

## Government response to consultations on offshore electricity transmission

Offshore Electricity Transmission: Further consultation on the enduring regime, August 2010,

and

Offshore Electricity Transmission: Implementing further refinements to the enduring regime, November 2010

15 December 2010

## Contents

Summary	3
1. Background and introduction	4
<ol><li>Changes to the industry framework to provide additional flexibility for offshore generators</li></ol>	8
3. The enduring regulatory regime for offshore electricity transmission	17
4. Next steps	19
Appendix 1: Update on policy positions for different build options	22
Appendix 2: Summary of responses to the November 2010 consultation	32
Separate Annexes	
Annex 1: Final changes to the Connection and Use of System Code	
Annex 2: Final changes to the Grid Code	

Annex 3: Scope of changes to the System Operator - Transmission Owner Code

## Summary

This Government response follows a series of consultations by Government and Ofgem to establish an enduring regulatory framework for offshore electricity transmission. In particular, it responds to the joint DECC and Ofgem E-Serve consultations of August and November 2010, on refinements to the enduring regime. This response sets out:

- the changes made by the Secretary of State to the Connection and Use of System Code (CUSC) and the Grid Code, following consideration of responses to the changes proposed in the November consultation. These changes will take effect from 31 December 2010;
- an overview of the enduring regulatory regime for offshore electricity transmission; and
- the approach to making further refinements to the enduring regime.

#### Changes to industry codes

To implement the generator build model, changes have been made by the Secretary of State to the CUSC and the Grid Code to place obligations on offshore generators wishing to undertake activities otherwise undertaken by an Offshore Transmission Owner (OFTO). This is to ensure that transmission assets comply with the same standards whether constructed by generators or OFTOs.

To provide further clarity on OFTO build options, changes have been made to the CUSC connection process to provide offshore generators with flexibility as to the scope of activities they wish to undertake under the late OFTO build option. This is to enable generators to make informed commercial decisions.

The full text of the changes to the CUSC and the Grid Code are attached as separate annexes. The changes will take effect from 31 December 2010.

#### **Overview of the regime**

Government and Ofgem have put in place a regulatory regime that facilitates choice in respect of the division of responsibility for the delivery of transmission assets. This provides generators with further flexibility to progress their projects, to enable timely and efficient delivery of transmission assets.

#### Next steps

In light of the changes made by the Secretary of State, we consider that changes are also required to the System Operator – Transmission Owner Code (STC). Separately, Ofgem also intends to consult on changes to the Tender Regulations necessary to fully implement refinements to the enduring regime. In addition, DECC and Ofgem are jointly taking forward work to consider whether additional measures will be required to ensure offshore electricity networks are delivered in a strategic and coordinated manner through the competitive offshore transmission regime.

## **1. Background and introduction**

This chapter sets out the purpose of this document and provides relevant background to the regulatory regime for offshore electricity transmission and the recent decision to implement a generator build option on an enduring basis.

#### **Purpose of document**

- 1. This document sets out the Government response to the August 2010<sup>1</sup> and November 2010<sup>2</sup> consultations on offshore electricity transmission. As these consultations were developed jointly by DECC and Ofgem<sup>3</sup>, and aspects of the final regime will be implemented by Ofgem, this document has been prepared jointly by DECC and Ofgem.
- 2. This document summarises the key changes that the Secretary of State has made to the CUSC and the Grid Code to implement the refinements to the offshore electricity transmission regime, as set out in the August and November consultations.
- 3. In addition, there are a number of other refinements that will be implemented separately, through different routes, either jointly by DECC and Ofgem or by Ofgem. This document outlines our approach to progressing these further changes.

#### Background

- 4. Government and Ofgem have worked together to put in place an innovative regulatory regime for offshore electricity transmission which provides flexibility and supports the delivery of significant volumes of offshore generation while protecting the interests of present and future consumers. A key element of the regime involves Ofgem running competitive tenders to appoint Offshore Transmission Owners (OFTOs) to finance, own and maintain (as well as design and construct where required) the transmission assets for connecting offshore renewable projects to the onshore grid. All offshore transmission assets to date have been built and operated by offshore wind developers.
- 5. The legal framework for the new regime was established on 24 June 2009, and Ofgem E-Serve, Ofgem's delivery arm, is currently working within that framework to appoint the first OFTOs. The regime is being delivered in two parts: a transitional and an enduring regime.
- 6. In July 2009, Ofgem commenced the first transitional tender round for 9 offshore wind projects with transmission assets worth £1.1 billion. Strong competition in these tenders

<sup>&</sup>lt;sup>1</sup> Offshore Electricity Transmission: Further consultation on the Enduring Regulatory Regime, August 2010, Ofgem ref 113/10; DECC ref 10D/786

<sup>&</sup>lt;sup>2</sup> Offshore Electricity Transmission: Implementing further refinements to the enduring regime, November 2010, Ofgem ref 137/10; DECC ref 10D/977

<sup>&</sup>lt;sup>3</sup> Throughout the document, Ofgem will be used to represent both Ofgem and Ofgem E-Serve.

attracted almost £4 billion of investment appetite. Ofgem has forecast savings from the competitive tender process of around £350 million on the first £1.1 billion of offshore transmission assets. This demonstrates the strength of the offshore regime in securing benefits for generators and consumers.

- 7. The second transitional tender round, for around £1.9 billion of transmission links connecting a further 2.8GW of offshore wind farms, was launched on 17 November 2010. Tenders for the first three projects, Gwynt-y-Mor, Lincs and London Array, are under way with further projects to be tendered in Spring 2012. After this round, future projects will fall within the scope of the enduring regime.
- 8. During development of the enduring regime, concerns were raised by generators as they wanted to retain control over the design and delivery of the transmission assets connecting their generation equipment, in order to reduce overall risk. Therefore, the August consultation set out proposals to extend the flexibility of the regime by including a 'generator build' option on an enduring basis. This would allow generators to construct the transmission assets before transferring them, upon completion, to an OFTO identified through a competitive tender process run by Ofgem. The consultation also sought further views on the proposed approach to 'OFTO build' options, whereby the OFTO undertakes the construction of the offshore transmission assets.
- 9. Following the strong support for the proposals for additional flexibility, from respondents to the August consultation, we decided, as explained in the joint decision statement of 21 October 2010<sup>4</sup>, to implement the generator build option on an enduring basis. This decision was taken on the basis that the generator build option should be implemented in a way that ensures a level playing field of requirements and obligations across the different build options.
- 10. The November 2010 consultation set out a number of changes that we proposed would be made to the enduring regime in order to ensure that a level playing field is maintained across the different build options. The full rationale for these changes is set out in the November 2010 consultation. In summary, the key areas for change were:
  - **Standard Industry Framework**: changes to aspects of the industry codes are needed to ensure compliant and fit for purpose offshore infrastructure, that is attractive to potential bidders. We set out our intention to deliver the changes using the Secretary of State's existing powers under sections 90 and 91 of the Energy Act 2004. These powers are time limited and expire on 18 December 2010.
  - **Asset transfer**: in order to ensure effective, timely and fair transfer of transmission assets from the generator to the successful OFTO bidder, DECC is seeking to extend the life of the powers enabling the Authority to make property schemes through the Energy Bill.
  - **OFTO of Last Resort**: these arrangements will be extended under the generator build approach. We have concluded that these arrangements will not extend the

<sup>&</sup>lt;sup>4</sup> Providing additional flexibility in the enduring regulatory regime for offshore electricity transmission: Initial joint decision statement, 21 October 2010

OFTO of Last Resort licence obligation to include OFTO build tenders, although if such tenders failed then generators would be given the option of progressing the development of the project. More guidance on how the OFTO of Last Resort arrangements would work in practice is available on the Ofgem website<sup>5</sup>.

- **Cost Guarantee**: the transitional arrangements provide developers with a guarantee that they are able to recover the higher of 75 per cent of the ex-ante cost estimate or 100 per cent of the efficiently incurred ex-post cost assessment from the OFTO. The Authority has decided not to extend the ex-ante cost guarantee for enduring generator build tenders. The Authority does not consider it in the interest of the consumer to include a cost guarantee which provides generators a route to transfer inefficiently incurred costs to the consumer. Ofgem will publish information relating to aspects of the first transitional tender round cost assessment following the granting of each licence.
- **Competition**: the August consultation set out that we would continue to consider whether generator procurement of transmission works would raise competition concerns when compared to the OFTO build approaches. We proposed that generators would be required to ring-fence transmission costs from generation costs when signing procurement contracts. Appendix 1 contains further information on this issue.

#### Structure of document

11. This document has four chapters and two appendices.

- Chapter 2 sets out the changes that have been made to the CUSC and the Grid Code, following responses to the changes proposed in the November 2010 consultation;
- Chapter 3 provides a high-level overview of how the enduring regulatory regime for offshore electricity transmission will work;
- Chapter 4 outlines the further steps required to refine the enduring regime for offshore electricity transmission;
- Appendix 1 contains an update on the policy position for different build options and the implementation route that will be used to deliver the policy; and
- Appendix 2 summarises the responses to the November 2010 consultation.
- 12. There are also three separate annexes containing the final changes to the CUSC and the Grid Code made by the Secretary of State on 15 December 2010, as well as a scoping document which sets out the high level changes we consider need to be made to the STC.
  - Annex 1: Final changes to the Connection and Use of System Code

<sup>&</sup>lt;sup>5</sup> Guidance on the Offshore Transmission Owner (OFTO) of Last Resort Mechanism, available at <u>http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=24&refer=Networks/offtrans/rott</u>.

- Annex 2: Final changes to the Grid Code
- Annex 3: Scope of changes to the System Operator Transmission Owner Code

#### **Related documents**

- Impact Assessment (IA No DECC00012): Extension of the enduring offshore transmission regime to include the option of a generator building assets, with a competitive tender transferring assets to OFTO, DECC ref 10D/1009
- Offshore Electricity Transmission: Implementing further refinements to the enduring regime, November 2010, Ofgem ref 137/10; DECC ref 10D/977
- Providing additional flexibility in the enduring regulatory regime for offshore electricity transmission Ofgem/DECC initial joint decision statement, October 2010
- Offshore Electricity Transmission: Further consultation on the Enduring Regulatory regime, August 2010, Ofgem ref 113/10; DECC ref 10D/786
- Extension of the enduring offshore transmission regime to include the option of a generator building assets, with a competitive tender transferring assets to OFTO, IA No: DECC00012
- Offshore Electricity Transmission: open letter on draft Tender Regulations, February 2010
- Offshore Electricity Transmission: Joint statement on the Enduring Regime Clarification of transmission losses, January 2010
- Offshore Electricity Transmission: Consultation on the Enduring Regime, December 2009
- 13. Prior to the publications listed above, Government and Ofgem consulted extensively on the regime. All relevant documents are available on the Ofgem website.

## 2. Changes to the industry framework to provide additional flexibility for offshore generators

This chapter sets out the changes that have been made to the CUSC and the Grid Code, following responses to the changes proposed in the November consultation. The final text of the codes is set out in the annexes to this document.

#### Purpose of code changes proposed in November consultation

#### **Generator build option**

- 14. The November 2010 consultation set out our proposed code changes to place obligations on an offshore generator that wishes to undertake activities otherwise undertaken by an OFTO. These changes require that generators construct transmission assets to the standards required of all other OFTOs.
- 15. The reasons for doing so were outlined in previous consultations. In summary, without changes to the industry codes, there is no default mechanism to require offshore generators to design and build offshore transmission assets which meet the minimum standard of offshore transmission system performance and design.
- 16. This could result in non-compliant offshore infrastructure which may be unable to connect to the National Electricity Transmission System (NETS) without derogation from Ofgem. There would also be a risk that the National Electricity Transmission System Operator (NETSO) would be unable to efficiently operate or coordinate the infrastructure and be unable to comply with the conditions of its transmission licence.

#### Late OFTO build options

- 17. We proposed code changes to provide further clarity on the OFTO build options to ensure that generators make informed commercial decisions.
- 18. We also proposed changes to the CUSC connection process to provide offshore generators with flexibility as to the scope of activities they would wish to undertake under the late OFTO build option.

#### Summary of code changes proposed in November consultation

19. In order to effect these changes for both build options<sup>6</sup>, we proposed amending the CUSC connection process to:

<sup>&</sup>lt;sup>6</sup> Generator build and late OFTO build options.

- Introduce a minimal change to the connection application and the generator's ability to submit a competent application.
- Allow a generator to decide which of the three options<sup>7</sup> it wishes to proceed with as part of its Connection Agreement through discussion with NGET in the post offer period and for that choice to be reflected in the Bilateral Connection/Construction Agreement.
- Continue with the current arrangements that allow a generator to accept or reject a connection offer.
- Reflect the option selected by the generator in the Construction Agreement, where late OFTO build or generator build is selected.
- Set out the process for sharing updated information between the generator and the NETSO as detailed design, construction and commissioning work is completed: including technical data; programme plan information; commissioning plan information; responsibility schedules and other operational diagrams. This information is equivalent to that which an OFTO would be obliged to provide under the TO Construction Agreement in the STC.
- Allow the offshore generator and the NETSO to enter into an agreement that clearly defines (or can be developed to clearly define) the terms of the new transmission system connection, including clarity on allocation of rights and responsibility for pre-construction and construction works.

20. We also proposed amending the CUSC to:

- Clarify that a material change to a Connection Agreement which impacts on another CUSC party will be treated as a modification application.
- Introduce new definitions necessary for the introduction of the generator build option and clarification of the late OFTO build option.
- Extend the modification application/offer and notification to include changes to Offshore Transmission System Development User Works (OTSDUW)<sup>8</sup>.

21. Our proposed amendments to the Grid Code were as follows:

- Where the generator does not indicate disinterest in generator build or late OFTO build, we have introduced a requirement on the NETSO to provide network data to the offshore generator to ensure the offshore generator has sufficient information to assess the viability of each option.
- Provide a consistent approach to the numbering and nomenclature of assets at sites

<sup>&</sup>lt;sup>7</sup> Generator build, late OFTO build, and early OFTO build options.

<sup>&</sup>lt;sup>8</sup> OTSDUW, or Offshore Transmission System Development User Works, are those works that are undertaken by an Offshore Transmission Owner, unless a generator opts to undertake them under the late OFTO build option or the generator build option.

shared by the offshore generator and the Transmission Licensee. This will ensure the safe and effective operation of the NETS.

- Change the scope of data and timing of data provision requirements applicable to the NETSO. This will ensure that the offshore generator has sufficient information about the NETS to make a decision between the range of options available i.e. early OFTO build, late OFTO build and generator build. It will also allow the offshore generator to develop an offshore transmission system design.
- Define explicit obligations with which the offshore generator must comply when constructing transmission assets, to ensure that the minimum standards of NETS can be maintained.
- Change the scope of data and timing of data provision requirements applicable to the offshore generator to ensure that the NETSO:
  - has sufficient information to populate bilateral agreements that it will be required to enter into;
  - can operate the NETS (and plan for the operation of the new infrastructure as part of NETS); and
  - o comply with the obligations placed upon it under the STC.
- 22. Reflecting the obligations set out in section K of the STC (which are based on the obligations set out in the Grid Code) in section 6 of the Connection Conditions within the Grid Code. These obligations will apply at the Transmission Interface Point for OTSDUW.

#### **Responses to individual questions set out in the November consultation**

- 23. The November 2010 consultation sought views on whether the changes proposed in the CUSC and the Grid Code were applicable to an offshore generator constructing an offshore transmission system.
- 24. The November consultation noted that changes to the System Operator Transmission Owner Code (STC) will also be required to ensure that the NETSO can meet the requirements placed upon it by the CUSC and the Grid Code as a result of implementing the generator build option on an enduring basis. Further details on this are set out in Chapter 4.
- 25. A full summary of responses to the November consultation is set out in Appendix 2.

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

- 26. Three respondents considered that the changes proposed to the CUSC and the Grid Code achieved the policy intent.
- 27. Two respondents considered that the changes to the CUSC and the Grid Code would be better considered alongside changes to the STC before their view could be provided.
- 28. One respondent considered the proposed changes were too prescriptive and that obligations in the STC and NETS Security and Quality of Supply Standards (SQSS) would provide sufficient incentives for offshore generators to construct transmission assets to the required design standards.

29. We remain of the view that in order to provide a level playing field, the obligations placed on an OFTO when constructing offshore transmission assets should also be placed on an offshore generator that chooses to construct those assets. We also consider it prudent to place these obligations on the offshore generator directly to ensure that the NETSO can continue to meet its licence obligations.

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

- 30. Two respondents noted that although the Balancing and Settlement Code (BSC) does not require amendment to facilitate the generator build option or to clarify the late OFTO build option, the BSC could be improved by amending the requirement for onshore metering during construction and testing. It was suggested that this amendment could be progressed through normal governance arrangements. We consider this to be a pragmatic approach.
- 31. One respondent considered that the codes should reflect the asset transfer value of the OTSDUW. We consider that the transfer value of the OTSDUW is a matter for the Tender Regulations and not for the industry codes.
- 32. We also received comments from some respondents that, in light of the rapid development of code changes, it would be prudent to undertake a review of the codes once the changes are introduced. We consider such a review to be sensible, and set out further details on this in Chapter 4.

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

- 33. One respondent expressed concern that any requirement to hand-over part (or all) of the offshore transmission system to an OFTO prior to the commencement of export from the first generator could pose problems for phased projects. We have considered the issue of commissioning later in this chapter.
- 34. Another respondent expressed concern that generators may structure staged projects in a way that makes their financing unnecessarily difficult, and suggested Ofgem set norms for staged projects to avoid this problem. We consider that this is an issue for the tender process and not the industry codes.
- 35. One respondent felt that the BSC issue raised in Q3.2 needed to be addressed to avoid creating inefficiencies for phased development. This comment has been addressed in the response to question 3.2 above.
- 36. One respondent was concerned that different codes would govern generator build and OFTO build approaches. This could introduce extra risk to the generator build option where on adoption the requirements set out in the STC will prevail over any Grid Code conditions applying to generator build. As discussed in this document and in the November consultation, we consider that it is right to place obligations on offshore generators wishing to undertake activities otherwise undertaken by an OFTO and that these obligations should ensure that transmission assets comply with the same standards, whether constructed by generators or OFTOs. We are of the view that the changes made to the CUSC and Grid Code are robust and achieve this intent.

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

- 37. Most respondents thought that 28 days was insufficient. Some were not clear on whether the generator would only have to provide a programme, or whether more detailed design information was required, in which case 28 days was seen as insufficient.
- 38. As set out in Appendix 2 to the November consultation, we expect an offshore generator to decide whether it wishes to construct its transmission assets in the three months it has to accept or reject its offer of connection from the NETSO. We consider that a generator may find it difficult to provide the design of its transmission assets within 28 days of accepting its offer.
- 39. Based on the majority of views, we have amended the timeline so the information requested in paragraph 17.1 of the Construction Agreement (Schedule 2 Exhibit 3A) should be provided to the NETSO within three months of the generator signing its Construction Agreement. As provided for in paragraph 17.1 of the Construction Agreement, we expect the parties to the Construction Agreement to liaise with each other in the development of the detail of the OTSDUW.
- 40. We note the request for clarity from a number of respondents on what constitutes a modification application with regards to the development of the detail of the OTSDUW. This is discussed further below in the section on additional changes made to the CUSC and the Grid Code.

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

41. Respondents generally agreed that it did, although practical application would help to determine this. As such, we have not made any further changes to this section of the Grid Code.

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

42. Responses were equally divided in their opinion as to whether this change was appropriate. Two respondents agreed and two did not. Of the two respondents who agreed that the change was necessary, both noted that frequency control would be required by both the OFTO and the offshore generator on an offshore transmission system where a DC connection was used. We consider that the requirement to provide frequency control where a DC connection is used is prudent. As such, we have not proposed any further changes to this section of the Grid Code. Q3.7 We note that the OFTO has an obligation under the STC to ensure an offshore transmission system stays connected to the NETS through faults and disturbances and that this obligation should apply to all offshore transmission systems regardless of the party that has constructed them. Do you consider that the changes being proposed in section CC6.3.15 of the Connection Conditions in the Grid Code reflect these requirements on an offshore transmission system constructed by an offshore generator?

43. One respondent agreed. Another considered the wording of the clause to be difficult to understand but nevertheless provided technical comments relating to the provision of reactive power. As such, we have not made any further changes to this section of the Grid Code (other than changes to ensure consistency in drafting style).

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

- 44. Two respondents were of the view that there should be no additional requirements placed on generators build via the Grid Code than are placed on OFTO build under the STC. Two respondents were of the view that the additional clarity provided by this clause is beneficial. We note that the STC does not place any specific obligation on the OFTO with regard to Communications Plant and that it is for NGET to advise the OFTO what Communications Plant it will require. In light of concerns raised in other areas against requirements being left to the NETSO to define, we consider that the additional clarity provided in CC.6.5 of the Grid Code is welcome. We have not made any further changes to this section of the Grid Code (save for clarification made in CC.6.5.6(b)(iv)).
- 45. Another respondent suggested adding a requirement that transmission assets built by generators should have their own independent supervisory control and data acquisition (SCADA) and communications systems. We note the requirements set out in CC.6.5.6 and that NGET will set out SCADA requirements in the Bilateral Connection Agreement/Construction Agreement as required.

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

46. We received a variety of views in response to this question. One respondent considered that Grid Code Planning Code PC.A.8 should remain in the Grid Code as it was consistent with Grid Code Planning Code PC.7. Another respondent considered the clause better suited to the CUSC as it dealt with data provision. Four respondents stated they had no view either way. In light of the lack of clear justification for one option against the other we have left this section in the Grid Code Planning Code.

#### Additional responses to the November consultation

- 47. A number of respondents provided additional comments on the proposed changes to the CUSC and the Grid Code.
- 48. One respondent noted that the STC allows the OFTO to meet its obligations in relation to the provision of reactive power compensation using a combination of Plant owned by the OFTO and Plant owned by the generator, but that it was not clear whether this was available to a generator which has opted for the generator build option. We have amended CC.6.3.1 of the Grid Code Connection Conditions so that where the generator build option applies the Grid Code is now consistent with the STC on this point.
- 49. A number of respondents sought clarity with regard to the development of OTSDUW and when this would constitute a material change and result in a modification under section 9 of the CUSC. We recognise that a generator may not be in a position to confirm the detail of its design for its OTSDUW and that the connection process must allow for the development of this detail after the Construction Agreement has been signed. We consider that the new CUSC paragraph 6.9.6.1 already provides sufficient clarity on this point because it uses the existing CUSC test of 'Material Effect' and the existing CUSC definition of 'Modification'. We have amended the Construction Agreement (clause 17.1) to simplify the drafting (and made corresponding changes to clauses 2.3.2 and 2.11 of the Construction Agreement). For completeness, we note that CUSC 2.9 specifically deems changes to Appendices F1, F3 or F5 to the relevant Bilateral Connection Agreement as a Modification and that this would include subsequent changes as a result of a change to a Construction Agreement.

#### Implementation

- 50. We also received requests for clarity on how the changes proposed would be implemented. On 15 December 2010, the Secretary of State made the changes to the CUSC and the Grid Code detailed in Annex 1 and Annex 2 to this document, using powers available to him under section 90(1)(c) of the Energy Act 2004. The approach to progressing changes to the STC is explained in Chapter 4.
- 51. Respondents noted the challenging timeframe in which the code changes were developed and recognised the potential for unintended consequences to be introduced. However, the responses were overwhelmingly supportive of a swift introduction of the generator build option in the enduring regime for offshore electricity transmission. In light of these responses, on 15 December 2010 the Secretary of State made the changes to the CUSC and the Grid Code, before his powers under section 90 of the Energy Act 2004 expire. Chapter 4 sets out what we are doing to address the potential for unintended consequences through the code changes.
- 52. We note that standard condition C8 of NGET's transmission licence was amended at 'Go Active'<sup>9</sup>. This allowed for the implementation of the offshore regime and placed a requirement on the NETSO modifying a Connection Agreement to implement the changes introduced by the offshore transmission regime. We do not consider that any further changes are required to the transmission licence to implement the late OFTO build or generator build option.

<sup>&</sup>lt;sup>9</sup> The Secretary of State commenced the powers in sections 90 and 91 of the Energy Act 2004. The 'Offshore Transmission Go Active' date for the new offshore transmission regime was 24 June 2009.

53. We consider that it is appropriate for the NETSO to contact those generators that are currently parties to an enduring offshore transmission Connection Agreement to invite that generator to modify that agreement. We have updated the Offshore Transmission Implementation Plan, which is published subsidiary to this document on Ofgem's website, to reflect this.

#### Additional changes made to the CUSC and the Grid Code

- 54. A number of respondents commented on formatting and consistency within the CUSC and the Grid Code. We thank respondents for these comments, which have been incorporated into the final versions provided in the annexes.
- 55. In addition, we have made changes to the following areas within the CUSC and the Grid Code to improve clarity or consistency, including:
  - Section 1 of the CUSC updated to amend referencing and numbering;
  - Paragraph 6.9.6 of CUSC square brackets removed, to clarify that a material change to OTSDUW can impact on the CUSC party at the Connection Site or the Interface Point;
  - Paragraph 24 of Exhibit B to mirror paragraph 2.13.8, this has not changed the meaning of paragraph 24 but has introduced consistency within CUSC;
  - Paragraph 24 of Exhibit B of the CUSC amended to provide consistency with 2.13.8 of the CUSC;
  - We have included explanatory text at paragraphs 8, 9 and 10 of Exhibit C of the CUSC;
  - Paragraph 1.3 of the CUSC Construction Agreement (Schedule 2A Exhibit 3A) amended to apply to all generators;
  - Paragraph 2.3.2, 2.11 and 17.1 of the CUSC Construction Agreement (Schedule 2 Exhibit 3A) amended to allow the generator to amend both the OTSDUW and the dates;
  - Paragraph 1.3 of the CUSC Construction Agreement (Schedule 2A Exhibit 3A) amended to differentiate between 'Transmission Connection Asset Works' and 'Onshore Transmission Reinforcement Works' which apply depending on which option the generator has chosen;
  - Paragraph 17 of the CUSC Construction Agreement (Schedule 2 Exhibit 3A) amended to provide consistency with the requirements set out in Appendix F to the Grid Code and to allow a generator three months to provide information relating to the design of its OTSDUW (as discussed above);
  - A number of terms previously not defined in the CUSC have been defined, including:
    - Offshore Works Assumptions;
    - Onshore Transmission System;
    - o OTSDUW Development and data Timetable;
    - $\circ$  Preferred Bidder; and
    - Transmission Interface Agreement.

- PC.4.4.2, PC.A.1.4 and PC.A.8 of the Grid Code Planning Code amended to provide consistency with the requirements set out in Appendix F to the Grid Code Planning Code;
- Change in PC.A.3.2. of the Grid Code Planning Code removed as that was already dealt with in Grid Code Planning Code PC.A.3.2.2;
- CC.3.1 of the Grid Code Connection Conditions amended to clarify that generators undertaking OTSDUW are not a separate class of generator;
- CC.6.3.1 amended to clarify that the obligation placed on an OFTO by Section K of the STC can be met by a combination of generation Plant and OTSDUW Plant and Apparatus; and
- CC.7.2.8, CC.7.2.15 and CC.7.5.9 amended for consistency.

## Changes made to the CUSC and the Grid Code not relating to generator build or late OFTO build

- 56. In addition to the changes required to introduce the generator build option and to clarify the late OFTO build option, we have also made two changes to the codes, for purposes connected with offshore transmission, to clarify the arrangements that were put in place at Go Active:
  - We have amended the CUSC 2.13.3 to clarify that an Offer to Vary is open for acceptance for three months; and
  - We have amended PC.5.4(f) to clarify the provision of data in the preparation, production and publication of the Offshore Development Information Statement (ODIS).

#### **Commissioning and testing**

- 57. A number of responses to the August and November consultations raised an issue relating to commissioning. Respondents questioned the ability of generators, under the generator build option, to commission and test transmission assets following the full commencement of the offshore regime.
- 58. Concerns were expressed that part of the generator developer's commissioning process would require energy to flow over the transmission system for testing purposes, prior to completed transmission assets being transferred to a licensed OFTO. Respondents were concerned at the possibility that this activity might, following full commencement of the regime, be considered to be in breach of the prohibition on transmitting electricity offshore at voltages of 132kV and above. Respondents expressed a preference for generators having the ability to fully commission the transmission assets (i.e. including such testing) prior to transfer to the OFTO.
- 59. We thank stakeholders for bringing this issue to our attention. We recognise the importance of clarity on this matter to provide market certainty and provide confidence to all parties that the assets being transferred are fit for purpose. Therefore we intend to set out our position on this issue early in 2011.

# 3. The enduring regulatory regime for offshore electricity transmission

This chapter provides a high level overview of how the enduring regulatory regime for offshore electricity transmission will work.

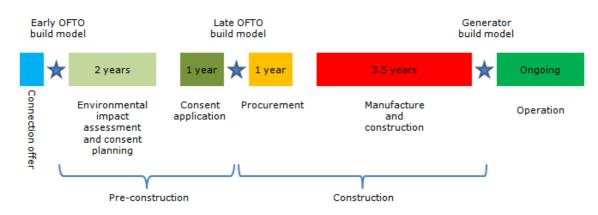
Appendix 1 contains a more detailed overview of the regime and policy positions on a number of areas consulted on in the August 2010 consultation.

#### **Objectives of the enduring regime**

- 60. Government and Ofgem note the important role of the enduring regulatory regime for offshore electricity transmission in facilitating the delivery of renewable energy targets and contributing to security of supply objectives.
- 61. The objectives of competitive tendering for offshore transmission licences are to deliver fit for purpose electricity transmission infrastructure to facilitate the connection of offshore generation and the realisation of significant carbon savings; to provide best value to consumers and to attract new entrants and sources of finance to the sector.

## Overview of the build options and appointment process under the enduring regime

62. We have sought to ensure that the regime facilitates choice in respect of the division of responsibility for the delivery of transmission assets. We have used three models – 'build options' – to illustrate the broad range of options that will be available to an offshore generator. These build options are illustrated below.



63. The diagram shows that:

 The widest scope of activities for an OFTO would occur if they were appointed following initial scoping work by the generator (which avoids a duplication of effort and cost) and were responsible for all aspects of pre-construction, consenting, procurement, construction and operation of transmission assets. For ease, we term this an early OFTO appointment.

- A late OFTO build option would see an OFTO appointed to deliver the procurement of the transmission assets and construction phases of the build programme, after a generator had obtained the necessary consents for the transmission works.
- A generator build option would enable a generator to design and construct, in accordance with a series of common standards, transmission assets with a transfer of ownership to an OFTO (appointed via competitive tender) after the generator had completed construction.
- 64. By providing this enhanced choice, we consider that the regime provides further flexibility for generators to progress their projects, in a way that is compatible with the competitive regime. Ultimately, this flexibility within the competitive framework should ensure the best outcomes are delivered for consumers.
- 65. The framework which has been developed by Government and Ofgem will, irrespective of the point at which an OFTO is appointed, involve a series of common features:
  - Codes and technical rules require the development of infrastructure to a consistent set of standards;
  - OFTOs will be appointed and granted a transmission licence through a competitive tender process run by Ofgem;
  - OFTOs will be required, through licence obligations and industry codes, to develop and operate systems efficiently; and
  - Long term revenues and incentives are provided under the OFTO licence to provide certainty for industry participants. Project specific licence conditions are determined by the Authority as part of each tender exercise, including any performance obligations.
- 66. Appendix 1 contains an update on the policy position for different build options and the implementation route that will be used to deliver the policy.

## 4. Next steps

This chapter outlines the further steps required to refine the enduring regime, including further changes to the industry codes as well as changes to aspects of the enduring tender process. It also outlines next steps with regard to separate but related areas, such as coordinated network development.

#### Further changes to the industry codes

- 67. The Secretary of State has made the necessary changes to the CUSC and the Grid Code to deliver the generator build option, using the powers under section 90 of the Energy Act 2004.
- 68. These changes are published in the annexes to this response.
- 69. The modifications that have been made by the Secretary of State come into effect on 31 December 2010, the date from which National Grid has been requested to publish them.

#### System Operator – Transmission Owner Code

- 70. The November 2010 consultation explained that, in light of the challenging timetable for delivery of code changes, we would prioritise making changes to the user facing codes under the Secretary of State's existing powers before they expire on 18 December 2010. As such, changes to the CUSC and the Grid Code have been progressed ahead of amendments to the System Operator Transmission Owner Code (the STC).
- 71. The November consultation also explained that we would propose changes to the STC later in the year. Annex 3 contains our high level view of the changes to the STC that we would expect to be developed to complement the changes made to the CUSC and Grid Code.
- 72. Changes to the STC will need to be developed in 2011. We propose that these changes will be progressed through normal governance processes. However, Government is seeking to extend the powers under sections 90 and 91 of the Energy Act 2004 through the Energy Bill, to ensure that these changes are made in a timely manner should there be any delays to the normal governance process.

#### **Codes Consistency Check**

73. We welcome the high number of detailed responses to the August and November consultations, and recognise that the changes made to the CUSC and the Grid Code have been developed over a relatively short period of time. Several respondents commented that it is important to ensure that all changes are made in a consistent manner. Therefore, we will undertake a consistency check of the CUSC and the Grid Code to ensure no unintended consequences have resulted from these changes. This work will be undertaken during 2011, through consultation with the industry. We expect to implement any necessary changes for the purpose of offshore transmission using the

Secretary of State's powers under sections 90 and 91 of the Energy Act 2004, the life of which Government is seeking to extend through the Energy Bill.

- 74. Implementing the changes through the Secretary of State's powers will help to deliver the full programme of changes in a timely fashion. This is primarily because changes to both the CUSC and the Grid Code will be considered together, which will promote consistency. Considering the CUSC and the Grid Code separately, as would occur through separate normal governance processes, could lead to proposed changes coming to the Authority for decision at different times and in isolation. Considering the codes together should also reduce the risk of referral of disputes to the Authority.
- 75. Another advantage of using the Secretary of State's powers is that a wider group of stakeholders can provide input into development of the codes. This can help to ensure the development of robust and appropriate obligations. By comparison, normal governance arrangements limit input from those who are not party to the codes OFTOs for example, may not be able to comment on proposed amendments to the CUSC and the Grid Code.

#### Changes to the enduring tender process

76. As set out in Appendix 1, there are a number of policy positions relating to the detail of running enduring tenders that will be finalised through further consultation by Ofgem. Those detailed aspects relate to areas of policy which will be implemented through the Tender Regulations, Tender Rules and associated tender documentation or the amended standard conditions of the OFTO Licence. Ofgem expects to commence consultation on these areas from early 2011.

#### **Commencement of the enduring regime**

- 77. The Secretary of State commenced a series of statutory provisions ("Go Live"<sup>10</sup>) for the transitional regime in July 2010. This made the regime applicable to assets built by the generator that have transferred to the successful bidder following the competitive tender, enabling Ofgem to grant a transmission licence to that successful bidder. The government set out in July that it expected to fully commence the provisions of the Energy Acts on an enduring basis following the conclusion of the consultation on the enduring regime.
- 78. DECC and Ofgem are considering the most appropriate timing at which to fully commence the enduring regime.

#### **Co-ordinated network development**

79. We recognise the importance of developing a coordinated offshore and onshore transmission network and the benefits this can bring. In this regard we note the licence requirement placed on the NETSO by Ofgem, which requires the publication of an Offshore Development Information Statement. The NETSO has already published the first ODIS and will be consulting on a further version during 2011. The November consultation

<sup>&</sup>lt;sup>10</sup> 'Go-Live' is commencement of sections 89 and 180 of the Energy Act 2004 and section 44(3) of the Energy Act 2008.

set out that we intend to undertake further work to consider whether additional measures will be required to deliver coordinated networks through the offshore transmission regime and, if so, how these measures might work in practice.

80. DECC and Ofgem will work together during 2011 to ensure that the benefits from economic and efficient coordination of networks are realised under the offshore regime. In order to progress this work we will jointly lead a working group to help us look at a range of issues identified through the August 2010 consultation. We will invite key stakeholder representatives. Terms of reference for this group will be published on the DECC and Ofgem websites in due course.

#### **Third Energy Package**

- 81. The EU Third Energy Package must be implemented by March 2011. The measures of the package aim to ensure that the benefits of a competitive energy market can be realised, and as such its objectives are well aligned with those of the enduring regime for offshore electricity transmission. A key requirement of the Third Energy Package is ownership unbundling – the separation of transmission interests (ownership and operation of transmission systems) from generation activities - and consequently it specifies the roles and responsibilities of transmission owners in terms of network operation, maintenance and development.
- 82. Work is already underway to implement the Third Energy Package into UK law within the required timescale. DECC has consulted separately on the implementation of the Third Energy Package and expects to publish its response by early 2011.

# Appendix 1: Update on policy position for different build options

This appendix sets out remaining regulatory refinements for the enduring regime, which have been set out in previous consultations by Government and Ofgem.

Finalisation and implementation of these refinements will be taken forward through different routes: amendment to the Tender Regulations, Tender Rules (including any stage-specific rules) and OFTO licence conditions. These will be the subject of future Ofgem consultations.

The appendix describes each of the different build options and the different processes that will be required under each of the options. The commentary highlights current policy positions and sets out the implementation route that will be used to deliver each area of policy.

#### **Generator Build option**

#### **Connection application and asset design**

- 1. As set out in the November 2010 consultation, any generator wishing to connect to the National Electricity Transmission System (NETS) must make an application in writing to the National Electricity Transmission System Operator (NETSO), under the CUSC.
- 2. When an offshore generator seeks connection to the NETS, it will be given the option of electing generator build or OFTO build. The final scope of the generator's activities will be reflected in the Construction Agreement.
- 3. As has been the case to date, the generator's connection application will include the generator's required level of capacity, which provides the basis of the specification for the tender process.

#### Qualifying project requirements and tender entry conditions

- 4. A generator who wishes to trigger a generator build tender will need to comply with a series of Qualifying Project Requirements and Tender Entry Conditions. This is an area where changes may be included in future consultations on the Tender Regulations in 2011. There are a number of areas under consideration.
  - Ofgem is minded to require a developer to fill in the transfer agreement, as far as
    possible, with all relevant information available to the developer and provide an
    undertaking to continue to fill in the transfer agreement with all relevant information. This
    is currently required of developers under the transitional regime;

- Ofgem will consider the interface between the build option signalled through the Connection Agreement with NGET and the Tender Regulations;
- Ofgem will consider whether to include further entry conditions to facilitate transfer of preconstruction related works; and
- Ofgem will review whether entry requirements are consistent with the approach to leasing Round 3 offshore zones.

#### **Triggering the tender**

5. As explained in previous consultations, a generator may make a written request to Ofgem which will trigger the start of the tender process, within a tender window specified by the Authority.

#### **Tender stages and timescales**

6. Ofgem expects that the tender process under a generator build option will be similar to the way in which the tender process has operated to date under the transitional tender regime. The Pre-Qualification (PQ) document for each tender will confirm the structure and timing of the process.

#### **Tender specification**

7. Under generator build, the transmission assets constructed by the generator will form the assets in the tender for that project. The tender specification will be based on details of the constructed assets, and made available to bidders via a data room.

#### The basis of bids

8. As is the practice under the existing transitional tender process, Ofgem considers that bidders should submit a fixed tender revenue stream based on the costs of acquiring assets and operating and maintaining the asset over 20 years.

#### **Evaluating bids**

9. As has been the approach to date under the transitional tender rounds, the approach to evaluation will be set out ahead of each stage in the tender process. We are considering the role that generators may play in providing input on technical aspects of the evaluation.

#### Transfer of assets and responsibility to the OFTO

10. There are several issues relating to the transfer of responsibility, discussed below.

#### **Property scheme**

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

- 12. This issue was revisited in the November 2010 consultation. We noted that Schedule 2A to the Electricity Act 1989 enables the Authority, once a preferred bidder or successful bidder has been identified, to make a property scheme if required in order to ensure that the property is transferred from the asset owner (which may be the generator or other parties) to the successful bidder in a fair, timely and effective manner. These powers are available until 2013, or up to 2016 if extended by order.
- 13. We expect it would be in the relevant parties' interest, under the generator build option, to reach a commercial agreement as to the terms of the transfer. However, the power to make property schemes was put in place as a last resort measure, to provide an avenue for expediting the transfer of assets where commercial agreement could not be reached. It was designed to provide certainty and reassurance that the transfer of assets can be achieved to tender participants for transitional projects. This included helping to ensure that generators and preferred bidders or successful bidders were not placed under undue pressure by a third party seeking unreasonable commercial advantage.
- 14. The November 2010 consultation stated that DECC would look into the possibility of extending the life of the powers to make property schemes. DECC is seeking to make an appropriate change to this provision through its Energy Bill, to allow the powers to be available until 2025.

#### Guidance on transfer agreements

- 15. In addition to the property scheme, Ofgem considers that there is a strong argument for developing a standard framework to facilitate the transfer for all projects.
- 16. In previous consultations, Ofgem indicated that generators should produce a transfer agreement based on Ofgem guidance and provide information on costs incurred.
- 17. In the first transitional Tender Round, a model Sale and Purchase Agreement was published on 22 July 2009. However, for the second transitional Tender Round, Ofgem have provided developers with guidance<sup>11</sup>, published in November 2010, to assist them in the production of the Transfer Agreement for their qualifying projects. This guidance also included example clauses which developers may wish to use. This is intended to give parties guidance on what is expected in transfer agreements, whilst allowing parties freedom when developing transfer agreements suitable to the project.
- 18. This is an area where Ofgem will look to learn from ongoing experience. Ofgem will review whether this approach is appropriate for the enduring regime. Ofgem expects that any amendments to the approach will be addressed through amendments to the Tender Regulations and associated tender documentation.

#### Ex-ante cost estimates and ex-post cost assessments

19. This issue was set out in detail in the November 2010 consultation, which set out the Authority's decision to discontinue cost guarantees for enduring generator build tenders.

<sup>&</sup>lt;sup>11</sup> <u>http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=13&refer=Networks/offtrans/rttt</u>

20. This will depart from the transitional arrangements which provide parties with a guarantee that they are able to recover the higher of 75 per cent of the ex ante cost estimate or 100 per cent of the efficiently incurred ex-post cost assessment from the OFTO.

#### **OFTO of Last Resort**

- 21. This issue was set out in detail in the November 2010 consultation, which set out the decision to maintain this obligation in respect of generator build projects only, so as to avoid a situation of stranded generation projects.
- 22. We consider it to be unduly risky for generators (and project investors) not to have the safeguard of an OFTO of Last Resort for projects where the generator takes forward construction of the transmission assets.
- 23. More guidance on how this process will work is available on Ofgem's website<sup>12</sup>.

#### **Competition issues**

- 24. As set out in the August 2010 consultation, an important objective of the regulatory regime is to create vigorous and effective competition in the provision of transmission services and in the supply chain which would serve the offshore market. There are a number of areas where a generator build approach may create competition concerns.
- 25. A generator procuring generation and transmission works together may be more likely to appoint a single provider which could, potentially, have a number of undesirable consequences. These relate to the costs passed on to customers and the risk of inefficient allocation of costs should a generator identify generation costs as transmission costs due to the benefits of effectively offset capital expenditure with a long-term source of finance.
- 26. The August 2010 consultation asked for input on mechanisms to require generators to ringfence transmission costs from generation costs when signing procurement contracts under a generator build model. In response, a number of generators supported our proposals, with some suggesting that, if ring-fencing is not possible, then there should at least be as much transparency as possible to prevent cross subsidisation.
- 27. Given the general support expressed, we consider it important to consider ways in which a generator can be required to competitively procure for transmission in a transparent, fair and non discriminatory manner.
- 28. Ofgem will require that generators ring-fence transmission costs from generation costs when signing procurement contracts. As such, Ofgem expects to consult further on the mechanisms to implement this requirement in the coming months.

<sup>&</sup>lt;sup>12</sup> Guidance on the Offshore Transmission Owner (OFTO) of Last Resort Mechanism, available at: <u>http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=24&refer=Networks/offtrans/rott</u>.

#### **OFTO build options**

- 29. This section focuses on the approaches which we could use to appoint an OFTO that will undertake construction and ongoing operation of transmission assets. In the August consultation, we set out two OFTO build approaches:
  - An **early appointment**, in which an OFTO is appointed with responsibility for all aspects of consenting, design, procurement, construction and ongoing operation of transmission assets.
  - A late appointment, in which an OFTO is appointed for procurement, construction and ongoing operation of transmission assets.

30. This section provides an update on the OFTO build proposals in the August consultation.

#### **Common features**

31. There are a number of features that are common to both OFTO build approaches:

#### **Connection Application**

32. The connection application process is the same whether a generator wishes to opt for a generator build or OFTO build option. As under generator build, when an offshore generator seeks connection to the NETS, it will be given the option of electing generator build or OFTO build. The generator's Connection Application will include the generator's required level of capacity, which provides the basis of the specification for the tender process. The final scope of the generator's activities for late OFTO build will be reflected in its Construction Agreement will set out the onshore construction works to be undertaken by the TO and assumptions about the offshore construction works to be undertaken by the OFTO.

#### **Triggering the tender**

33. As discussed in previous consultations, a generator may make a written request to Ofgem to enter the next available tender window, which will trigger the start of the tender process.

#### **Qualifying Project Requirements and Tender Entry Conditions**

34. A generator who wishes to trigger either an OFTO build tender will need to comply with a series of Qualifying Project Requirements and Tender Entry Conditions. This is an area where changes may be included in future consultations on the Tender Regulations in 2011.

#### **Pre-construction works**

35. Under both OFTO build models, the generator will carry out a range of pre-construction activities before OFTO appointment. Previous consultations have set out that developers are able to recover the efficiently incurred costs of certain pre-construction works. The timing of OFTO appointment is likely to affect the extent of these works. As we are providing flexibility to developers in the time at which they choose to appoint an OFTO, a flexible approach to dealing with these costs is required.

- 36. The August 2010 consultation proposed a limited scope of pre-construction works (please see the list of activities as defined in that consultation. While the majority of respondents welcomed a flexible approach, most respondents did not think that the scope should be limited to the proposed list.
- 37. Ofgem recognises the link between the scope of pre-construction works and the tender specification. Therefore Ofgem proposes to define the specific envelope of pre-construction costs (within the bounds set out in the August consultation) for each project on a case by case basis ahead of each OFTO build tender exercise. Ofgem will determine the efficiently incurred cost of undertaking works within this scope to inform the tender specification.

#### Contingencies

- 38. The August consultation noted that there is a balance to be struck between providing contingencies that may or may not be used and putting in place hedging instruments and assuming uncovered risk. We recognised that contingencies may sometimes be more efficient than market based solutions. Therefore the consultation set out that contingencies will be determined on a case by case basis before the commencement of each tender exercise, and sought views on appropriate mechanisms to ensure efficient management of contingencies.
- 39. Responses were supportive of defining contingencies on a case by case basis. In terms of mechanisms, respondents suggested:
  - rewards to incentivise efficient contingency values;
  - capping of contingency; and
  - sharing mechanisms.
- 40. The position on contingencies will be strongly influenced by the decision on the basis of bid, particularly for the early appointment option. Contingency mechanisms, and their impact on the OFTO revenue stream, would operate through the OFTO licence. Specific licence conditions will be determined by the Authority and will be consulted on ahead of licence grant.

#### **Effective tender process**

- 41. The Authority determines the framework of the tender process under the offshore transmission regime. The approach to evaluation is set out in the tender documentation at each stage of the tender process.
- 42. The Authority is able to request information and views from the National Electricity Transmission System Operator (NETSO) to inform the tender process. NETSO is required to provide this information through Standard Licence Condition 25 of their transmission licence.
- 43. The August 2010 consultation also considered allowing generators that are directly affected by a tender exercise a role in evaluation. Ofgem considered allowing generators to comment on:
  - The technical aspects of any variant bids received so as to inform Ofgem evaluation;

- The technical aspects of all bids received so as to inform Ofgem evaluation; and/or
- Comment on technical evaluation criteria- in advance of tenders being run
- 44. Generator responses to the consultation showed very strong support for a generator role in evaluation. Some respondents said that it should only be allowed if their role does not lead to competition concerns through generator bias.
- 45. Ofgem considers that allowing generators a role in evaluation may assist in ensuring a robust tender process. As such, the Authority is minded to further consider the role of the generator in the tender process as part of the forthcoming consultation on the Tender Regulations. Decisions in all stages of the tender process, including selection of a preferred bidder and granting a licence to a Successful Bidder, will be taken by the Authority alone.

#### Transfer of responsibility: pre-construction works

- 46. Under the OFTO build approaches it will be possible for the developer to undertake some preconstruction works and then transfer these to the appointed OFTO.
- 47. As under generator build, the process that facilitates asset transfer is an area where we will look to learn from ongoing experience. Ofgem expects that any amendments to the approach will be addressed through amendments to the Tender Regulations and associated Tender documentation.
- 48. To determine efficiently incurred costs of pre-construction works, Ofgem considers that generators should make information about any pre-construction costs which they have incurred available to bidders. Ofgem has a role in assessing costs to determine whether or not they have been efficiently incurred.

#### **OFTO of Last Resort**

- 49. The November consultation stated that the OFTO of Last Resort licence obligation will not be extended to include OFTO build tenders. We have previously noted that the failure of an OFTO build tender process may demonstrate that the market does not see an economic case for investment in a project. Appointing an OFTO of Last Resort in such a situation would involve a significant risk premium as the directed Transmission Owner (TO) would be responsible for construction of assets. We do not consider this to be in the interest of consumers.
- 50. However, we are looking to create a level playing field between options. We are mindful that the lack of this option may deter generators from choosing an OFTO build model, preferring the security offered by OFTO of Last Resort under generator build. Therefore, we decided that should an OFTO build tender fail to appoint an OFTO, the generator is free to take the project forward under generator build arrangements.

#### **Effective competition**

51. The August consultation asked whether there was a need for including appropriate mechanisms to ensure effective competition across the supply chain under OFTO build options. Respondents had mixed views on the benefits of exclusive arrangements. However,

the majority of respondents that replied to this question thought that existing legislation is sufficient.

52. Ofgem does not propose to include any mechanisms to promote effective competition, although we may consider how the timing of the tender process can best ensure competition across the supply chain.

#### **Early OFTO appointment**

#### **Tender stages and timescales**

- 53. Ofgem has previously set out that the OFTO build process is likely to differ from the generator build tender process. The OFTO is undertaking a greater scope of activities under OFTO build. Therefore, tender timescales are likely to be extended to allow parties to develop submissions and the Authority to undertake a robust evaluation.
- 54. As such, Ofgem has outlined a possible enduring tender process lasting 13 months, including an enhanced Pre-Qualification stage (PQ) (4 months) and an extended Invitation to Tender (ITT) stage (9 months). There may be also be a case for an optional Qualification to Tender (QTT) stage and optional Best and Final Offer (BAFO) stage, depending on the circumstances of the project being tendered.
- 55. In the consultation on the Tender Regulations in January 2010, Ofgem set out that the timing and structure of each tender would be determined on a case by case basis. The Pre-Qualification (PQ) document for each tender will confirm the structure and timing of the process.

#### **Tender specification**

- 56. Under an Early OFTO appointment, no detailed design work would have been undertaken by a generator and consents would not have been obtained at the point the tender takes place. The generator specifies the level of capacity they wish to connect and the timescales for delivery through the connection process. The NETSO then specifies anticipated connection points and details of necessary onshore reinforcement.
- 57. A bidder is able to propose a design solution consistent with these parameters. Bids must also be consistent with required technical codes and standards.

#### Basis of bids

- 58. Under the early approach, the OFTO could be appointed up to three years before it would be letting a procurement contract and seven and a half years before it would be receiving revenue. In the August consultation we set out the difficulty for bidders to provide firm prices without significant contingency and risk premia under these circumstances. We set out two options:
  - Bidders outline their anticipated price and provide a series of indices or contingencies to mitigate some of the market risk; and

- Bidders propose their approach to procurement and financing, for example adherence to best procurement practices and meeting the principles of funding competitions.
- 59. A number of respondents said that fixed price bids are unfeasible under an early approach. However, respondents did not propose potential alternatives. Ofgem wants potential OFTOs to bid on a basis that leads to the most effective tender process.
- 60. Ofgem recognises that we need to define the basis of bid ahead of an early tender process to provide certainty to generators seeking to appoint an early OFTO and bidders in the process.
- 61. The basis of bids for early OFTO build will be determined ahead of the first early OFTO build tender process. The specifics of the bid requirement will be defined in the ITT document for each tender.

#### Late OFTO appointment

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

- 62. The August consultation recognised that it would be beneficial to align the tender process with timings for delivering other elements of projects, such as achieving planning consents. Therefore we proposed linking the project specific elements of the tender process to milestones within the planning process to provide greater certainty to bidders. We also recognised that there may be benefits in ensuring that timescales for multiple projects align to reduce the level of resource commitment required by bidders. Therefore we suggested that the generic PQ stage would still occur in annual tender windows.
- 63. Respondents were generally supportive of this proposal. However, some thought that unforeseen delays in the planning process could lead to risks in the approach. Some generators also had concerns that it would put the tender process on a project's critical path for longer.
- 64. As under early OFTO appointment, the PQ document for each tender will confirm the structure and timing of the process, and we consider that the tender process will need to be longer than the existing transitional tender process. The Authority reserves the option to vary the length of the tender process depending on project specific circumstances.

#### **Tender specification**

- 65. As under early OFTO build, a bidder is able to propose a design solution consistent with the parameters defined by the pre-construction works undertaken by the generator. Bids must also be consistent with required technical codes and standards. Ofgem does not propose to allow parties to submit variant bids which undermine these pre-construction works as it could lead to delays in connection. However, we consider that variant bids within the scope of the tender specification would be acceptable.
- 66. As set out above, pre-construction works will be defined on a case by case basis ahead of each OFTO build tender exercise. As such, the tender specification is also likely to vary on a case by case basis, and will be defined in the tender documents.

#### **Basis of bids**

- 67. The tender process needs to ensure that the supply chain is engaged in the best way and barriers to entry are not onerous. Therefore, the August consultation considered three approaches to the basis of bid required of potential OFTOs. Firm prices are required in all three:
  - Negotiated equipment prices bidders approach supply chain to negotiate prices for equipment on an individual basis. We have concerns that the cost of this approach could limit competition;
  - Indicative equipment prices OFTOs are appointed ahead of detailed negotiation of contracts. ITT stage bids are based on manufacturers' list prices;
  - Heads of terms offering major equipment manufacturers offer heads of terms to all participants in the tender process. This allows a level playing field for all bidders.
- 68. Respondents did not agree on the most appropriate basis of bid. A potential OFTO and a member of the supply chain preferred an indicative cost approach. A number of respondents were in favour of leaving all options open. However, from an evaluation point of view it is important that all bidders are bidding on the same terms.
- 69. As under early OFTO build, the basis of bid for late OFTO build will be determined ahead of the first late OFTO build tender process. The specifics of the bid requirement will be defined after the PQ stage for each tender.

## Appendix 2: Summary of responses to the November 2010 consultation

The DECC and Ofgem consultation on implementing further refinements to the enduring regime closed on 29 November 2010. It gave respondents the opportunity to comment on proposed amendments to the Connection and Use of System Code (CUSC) and the Grid Code.

Responses were received from 17 stakeholders, in the form of 17 full responses and 2 initial responses of a material nature. Copies of all non-confidential responses have been published on Ofgem's website.

This appendix provides an overview of the additional issues arising from the responses. A question by question analysis of the responses that impact on or have informed the changes to the CUSC and the Grid Code is set out in Chapter 2.

#### **Key themes**

- 1. The key points raised by respondents which impact on or have informed the proposed changes to the standard framework are:
  - most respondents agreed that the changes to the CUSC and the Grid Code broadly reflect the policy intent. There were a number of suggestions made to help clarify the changes, including changes to other codes;
  - many respondents however, noted the challenging timeframe for responding to the consultation, with some concern that it could result in the need for further code changes. A number of respondents suggested that further development could be done using the normal industry review process; and
  - a number of respondents asked how changes to the System Operator Transmission Owner Code would work with the proposed changes to the CUSC and the Grid Code.

#### Issues commented upon (not in response to specific questions)

2. Most responses commented on a number of other issues raised in the November 2010 consultation document.

#### **Transfer of assets**

3. Most respondents welcomed the extension of the property transfer scheme. However there were questions on the mechanisms to facilitate the final stages of handover from the generator to an OFTO. There was concern that a number of scenarios (such as phased development, appointment of an OFTO of last resort and certification under the Third Energy Package) could delay a generator from being able to transmit. Some respondents suggested

possible ways to enable a generator to undertake commissioning works. These included a conditional award of the offshore transmission licence, changes to primary legislation, clarification through secondary legislation, temporary exemptions or other methods which would allow an OFTO to be appointed in a timeframe consistent with the wind farm's commissioning programme.

#### **OFTO of Last Resort**

4. A number of respondents welcomed the inclusion of an OFTO of Last Resort as part of the generator build option. Some respondents still preferred for the arrangements to extend to all build options. One respondent suggested establishing a default OFTO of Last Resort, who has financial standing and ability to assume the responsibilities. Another respondent thought that given the delays should a generator have to revert to a generator build approach, it would be preferable to hold a quick re-run of the tender.

#### **Cost Guarantee**

- 5. A number of developers expressed disappointment at the removal of the cost guarantee. One respondent argued that there is even more uncertainty about the offshore transmission market with Round 3 projects taking the technological leap from HVAC to HVDC. Another advocated for a reduction rather than a complete removal of the guarantee, as it helped to provide comfort to investors unfamiliar with the industry.
- 6. A number of respondents asked for Ofgem to provide greater guidance and visibility on the definition of economic and efficient OFTO spend.

#### **Competition issues**

7. Respondents provided views on how ring-fencing of generation and transmission costs could be effected. One suggested that the Tender Regulations specify how costs are monitored, allocated and reported to Ofgem. Another suggested that generation and transmission costs be separately identified in a single procurement contract. This could be through an auditable mechanism. Two respondents were averse to formal ring-fencing requirements for separate contracts which could result in higher costs to consumers.

#### Third Energy Package

8. A number of respondents expressed concern about how implementation of the Third Energy Package would impact on offshore transmission and expressed a desire for information on how OFTOs will be certified as TSOs, and to see that implementation of the Third Energy Package does not disadvantage developers in the UK.

#### Coordination

9. A number of respondents reiterated their support for coordinated network development.

#### **Incremental capacity increases**

10. In response to Q 3.3, one respondent noted that it understood that OFTOs must allow for a 20% increase in capacity over the operational life of the asset. The view was expressed that developers might however want to build a level of capacity capability above 20% in, for

example, the first phase of a project ahead of further developments or phases. This seems to be a misunderstanding of the policy position set out in previous statements, which does not relate to project phasing, but rather additional capital investments which are the result of changes in contracted demand between the generator and the NETSO<sup>13</sup>.

11. In response to such a change in demand, an appointed OFTO will, when requested by NETSO, be allowed to undertake incremental investment up to a value of 20% of the initial capital cost of the transmission assets 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.

#### Additional comments relating to the proposed changes to CUSC and Grid Code

- 12. We received a number of comments in relation to changes to the CUSC and the Grid Code not in response to the specific question we asked. We would like to thank respondents for providing these additional views.
- 13. We received a number of drafting comments on the changes to the CUSC and the Grid Code, which have been incorporated where relevant.
- 14. One respondent considered that the requirement for the Site Capability Specification (SCS), Connection Site Specification (CSS) and Transmission Site Specification (TISS), provided for in the CUSC Construction Agreement (Schedule 2 Exhibit 3A) should be explained. We consider that the definitions of these agreements in section 11 of CUSC provides an explanation of the requirements for each of these agreements.
- 15. One respondent was concerned that the OFTO would be required to complete the Site Capability Specification (SCS), Connection Site Specification (CSS) and the Transmission Interface Site Specification (TISS) and that these agreements could have an impact on the generator's Connection Agreement. We consider that these agreements are matters for the OFTO to enter into under its obligations in the STC and (excluding the Connection Site Specification, already provided for in the CUSC) are not agreements for the generator to enter into as a result of the generator build proposals. As such, we do not consider it is appropriate that the generator should complete these agreements. However, we remain of the view that the generator that constructs its transmission assets is best placed to provide the information necessary for the completion of these agreements. We have not made any further changes to clause 17 of CUSC as a result of this comment.
- 16. One respondent was concerned with the need to provide duplicate information with regard to transmission assets constructed by an offshore generator. We note this issue was an issue for the transitional projects and do not consider that information will be required to be provided more than once in the enduring regime, except where that information has changed through the development of the OTSDUW.

<sup>&</sup>lt;sup>13</sup> See for example 'Offshore Electricity Transmission – A further Joint Ofgem/DECC Regulatory Policy Update', Final Consultation Document, 23 March 2009, and 'Offshore Electricity Transmission - A Joint Ofgem/BERR Regulatory Policy Update', 13 June 2008.

- 17. One respondent considered that the changes to Grid Code Operating Code 11 were not required as derogations have been given in the past thus proving this requirement unnecessary. As we have stated before we consider that the same rules should apply offshore as onshore unless there is justification for different treatment. We also consider that the obligations placed on an OFTO should be placed on a generator constructing transmission assets. We do not consider that derogations should be provided on an ongoing basis under the enduring regime and that the changes proposed to OC11 are relevant and necessary.
- 18. One respondent questioned the need for the Agreement to Vary and the TO Construction Agreement. As noted in the November Consultation, the CUSC allows for but does not require an Agreement to Vary. We consider it prudent to allow for the Agreement to Vary to remain available to parties under the options being provided under these changes.
- 19. One respondent requested clarity with regard to which party defines the OTSDUW in the Construction Agreement. We consider that the party constructing the assets will define these assets with consideration to the standard arrangements required under the relevant documents. With regard to late OFTO build activities, for example consents, it will be for the generator and NETSO to agree which activities the generator wishes to undertake and these will be set out in the Construction Agreement.
- 20. One respondent questioned the asymmetry of rights set out in the CUSC Construction Agreement (Schedule 2 Exhibit 3A), specifically paragraphs 2.3.2 and 2.11. We consider that he changes proposed to these paragraphs of the Construction Agreement are comparable to the rights available to an OFTO under the STC and that the changes are appropriate.
- 21. One respondent requested information in relation to harmonics. Another respondent requested consistency between onshore and offshore arrangements with regards to harmonics. We consider that the changes being proposed to introduce generator build and the changes implemented at 'Go Active' did not introduce any change to the application of Engineering Standard G5/4 in relation to harmonics. We note that Engineering Standard G5/4 applies equally onshore and offshore.
- 22. One respondent considered that the Grid Code Planning Code (PC) A.5.4.2 was incomplete as it did not provide for an associated control scheme for reactive power. Our approach to the development of these arrangements has been to place the same obligations on an offshore generator that wishes to construct its transmission assets as re placed on an OFTO. We do not consider that further obligations should be introduced in the timescales available to develop these changes.
- 23. One respondent considered that the information provided for in PC.A.8 should be provided with the CUSC Connection Offer. We do not consider that it is appropriate to require the NETSO to provide this level of information. As set out in the November consultation the NETSO will provide a subset of the Network Data to allow the generator to develop its OTSDUW. Generators are able to request the Network data set out in PC.A.8 if they require it to undertake detailed studies to enable the development of the OTSDUW.
- 24. One respondent considered that the change to the Grid Code Connection Conditions CC.6.3.8 was inappropriate. We disagree with this comment. The obligations set out in Section K of the STC are based on the obligations on non-synchronous onshore generator in the Grid Code. As such, we consider that the obligations placed on an offshore generator

constructing its transmission assets should be based on the same obligations. We consider that the changes to CC.6.3.8 achieve this approach.

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