STC Committee (reps do not have to be an OFTO provided nomination is supported by OFTOs)	Before Go-Active (preferable)	Promote opportunity - invite nominations to code owners from prospective OFTOs in March document
	Preferred bidders apply to accede to STC	Within [A] days of becoming preferred bidder	Tender Regulations (dependent on commencement of s.92 of EA2004)
	Preferred bidders offer to enter into OFTO Construction Agreement with GBSO	Within timetable to be defined in STC	Section D Part Two STC
	Preferred bidders enter into OFTO Construction Agreements with GBSO	Within timetable to be defined in STC	Section D Part Two STC
	Agree terms with offshore generators for transfer of assets (for transitional projects)	After preferred bidder is announced	Commercial agreement between offshore generator and OFTO
	Enter into interface agreement with offshore generator (site sharing and access arrangements)	Within timetable defined in STC and CUSC	Section C Part Three STC

Relevant Party	Relevant Activity	Timetable	Relevant Obligation
Offshore Transmission Owner (continued from previous page)	Enter into transmission interface agreement with onshore transmission licensee (site sharing and access arrangements)	In accordance with STC	Section C Part Three STC
	Provide GBSO with information required under STC (data required for SYS, services capability specification as defined in STC)	In accordance with STC	Section C Part One STC (Services Capability Specification)
	Set up operational interfaces with GBSO	As defined in STC party entry process	Section Part B 3.2 STC
	Set up operational interfaces with transmission licensee or distribution licensee	As required by OFTO Construction Agreement	Section D Part 1 (2.7 for transmission licensee) and (2.8 for DNO) STC
	Set up operational interface with offshore generator	To be effective by Go-Live (including time for testing) or by later time (reflect project-specific requirements)	Section D Part 2 (15.1.1) STC
DNO	Facilitate transfer of agreements with offshore generators to GBSO as required for offshore transmission regime	Share information with GBSO before Go-Active (preferable)	Section 6 CUSC
	Offer to enter into DCUSA bilateral agreements with GBSO	By GBSO application+ 3 months	Standard condition 12 of the electricity distribution licence
	Enter into agreement with GBSO	By GBSO application+ 6 months	Standard condition 12 of the electricity distribution licence
	Agree arrangements to terminate existing contracts not compatible with offshore transmission regime	By Go-Active + 6 months	Requirement of contract with GBSO
GBSO	Offer to enter into contractual agreements with offshore generators	By Go-Active + 3 months	Standard condition C8 of the transmission licence defines generator right to an offer of terms from GBSO.
	Enter into contractual agreements with offshore generators and DNOs	By Go-Active + 6 months	Standard condition C8 of the transmission licence
	Submit NGET Construction Application to preferred bidder	Following preferred bidder's accession to the STC	Section D Part Two STC
	Enter into contractual agreements with OFTOs for provision of transmission services	Within timetable to be defined in STC	Section D Part Two STC
	Set up operational interfaces with offshore generators	Before Go-Live (including time for testing)	Requirement of contract with offshore generator

Relevant Party	Relevant Activity	Timetable	Relevant Obligation
GBSO (continued from previous page)	Set up operational interfaces with DNOs for embedded transmission connection points	Before Go-Live (including time for testing)	Requirement of contract with DNO
	Set up operational interfaces with OFTOs	Before Go-Live (including time for testing)	Requirement of contract with OFTO
	Provide information (and assistance by responding to queries) to tender process	Before Go-Active and throughout tender process	New standard condition C25 of transmission licence
	Enter into transmission interface agreement with OFTOs	Within timetable to be defined in STC	Requirement of contract with OFTO
	Develop SYS publication to extend to offshore areas	Pre Go-Active	Standard condition C11 of the transmission licence
	Reflect new contractual parties when procuring balancing services for use after Go-Live	To be confirmed	Requirement under relevant documents
	Update operational systems to include offshore networks (e.g. control room info)	To be effective by Go-Live (including time for testing) or by later time (reflect project-specific requirements)	Requirement under relevant documents
	Development of IS systems	To be effective by Go-Live (including time for testing)	Requirement under relevant documents
	Transmission network use of system charging methodology in place that takes account of offshore	Before Go-Live	Standard condition C5 of the transmission licence
Publication of charging statement including offshore charges	2010	Standard condition C4 of the transmission licence	
Code Owners and Associated Panels	Extend governance arrangements to take on extended scope of codes	From Go-Active	Standard conditions B12 (STC), C17 and D3 (GB SQSS), C14 (Grid Code), C3 (BSC) and C10 (CUSC) of the transmission licence and standard conditions 22 (DCUSA) and 21 (Distribution Code) of the electricity distribution licence. Governance arrangements defined in each code.
	Facilitate accession of new offshore parties	From Go-Active	CUSC and BSC (offshore generators) and STC (OFTOs)
	Facilitate election and appointment of OFTO representatives for GCRP and STC Committee	Pre Go-Active	Grid Code General Conditions (and Constitution and Rules) and Section B of the STC

QUESTIONS

Question 4.

We would welcome comments on the activities identified in the Offshore Implementation Plan and feedback on any activities that should be undertaken in the Implementation Period that are not included in the Offshore Implementation Plan.

Question 5.

We would also welcome nominations for representatives for the Grid Code Review Panel (GCRP) and the STC Committee from prospective OFTOs. Please note that representatives do not have to be an OFTO, provided the nomination is supported by OFTOs. Nominations should be sent to the Secretary, whose contact details can be found on the relevant Committee pages on NGETs website www.nationalgrid.com/uk/Electricity/Codes

Question 6.

We propose that the Secretary of State makes the changes set out in the annexes to this consultation, subject to evidence to the contrary. We would welcome respondents' views.

- 7.63 We have provided change proposals for the relevant documents that are intended to enable industry participants to undertake the activities identified as being relevant during the implementation period in Annex 10.

IN SUMMARY THE CHANGES WE ARE PROPOSING ARE:

Transmission Licence

- Introduce new terms to condition A1.
- Update condition B12 to require the licensee to comply with any direction from the Secretary of State to amend the STC.
- Update condition C3 to require the licensee to comply with any direction from the Secretary of State to amend the BSC.
- Amend Condition C8 to require the licensee (NGET) to enter into contractual agreements with offshore generators.
- Update condition C10 to require the licensee to comply with any direction from the Secretary of State to amend the CUSC.
- Update condition C14 to require the licensee to comply with any direction from the Secretary of State to amend the Grid Code.

CUSC

- Amend section 6 to require the distribution network operator to provide the GBSO with information relating to any relevant agreement with an existing offshore generator.
- Amend section 6 to require the GBSO to make a modification to a relevant agreement to meet the requirement of the Offshore Implementation Plan.
- Introduce new terms to Section 11

Distribution Code

- Introduce new terms to DRC.
- Amend DPC 8 to require the DNO to comply with its obligations under Section 6 of the CUSC, in relation to implementation.
- Amend DPC 8 to require an existing offshore generator to cooperate with the DNO to facilitate the timely completion of the Offshore Implementation Plan.

NEXT STEPS

7.64 Section 90 of the Energy Act 2004 provides for the Secretary of State to modify the transmission and distribution licence and the relevant documents to be exercised up to 18 months from the commencement of that section.

8 NOVEMBER CONSULTATION – QUESTION BY QUESTION ANALYSIS

CHAPTER SUMMARY

- This chapter provides more details on the responses received to Ofgem/DECC's November 2008 Policy Update. It follows the same structure as the questions asked in that document. We have also included comments made by respondents not in direct response to a question. This chapter also contains (in bold) our response to points made, where appropriate, or cross-references to where the issue is covered in other parts of this document or in Ofgem's tender consultation document.

- 8.1 The November 2008 Policy Update asked a number of specific questions, replicated in this summary chapter, about the design of the regime, the OFTO of last resort proposals, and the drafting of the codes and licences. In addition to providing comments in these areas, some respondents took the opportunity to provide views of a more general nature or on the tender process which is covered in a separate Ofgem consultation process.
- 8.2 There were 16 respondents to the November 2008 Policy Update. Responses were generally positive towards the proposals and expressed a desire to make the new regime as effective as possible. There were a number of constructive comments on the detail of the regime, suggestions for improvement, and requests for clarification.

General Views Not in Response to Specific Questions in the November 2008 Policy Update

Strategic investment in offshore grid

- 8.3 Nine respondents expressed views on the interaction between our proposed approach and strategic investment in the offshore grid. Respondents welcomed the explanation contained in the November 2008 Policy Update of how the new regime would help deliver future investment and coordination in the offshore grid. One respondent particularly welcomed the proposed flexibility in the regime and asked for further details on how this would be used to manage the strategic connection of Round 3.
- 8.4 Five respondents felt that the arrangements would need careful management to ensure that efficient integration of offshore projects was delivered.
- 8.5 **Chapter 4 covers the issue of co-ordinated network development.**

Investment in onshore grid

- 8.6 One respondent sought reassurance that current planned investment in the onshore grid will provide adequate transmission capacity for future offshore wind and other forms of electricity generation.
- 8.7 **Chapter 4 provides further information on onshore grid developments.**

Overall policy approach

- 8.8 Seven respondents provided views on the overall approach to the new regime. One respondent explicitly gave its support for the competitive approach and the flexibility in our proposals.
- 8.9 Two respondents felt that a single OFTO should be responsible for a geographical area (each Round 3 development zone defined by The Crown Estate).
- 8.10 One respondent called for the option under the enduring regime for developers to design, tender and construct the transmission assets and transfer them to the OFTO after completion.
- 8.11 Three respondents advocated allowing NGET to build the offshore network in a similar manner to onshore arrangements in England and Wales.
- 8.12 **Chapters 3 and 4 provide the rationale for the approach we are proposing.**

Definition of offshore transmission at 132kV and above

- 8.13 Five respondents raised some concerns about the costs of transferring existing licence-exempt embedded projects to the new regime. Three of these respondents suggested an ongoing exemption from the new regime for existing projects conveying at 132kV.
- 8.14 **Chapter 7 provides details on the approach to existing 132kV connected licence-exempt offshore generation projects.**

Costs and complexity

- 8.15 Five respondents raised concerns about the possible cost and complexity of the proposed regime. One of these felt that the full benefits of the new regime would be in the longer rather than the short term. Three others requested greater certainty and less complexity particularly on proposals relating to connection application and tendering processes.
- 8.16 **Chapter 6 and Ofgem's tender consultation document provide further clarity and details on proposals for the regulatory regime and tender process. The impact assessment accompanying this document sets out further details on costs and benefits of our proposals.**

Review of the regime

- 8.17 Two respondents requested a review of the proposals before implementation of the regime to ensure that they will deliver the anticipated benefits.
- 8.18 **We will consider our proposals in the light of responses to this consultation and other engagement with stakeholders ahead of Go-Active. We then intend to monitor the effectiveness of the new regime to ensure it is delivering the anticipated benefits.**

Offshore transmission networks and supergrids

- 8.19 One respondent advocated ensuring that the tendered offshore transmission assets can form part of any future larger, but unknown offshore grid. Another asked if the development of tender process proposals had taken account of the need for interaction with any potential offshore supergrid.
- 8.20 **We believe that our proposed regime and tender process has the flexibility to accommodate any such developments should they be realised.**

EU Unbundling

General comments

- 8.21 Eight respondents provided general comments on EU unbundling and its potential impact on the offshore transmission regime. Three respondents requested further clarification and explanation of the issue as the proposals developed. Two respondents felt that the proposals would not necessarily prevent generators acting as OFTOs, provided suitable business separation arrangements were implemented in line with the Directive. There was a difference of opinion as to how much change this would involve for existing onshore TOs in Scotland.
- 8.22 One respondent felt that changing the definition of offshore transmission to above 132kV for Rounds 1 and 2 projects would negate the need to comply with any unbundling requirements for these projects. One respondent suggested that generators be allowed to bid to become OFTOs provided they divested by the time the directive is implemented in the UK. Finally, one respondent suggested that should the generator (or any affiliate) not be allowed to bid, this would provide the opportunity for greater generator involvement in the tender process.
- 8.23 **Chapter 5 covers the issue of the EU Third Package and unbundling.**

We seek respondents' views as to our revised approach to the OFTO of last resort mechanism

- 8.24 Eight respondents commented on the revised OFTO of last resort approach.
- 8.25 Support remains for an OFTO of last resort mechanism. There were several requests for clarity, including the possibility of publishing a guidance note on how the process will operate.
- 8.26 One respondent felt that if the requirements for an OFTO of last resort were substantially less onerous than in the initial tender process, then there might be a perverse incentive for TOs to bypass the tender process.
- 8.27 One respondent felt that exempting transitional projects from the new regime would negate the need for such an OFTO of last resort mechanism. The developer would act as an OFTO until one could be appointed under a new tender.
- 8.28 Two respondents thought that the Third Package could allow the generator to become the OFTO of last resort as per previous proposals.
- 8.29 Two respondents considered that directing a small OFTO to become the OFTO of last resort for a large offshore project could impose a significant burden on such an OFTO and may deter investors for the original project if they felt they may be entering into as yet unknown further commitments. They called for Ofgem to carefully consider the criteria for selecting the 'directed' OFTO or go further and give assurances to potential OFTOs up front that they would not be called upon to act as OFTO of last resort against their wishes.

8.30 **Chapter 6 provides updated proposals on an OFTO of last resort mechanism.**

Does the drafting of the OFTO of last resort licence condition reflect our updated policy?

8.31 Three respondents felt that the draft licence conditions reflected the updated policy.

Design of the Regulatory Regime

What are your views on the proposed options for extending or retendering licences at the end of the 20-year revenue stream?

8.32 Seven respondents provided comments on the proposals. The comments were generally supportive of the flexible approach proposed.

8.33 Three respondents queried what would happen in the event that the incumbent OFTO did not wish to continue. One respondent requested clarity on whether at the end of the revenue stream, the incumbent OFTO would receive/retain any value from the transmission assets. **Under this scenario we would envisage a retender taking place.**

8.34 One respondent requested clarity on whether at the end of the revenue stream, the incumbent OFTO would receive/retain any value from the transmission assets. **We can confirm that the assets would be owned by the OFTO.**

8.35 One respondent asked for Ofgem to publish the criteria that the Authority will use to determine whether to extend a revenue stream or retender and suggested that the amount of further time that the generator wants the connection for should be a criterion. **The Authority will take into account a number of factors in deciding the approach to the ongoing regulation of the connection. We set out in the November 2008 Policy Update that ongoing demand for connection would be a key consideration in this decision. This consideration would encompass the amount of further time a generator wished to be connected for. The Authority will not decide now whether to publish the precise criteria given the length of time before any such decisions will be made.**

8.36 It was also suggested that the 20% threshold for retendering be index linked. **We can confirm that the threshold will be calculated in real terms.**

8.37 One respondent suggested that, as a first step at the end of the revenue stream, the incumbent OFTO have the opportunity to submit a bid for extending the revenue stream which, if acceptable to the generator and the Authority, would avoid a retender. **We believe the proposals for extension and retendering as set out in the November 2008 Policy Update will ensure the most cost-effective solution.**

Revenue adjustments – should the regulated revenue stream be adjusted and, if so, how should this be designed?

Indexation and adjustment to the revenue stream - Do you have comments on our proposals in respect of inflation; refinancing; and business rates and licence fees?

8.38 These two questions are addressed below.

Inflation

One respondent argued for full indexation of the revenue stream. One respondent felt that only the capital expenditure should be indexed while another supported indexation for operational expenditure only. One respondent advocated indexation of 'known unknowns' outside of the OFTOs control such as business rates and licence fees. One respondent supported indexation but suggested it be down to each bidder to decide what part of the revenue would be indexed in its bid in accordance with its sources of finance.

The issue of indexation of the revenue stream is covered in Chapter 6.

Refinancing

One respondent felt that a minimum of the proposed 50% share of refinancing gains should go to the OFTO while another respondent argued that this should be the maximum proportion to go to the OFTO. Two others felt there should be no sharing of refinancing gains as this would be complex and would be factored into higher bids. One asked whether refinancing losses would also be shared. One respondent advocated the tender process taking place during construction (by the generator) which would avoid the need to factor in post-construction refinancing gains.

Refinancing is covered in Chapter 6.

Business rates and licence fees

Two respondents agreed with the proposal that these be treated as pass-through items.

Miscellaneous

8.39 One respondent agreed with the proposal for insurance costs not to be a pass-through item, believing that there was scope for OFTOs to manage insurance costs generally. However, there may be some insurance cost increases beyond the control of the OFTO which should be treated as an 'unknown unknown' with Ofgem explicitly stating that this would be a potential re-opener. One respondent felt that due to volatility of insurance premiums, these should be treated as 'known unknowns'. **We continue to propose that insurance costs will not be included as a pass through item.**

8.40 One respondent felt that not predefining 'unknown unknowns' would reduce certainty over the level of the revenue stream and increase risk for generators. Two respondents argued that not predefining 'unknown unknowns' would place the OFTO at greater risk as it may not be able to get reasonably priced insurance nor have the confidence that such events would trigger a re-opener. This would lead to higher priced bids. **Chapter 6 covers our proposed approach to 'unknown unknowns'.**

- 8.41 One respondent suggested that a re-opener should be triggered when reasonably procured insurance products prove ineffective or prohibitively expensive and that this should be explicitly provided for in OFTO licences. One respondent supported treating re-openers on a case-by-case basis and suggested that Ofgem set a minimum value for such re-openers and that both the OFTO and the generator should be able to request a re-opener. **We continue to propose that reopeners will be treated on a case by case basis, but we do not propose setting a threshold.**
- 8.42 One respondent felt that, as onshore, OFTOs should be able to recover costs associated with code changes. **This point is covered in Chapter 6.**

What are your views on a possible delivery incentive for onshore TO/DNOs?

- 8.43 Opinion was divided on whether there should be a delivery incentive for the onshore TO/DNOs whereby late delivery would result in liquidated damages being paid to the OFTO. Some argued that onshore TOs already had a commercial incentive to complete works on time in that their price controls would not be adjusted until work was completed and that events beyond their control might result in delays. However, others felt that an OFTO should receive compensation for lost revenue when the cause is beyond its control. **This issue is covered in Chapter 6.**

Delivery incentive for OFTOs

- 8.44 Five respondents supported the proposal not to have a delivery incentive on OFTOs. One respondent questioned whether the liquidated damages proposals in the STC for late delivery by an OFTO contradicted this proposal. **This issue is covered in Chapter 6.**

How can our detailed proposal on the availability incentive be further refined and improved?

- 8.45 There was general support for the use of incentives but a number of the eight respondents who commented on this area had comments and concerns on the details.

Target availability

- 8.46 One respondent explicitly supported the 98% target and another supported the proposal for flexibility on a project-by-project basis. Two respondents expressed doubt about the comparability of the availability of offshore transmission connections and the three interconnectors mentioned in the November 2008 Policy Update. They felt a lower target would be more appropriate to reflect the need to access offshore substations and the lack of historical data.
- 8.47 One respondent felt that target availability should be lower in the early and later years of the revenue stream to reflect that expected availability/performance of the assets would be lower. One respondent argued that by excluding planned maintenance of the transmission assets, the target could be raised to 100%. It also felt that the period of a year for each incentive period was too long. One respondent felt the initial availability target should be higher than the proposed default availability target of 98%.

8.48 Two respondents felt that the target should be based on the annual GWh availability of the wind farm rather than on the period of availability.

8.49 **The availability target proposals are covered in Chapter 6.**

Banking mechanism

8.50 One respondent suggested an alternative mechanism. One felt that the proposed mechanism only worked for the banking of credits and not the carrying over of debits. One respondent also asked how the mechanism would work where the OFTO assets comprise transmission links to more than one offshore substation. **The mechanism is covered in Chapter 6.**

Exposure of revenues

8.51 One respondent felt the proposed 10% cap was appropriate. One respondent argued that the penalty cap should be higher and one felt it should be lower. Another suggested that the cap be removed and replaced with an obligation on OFTOs to take out business continuity insurance to cover the risk of a catastrophic failure. One felt the cap should be lower for those OFTOs able to demonstrate that they had taken measures to minimise the likelihood and impact of unavailability of assets. **Exposure of revenues is covered in Chapter 6.**

Maintenance of assets towards the end of the regulated revenue

8.52 One respondent felt that rather than the proposed Performance Bond, the OFTO's penalty cap could be raised in the last few years of the revenue stream to incentivise it to effectively manage the maintenance of the assets. Another thought the use of a Performance Bond in the later years could precipitate OFTOs abandoning projects where they had been underperforming before they are required to place a Performance Bond. **An updated proposal on a Performance Bond is in Chapter 6.**

How should Ofgem appropriately respond to persistent poor performance by the OFTO, and how should any revocation mechanism be designed?

8.53 Respondents felt that any revocation mechanism should be built around the need to ensure continuity of network availability for the generator. Two respondents stated that revocation should not occur until alternative arrangements have been made to allow the generator to continue conveying electricity. They suggested that this could be in the form of a temporary derogation for the generator to operate the transmission assets. Two respondents reiterated that revocation should be a last resort and that other steps such as allowing lenders' and investors' to exercise their step-in rights to resolve any persistent poor performance should be used first. **This issue is covered in Chapter 6.**

What are your views on our proposals to manage the risk of OFTO abandonment through the OFTO of Last Resort scheme and construction securities?

- 8.54 Respondents generally felt the risk was low and emphasised that the speed of action to ensure continuity was paramount. Concerns were expressed about the level of and mechanism for the proposed construction security.
- 8.55 One respondent felt the proposal for a security of 15-30% of expected construction costs excessive and suggested an initial level of 10%, while another felt 20% was suitable. Yet another felt the revised proposal set too low a level and was inconsistent with CUSC and Crown Estate lease security arrangements. Three respondents advocated the security reducing as construction milestones were reached. One respondent felt the security should relate to the cost of the activities it was securing rather than as a percentage of construction costs. There was also a request that Ofgem, rather than NGET, should hold the security, and for clarity on what the security would be used for. The use of a credit rating for deciding whether a construction security was necessary was also questioned. One respondent felt that the proposed measures were not necessary at all. **Updated proposals on abandonment and a construction security are in Chapter 6.**
- 8.56 Responses to the OFTO of Last Resort scheme are contained in the EU unbundling summary.

We invite views on whether security cover should be available to an OFTO in the event of a late payment by GBSO

- 8.57 Four respondents thought that such a requirement was not necessary on the grounds of low risk and cost of providing such security. **This issue is covered in Chapter 6.**

We would welcome views on Ofgem's proposal to introduce business separation obligations to NGET's transmission licence and at what stage such obligations should become effective.

- 8.58 All four respondents who commented on this issue agreed that business separation was essential. Two respondents proposed some further measures to ensure that any National Grid affiliated OFTO did not receive any commercial advantages. The two other respondents felt the provisions accurately reflected the policy proposal with one suggesting that such conditions should become effective at Go-Active. **Business separation proposals are covered in Chapter 6.**

OTHER ISSUES RAISED BY RESPONDENTS

8.59 Other issues raised by respondents are outlined below along with our response.

Duration of regulated revenue stream

8.60 Two respondents reiterated their view that a 20-year revenue stream was too short.

Incremental capacity increases

8.61 One respondent restated its view that the proposed 20% was a reasonable threshold. One respondent felt that costs associated with expanding the offshore network would likely exceed 20% in most cases. Another respondent too felt that 20% of initial capital cost was too low, unless it was indexed for inflation. **We can confirm that the 20% limit will be indexed. This issue is covered in Chapter 6.**

Decommissioning

8.62 One respondent expressed concern that the timing and level of commitments made by the generator in its decommissioning plan for transmission assets made prior to construction may not be suitable for a smaller OFTO to take on. **Any OFTO decommissioning plans would need to receive Secretary of State approval but would not necessarily have to be identical to the generator's original plans.**

8.63 One respondent suggested that the generator will be paying for OFTO decommissioning commitments for transmission assets via the revenue stream. If, at the end of the revenue stream, the assets are not decommissioned and a new OFTO is appointed, then the generator or new OFTO should receive credit from the original OFTO for avoided or deferred decommissioning costs. **Decommissioning obligations would remain with the OFTO. In the scenario above, the costs of the obligation would be factored into the arrangements at the end of the revenue stream.**

THE TENDER PROCESS PROPOSALS

Interaction with consents and sustainability/environmental assessments

8.64 One respondent felt that the need for OFTOs to apply for consents post licence award will result in project delays. One respondent requested that environmental considerations be given greater prominence in the tender process such as the proposed Marine Management Organisation having a role in the award of OFTO licences. There were also concerns about how an OFTO will abide by any future environmental cabling conditions. **We expect OFTOs to abide by environmental requirements and that this will not delay the process. We do not believe it appropriate for the proposed MMO to have such a role in the award of OFTO licences.**

Role of the generator in the tender process

- 8.65 One respondent suggested that the generator should have a greater role in the tender process if it, or its affiliate, are not bidding. **The proposed roles of all tender participants are set out in Ofgem's tender consultation document.**

Transitional projects

- 8.66 One respondent asked for greater clarity on which projects would qualify as transitional. This is covered in Ofgem's tender consultation document.

Timing of OFTO responsibility for transmission assets

- 8.67 One respondent requested clarity on when an OFTO would become responsible for the regulated assets.
- 8.68 **Ofgem has recently published the final consultation on the design of the tender process for identifying OFTOs. That document confirmed proposals that an OFTO licence would be granted to the preferred bidder identified through the competitive process once that party had satisfied a number of issues to the Authority's satisfaction, such as demonstrating its funding proposition is in place. Ofgem has also set out that, in respect of the transitional regime, the preferred bidder would also be required to enter into an agreement for the transfer of the transmission assets before the licence was granted.**

Tender process

- 8.69 One respondent reiterated previous concerns that OFTOs would not be able to make firm bids in the time available and the difficulty in making bids which would remain valid throughout the tender process given the time between a bid being made and an OFTO chosen.
- 8.70 One respondent reiterated its reservations about the complexity of the process, uncertainties which remain to be resolved, and how the tender process will be managed. One respondent expressed concerns that the tender process would not necessarily select the bid with the least environmental impacts. One respondent felt there would be difficulties in comparing bids on a level playing field when the range of technical solutions might be quite diverse. One respondent expressed concern about the potential timescales for selecting an OFTO and the resultant adverse impact on projects. **Ofgem's tender consultation document provides further details and clarity.**

Pool of potential OFTOs

- 8.71 Two respondents were concerned about the level of market interest in becoming an OFTO given the current conditions in financial markets, competing opportunities in this sector worldwide, and likely legislative constraints on developers being able to own transmission assets. **Our engagement with potential investors and OFTOs confirms that the long-term and low risk profile nature of the projects makes them an attractive investment proposition. This is covered in Chapter 4.**

OTHER ISSUES

Separation of transmission and generation assets

- 8.72 Three respondents expressed concerns about the complexity and cost of separating transmission and generation assets and two requested more guidance on how this separation could be achieved. One existing developer felt that the regime would impose additional costs due to the need to split the existing integrated generation/transmission design. **Analysis of the overall costs and benefits of the regulatory regime are in the accompanying impact assessment.**

Charging

- 8.73 Six respondents raised concerns about the potential adverse impact of offshore transmission charging proposals on the economics of offshore wind. **This is subject to a separate consultation process and an update is provided in Chapter 6.**

Standard Industry Framework

Standard conditions of the transmission licence

- 8.74 Two respondents asked for clarification of the proposed new term of 'incremental investment threshold'. **We have amended the drafting to remove this defined terms and explain in the context of the proposed OFTO obligation to offer terms to the GBSO (standard condition E17).**
- 8.75 One respondent asked for a definition of Renewable Energy Zone to be provided in the standard conditions. Respondents also provided detailed drafting comments on standard conditions. **These comments have been considered and the proposed changes to the standard conditions updated where relevant.**
- 8.76 Two respondents provided comments on the proposed changes to B17. **We have revised drafting of our change proposals to reflect the proposed change from GB transmission system to national electricity transmission system.**
- 8.77 Two respondents asked for additional clarity in respect of the proposed OFTO of last resort provisions. **We have developed our proposals for OFTO of last resort obligations in line with the description of the proposed approach included in [Chapter 6](#).**
- 8.78 One respondent suggested a further change to standard conditions C17, D3 and E16. This respondent considered that the standard conditions should refer to the GB SQSS as amended instead of to a specific version of that document. **We recognise that there is merit in considering such a change, but do not consider that such a change is necessary or appropriate for offshore transmission.**
- 8.79 One respondent noted that obligations equivalent to standard conditions B15, B16 and B17 had not been proposed for OFTOs. **We do not consider that it would be appropriate to define standard conditions for OFTOs at this stage. Ofgem proposes to consider defining, on a project-specific basis, necessary obligations as special conditions in each OFTO transmission licence.**

Balancing and Settlement Code (BSC)

- 8.80 Two respondents raised concern with the proposal for security requirements proposed for busbars forming part of an Offshore Transmission System, and the impact on the number of Balancing Mechanism Units a generator would be required to register under the BSC. **As discussed in Chapter 7 of this document, we have amended the proposed minimum security requirements for busbars on an offshore platform in the GB SQSS. We have reviewed the BSC change proposal in light of this change to the GB SQSS change proposal and do not consider that further changes are needed to the BSC.**
- 8.81 One respondent provided suggested changes for the treatment of licence-exempt offshore generators connected to an Embedded Transmission (ET) Offshore Transmission System⁴⁵. Another respondent was of the view that licence-exempt offshore generators connected to an ET Offshore Transmission System would continue to be treated as embedded generators. **Chapter 7 covers our approach to the treatment of offshore generators connected to an ET Offshore Transmission System.**
- 8.82 One respondent queried what work was being done on BSCPs. **Changes required to BSCPs will be considered through normal governance arrangements. Ofgem will ask ELEXON, as BSC Owner, to consider what changes are needed and to publish a programme of work on their website.**

CUSC

- 8.83 A number of respondents raised concerns with the termination clauses in section 2 of the CUSC and in the Offshore Construction Agreement (Schedule 2, Exhibit 3A). The proposed changes to these sections would have allowed NGET to terminate a connection agreement where the Authority confirmed that the tender process was not going ahead. **This issue is covered in Chapter 7.**
- 8.84 Two respondents were concerned at NGET's ability to amend a Connection Agreement once the OFTO had been appointed. **As set out in our November 2008 Policy Update, we have proposed a two-stage connection process. Further information on the two-stage connection process can be found in paragraph 4.15 of our November 2008 Policy Update. It is our intention that NGET would offer an offshore generator an agreement to vary bilateral agreements entered into at the initial stage to reflect changes to offshore works assumptions required following detailed design of the offshore transmission system once the OFTO has been identified.**
- 8.85 One respondent questioned the need for an offshore generator to hold Section 36 consents before entering the tender process. **We have further developed our intention with regards to the tender process. The need for the offshore generator to hold Section 36 consents before entering the tender process has been removed from the CUSC change proposal.**

45 An Offshore Transmission System connected to a Distribution System.

- 8.86 One respondent was of the view that the connection application should include the assumptions that NGET had made when considering the connection offer. **The CUSC change proposal has been updated to include this.**
- 8.87 One respondent noted that offers that had been ruled out by NGET when considering a connection application would be included in the data room and requested that these ruled-out options should be provided to the applicant before entering the data room. **NGET must provide an applicant with a connection offer within three months of receiving that application. These timescales do not provide for NGET to fully develop more than one option nor to provide details of all options considered as part of a connection offer. NGET has confirmed that it will be happy to discuss any of the options with the applicant once the offer has been made.**
- 8.88 One respondent was of the view that Clause 10 of the Bilateral Connection Agreement to clarify that the Maximum Export Capacity (MEC) may be less than Transmission Export Capacity (TEC) measured Offshore and that restrictions on availability should only bite when exports (less losses) exceed the MEC. **We have proposed that Appendix C of the Bilateral Connection Agreement (Schedule 2 Exhibit 1 of CUSC) shall set out each generator's TEC and the associated MEC that NGET has agreed with the distribution licensee, where the generator has chosen an embedded transmission connection point. We note that the GBSO will contract with a distribution licensee for connection to and use of the distribution system. When applying to the distribution licensee, the GBSO would need to specify the level of export capacity required as part of its application. We note that the size of an offshore transmission system and any associated connection to an onshore system (including to a distribution system) will reflect the Connection Entry Capacity (CEC)(s) and TEC(s) of the offshore generator(s) that will be connecting to that offshore transmission system. We also note that the relationship between TEC and MEC will vary on a project-specific basis and depending on the numbers of offshore generators connected to the offshore transmission system.**
- 8.89 One respondent asked why Recital B of the Construction Agreement (Schedule 2 Exhibit 3A) had been removed. **Recital B has been replaced with Recital E.**
- 8.90 One respondent suggested that NGET should begin seeking consents for works on the onshore transmission system before the OFTO has been appointed. **The completion date assumed by NGET in the Construction Agreement would assume that work on obtaining consent would not begin until the OFTO had been appointed. However, work on obtaining consents could begin earlier where NGET was of the view that an earlier start was needed or on agreement between NGET and the offshore generator.**
- 8.91 Two respondents noted the mismatch of liabilities between the CUSC (£5M) and DCUSA (£1M). **This is discussed in [Chapter 7](#).**

- 8.92 Two respondents did not agree with the proposal that an onshore transmission licensee should be liable to pay liquidated damages to an OFTO if an offshore transmission system cannot be completed due to late delivery by the onshore transmission licensee. **This is discussed in Chapter 7.**
- 8.93 A number of respondents provided detailed comments on the drafting of the CUSC. **These comments have been considered and the CUSC updated where relevant.**

Distribution Code

- 8.94 One respondent suggested that the Guide to the Distribution Code should be updated. **Section 90 of the Energy Act 2004 provides the Secretary of State with powers to amend the relevant documents. The Guide to the Distribution Code does not form part of that Code. Therefore, the Secretary of State does not have powers to make changes to the Guide to the Distribution Code. We note that changes to the Guide to the Distribution Code could be progressed under normal governance to reflect changes made by the Secretary of State as part of the proposed offshore transmission regime.**

DCUSA

- 8.95 One respondent was of the view that the DCUSA did not set out the implications for offshore generators connected to an ET Offshore Transmission System, particularly in terms of access restrictions that they may be subject to. **We note that there are differences between transmission and distribution access arrangements and that distribution access restrictions would be set out as part of a distribution connection agreement on a project-specific basis.**
- 8.96 One respondent was of the view that it may be necessary to include reference to the STC in Section 48 of DCUSA (Compliance with Codes). **We note that the references to CUSC and Grid Code are required due to the nature of some obligations relating to security of supply in emergency circumstances (e.g. black start). We do not consider that there is similar justification for the STC to take precedence over the DCUSA. As such, we can see no reason to include the STC in this section of DCUSA.**
- 8.97 One respondent questioned the applicability of guaranteed standards (section 49 of DCUSA) on the GBSO. **We have reviewed the ESPR (Electricity (Standards of Performance) Regulations 2005) legislation and sought guidance from the Chair of the DCUSA Panel. We are of the opinion that the GBSO as the Offshore Transmission System Operator (OTSO) Party should be required to compensate another network operator where damage results in a customer losing supply.**

- 8.98 One respondent asked why it was not a condition precedent that the OTSO hold a transmission licence. **OTSO is defined as the GBSO with GBSO being defined as a holder of the GB System Operator Licence⁴⁶. As such, we do not consider that an additional condition precedent is needed.**
- 8.99 One respondent believed it was necessary for the DNO to establish a contractual interface with the generator connected to an ET Offshore Transmission System. **The DCUSA does not preclude parties from entering into bilateral interface agreement with an OFTO if required by either party.**

Grid Code

- 8.100 One respondent considered the offshore ownership boundary to be fundamentally correct and would like the inclusion of ownership and control of the 33kV switchgear to be within the generator's remit. **We note the principles of ownership as defined in section 2.12 of the CUSC. We have not proposed different arrangements for offshore.**
- 8.101 One respondent suggested that the definition of Control Point should allow the generator to advise NGET of its preferred location. **We have not proposed different arrangements for offshore other than to reflect in the definition the proposed change to the definition of Large Power Station.**
- 8.102 One respondent noted the inclusion of new sections for offshore in Connection Conditions ('CC'), section 6. This respondent was of the opinion that power stations located offshore and connected by 132kV assets operating at below 132kV should be required to comply with the original obligations. **We consider that the change proposed for CC 3.3 of the Grid Code will maintain current arrangements that apply to offshore distribution connected generators.**
- 8.103 One respondent questioned the need for Small Power Stations to provide PNs, given the de-minimis nature of such stations (under 10MW), which, to be connected to the transmission system, must be part of a larger offshore development. **We note that PN information is relied on by the GBSO to operate the GB transmission system. We also note that all transmission connected parties are required to submit PNs to the GBSO.**

⁴⁶ The term 'GB System Operator Licence' has been changed to 'National Electricity Transmission System Operator Licence' in the relevant documents.

- 8.104 One respondent did not agree with the proposals for the Grid Code Review Panel (GCRP). This respondent was of the opinion that representative for Large Power Stations with total capacity of 3GW or less should be increased by two, which is comparable to the number of representatives for Large Power Stations with total capacity of 3GW or more. We note that under current arrangements, most offshore generators are classed as medium power stations with direct (via a contractual arrangement with the GBSO) or indirect (via the Distribution Code) obligations to comply with certain Grid Code obligations. **We note that there is one seat at the Grid Code Review Panel (GCRP) for a representative of generators (without large power stations). We do not consider that the change proposed to the Grid Code definition of Large Power Station will have a material effect on possible offshore generator representation at GCRP. We note that under the constitution and rules of GCRP, the GBSO seeks nominations for GCRP (members and alternates) on an annual basis and, if agreement cannot be reached in respect of GCRP representation for any category, then the issue would be referred to the Authority for a decision. We are not aware of any such issues that have needed resolution by the Authority.**
- 8.105 One respondent was of the view that fault ride-through requirements in the Grid Code should be combined with those placed on OFTOs via the STC so that generators and OFTOs can develop and agree the most appropriate solution. One respondent was of the view that the generator should have the choice between meeting requirements as for onshore generators or based on generic requirements. It noted concern with how OFTO networks will be treated where there is more than one generator connected. Two of these respondents believed there was a need to review the proposed fault ride-through requirements. One respondent was of the view that the characteristics of figure 5 in section CC6.3.15.2b) can be applied offshore. We note that the Grid Code subgroup considered frequency ride-through requirements and were in favour of the proposed new option for offshore generators. **We note that at the initial stage of developing the Grid Code change proposal, the GBSO consulted with Grid Code subgroup members. We understand that the new option is intended to be broadly equivalent to the current obligation but defined at an offshore boundary point.**
- 8.106 One respondent was of the view that a size threshold of 50MW for frequency response capability provision should not apply offshore and that all Offshore Large Power Stations should be required to provide frequency response capability. **We note that the justification for the Grid Code change proposals B/06 that introduce the threshold of 50MW in the Grid Code was that frequency is managed on a GB basis and that there was benefit in a clearly defined, fixed threshold across GB. We do not consider that justification has been presented for different treatment offshore.**
- 8.107 One respondent noted that the offshore regime does not provide for offshore connections that connect into a distribution system which in turn connects into an offshore transmission system and that 'offshore distribution' needs to be introduced by the Grid Code Review panel when the offshore regime has been introduced. **We note that the GBSO intends to progress this issue under normal governance arrangements in due course.**

- 8.108 One respondent suggested that the definition of 'System to generator operational intertripping scheme' should be reworded to become a 'transmission intertripping scheme'. **Ofgem has taken account of this comment in reaching its decision on Grid Code change proposal F/08. We recognise that there will be offshore generation projects with contractual agreements with NGET that specify system to generator operational intertripping requirements, which will need to be changed as part of the implementation of the proposed offshore transmission regime. We do not anticipate a need to reclassify contractual agreements between offshore generators and NGET for system to generator operational intertripping schemes as transmission intertripping schemes as a consequence of the implementation of the proposed offshore transmission regime.**
- 8.109 One respondent noted that the definitions within the Grid Code allowed for fully interconnected transmission systems but that consultations have been based on the presumption of radial connections from a single onshore connection point. **Proposed changes for the offshore regime have been developed with particular attention to radial connections, in line with current projects being progressed offshore. However, we do not consider that the proposed arrangements are limited to radial offshore connections and note the flexibility within proposed Grid Code requirements that are intended to accommodate a range of design options.**
- 8.110 One respondent was concerned that the SQSS did not define Power Quality but that this was the only design criteria set out in the Grid Code and that this could lead to adverse effects on other users and to disputes. It also noted that it was unclear whether demand criteria should include Power Quality, particularly where a single generator is connected. **We have amended our proposal for a new Appendix E to the Grid Code Planning Code to clarify power quality requirements in respect of an offshore transmission system.**
- 8.111 One respondent was of the view that statement in PC that all equipment in an offshore network must be fully compliant with IEC standards was overly restrictive and may lead to over-design in some networks. The respondent was of the view that this requirement was discriminatory as there was no such requirement onshore. One respondent noted that it was the responsibility of the OFTO to specify equipment standards under the STC. **We have amended our proposal to take account of this respondent's concern.**
- 8.112 One respondent noted that the figure CCA7.2.2.2(b) implies that sites are required to provide reactive capability when the network is operated both above and below statutory limits and that this was unnecessary and would lead to additional cost. It also noted that it has commented on this issue before and that its comments had not been addressed. **We note that we are not proposing changes to CCA7.2.2.2 (b). However the respondent is able to request a review under normal governance arrangements.**

- 8.113 One respondent was of the view that it may not be possible to meet zero reactive power transfer at the LV boundary within the specified tolerance at low to zero real MW outputs and that the use of separate reactive compensation does not appear economical. The same respondent noted that the requirement to control voltage is incumbent on the generator but that the Grid Code appears to allow some variation in the requirements, which can be defined in a Bilateral Agreement. It was of the view that there appears to be no means in the Grid Code to allow sharing of responsibility for overall voltage control between the OFTO and the generator. **We have sought clarification from the GBSO about the proposed requirement. The GBSO noted that there are a large number of wind turbine technologies available on the market with some form of reactive capability and that this proposal was supported by the Grid Code subgroup. We have amended the proposed Grid Code change to clarify that the 5% tolerance applies for the zero reactive power transfer requirement.**
- 8.114 A number of respondents provided detailed comments on the drafting of the Grid Code. One respondent provided feedback on consistency of terms used within the Grid Code. **These comments have been considered and the Grid Code updated where relevant.**

STC

- 8.115 One respondent noted that the draft TO Construction Agreement (TOCA) included the requirement for the OFTO to pay liquidated damages. **Liquidated damages are discussed in Chapter 7.**
- 8.116 The same respondent noted that the draft TOCA did not reflect the fixed price nature of the OFTO revenue stream. One respondent was of the view that TO final sums should include interest charges where the TOCA has been terminated **The treatment of OFTO costs is discussed in Chapter 6.**
- 8.117 One respondent raised a number of points on the proposed governance of the STC. It was of the view that NGET should not be eligible as an OFTO representative unless no other representatives could be found. It also noted that the STC representative appointment only applies to those Parties who are STC parties at 20 December each year and that this timing may exclude OFTO Parties appointed by the tender process by April 2010. The same respondent sought clarity on the STC Voting procedure, especially in relation to section B6.6 to 6.8 of the STC. **One respondent noted its approval with the proposed governance arrangements. We are proposing arrangements for OFTOs to be able to provide nominations for the STC Committee representatives and for OFTOs to elect representatives from those nominations. We do not consider that it is necessary to restrict any OFTO from providing or otherwise participating in the election process for the STC Committee representatives. We acknowledge that alternative arrangements would be needed initially and would need to form part of the implementation plan.**
- 8.118 One respondent was of the view that NGET's credit rating for construction securities was inappropriate and not defined in the STC. **We have proposed a new definition in the STC, based on the existing definition in the CUSC.**

- 8.119 One respondent was of the view that fault ride-through should be revised to permit solutions where the OFTO and the generator can agree that a solution can be provided and facilitated by the OFTO. We note that under the proposed arrangements, an offshore generator may discuss and agree construction details directly with NGET and an OFTO. **We do not consider that the proposed changes to the STC and Grid Code preclude the development of new technical solutions. However, we note that both STC and Grid Code have governance arrangements which provide opportunity for the development of obligations to reflect changes in technical solutions.**
- 8.120 One respondent noted that it expected the existing arrangements within the STC and the provision of Construction Planning Assumptions will ensure that Scottish TOs and DNOs can provide the necessary options analysis to ensure that an optimum design can be provided to the offshore user. One respondent noted that the OFTO will require data from the onshore TO to ensure the OFTO complies with the STC and the Grid Code in terms of Voltage Waveform Quality and that the preferred OFTO will need to provide the onshore TO Voltage Waveform Quality levels that result from appropriate addition of existing levels and incremental changes in OFTO design. **We have proposed to extend existing arrangements offshore wherever possible. We have also proposed additional rights for an OFTO to seek detailed information from NGET when preparing a TO Construction Offer.**
- 8.121 One respondent noted that the issue of liquidated damages has still to be resolved. One respondent was opposed to the proposal that the onshore TO pay the OFTO liquidated damages where the delay to the completion of an onshore system had an impact on the delivery of an offshore system. **Liquidated damages are discussed in [Chapter 7](#).**
- 8.122 One respondent was of the view that the proposals for financial securities (from late payment by the GBSO and from the OFTO construction costs) were unnecessary. **Our proposed approach to financial securities is set out in [Chapter 7](#).**
- 8.123 One respondent questioned the usefulness of development plans as each network will be a separate licence and there is a cap of 20% on any development. The proposed obligations only apply to OFTOs with an investment plan. **We acknowledge that this may be a limited subset of OFTOs but consider that it is a possible scenario given the broad scope of projects for which an OFTO may be sought.**
- 8.124 One respondent noted that the requirement that OFTO equipment in an offshore network must be fully compliant with IEC standards was overly restrictive and may lead to over-design in some networks. **This comment was also made regarding provisions within the Grid Code and is discussed under comments on the Grid Code.**
- 8.125 One respondent questioned the need for all offshore equipment to be of a suitable standard for a marine environment, especially where the equipment was located in an indoor room (e.g. switchgear). **We have amended our proposal to take account of this respondent's concerns.**

- 8.126 One respondent questioned why the calculations at Section D 2.3.3 and 2.3.4 were required. **We are aware that changes to an onshore system may trigger consequential changes to an offshore system. We consider that it would be appropriate for the costs of the changes to the offshore transmission system to be considered as part of the assessment of the onshore system change proposal and funded by the transmission licensee that triggers the unexpected works on the offshore transmission system.**
- 8.127 One respondent noted that section D item 3 did not contain wording to cater for planning boundary modifications for OFTO networks. **We note that Section D, Part Two, section 3 reflects the default arrangements for a user's boundary with the transmission system set out in section 2.12 of the CUSC. We are not proposing changes to the provisions in the CUSC to treat offshore differently and therefore do not consider that a different approach is required in the STC.**
- 8.128 One respondent was of the view that the amount of proposed construction securities was unclear and that, if the OFTO fails, then it will be the entire revenue stream and future access for the generator that is lost. **Our proposals in relation to Constructions Securities are set out in [Chapter 6](#).**
- 8.129 One respondent called for a fundamental review of the approach to reactive power compensation. **Our proposed approach to the treatment of OFTO provided reactive power is set out in [Chapter 7](#).**
- 8.130 A number of respondents provided detailed comments on the drafting of the STC. **These comments have been considered and the STC updated where relevant.**

SQSS

- 8.131 Five respondents were of the view that the proposed security requirements for busbars forming part of an Offshore Transmission System were unnecessary. **We discuss this issue in [Chapter 7](#) of this document.**
- 8.132 One respondent was of the view that the limitations of the cost benefit analysis on the connection criteria applicable to an offshore transmission system have not been adequately reflected and that the limits of applicability of the offshore parts of the GB SQSS should be extended accordingly to reflect this. One respondent was of the view that the application of MITS criteria to the OFTO network would only be applicable if the network was designed to parallel the busbars. One respondent noted that interconnected offshore systems are subject to the same criteria as onshore systems but that no cost benefit analysis justifying this had been carried out. **We note that this proposal reflects the recommendation of the GB SQSS subgroup and was a pragmatic approach pending a fuller review. We note that the GB SQSS Review Group has initiated a fundamental review and that includes fuller consideration of security criteria for offshore transmission systems.**

- 8.133 One respondent was of the view that the issue of Offshore Power Station Demand had not been addressed regarding the need for backfeed from the transmission system. One respondent supported the proposal that there should be demand connection criteria offshore and that these should cover, in the short term, demand by the OFTO network and any demand required by the generator. This respondent was also of the view that the deterministic criteria applied to demand in excess of 1MW may drive design of the entire OFTO network and that this seemed perverse. One respondent sought clarity on the wording of section 8.10. **We have proposed minimum security criteria for the GB SQSS but also note that a customer is able to request connection arrangements to a higher standard of security. We have also proposed changes to the CUSC that would require an offshore generator to provide back-up supplies at an offshore platform if there was not redundancy in the offshore transmission system.**
- 8.134 One respondent was of the view that the statement at Section 1.17 of the GB SQSS that 'offshore generators' circuits must be at a voltage level of 132kV' is inconsistent with the policy decision to allow customer choice. Another respondent was of the view that the proposed wording in section 1.17 represented a fundamental change in the interpretation of the location of the offshore interface point and that this wording should be amended to allow the OFTO the choice between HV or LV connection points and should not be dictated by the GB SQSS. **We have amended the drafting to improve consistency with principles of ownership defined in the CUSC.**
- 8.135 One respondent was of the view that the reactive power compensation proposals were discriminatory when compared to onshore. **Our proposed approach to reactive power compensation is set out in [Chapter 7](#).**
- 8.136 One respondent was of the view that the means by which reactive power limits can be selected as anything other than zero is unclear and that the presumption that the transfer will be zero may lead to under-use of the generator reactive capabilities and over design of the OFTO network. **We note that the GBSO coordinates the provision of reactive power services for the GB transmission system. We have proposed that this role will extend offshore.**
- 8.137 One respondent was of the view that design variations in transitional projects should be treated as a legacy rather than a design variation. **We recognise that the Authority would have powers to grant derogations from GB SQSS to OFTOs once the proposed offshore transmission regime has been implemented. We have advised developers of transitional projects that Ofgem is willing to consider derogation requests before Go-Active.**
- 8.138 One respondent was of the view that section 7.8.1 should be amended to cater for multiple connections using different technologies at a single offshore substation. **We note that there are a number of possible combinations that may arise. Therefore, in line with onshore guidance, the interpretation of the applicable criteria in section 7 has been proposed in section 1.**

- 8.139 One respondent was of the view that the GB SQSS required that all offshore connections of 120MW or more must be connected by at least two circuits rated each of 50% of the connection capacity and that this was major change from the original GB SQSS subgroup proposals which allowed up to 1500MW of capacity on a single circuit. **We note that the proposed 120MW threshold applies to transformers forming part of an offshore transmission system. We note that the threshold recommended by the GB SQSS subgroup applied to cable circuits forming part of an offshore transmission system.**
- 8.140 One respondent noted that there were no voltage step limits analogous to those applicable onshore defined in the GB SQSS and that it was not obvious if these requirements were applied elsewhere e.g. in the Grid Code and that confirmation of the position by Ofgem and NGET was required. **The Grid Code and STC have been amended.**
- 8.141 A number of respondents provided detailed comments on the drafting and formatting of the SQSS. **These comments have been considered and the SQSS updated where relevant.**

9 WHAT HAPPENS NEXT?

CHAPTER SUMMARY

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

HIGH LEVEL MILESTONES

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

23 MARCH 2009

Publication of this Government response as the final consultation in developing the offshore transmission regulatory regime.

7 April 2009

DECC/Ofgem external communication session.

May 2009

Commencement of section 92 of EA2004 and section 44 (1) and (2) of EA2008 to enable the Authority to make regulations to enable the first round of tenders to begin shortly after 'Go Active'.

Early June 2009

DECC/Ofgem statement on changes to proposals following this final consultation.

24 June 2009

'Go-Active' commencement of sections 90 and 91 of EA2004.

Summer 2009

First tenders commence.

June 2010

'Go-Live'⁴⁷ commencement of sections 89 and 180 of EA2004 and section 44(3) of EA2008.

47 Go-Live is expected to be one year after the Go-Active date.

IMPLEMENTATION OF CHANGES TO LICENCES AND CODES

- The Government will implement those changes to the standard licence conditions and industry codes that it considers appropriate for purposes connected with the offshore transmission regime by commencing section 90 of the Energy Act 2004.
- Under Section 90, the Secretary of State will be able to establish the obligations that will be common to each offshore transmission licensee, modify the standard conditions reflecting obligations on the GBSO and modify codes and agreements to reflect any changes he considers appropriate for purposes connected with offshore transmission.
- Following the consultation process, the Government will commence section 90 of the Energy Act 2004 to enable the Secretary of State to make the appropriate modifications to the existing standard licence conditions of transmission and distribution companies and amend the industry codes.

EXTENSION OF THE GBSO ROLE OFFSHORE

- The Government will extend the role of the GBSO offshore by making appropriate modifications under section 91 of the Energy Act 2004.
- Section 91 allows the Secretary of State to modify the 'coordination licence' for the purpose of applying a system operator's authorisation and licence conditions in relation to the transmission of electricity in specified offshore areas. Such modification may include modifications to the licence and conditions which the Secretary of State considers appropriate for incidental, consequential or transitional purposes. It also enables the Secretary of State to make, for incidental or consequential purposes in relation to that main purpose, modifications of a particular licence or modifications of the SLCs of any type. In practice, this allows the terms and conditions of NGET's licence to be modified such that its functions as GBSO will cover all onshore and offshore transmission networks. Section 91 powers may also be used to make incidental, consequential or transitional modifications to licence conditions, including SLCs.

IMPLEMENTATION OF THE TENDER REGULATIONS

- The Government will introduce the powers to the Authority by commencing section 92 of the Energy Act 2004, alongside any changes resulting from the Energy Act 2008. This will allow the Authority (subject to Secretary of State approval) to make tender regulations to implement the tender process for selecting to whom to grant offshore transmission licences. Before implementing the tender process, we expect to adopt the following process:
 - The commencement of section 92 of the Energy Act 2004;
 - Tender Regulations being submitted to the Secretary of State for approval;
 - Implementation of the tender process once the regulations take effect;
 - Ofgem will be engaging with transitional projects to help ensure that tender exercises can begin as close as possible to the Go-Active date; and
 - Ofgem will be organising resources for tender teams and developing internal governance procedures to ensure that they are fully prepared for Go-Active.

NGET

- NGET, in its role as GBSO, is engaging with potential transitional projects and held a joint workshop with the BWEA entitled 'Getting Connected' on 1 December 2008 to help develop the regime and prepare stakeholders for its introduction.

OTHER ISSUES

- In addition to modifications made by the Secretary of State under the Energy Act of 2004, some aspects of the regime will be implemented through other mechanisms, for example, some elements of the regulatory regime will be implemented through the insertion of special conditions into the licences of each OFTO by Ofgem. The implementation of relevant business systems for running the tender process will be undertaken by Ofgem and, where appropriate, NGET as GBSO.

APPENDIX 1:

CODE OF PRACTICE ON WRITTEN CONSULTATION

Criterion 1: When to consult

Formal consultation should take place at a stage when there is scope to influence the policy outcome.

Criterion 2: Duration of consultation exercises

Consultations should normally last for at least 12 weeks with consideration given to longer timescales where feasible and sensible.

Criterion 3: Clarity of scope and impact

Consultation documents should be clear about the consultation process, what is being proposed, the scope to influence and the expected costs and benefits of the proposals.

Criterion 4: Accessibility of consultation exercises

Consultation exercises should be designed to be accessible to, and clearly targeted at, those people the exercise is intended to reach.

Criterion 5: The burden of consultation

Keeping the burden of consultation to a minimum is essential if consultations are to be effective and if consultees' buy-in is to be obtained

Criterion 6: Responsiveness of consultation exercises

Consultation responses should be analysed carefully and clear feedback should be provided to participants following the consultation.

Criterion 7: Capacity to consult

Officials running consultations should seek guidance in how to run an effective consultation exercise and share what they have learned from the experience.

APPENDIX 2:

LIST OF RESPONDENTS TO OFGEM/DECC NOVEMBER 2008 REGULATORY POLICY UPDATE (NON CONFIDENTIAL RESPONSES)

ABB Limited

BWEA

Centrica

DONG Energy

E-ON UK

IET

Joint Nature Conservation Committee

Mainstream Renewable Power

NGET

Scottish and Southern Energy

Scottish Power

SEDG

StatoilHydro

SP Energy Networks

WWF

Warwick Energy

APPENDIX 3:

COMPARISON OF ONSHORE AND PROPOSED OFFSHORE ACCESS AND COMPENSATION ARRANGEMENTS

INTRODUCTION

This note illustrates how charging, access and compensation arrangements would apply to onshore and offshore generators under the current Local Charging and Offshore Charging Proposals as well as proposed Connection and Use of System Code (CUSC) drafting for Offshore Transmission.

Five different connection arrangements are considered ranging from 'no redundancy' through to 'full redundancy' (ie onshore GBSQSS compliant with no loss of access for the first outage).

The arrangements are described in terms of:

- 1) Transmission Network Use of System (TNUoS) Parameters: the factors which impact on the transmission charge levied on the generator as defined in the TNUoS Charging Methodology; and
- 2) Access and Compensation Parameters: the factors which affect access and compensation rights as defined in the CUSC.

TNUoS PARAMETERS

The TNUoS charging parameters which vary according to connection capacity and redundancy are the transmission capacity ascribed to the generator (ie Transmission Entry Capacity or "TEC") and the Security Factor.

The proposed process for calculating the Security Factor for offshore connections makes use of specific parameters derived from the proposed design and construction process for offshore networks. Onshore Security Factors are calculated using a generic assessment of onshore network redundancy. In both cases, the Security Factor is capped at 1.8.

ACCESS AND COMPENSATION PARAMETERS

The CUSC uses connection arrangements with 100% circuit redundancy as a baseline in setting out access and compensation arrangements. For connections of this type, compensation is due to generators who have their access restricted due to an Interruption through and Interruption Payment.

If an Interruption Payment is triggered, this is derived by calculating the level of restriction applicable (comparing the relevant Connection Site capacity with the capacity of unaffected Balancing Mechanism Units) and applying a compensation rate dependant on the circumstances of Interruption (Planned, Emergency De-Energisation, or Other).

The CUSC caters for Design Variations (connections which do not have 100% circuit redundancy) by allowing Restrictions on Availability to be defined within the Bilateral Connection Agreement between NGET and the generator. In the event of an outage, these place an obligation on the generator to restrict itself to either a pre-defined output (in cases where operational capability is unlike to vary) or in accordance with operational limits applicable at the time of the restriction. The restricted output level will be lower than their TEC, and zero in cases where no redundancy is provided for in the generator connection arrangements. The CUSC in turn treats these events as Allowed Interruptions which are excluded from the Interruption Payment mechanism.

The proposed CUSC drafting for offshore transmission applies the same principles by allowing for Restrictions on Availability on Offshore Connections as well as Design Variations.

ILLUSTRATIVE EXAMPLES

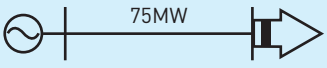
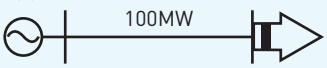
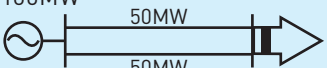
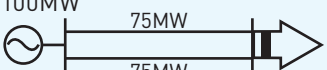
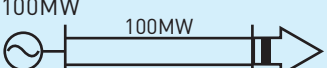
Five different connection arrangements are described:

- 1) A single connecting circuit rated less than the generator's maximum physical capability;
- 2) A single connecting circuit with a rating equivalent to the generator's maximum physical capability;
- 3) Two 50% rated circuits;
- 4) Two 75% rated circuits; and
- 5) Two 100% rated circuits.

Please note that these examples are expressed in terms of continuous rated active power capability for simplicity.

The examples highlight that:

- 1) Onshore and Offshore generators entry capacity is determined in the same way;
- 2) CUSC Compensation arrangements are the same for onshore and offshore generators (subject to any changes made to cap CUSC compensation arrangements to offshore network performance incentives); and
- 3) Security Factors are applied differently to onshore and offshore generators whose connections have partial redundancy due to the specific charging treatment applied to offshore transmission charging.

Generator Connection Arrangement	Offshore				Onshore			
	TNUoS Parameters		Access/ Compensation Parameters		TNUoS Parameters		Access/ Compensation Parameters	
	Entry Capacity	Security Factor	Allowed Interruption	CUSC Compensation on	Generator Capacity	Security Factor	Allowed Interruption	CUSC Compensation on
100MW  1. Restricted	75	1	75	Nil	75	1	75	Nil
100MW  2. No Redundancy	100	1	100	Nil	100	1	100	Nil
100MW  3. Partial Redundancy	100	1	50	For 2 nd fault, for capacity of affected BMU	100	1.8	50	For 2 nd fault, for capacity of affected BMU
100MW  4. Partial Redundancy	100	1.5	25	For 2 nd fault, for capacity of affected BMU	100	1.8	25	For 2 nd fault, for capacity of affected BMU
100MW  5. Full Redundancy	100	1.8	0	For 2 nd fault, for capacity of affected BMU	100	1.8	0	For 2 nd fault, for capacity of affected BMU

APPENDIX 4:

THE AUTHORITY'S POWERS AND DUTIES

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).

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 Acts⁴⁸.

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 accordingly⁴⁹.

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.

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 them⁵⁰;
- 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 areas⁵¹.

48 entitled “Gas Supply” and “Electricity Supply” respectively.

49 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.

50 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.

51 The Authority may have regard to other descriptions of consumers.

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 licensed⁵² 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.

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 anti-competitive 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 Regulation⁵³ 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.

52 or persons authorised by exemptions to carry on any activity.

53 Council Regulation (EC) 1/2003

APPENDIX 5:

LIST OF ANNEXES (CODES AND LICENCES)

Separate Annex No.	Document
1	Transmission Licence Standard Conditions
2	BSC
3	CUSC
4	DCUSA
5	Distribution Code
6	Grid Code
7	STC
8	GB SQSS
9	Transmission Owner Special Licence Condition
10	Relevant document conditions that are connected with the implementation of the offshore regime
11	OFTO Special Conditions

GLOSSARY

A	Authority	The Gas and Electricity Markets Authority	N	NGET	National Grid Electricity Transmission plc
B	BERR	Department for Business Enterprise and Regulatory Reform	O	Ofgem	Office of Gas and Electricity Markets
	BETTA	British Electricity Trading and Transmission Arrangements		OFTO	Offshore Transmission Owner
	BSC	Balancing and Settlement Code		OTETWG	Offshore Transmission Embedded Transmission Working Group
C	CUSC	Connection and Use of System Code		OTSCWG	Offshore Transmission Standard Conditions Working Group
D	DECC	Department of Energy and Climate Change	R	RAV	Regulatory Asset Value
	DC	Direct Current		RES	Renewable Energy Strategy
	DCUSA	Distribution Connection and Use of System Agreement		RPI	Retail Price Index
	DNO	Distribution Network Operator	S	SEA	Strategic Environmental Assessment
	DTI	Department of Trade and Industry		SHETL	Scottish Hydro Electric Transmission Ltd
G	GBSO	Great Britain System Operator		SLC	Standard Licence Conditions
	GB SQSS	Great Britain Security and Quality of Supply Standard		SPT	Scottish Power Transmission Ltd
	GCRP	Grid Code Review Panel		SQSS	Security and Quality of Supply Standard
	GW	Gigawatt		STC	System Operator - Transmission Owner Code
H	HV	High Voltage		SYS	Seven Year Statement
	HVDC	High Voltage Direct Current	T	TAR	Transmission Access Review
I	IFA	Interconnexion France Angleterre		TCMF	Transmission Charging Methodologies Forum
K	kV	Kilo Volt		TEC	Transmission Entry Capacity
L	LV	Low Voltage		TO	Transmission Owner
M	MITS	Medium Interconnected Transmission System		TOCA	Transmission Owner Construction Agreement
	MRA	Master Registration Agreement		TNUoS	Transmission Network Use of System
	MW	Megawatt	U	UoS	Use of System
N	NETSO	National Electricity Transmission System Operator'			

