

Offshore Electricity Transmission: Consultation on implementation of the Generator Commissioning Clause in the Energy Bill 2012-13

Consultation

Publication date: 30 August 2013

Response deadline: 25 October 2013

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Overview:

We are seeking to implement new legislative provisions within the current Energy Bill to ensure that, following full commencement of the offshore transmission regime, generator developers can lawfully commission offshore transmission assets prior to transferring these assets to a licensed Offshore Transmission Owner (OFTO). This consultation sets out our proposals for the implementation of the new Generator Commissioning Clause following the coming into force of the Energy Bill currently before Parliament.

In this document we outline proposals for the point in the commissioning process when a completion notice would be issued for Generator build projects, along with how the new arrangements would be implemented through proposed industry code and licence modifications. We also consider the practical application of the proposed new arrangements, in particular how they might apply to projects that at the time the new arrangements come into force, have passed the point at which a completion notice would ordinarily be issued, but have not yet transferred to an OFTO.

Context

With the government setting an ambitious target that 15 per cent of the UK's energy needs to be met from renewable sources by 2020, a dynamic approach was needed to deliver the substantial investment required in transmission. In the case of offshore wind, the Department of Energy and Climate Change (DECC), together with Ofgem, established the competitive regulatory regime for offshore transmission in June 2009. Under the regime we run the competitive tender process to select and licence Offshore Transmission Owners (OFTOs).

From the outset the offshore transmission regime has sought to encourage innovation and to attract new sources of technical expertise and finance, whilst ensuring that grid connections are delivered efficiently and effectively. The competitive regime was designed to be delivered in two parts, a transitional and an enduring regime. Once we have granted OFTO licences for all projects in the transitional tender rounds it will bring total investment in offshore transmission to approximately £2.5bn.

The investment opportunity in the enduring regime is expected to be significantly larger and is likely to deliver billions of pounds of investment in offshore transmission over the next decade. The enduring regime is also operating in the context of the proposed development of increasingly complex, integrated and coordinated offshore grid networks in the UK and the European Union (EU).

Now that the Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations 2013 (the '2013 Tender Regulations') are in force, we are ready to start running tender exercises under the enduring regime. Currently we are finalising tenders for Transitional Tender Round 1 (TR1) and Transitional Tender Round 2 (TR2) and expect to shortly commence the first round of tenders under the enduring regime, Tender Round 3 (TR3).

Associated documents

- [Offshore transmission: proposed measure to address concerns regarding commissioning of transmission assets under the generator build model](#)
- [Offshore Electricity Transmission: addressing generator build commissioning concerns.](#)
- The Energy Bill and explanatory notes available at the [Parliament website](#). The Generator Commissioning Clause as at the time of publication is also provided in Appendix 2.
- [Statement on future generator build tenders](#)
- [The Electricity \(Competitive Tenders for Offshore Transmission Licences\) Regulations 2013, February 2013](#)

Contents

Executive Summary	iv
1. Introduction	1
Purpose of this document	1
Document structure	2
Introduction	3
Legal framework	4
Timing of implementation of the Clause and full commencement	9
Responding to this document	10
2. The Generator Commissioning Clause	12
Principles for implementation	12
The completion notice trigger point	13
3. Implementation of the Generator Commissioning Clause	24
Projects in flight	24
Phased and staged projects	26
Settlement metering arrangements	28
Projects overrunning the 18 month period of the Clause	31
4. Proposed Modifications to the Electricity Transmission Licence	32
Proposed licence modifications	32
5. Proposed Code Modifications	34
Introduction	34
Proposed CUSC modifications	34
Proposed Grid Code modifications	36
Embedded offshore transmission systems: application for distribution connected transmission system projects	36
6. Next Steps	38
Proposed future publications and implementation	38
Stakeholder engagement	38
Appendices and Annexes	39
Appendix 1 - Consultation Response and Questions	40
Appendix 2 – Generator Commissioning Clause	42
Appendix 3 – Interdependencies and Interactions	47
Appendix 4 - Glossary	49
Appendix 5 - Feedback Questionnaire	56

Executive Summary

This document summarises our key proposals for the implementation of the Generator Commissioning Clause ('the Clause') in the Energy Bill currently before Parliament. The Clause was developed jointly by DECC and Ofgem¹ to ensure that, following full commencement of the offshore transmission regime, a generator developer can lawfully commission and operate offshore transmission assets before transferring these assets to an OFTO.

In this document we outline proposals for the point in the commissioning process when the 'completion notice' described in the Clause will be issued and how the arrangements will be implemented through proposed industry code and licence modifications. We also consider how the Clause will apply to projects 'in flight', by which we mean any offshore transmission projects that at the time the new arrangements come into force, have passed the point at which a completion notice would ordinarily be issued, but have not yet transferred to an OFTO.

The completion notice trigger point

The completion notice is a concept under the Clause that indicates that a transmission system can be made available for use. It marks the beginning of the final 18-month period during which a developer can carry out the activity necessary for commissioning of transmission assets without holding a transmission licence. In order to work alongside existing industry processes we have considered existing stages in the commissioning process that could be suitable for triggering issuance of the completion notice. Based on the requirements of the Clause we consider that the trigger point should represent the point at which the offshore transmission assets are technically ready, so that transmission is possible.

We propose that the current Interim Operational Notification (ION) issued to a developer by the National Grid Electricity Transmission (NGET), as part of the commissioning process, be split into two parts: ION Part A and ION Part B. ION Part A would be the first point for dynamic energisation and would be issued with zero Transmission Entry Capacity (TEC); ION Part B would be issued when TEC would be granted, enabling generation and transmission to commence.

After analysing transitional tender round projects and considering consistency with OFTO build commissioning processes and existing System Operator - Transmission Owner Code (STC) commissioning arrangements, ION Part B is currently our preferred option for the point at which the completion notice should be issued. We consider that ION Part B may represent the best point at which to judge technical readiness of the offshore transmission assets. Given this is the first point at which the generator can transmit electricity onto the NETS, ION Part B would be a clear and well understood stage in the commissioning process. From this point we believe

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

18 months should be sufficient time to resolve any outstanding commissioning issues and to transfer the transmission assets to the OFTO, which is consistent with the original intent of the Clause.

Projects in flight

As part of this consultation, we have considered how the Clause should apply to projects in flight. Given the Clause does not make express provision for such projects we have identified an approach we consider consistent with the Clause. We propose that for such projects a completion notice will be issued at the time the code and licence modifications to implement the Clause take effect and once full commencement of the offshore transmission regime has occurred. This will give such projects 18 months from this point to complete commissioning and transfer the offshore transmission assets. Given these projects will have passed our proposed completion notice trigger point at the time the code and licence modifications take effect, this will not impose any additional requirements on these projects or give them any less time than future projects subject to the Clause.

Settlement metering

Under current industry arrangements, until the offshore assets are transferred to the OFTO, they are not defined in the Balancing and Settlement Code (BSC) as an 'offshore transmission system' and settlement metering is therefore carried out at the onshore boundary point. After asset transfer the assets become an offshore transmission system and so metering is moved to the offshore boundary point.

Once the Clause comes into force, Generator build transmission assets will legally constitute an offshore transmission system before transfer to an OFTO but under current arrangements will not form part of the National Electricity Transmission System (NETS) at that point, raising the question of where metering should take place going forward.

In June 2013 a Modification Proposal (P294) was raised to the BSC, proposing that metering should be at the offshore boundary point from the beginning of the commissioning period. The industry process to consider this proposal is currently underway. Ofgem may consider this matter further including whether any modifications may be needed to the BSC for the implementation of the Clause.

Next steps

In this consultation we seek stakeholders' views on our proposals for the implementation of the Clause. As part of the consultation process we are running a stakeholder briefing session in London on 16 September 2013, where we will be seeking initial feedback and would like to hear stakeholders' views on the proposals for the implementation of the Clause. Once the consultation closes, we will review responses and intend to publish our final proposals, alongside code and licence modifications to implement them, later in the year.

1. Introduction

Chapter Summary

This chapter provides background on the Generator Commissioning Clause, how it came about and the legal and regulatory context. It also outlines plans for the Clause coming into force, code and licence modifications taking effect, and full commencement of the offshore transmission regime.

Purpose of this document

- 1.1. The Generator Commissioning Clause² (the 'Clause') within the Energy Bill currently before Parliament includes powers for the Gas and Electricity Markets Authority (the 'Authority') to make the modifications to transmission and distribution codes³ that it considers necessary or desirable for the purpose of implementing the Clause. Full Clause text is provided in Appendix 2.
- 1.2. The purpose of this document is to outline our proposals for the implementation of the Clause including associated proposed code and licence modifications. We expect this consultation to provide clarity and confidence to stakeholders so that generator developers ('developers') will be able to lawfully commission offshore transmission assets under Generator build prior to transfer to an Offshore Transmission Owner (OFTO).
- 1.3. The focus of this document is the arrangements for current and future projects following the coming into force of the Clause and full commencement of the offshore transmission regime ('full commencement'). Later in this chapter we outline the interaction between the Clause coming into force and full commencement. In Chapter 3 we consider the practical implementation of the Clause including proposed arrangements for projects 'in flight'. These are projects that will have passed the point at which a completion notice would ordinarily be issued at the time the code and licence modifications to implement the Clause take effect and where the offshore transmission assets are operational, but have not yet transferred to an OFTO.
- 1.4. The code modifications proposed as part of this consultation involve modification of the Connection and Use of System Code (CUSC), including the Construction Agreement and Bilateral Connection Agreement (BCA); the Grid Code; and potentially the Balancing and Settlement Code (BSC). The

² Clause 138 as current at the time this document was published. This may change during the Energy Bill's passage through parliament.

³ Section 4(1) of the Electricity Act 1989 (as amended) sets out that companies involved in the generation, distribution, transmission, supply, transportation, shipping or provision through interconnectors of electricity or gas require licences, unless specifically excluded from doing so by the Secretary of State. Ofgem decides the content of these licences. The transmission and distribution licence requires the establishment of a number of multilateral industry codes that underpin the electricity markets. These codes establish detailed rules for industry that govern market operation, the terms for connection and access to energy networks.

modifications we propose to the electricity transmission licence (the 'licence') as part of this consultation would primarily involve modifying Section C of the licence, which would only impact on the National Electricity Transmission System Operator (NETSO). There are also modifications proposed to definitions within Section A of the licence. We have provided drafting of our proposed code and licence modifications as change marked text in the annexes attached to this document.

Document structure

1.5. This document has six chapters:

- Chapter 2 outlines our principles for implementation of the Clause and explains the significance of the completion notice, options for when it could be triggered and our current preferred option.
- Chapter 3 explains the practical application of the Clause to projects in flight, staged and phased projects and the interaction with settlement metering and the BSC.
- Chapter 4 outlines proposed licence modifications for the implementation of the Clause.
- Chapter 5 outlines proposed code modifications for the implementation of the Clause.
- Chapter 6 provides information on next steps that we will be taking regarding finalising our proposals on implementation of the Clause and further areas of work.

1.6. We have provided a number of appendices to support the proposals throughout this document:

- Appendix 1 provides all the questions contained within this consultation and details of how to respond.
- Appendix 2 provides the full text of the Clause, current at the time of publication of this consultation.
- Appendix 3 identifies the linkages with other work areas to ensure that the new arrangements are aligned as appropriate. This includes the interaction between the tender process and commissioning and Interest During Construction (IDC).
- Appendix 4 provides a glossary of terms used throughout this document.

- Appendix 5 provides a feedback questionnaire.
- 1.7. We have also provided copies of the change marked text of the codes and licence as follows:
- Annex 1 provides the proposed licence modifications.
 - Annex 2 provides the proposed CUSC modifications, including the Construction Agreement and BCA.
 - Annex 3 provides the proposed Grid Code modifications.

Introduction

- 1.8. The regulatory regime for offshore electricity transmission networks applies to all such networks at or above 132kV in Great Britain's (GB) offshore waters⁴ that convey electricity from generating stations (currently wind generation) in such waters. The offshore transmission regulatory regime is 'partially commenced'. This means that for offshore networks at 132kV, these only form part of a transmission system from the point the assets transfer to an OFTO that is licensed to operate those assets through the competitive tender process under the 2013 Tender Regulations⁵ but not before that point.
- 1.9. Any time before asset transfer, conveyance at 132kV is currently legally classified as distribution of electricity, not transmission. Effectively, these offshore networks constitute distribution systems before transfer to an OFTO. Distribution of electricity is also a prohibited activity if carried out without a licence or exemption. However, developers may be exempt from requiring a licence to operate the offshore network under the Electricity (Class Exemptions from the Requirement for a Licence) Order 2001⁶ (the 'distribution exemption'). This enables developers to commission these networks lawfully.
- 1.10. Government intends to 'fully commence' the offshore regulatory regime in due course which means the regime will apply to all offshore networks at and above 132kV. As a result, such offshore networks will constitute offshore transmission networks at all times, ie. including before transfer to an OFTO. The result is that conveyance of electricity over such networks for the purpose

⁴ Section 6C(7) of the Electricity Act 1989 (as amended) provides that 'offshore waters' means:

(a) waters in or adjacent to Great Britain which are between the mean low water mark and the seaward limits of the territorial sea; and

(b) waters within an area designated under section 1(7) of the Continental Shelf Act 1964.

⁵ 2010 Tender Regulations if a qualifying project falls within the transitional provisions of the 2013 Tender Regulations.

⁶ SI 2001 No. 3270

of supply (including commissioning) by developers would result in a breach of the prohibition on transmission without a transmission licence.

- 1.11. We are aware of developers' concerns regarding the commissioning of offshore transmission assets under Generator build following full commencement. We understand that some conveyance of electricity may be necessary in order to commission the transmission assets, which in turn facilitates the transfer of the assets to an OFTO. We recognise that it is also desirable for renewable electricity to flow over these offshore transmission assets during the finalisation of commercial activities and grant of a transmission licence to an OFTO.
- 1.12. DECC and Ofgem have worked together to address these concerns through the development of the Clause within the current Energy Bill. The Clause balances the preference for developers to be able to commission their offshore transmission assets under Generator build, with the need to ensure that developers transfer these assets to OFTOs in a timely manner.
- 1.13. The intent of the Clause is to enable developers commissioning offshore transmission assets under Generator build to convey electricity for a defined period in certain circumstances. The Clause effectively permits transmission by developers to undertake commissioning of the transmission assets during the period leading to OFTO licence grant, while still ensuring that developers transfer these assets to an OFTO in a timely manner.
- 1.14. Given that the Clause was developed specifically to enable developers to commission transmission assets under Generator build, the proposals in this document relate only to Generator build projects. While we have made comparisons with OFTO build at various points throughout this document, none of the proposals will impact on OFTO build arrangements.

Legal framework

Background

- 1.15. The Clause provides that transmission over an offshore transmission network can take place during a commissioning period if it takes place before a 'completion notice' is given or during a period for 18 months from the day on which the completion notice is issued. In order to implement this concept of a commissioning period we need to identify the appropriate point in the construction and commissioning of offshore transmission assets for issue of a completion notice. From that point, a developer will have a final period of 18 months in which to complete its commissioning activities and transfer the assets to the OFTO.
- 1.16. The draft Energy Bill was published on 22 May 2012 and since then some amendments have been made to address issues identified during consultation.

The final Energy Bill was laid in Parliament on 29 November 2012 and includes some key changes to the Clause made since the May draft, including:

- the 12 month period post issue of the completion notice has been increased to 18 months;
- the 18 month period could be reduced to 12 months by notice by the Secretary of State in 2 to 5 years from Clause commencement, where the Secretary of State considers this is appropriate;
- adjustments were made to the section of the Clause relating to how a developer entity is defined and how associated developer group structures are captured; and
- powers have been included in the Energy Bill for the Authority to modify relevant industry codes to give effect to the Clause after consultation, where such consultation can be prior to enactment. Any associated necessary licence modifications are to be taken forward using the Authority's powers under Section 11A of the Electricity Act 1989 (the 'Act').

1.17. In order to implement the Clause, we have been working with NGET, as the owner/administrator of the CUSC and Grid Code, to identify code and licence modifications needed to give effect to the process for issuing the completion notice under the Clause. This work is running in parallel with the Parliamentary process to ensure implementation occurs in a timely manner.

Legal and regulatory context

1.18. Subsection 4(1)(b) of the Act provides that a person who **participates in the transmission of electricity** for the purpose of giving a supply to any premises or enabling a supply to be so given shall be guilty of an offence unless he is authorised to do so by a licence (or exemption).

1.19. Subsection 4(3A) of the Act provides that the reference to a person who participates in the transmission of electricity is to a person who:

*(a) co-ordinates, and directs, the flow of electricity onto and over a **transmission system** by means of which the transmission of electricity takes place, or*

*(b) makes available for use for the purposes of such a **transmission system** anything which forms part of it.*

1.20. Section 4(4) of the Act provides that:

'transmission system' means a system which—

*(a) consists (wholly or mainly) of **high voltage lines** and electrical plant, and*

(b) is used for conveying electricity from a generating station to a substation, from one generating station to another or from one substation to another.

1.21. Section 64 of the Act provides that:

'high voltage line' means—

(a) in relation to England and Wales, an electric line of a nominal voltage exceeding 132 kilovolts;

(b) in relation to Scotland, an electric line of a nominal voltage not less than 132 kilovolts,

and 'low voltage line' shall be construed accordingly.

1.22. Currently, offshore networks that consist of electric lines of 132kV and do not exceed 132kV do not fall within the above definition of 'high voltage line' and therefore cannot form part of a transmission system. However, offshore networks form part of a transmission system at the point at which they transfer to the OFTO (selected through a tender exercise) through 'partial commencement' of a different definition of 'high voltage line' introduced by the Energy Act 2004⁷. That different definition of 'high voltage line' brings the minimum voltage down to 132 kV. It means an electric line:

(a) which if it is in Scotland or is a **relevant offshore line**, is of a nominal voltage **of 132kV or more**; and

(b) in any other case, is of a nominal voltage of more than 132kV,

where a 'relevant offshore line' is⁸:

(a) wholly or partly in an area of GB internal waters⁹, an area of the territorial sea adjacent to the United Kingdom (UK) or an area designated under section 1(7) of the Continental Shelf Act 1964; and

(b) used to convey electricity to a place in Scotland; or

⁷ Section 180 of the Energy Act 2004 has amended the definition of 'high voltage line' in section 64 of the Electricity Act 1989.

⁸ Section 44 of the Energy Act 2008 has amended the definition of 'relevant offshore line' in section 64 of the Electricity Act 1989.

⁹ 'GB internal waters' means waters in or adjacent to GB which are between the low water mark and the seaward limits of the territorial sea adjacent to GB but do not form part of that territorial sea (inserted by Section 44 of the Energy Act 2008 in section 64 of the Electricity Act 1989).

(c) constructed wholly or mainly for the purpose of conveying, to any other place, electricity generated by a generating station that is situated in an area of the territorial sea adjacent to the UK or an area designated under section 1(7) of the Continental Shelf Act 1964.

- 1.23. Up until the point an offshore network transfers to the OFTO, such networks would constitute low voltage lines (electric lines of 132kV and less) in accordance with the definition of 'high voltage line' above. A distribution system is defined to include low voltage lines¹⁰. Therefore, until asset transfer, such networks are distribution systems. A distribution licence is required where a person is distributing electricity for the purposes of supply by means of a distribution system. However, a person carrying out distribution offshore is exempt from requiring a distribution licence under the distribution exemption. Therefore, a developer of such networks can convey electricity for the purposes of supply (including commissioning) without a distribution licence pursuant to the exemption up to the point of transfer to the OFTO.
- 1.24. Once the offshore transmission regime is 'fully commenced', conveyance of electricity on offshore networks at 132kV will be classed as transmission, not distribution, at all times and not just upon asset transfer to the OFTO. We set out the interactions between the expected timings of full commencement and implementation of the Clause below.

The Clause

- 1.25. The Clause amends the Act so that a developer who is commissioning Generator build¹¹ offshore transmission assets prior to transfer to an OFTO (and in doing so is participating in transmission of electricity for the purposes of supply) is deemed not be to participating in transmission for the purposes of the transmission prohibition in the Act during the 'commissioning period'.
- 1.26. The protection afforded by the Clause applies only in certain circumstances, those circumstances being defined by four conditions that must be met:
- Condition 1 requires that transmission is taking place over an 'offshore transmission system'¹².
 - Condition 2 requires that transmission is taking place during a 'commissioning period'¹³. The commissioning period is:

¹⁰ Section 4(4) of the Electricity Act 1989.

¹¹ Once the Clause comes into force it will apply to both transitional and enduring projects where generators are commissioning offshore transmission assets, provided the developer satisfies the conditions of the Clause.

¹² Subsection 6F(2) of the Clause.

- before a **completion notice** is given in respect of the system¹⁴; and
- during **18 months** beginning with the day on which the completion notice is given¹⁵.
- Condition 3 requires that the system is a '**qualifying project**' under the tender regulations¹⁶, and that to satisfy this condition the developer must have both:
 - made a request to the Authority that a tender exercise be run in respect of the offshore transmission network, and
 - that the Authority has determined that the request relates to a qualifying project¹⁷.

Condition 3 also provides that the Clause does not apply if the system or any part of it is transferred to the OFTO. The practical implications of this are discussed further in Chapter 3, 'Phased and staged projects'.

- Condition 4 effectively requires that the offshore transmission network is built by the developer that operates the relevant generating station to be connected to the offshore transmission network¹⁸. Specifically:

(a) the person who is the developer in relation to the tender exercise is also the operator of a relevant generating station, and

(b) the construction or installation of the system is being or has been carried out by or on behalf of, or by or on behalf of a combination of, any of the following:

(i) the person mentioned in paragraph (a);

(ii) a body corporate associated with that person at any time during the period of construction or installation;

(iii) a previous developer;

(iv) a body corporate associated with a previous developer at any time during the period of construction or installation.

¹³ Subsection 6F(3) of the Clause.

¹⁴ Under subsection 6G(1)(a) of the Clause.

¹⁵ Under subsection 6G(1)(b) of the Clause.

¹⁶ Current Tender Regulations are The Electricity (Competitive Tenders for Offshore Transmission Licences) 2013.

¹⁷ Subsection 6F(4) of the Clause.

¹⁸ Subsection 6F(5) of the Clause.

- 1.27. The Clause enables a person to benefit where the transmission system and relevant generating station are transferred to the same or different corporate group(s), regardless of whether the transfer is by sale of the generation and transmission companies or sale of the generation and transmission assets, so long as the construction or installation was carried out by the developer or a previous developer or an entity 'associated' with developer or previous developer. Note that the meaning of 'associated' is set out in paragraph 37 of Schedule 2A to the Electricity Act 1989¹⁹. If relevant to you, please consider the meaning of 'associated' to understand whether as a developer you are able to benefit from the Clause. Developers should seek their own legal advice on whether particular group structures fall within this definition.

The completion notice

- 1.28. In subsection 6G(2) of the Clause, a completion notice is defined as follows:

(2) A 'completion notice', in relation to a transmission system, is a notice which:

(a) is given to the Authority by the relevant co-ordination licence holder in accordance with the co-ordination licence (i.e. the NETSO), and

(b) states that it would be possible to carry on an activity to which section 4(1)(b) applies by making available for use that system.

- 1.29. In Chapter 2 we outline the concept of the completion notice in more detail and consider options for when it should be issued.

Timing of implementation of the Clause and full commencement

Full commencement

- 1.30. As noted above, upon full commencement, conveyance of electricity on offshore networks at 132kV will be classed as transmission, not distribution, at all times, not just upon asset transfer to the OFTO.
- 1.31. We are working with government to determine the most appropriate timing of full commencement. We will seek to coordinate full commencement with the implementation of the Clause to ensure that these new arrangements align. This will reduce complexity in understanding which arrangements apply and ensure greater regulatory certainty.

¹⁹ An extract of paragraph 37 of Schedule 2A to the Electricity Act 1989 is provided in Appendix 2 for reference.

- 1.32. We expect to provide further information on the proposed timing of full commencement in our final consultation on code and licence modifications later in the year.

The Clause coming into force

- 1.33. The Clause will come into force two months after the Energy Bill receives Royal Assent. The Energy Bill is currently before Parliament and we anticipate that Royal Assent may occur towards the end of 2013. If so, the Clause would come into force in January or February 2014.
- 1.34. Once the Clause comes into force, the Clause will apply to offshore networks that are over 132kV immediately. The effect of the Clause coming into force will be that any such project that satisfies the conditions of the Clause will fall within the 'commissioning period' and be permitted to transmit electricity over the transmission network. However, for those offshore networks at 132kV (ie. distribution, and covered by the distribution exemption), the transmission prohibition and therefore the Clause will not apply to them until full commencement of the offshore transmission regime (when such networks become transmission).

Code and licence modifications coming into effect

- 1.35. Under Section 6H of the Clause, the Authority will have powers to make code modifications to implement the Clause. As detailed earlier, we also expect to make modifications to the licence.
- 1.36. The significance of the code and licence modifications are that they will establish the obligation on the NETSO to issue completion notices, and will stipulate the time at which a completion notice should be issued within the commissioning process. We expect to implement the code and licence modifications a few months after the Clause comes into force (such that we can satisfy the requirements of the Section 11A powers we will use to implement the licence modifications). However this will not leave any developers of offshore networks at risk of being in breach of the prohibition on transmission post-full commencement provided they satisfy the conditions of the Clause.
- 1.37. We are consulting in this document on the most appropriate arrangements to apply for projects in flight at the time the code and licence modifications to implement the Clause comes into effect. See 'Projects in flight' in Chapter 3 for an outline of how these provisions may apply under such circumstances.

Responding to this document

- 1.38. We would welcome comments from respondents on all issues in this document, although particular issues on which we are seeking feedback are

highlighted in the relevant chapters. Respondents who wish to have their responses remain confidential should clearly mark the document/s to that effect and include the reasons for confidentiality. It would be helpful if responses could be submitted both electronically and in writing. Respondents are asked to put any confidential material in the appendices to their responses. We would be happy to discuss the questions raised in the document with stakeholders and interested parties.

- 1.39. We welcome responses by 25 October 2013. All responses should be sent to: offshore.enduring@ofgem.gov.uk.

2. The Generator Commissioning Clause

Chapter Summary

This chapter sets out our principles for implementation of the Generator Commissioning Clause, as well as proposals for the trigger point of the completion notice.

Principles for implementation

- 2.1. In line with the principles of Good Regulation, our approach to implementing the Clause is to make the minimum necessary changes to industry frameworks for implementation of the Clause. The new arrangements are intended to be targeted, functional and practical whilst achieving the intent of the new legislative provisions.
- 2.2. We consider it is more efficient to modify the existing codes that apply to developers to set out the new requirements for the issuing of the completion notice in respect of the transmission assets and any consequential obligations. As such we do not propose that developers be required to accede to any additional codes (such as the STC). This is because we consider that there are obligations within such codes that may not be relevant to a developer commissioning transmission assets, and instead have identified the obligations in relation to this activity that are specifically required for these purposes. This is to ensure that the obligations on the developer in relation to the commissioning of transmission assets are proportionate in relation to what is needed to properly commission such assets and operate for a short period only.
- 2.3. We are aware of the potential interactions between issuing the completion notice and the tender process conducted by Ofgem for the purposes of appointing and licensing an OFTO. Whilst we recognise these interactions, we consider that issuing the completion notice and the tender process should be treated separately. We would not wish to create constraints by formally linking the two. We want to ensure that Ofgem maintains flexibility in relation to how a tender exercise is run in respect of a particular project, and that there are no unintended consequences as a result of the implementation of the Clause. This is discussed further in Appendix 3.

The completion notice

- 2.4. In order to implement the Clause it is necessary to modify the licence to reflect the obligation on the NETSO to issue a completion notice. To do so we must determine, in line with the legal definition of the completion notice as set out in paragraph 1.28:

- at what point it would be 'possible to carry on an activity to which section 4(1)(b) applies' (transmission); and
 - what is meant by 'making available for use that system'.
- 2.5. In determining the appropriate point at which the completion notice should be issued, the completion notice must indicate that it would be possible to carry on the activity of transmission for the purposes of supply in respect of a particular offshore transmission network. It is not a requirement that the activity for the purpose of supply is actually taking place.
- 2.6. In order to implement the Clause it is necessary to judge at what point in the commissioning process it would be possible for the offshore transmission network to be made available for use. So, for instance, the generation assets may not need to be fully ready to operate in order for a completion notice to be issued in respect of the offshore transmission network. We interpret the point at which it would be possible for the offshore transmission network to be made available for use to mean the point of technical readiness of such a system. Henceforth when we refer to the technical readiness of the transmission assets as the point at which the completion notice should be issued, this refers to the requirement in the Clause that the completion notice indicates that these assets can be made available for use.

The completion notice trigger point

- 2.7. In collaboration with NGET, we have considered the existing stages within the commissioning process that could signify points at which we might consider the offshore transmission assets technically ready for operation. In line with our principle of making the minimum necessary changes for the implementation of the Clause we have considered the existing industry commissioning process to assess potential points for triggering the completion notice. The points we have considered include:
- The Energisation Operational Notification (EON);
 - The current Interim Operational Notification (ION); and
 - The Final Operational Notification (FON).

Each of these instruments is outlined below.

- 2.8. An EON is defined in the Grid Code as a 'notification from NGET to a User confirming that the User can... energise such User's Plant and Apparatus

(including OTSUA)²⁰. This stage of commissioning involves passive energisation, and under the Grid Code requires zero reactive power transfer at the connection point. We believe the point of EON issue is too early to indicate that the offshore transmission network would be ready to be made available for use, as at this point a developer would not be able to export electricity to the grid. This makes it difficult to determine with any level of certainty that the offshore transmission assets could be considered technically ready.

- 2.9. An ION is defined in the Grid Code as a 'notification from NGET to a Generator that the User has demonstrated compliance, except for the Unresolved Issues'. As defined at present, when NETSO grants an ION to a generator they grant export rights and Transmission Entry Capacity (TEC). We propose splitting the ION into two separate instruments, ION Part A and ION Part B. This is discussed in more detail below.
- 2.10. Part 3 of a standard ION sets out restrictions in relation to the generation assets. These restrictions are also referenced in Grid Code²¹ where there are potentially two 'caps' at 20% and 70% on the output of wind farms that cannot be exceeded until the generator has completed the requisite test/s. The relevant Grid Code extract is provided below:

*CP.6.6.3 The **Interim Operational Notification** will include the following limitations:*

- (a) *In the case of a **Power Park Module** the **Interim Operational Notification** will limit the proportion of the **Power Park Module** which can be simultaneously **Synchronised** to the **Total System** such that neither of the following figures is exceeded:*
- (i) *20% of the **Registered Capacity** of the **Power Park Module** (or the output of a single **Power Park Unit** where this exceeds 20% of the **Power Station's Registered Capacity**); nor*

- (ii) *50MW*

*until the **Generator** had completed the voltage control tests (detailed in OC5.A.3.2) to **NGET's** reasonable satisfaction. Following successful completion of this test each additional **Power Park Unit** should be included in the voltage control scheme as soon as is technically possible (unless **NGET** agrees otherwise).*

- (b) *In the case of a **Power Park Module** with a **Registered Capacity** greater or equal to 100MW, the **Interim Operational Notification** will limit the proportion of the **Power Park Module** which can be*

²⁰ OTSUA are Offshore Transmission System User Assets. This refers to offshore transmission assets constructed for the purpose of connecting an offshore generator to the National Electricity Transmission System.

²¹ CP.6.6.3 (a) & (b)

*simultaneously **Synchronised** to the **Total System** to 70% of **Registered Capacity** until the **Generator** has completed the **Limited Frequency Sensitive Mode** control tests with at least 50% of the **Registered Capacity** of the **Power Park Module** in service (detailed in OC5.A.3.3) to **NGET's** reasonable satisfaction.*

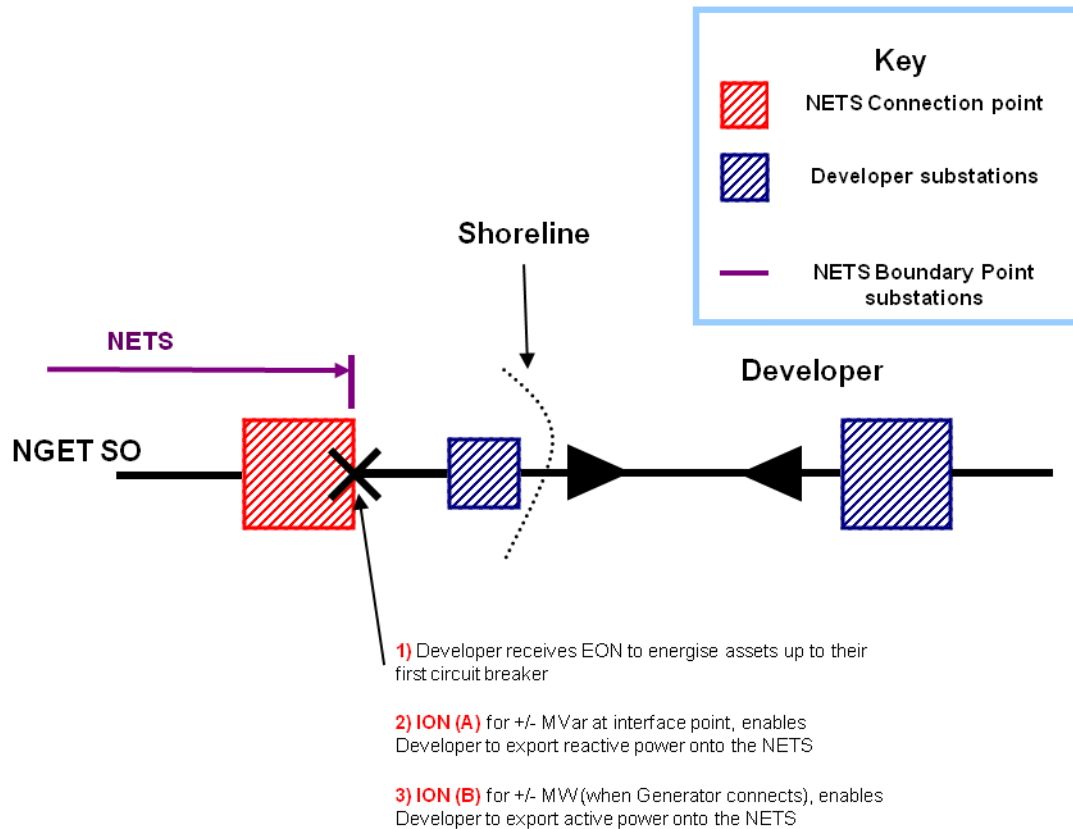
(c) *In the case of a **Synchronous Generating Unit** employing a static **Excitation System** the **Interim Operational Notification** may if applicable limit the maximum **Active Power** output and reactive power output of the **Synchronous Generating Unit** or **CCGT module** prior to the successful commissioning of the **Power System Stabiliser** to **NGET's** satisfaction.*

- 2.11. The final instrument NETSO issues signifying a relevant point in the commissioning process is the FON. The FON is generally issued late in the commissioning process once further testing has been conducted and Grid Code requirements satisfied.
- 2.12. It is worth noting that the instruments issued by NETSO as part of the commissioning process as outlined above (EON and ION) would be issued at the beginning of the process that demonstrates that the offshore transmission network meets the requirements of each instrument. The current industry process for commissioning of offshore transmission networks does not provide certification for the completion of particular stages. For Generator build assets any testing or compliance activity is monitored by NETSO only at the interface point with the NETS, which is different to commissioning transmission networks under OFTO build or for onshore TO build.

The proposed splitting of the ION into ION Part A and ION Part B

- 2.13. Under the existing offshore transitional regime the developer receives a single ION with two schedules of unresolved compliance issues (Part 1 relating to the offshore transmission network and Part 2 relating to the generation assets). In order to manage the varied commissioning timescales of offshore assets, NETSO has already adopted the practice of issuing some developers with a more limited ION (with no TEC or zero MW export – equivalent to Part 1 of the schedule to the ION under current arrangements) to manage the dynamic nature of the offshore transmission network.
- 2.14. We believe that there would be value for the purposes of commissioning Generator build offshore transmission networks in splitting the current ION into two separate instruments that we will refer to as ION Part A and ION Part B. Figure 2.1 below illustrates the proposed ION Part A and ION Part B (with the EON included for reference).

Figure 2.1: Components of the commissioning process



- 2.15. Under the proposed split ION, the ION Part A would be the first point for dynamic energisation or the ability to import/export reactive power up to the offshore substation, and would be necessary for the developer to start connecting the offshore transmission network. ION Part A would be issued, as in the case of current practice for some projects, with zero TEC.
- 2.16. ION Part B will be the point at which TEC is granted. ION Part B could not be issued if there is a gap in the system (ie. a developer could not receive an ION Part B unless the transmission system was complete and ready to connect the generation assets). The ION Part B would indicate that the first MW can be put on the system such that active power can be exported onto the NETS, and hence that the system is complete. We consider that ION Part B represents the earliest point at which the offshore transmission network could be said to be complete and technically ready to export power onto the NETS, and as such the earliest point at which the assets could be made available for use.
- 2.17. Having a separate ION Part A and ION Part B would provide the developer with greater transparency as the ION Part A will convert to an Interim Section

K Notification (ISKN) in the STC once the OFTO is appointed.²² Additionally, by splitting the ION into the ION Part A and ION Part B, we will create a point in the commissioning process that can be used to assess the technical readiness of the transmission assets and whether a completion notice should be issued.

- 2.18. To ensure that there are no unintended consequences arising as a result of the implementation of the Clause in industry codes, we propose that the ION would be split into ION Part A and ION Part B only for the purposes of generator built offshore transmission networks. Later in this chapter we will consider consistency between the proposed splitting of the ION into ION Part A and ION Part B for Generator build and how this aligns with existing industry commissioning practice.

Options for trigger of completion notice issue

- 2.19. We have identified and considered four options for the trigger point for the completion notice: EON; ION Part A; ION Part B; the lifting of the 20% restriction; and FON. Two of these options, ION Part A and FON we do not consider to represent viable points at which the completion notice could be issued, but have outlined them for completeness. Our assessment of each of these options is set out below.

Option 1: ION Part A

- 2.20. ION Part A would be issued to allow 'dynamic' operation of the offshore transmission assets, whereby the developer would have the ability to actively provide voltage support to the NETS. That is, ION Part A permits import or export of reactive power up to the offshore substation. Thus ION Part A would need to be issued early in the commissioning process as an ION in respect of the offshore transmission assets would be needed in the event that any MVars would be spilled onto the NETS. As such ION Part A would be issued when the developer first energises any of the offshore transmission assets, and this could be limited to just the onshore substation, before the offshore export cables have been laid. On this basis we believe that there is sufficient indication that the offshore transmission network may not be connected all the way through to the offshore substation at the point of ION Part A issue.
- 2.21. Additionally, the Grid Code Compliance Process²³ requires the developer to demonstrate that particular equipment is working correctly by testing the transmission assets prior to 20% of wind turbines being connected offshore

²² This is codified in STCP19-5 paragraph 3.1.4 which states 'Where an OFTO is assuming ownership of Plant and Apparatus fully or partially designed, constructed and commissioned by a Generator and initial energisation has occurred NGET shall issue an Interim Section K Notification or Final Section K Notification based on the operational notification current with the Generator at that time.'

²³ CP.6.6.3(a)

(as outlined above). ION Part A will contain a specific limitation relating to this and as such ION Part A could not be used, by itself, to indicate the commencement of full operation of the offshore transmission assets.

- 2.22. Due to the above we do not consider that the system could be technically ready and made available for use at the point of ION Part A issue. Therefore we do not consider ION Part A alone meets the requirements of the Clause and as such is not a viable trigger point for issue of the completion notice.

Option 2: ION Part B

- 2.23. ION Part B indicates a point at which the generation assets are likely to have started to be connected to the offshore transmission network meaning there would be no gaps in the system. It therefore represents a point at which the offshore transmission network is ready to be made available for use in line with the requirements of the Clause.
- 2.24. While ION Part B would be granted in respect of generation assets representing the point at which a developer can 'switch on' these generation assets, in order for it to be possible for this generation to be exported, it must be possible for the transmission assets to be technically ready.
- 2.25. ION Part B would represent the last point in the commissioning process at which NETSO issues any instrument before electrical current can flow over the offshore transmission network onto the NETS. Before the issue of ION Part B, which is when NETSO releases the TEC, the developer could not put active power onto the NETS and as such could not be said to be ready to transmit. In other words, prior to the issue of ION Part B the generation assets may be 'plugged in' but would not be allowed to 'switch on' until an ION Part B has been granted.
- 2.26. ION Part B would therefore represent a stage that is essential for a developer to achieve before they can commence earning revenue from generation. We understand from NGET that it is a point within the developer's control, such that if there were problems with the transmission assets to be resolved before the developer wished to trigger the completion notice, the developer would be able to request an ION Part B when they had rectified any such issues. Ultimately, any delay in the issuance of the ION Part B would equate to a delay in generation being transmitted.
- 2.27. Based on the timing of ION Part B and the information that NETSO would require from a developer in order to issue an ION Part B in respect of a project, we believe that this represents the earliest point within the existing commissioning process at which the offshore transmission network could be said to be complete and technically ready, such that the developer could make it available for use.

Option 3: The lifting of the 20% restriction in ION Part 3

- 2.28. We have considered the lifting of the 20% restriction triggered by the completion of a voltage control test (assuming this occurs after ION Part B) as an option that may represent a reasonable point at which the offshore transmission network could be said to be made available for use in line with the requirement in the Clause. While the restriction may not relate directly to the offshore transmission network, the effect of the restriction is that the offshore transmission network could not be fully tested or made use of beyond 20% capacity.
- 2.29. The lifting of the 20% restriction can only occur once the developer has conducted the relevant voltage control test, and our understanding from NGET is that the timing of this test is within the developer's control. We understand that, notwithstanding the 20% restriction placed on generation assets, there would not be a technical need to conduct the voltage control test at any particular point in the construction and commissioning process.
- 2.30. The option of setting this as the trigger point for the completion notice may offer a developer greater flexibility to respond to issues that arise in the commissioning process before the trigger of the completion notice. However the lifting of the 20% restriction is not by its nature a crucial part of the commissioning of an offshore transmission network in the way that an ION or EON may be. Additionally the voltage control test that triggers the lifting of the 20% restriction does not provide any further assurance that the offshore transmission network is operational²⁴. Further, by making the lifting of the 20% restriction the trigger point for the completion notice we consider that we would be giving it a new and potentially unnecessary significance. However we invite views on this matter.

Option 4: FON

- 2.31. As outlined earlier, the FON is issued at the end of the commissioning process once more extensive testing has been completed. This testing is dependent on operating the offshore transmission network under particular load factors, which are driven by weather conditions. Because of this reliance on weather conditions the offshore transmission network could have been in operational use for several years by the time a FON is issued.
- 2.32. Given that the completion notice is intended to indicate that the offshore transmission network can be made available for use, we do not believe that the FON most appropriately indicates this point, given that the assets would have been in use potentially for up to several years by the time a FON is issued. In light of this we do not believe the point of FON issuance aligns with

²⁴ For this reason we do not consider the lifting of the 70% restriction as an appropriate trigger point.

the intent of the Clause and as such does not represent an appropriate trigger point for the completion notice.

Analysis of options for the completion notice trigger point

- 2.33. Below we outline the rationale for determining our current preferred trigger point for the completion notice, and the analysis we have conducted in determining our preferred option.
- 2.34. In terms of analysis we have considered experience from TR1 and TR2 projects and also considered the interaction with existing regime arrangements such as OFTO build and STC commissioning arrangements.
- 2.35. In undertaking this analysis we consider that while there is value in anticipating the issues that could typically arise during commissioning and using these to test the practicality of the trigger point for the completion notice, we do not believe this point can, or should, cater for all potential scenarios that might arise during commissioning. Instead we believe that the new arrangements should be designed in such a way as to enable the most efficient and timely approach to commissioning the offshore transmission network.

Project analysis

- 2.36. Our project analysis involved seeking an understanding from NGET and developers of what issues could arise with commissioning of the offshore transmission networks from each of the possible trigger points and how long it would typically take to resolve such issues. This allowed us to consider whether up to 18 months from a proposed trigger point would represent a reasonable period in which to transfer the offshore transmission network to an OFTO, to confirm that our current range of options is consistent with previous analysis in the development of the Clause.
- 2.37. Following discussion with some developers about their experience in TR1 and TR2 projects we believe that there may not be a need for the later and more flexible point at which the completion notice could be triggered that is represented by Option 3. The voltage control test that would enable the 20% restriction to be lifted under Option 3 does not appear to provide any greater certainty of the condition of the offshore transmission network or its ability to operate. Discussions indicated that ION Part A may be too early in the process to indicate technical readiness of such assets. From these discussions we concluded that ION Part B appears to represent a reasonable point at which the transmission assets could be said to be technically ready from experience to date.
- 2.38. As part of broader engagement on transitional regime projects a number of points were raised by developers to highlight some important considerations

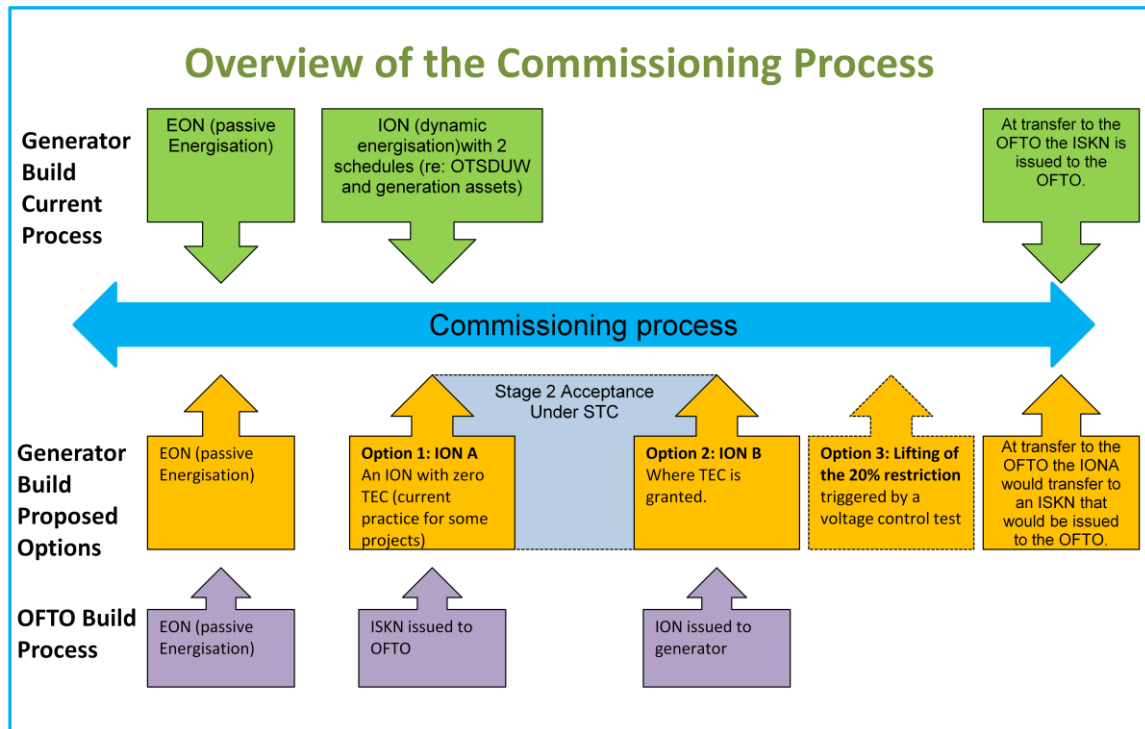
that we have sought to address as part of this document. For example, we appreciate the importance of providing clarity on the new arrangements so that developers can plan their construction programme to manage risks around commissioning and have set out possible implementation arrangements in Chapter 3. We are also aware of concern about what would happen in the event that a developer did not transfer the offshore transmission network to the OFTO before the end of the 18 month period, post-completion notice issue. We have considered this in Chapter 3.

2.39. We also understand that there is a need to consider, as part of any mechanism that tries to ensure a timely transfer of an offshore transmission network to an OFTO, how this relates to the Generator build tender process. We have considered this and set out our view in Appendix 3.

Comparison with OFTO build

2.40. To ensure consistency across the offshore regime we have compared the possible completion notice trigger points with a point signifying the completion of the offshore transmission network if such assets were being constructed under OFTO build as currently reflected in the codes. We believe the trigger points would align, as per figure 2.2 below.

Figure 2.2: Overview of the commissioning process with options



- 2.41. As seen in Figure 2.2, the proposed splitting of the ION into ION Part A and Part B would bring the Generator build commissioning process into line with the OFTO build commissioning process.

Stage 2 Acceptance (STC Commissioning)

- 2.42. At the stakeholder briefing session on the draft Clause, which we held with DECC on 10 July 2012 the completion notice was described as signalling when a transmission system is available for use, which was envisaged to be around Stage 2 Acceptance, which is part of the STC commissioning process.
- 2.43. Stage 2 Acceptance indicates acceptance onto the transmission system at first energisation, and as such begins just after EON issue. For an OFTO build offshore transmission network multiple Stage 2 Acceptance certificates could be issued for each part of a system as the assets are built out in a linear fashion from the onshore substation. Under OFTO build it would be necessary for the OFTO to have received Stage 2 Acceptance certificates for all parts of the transmission system before the generator could be granted an ION (equivalent to proposed new ION Part B as seen in Figure 2.2 above). As such, an OFTO build offshore transmission network would only be considered ready for use once Stage 2 Acceptance certificates have been received for all parts of the system.
- 2.44. For Generator build assets however, Stage 2 Acceptance only applies from the interface point with the NETS until the offshore transmission network is transferred to the OFTO, at which point an Offshore Transmission System Development User Works (OTSDUW) Completion Report²⁵ is provided to NETSO and Stage 2 Acceptance is issued for the whole system. However, ION Part B under Generator build would be granted at the equivalent point in time to the generator ION under OFTO build, meaning that Stage 2 Acceptance would in effect have been completed for a Generator build offshore transmission network by ION Part B point (though not officially granted until the OFTO owns the system as developers are not bound by STC commissioning requirements).

Current preferred trigger point

- 2.45. Based on the analysis above, we therefore consider that the lifting of the 20% restriction may not be the appropriate trigger for the completion notice. As such, ION Part B as detailed in Option 2, represents our current preferred point for the trigger of the completion notice as:
- it represents the best point at which an offshore transmission network could be said to be technically ready and as such we believe it would be

²⁵ System Operator-Transmission Owner Code (STC) clause 2.50 refers.

possible for it to be made available for use in line with the requirements of the Clause;

- it represents the first point at which a developer can transmit and earn revenue from generation; and
- we expect that an additional 18 months from the point of ION Part B issue should provide reasonable time for a developer to resolve any issues that might arise after this point to ensure that the offshore transmission network can be transferred.

Question box

Question 2.1: Do you agree with our proposal to split the ION into an ION Part A and ION Part B? Please provide reasons to support your answer.

Question 2.2: Do you agree with our assessment of the options for the completion notice trigger point? Please provide reasons to support your answer.

Question 2.3: Do you agree that ION Part B represents the best trigger point for the completion notice? Please provide reasons to support your answer.

Question 2.4: Are there any other points in the commissioning process that you feel we haven't considered in the options above that would be a more appropriate point for triggering the completion notice? Please provide reasons to support your answer.

3. Implementation of the Generator Commissioning Clause

Chapter Summary

This chapter outlines the key considerations around implementation of the Generator Commissioning Clause, particularly how it will apply to projects in flight, and phased and staged projects. This chapter also outlines the interaction with settlement metering and the Balancing and Settlement Code.

Projects in flight

- 3.1. Ofgem is aware that there may be a small number of projects in flight when the Clause is implemented. As part of the code modifications for the implementation of the Clause we propose to make provision for arrangements within the codes to address how projects in these circumstances are to be treated. Any requirement for NETSO to issue a completion notice in respect of projects in flight would be set through modifications to the licence and the CUSC.
- 3.2. There are some limitations on what we can implement in respect of projects in flight as the Clause does not make express provision for how such projects should be treated. We have assessed options we consider to be within the scope of the Clause. We have sought to identify points as early as possible following the Clause coming into force where we can require a completion notice to be issued in respect of projects in flight. This should maximise certainty around the treatment of those projects and ensure the most efficient and timely implementation of the Clause. We have discarded any options that would involve issuing a completion notice at earlier or later points in the implementation process. This is because they would conflict with the intent and scope of these provisions which is to signal when an offshore transmission network is available for use.
- 3.3. There are broadly two viable options for how projects in flight might be treated; such projects are not issued a completion notice at all or are issued a completion notice at a particular point.
- 3.4. The Clause applies from any time before a completion notice is issued²⁶ plus a further 18 months once a completion notice has been issued. Consequently, if a completion notice was not issued for projects in flight they would continue to

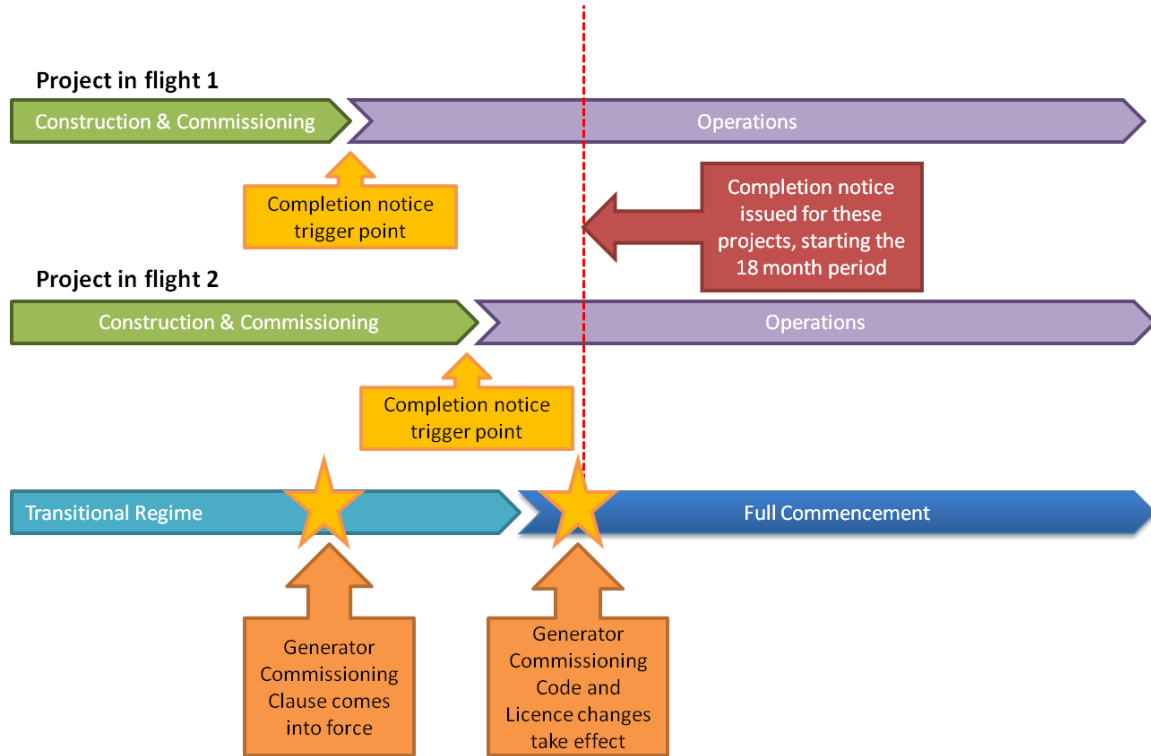
²⁶ Provided the relevant transmission assets are part of a qualifying project and other conditions in the Clause are satisfied.

benefit from the Clause until such time as they transferred to the OFTO,
provided they continued to satisfy all the conditions of the Clause.

- 3.5. Whilst this approach may provide benefits in not imposing an additional requirement on projects in flight, it does not align with the intent of the Clause. Such projects would have passed the point at which they are available for use and the intent of the Clause is to signal this point. Not issuing a completion notice and triggering the final 18 month period for commissioning for projects in flight would be inconsistent with treatment of all other projects. We also note that work in the development of the Clause has been ongoing for several years now. As such the projects that may be affected would have had awareness for some time of the intention to implement a finite commissioning period. For these reasons this is not our preferred approach.
- 3.6. As such the alternative in relation to the implementation of the Clause would be for a completion notice to be issued in respect of such projects at a set point. There are sub-options as to what this timing should be, in particular:
 - Completion notices issued for each project as soon as possible (which will vary if any projects are already over 132kV, and hence already transmission at Clause commencement, or become so on full commencement); or
 - Completion notices issued for all projects in flight on a common basis (once code and licence modifications come into force and full commencement has occurred so all projects are issued completion notices at the same time).
- 3.7. Our preferred approach is to issue a completion notice at a single point for all projects to ensure certainty for each of these projects and this ensures proportionate treatment of such project. This is part of the reason that we are seeking to align full commencement with the code and licence changes coming into force.
- 3.8. Based on our analysis of TR1 and TR2 projects, we would expect a small number of these projects to have passed the ION Part B point but not yet transferred to an OFTO by the time we implement the Clause. This approach gives these projects no less time than that given to other projects subject to the Clause. While this may result in longer than 18 months from the point that their system can be made available for use, there are existing commercial drivers already in effect that provide an incentive to transfer the offshore transmission network to the OFTO as swiftly as is practical. Additionally, there will be an end date by which time the projects need to transfer or lose the benefit of the Clause, which will provide a driver to transfer. We consider that this option provides a proportionate approach to implementing the Clause for projects in flight by ensuring the completion notice will be issued for such projects as soon as the majority of projects legally become transmission.

- 3.9. For these reasons our preferred approach is that completion notices be issued to projects in flight at the same time (once code and licence modifications have come into force and full commencement has occurred). This option is represented in the diagram below.

Figure 3.1: Proposal for completion notice to be issued when code and licence modifications take effect and full commencement has occurred



Question box

Question 3.1: Do you agree that the proposed approach, that projects in flight be issued a completion notice when the code and licence modifications take effect and full commencement has occurred, is the most appropriate approach for such projects? Please provide reasons to support your answer.

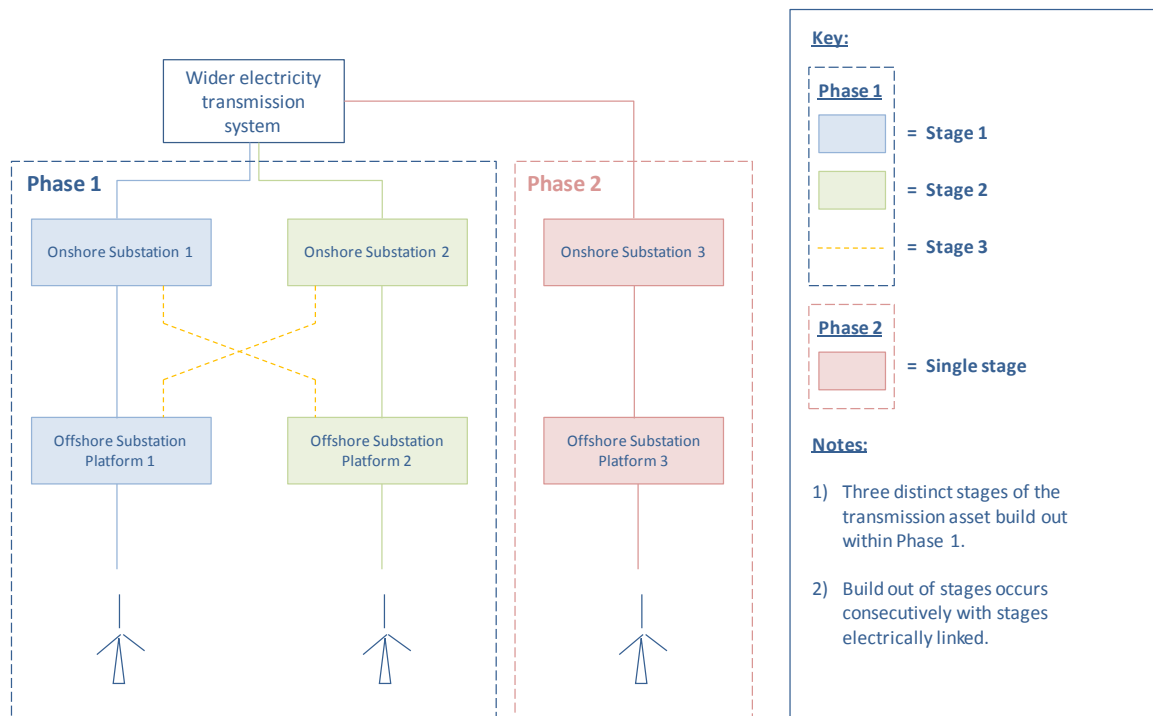
Question 3.2: Do you consider any other possible approaches we have not outlined would be a more suitable solution for projects in flight? It should be noted that options are limited by the scope of the Clause.

Phased and staged projects

- 3.10. A project may comprise multiple phases and/or stages. The following definitions clarify what we mean when we are referring to a 'phase' or a 'stage' of a project.

- *Phase*: a phase consists of transmission assets with a shared level of certainty and timing of build out, and within a discrete location. For example, we would anticipate a single phase to comprise transmission assets with a shared investment decision and/or shared key contractual commitments.
- *Stage*: within a phase, assets may be constructed incrementally in discrete groups. We use the term 'stage' to refer to each discrete group of assets.

Figure 3.2: Example of a project with stages and phases



- 3.11. As we have previously stated, our key overarching principle on tender arrangements for phased projects is to link the scope of a tender exercise to a committed project phase. We will determine the scope of the assets forming part of an offshore transmission network within a tender exercise through the qualifying project requirements in the 2013 Tender Regulations. We therefore anticipate that we will run separate tender exercises and grant separate OFTO licences for each committed project phase.
- 3.12. Under the Clause where a qualifying project has more than one stage, the completion notice will be issued when the last stage of that qualifying project reaches the proposed completion notice trigger point. This is because the Clause requires readiness of a system, not individual assets, and the system is analogous to a qualifying project. We would therefore expect that one qualifying project would have only one completion notice. Our proposed code modifications have taken account of our proposal that completion notices should not be issued for each interim stage that reaches the completion notice trigger point.

- 3.13. Each subsequent phase of an offshore wind project would be a separate qualifying project and would therefore receive a separate completion notice.

Staged transfer of assets

- 3.14. Under Condition 4 of the Clause, the Clause no longer applies if the system (or any part of it) that constitutes a qualifying project is transferred to the OFTO. The practical implication of this condition is that all assets within a qualifying project must be transferred to the OFTO at the same time otherwise the developer will not have the benefit of the Clause for any remaining assets that have not transferred to the OFTO. Under the Generator build tender process we expect all transmission assets within a qualifying project to transfer to the OFTO at the same time. This aligns with our standard arrangements for a Generator build tender as set out in the Statement on future Generator build tenders²⁷.

Settlement metering arrangements

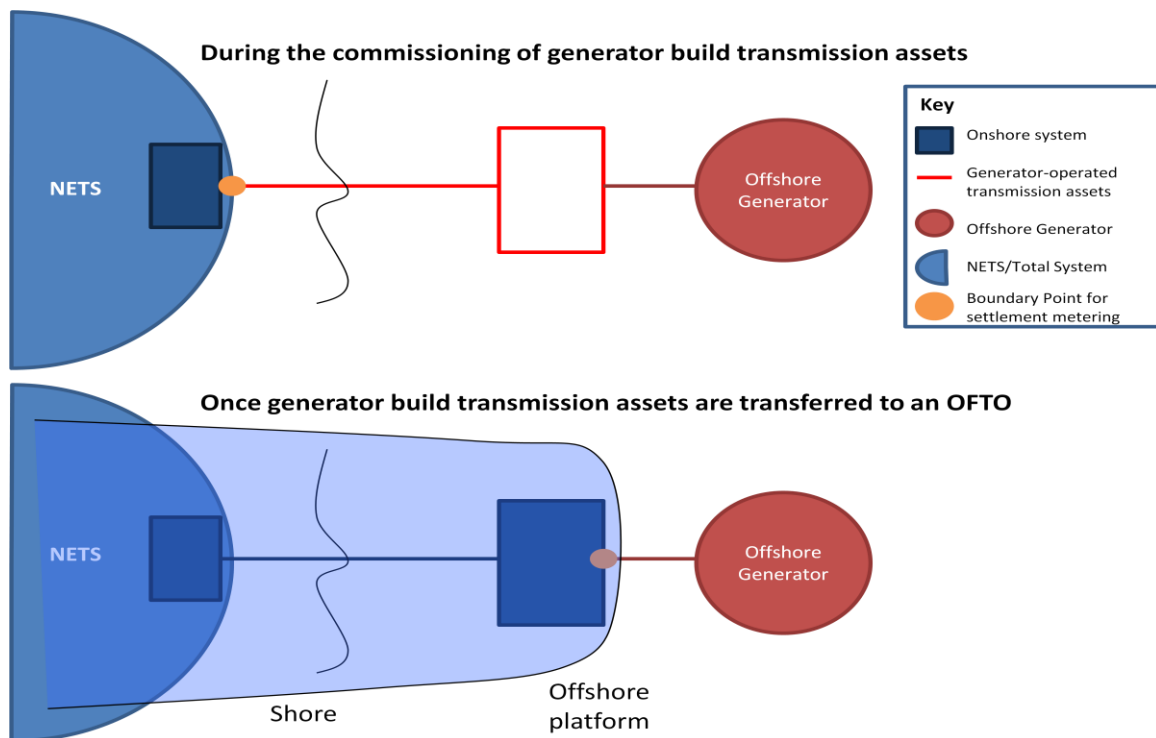
- 3.15. Under the current standard framework arrangements, Generator build offshore networks are not regarded as an offshore transmission system until transferred to the OFTO. However, the Clause applies to the transmission of electricity by a developer over an 'offshore transmission system' before transfer to an OFTO. Therefore, the codes and licence modifications will define these Generator build offshore networks as an 'offshore transmission system'. Defining a Generator build offshore network as an offshore transmission system, and subsequently whether this system forms part of the NETS before they transfer to an OFTO, has implications for settlement metering arrangements under the BSC.
- 3.16. Section K of the BSC sets out the requirements for the classification and registration of metering systems and Balancing Mechanism (BM) Units. Notably, Section K1.1.4(c) states that exports and imports must be metered at a single Boundary Point.
- 3.17. Relevant BSC definitions include:
- **Boundary Point** is defined as the point at which networks not forming part of the Total System connect to the Total System.
 - **Total System** is defined as the Transmission System and each Distribution System.
 - **Transmission System** is defined as forming part of NETS.

27

<http://www.ofgem.gov.uk/Networks/offtrans/pdc/cdr/2013/Documents1/Offshore%20Electricity%20Transmission%20Statement%20on%20future%20generator%20build%20tenders.pdf>

- 3.18. Whilst prior to full commencement of the regime the activity carried out on the offshore networks during the period that the developer is commissioning them is classified as distribution (for projects at 132kV in England and Wales), the networks themselves are treated as generation assets for BSC purposes. These assets are treated as generation assets because they are part of the developer's system as defined in the developer's construction agreement. As such under current arrangements these assets do not form part of the Total System.
- 3.19. Under current arrangements, for a Generator build offshore transmission network (including transitional regime projects), settlement metering occurs at the onshore boundary point (where the Total System begins) until the network is transferred to the OFTO. After transfer to the OFTO the boundary point, and therefore the metering point, shifts offshore as the network is then owned and operated by a transmission licensee and therefore forms part of the NETS.
- 3.20. A consequence of these current arrangements is that the developer is required to install settlement metering equipment both onshore and offshore (or make use of the dispensation arrangements available under the BSC). These current arrangements are represented in the figure below.

Figure 3.3: Settlement metering arrangements for generator built transmission



- 3.21. Under current definitions in the BSC (and in the transmission licence), Generator build offshore transmission networks are not treated as forming part of an offshore transmission system, and thus do not form part of the Total System or NETS. However as outlined above, once the Clause comes into force these assets will be defined as an 'offshore transmission system' but under the current BSC definitions will not form part of the NETS. Thus, there will be a need for clarification going forward whether Generator build offshore transmission networks should be part of the Total System.
- 3.22. For the avoidance of doubt, NGET has confirmed that these implications for BSC settlement metering will not have an impact on the placement or treatment of operational metering. As such, operational metering is not within scope when considering this matter.

BSC modification proposal

- 3.23. In June this year a proposed modification P294 to the BSC was submitted to Elexon for consideration. P294 considers the current metering arrangements during generator commissioning of offshore transmission networks as detailed above.
- 3.24. P294 proposes that settlement metering should only be required at the offshore point from the beginning of the commissioning period. Elexon currently has convened a Working Group to consider this modification application. The P294 consultation was issued on 2 August 2013, with responses invited by 23 August 2013²⁸.

Settlement metering and generator commissioning implementation

- 3.25. We have been considering whether modifications are necessary to modify the BSC to reflect the change in arrangements arising as a result of the Clause. P294 touches on the issues that arise in considering the interaction of the Clause with the BSC. We expect to consider this matter further as P294 progresses through the modification process. We expect to provide further views on any potential modifications to the BSC to implement the Clause in our next consultation. As part of this further work we may also need to consider implications for commercial arrangements for the provision of reactive power capacity to the onshore transmission system. Therefore, at this stage we are not proposing modifications to the current obligations in respect of the provision of reactive power capability at the Interface Point.
- 3.26. Note the modifications proposed in this document to the CUSC and Grid Code retain consistency with current arrangements for offshore transmission systems.

²⁸ <http://www.elexon.co.uk/mod-proposal/p294/>

Projects overrunning the 18 month period of the Clause

- 3.27. If an offshore transmission network has not been transferred to the OFTO 18 months after being issued with a completion notice, the developer would lose the benefit of the Clause. Should the developer continue to operate the transmission network beyond this point, it would be participating in transmission without a licence. Under the Act, transmission for the purpose of giving or enabling supply without a licence or an exemption is an offence.
- 3.28. In assessing whether enforcement action, including prosecution of any such offence, is in the public interest, the Secretary of State and the Authority will consider the factors relating to any non-compliance on a case by case basis.
- 3.29. We would expect developers to seek their own legal advice in relation to such circumstances.

4. Proposed Modifications to the Electricity Transmission Licence

Chapter Summary

This chapter provides an explanation of the proposed modifications to the electricity transmission licence to give effect to the NETSO's obligation to issue completion notices under the Clause.

Proposed licence modifications

- 4.1. We are proposing modifications to the licence to give effect to the provisions in sections 6F and section 6G of the Clause regarding the issuing of a completion notice when offshore transmission assets are available for use. We consider that when export of power from such systems onto the NETS is permitted by NGET in accordance with our preferred option of ION Part B, this signals the point of technical readiness; when the system is available for use.
- 4.2. Standard condition C25 in Section C of the licence requires NGET to provide information and assistance to the Authority in relation to applications requiring the appointment of an OFTO. We propose to clarify an existing licence obligation in paragraph 8 of standard condition C25 on NGET to issue a completion notice to the Authority in respect of a generator build offshore transmission system. NGET will be required to issue the Authority with a completion notice notifying it that any such offshore transmission system is available for use on the same date that export of power from that system onto the NETS is permitted by NGET. This point is when NGET issues to the developer the ION Part B under the Grid Code in respect of that system.
- 4.3. For projects in flight, given that for such projects NGET would have already passed the point at which export of power from that system onto the NETS is permitted by NGET (i.e. ION Part B under the Grid Code) on the date the code and licence modifications come into effect, we propose modifications that require NGET to issue a completion notice for such projects within 10 business days of the code and licence modifications taking effect (expected to align with full commencement). We also propose that modifications ensure that completion notices for all projects in flight be issued on the same day.
- 4.4. Consequently, we propose to amend the definition of 'offshore transmission system' and propose a new definition of 'completion notice' (which reflects the same definition in the Clause) in standard condition A1 in Section A of the licence. The current definition of 'offshore transmission system' in the licence is proposed to be amended so that we can ensure that an offshore transmission system built by the developer isn't treated as forming part of the NETS until that system transfers to the relevant OFTO, consistent with our intention that such developers should not be exposed to all the obligations

that would otherwise apply to an OFTO or TO carrying out the same activities. Once the offshore transmission system is owned or operated by an OFTO it will form part of the NETS (as per the definition of NETS in standard condition A1 in Section A of the licence).

- 4.5. We set out the proposed licence modifications in Annex 1. We have not identified any need to propose modifications to other licences to implement the Clause. A complete copy of the latest version of the licence, dated 5 August 2013, can be found on our website²⁹. Note that the modifications we propose to the licence are limited to what is necessary for the implementation of the Clause.

Question box:

Question 4.1: We invite comments on all aspects of the proposed drafting provided in Annex 1. In particular, do you agree that the proposed licence modifications adequately implement the provisions in the Clause and our proposals set out in this document? Please provide reasons to support your answer.

Question 4.2: Do you consider there are other licence modifications that are needed to implement the Clause? If so, please provide details.

5. Proposed Code Modifications

Chapter Summary

This chapter provides an explanation of the proposed modifications to the relevant industry codes to give effect to the obligation to be placed on NETSO to issue completion notices under the Clause. The proposed modifications also cover the obligations on the developer and NETSO in relation to operation of the offshore transmission system prior to transfer to an OFTO and include clarificatory modifications in respect of the connection point for such systems.

Introduction

- 5.1. Working with NGET, we have identified modifications to the CUSC and Grid Code that we consider necessary to implement the Clause in particular the issuing of a completion notice in respect of an offshore transmission system constructed by the developer. The proposed modifications to the relevant documents have been deliberately limited to those modifications that are considered appropriate for the implementation of the Clause.
- 5.2. We describe below the proposed modifications to the CUSC and Grid Code. The proposed modifications are provided in annexes to this document. A complete copy of the CUSC³⁰ and Grid Code³¹ can be found on the NGET website.
- 5.3. We have discussed potential interaction of the Clause with the BSC in Chapter 3. We have not identified any need to propose modifications to other industry codes³² to implement the Clause. We consider that any subsequent or consequential modifications that may become necessary that these can be managed through the normal governance process for each code. Details of this governance process can be found on our website³³.

Proposed CUSC modifications

- 5.4. In accordance with the proposed licence modifications outlined in Chapter 4, we are proposing that NGET issue a completion notice on the same date it issues the ION Part B (under the Grid Code) in respect of an offshore transmission system to the developer (in accordance with our current

³⁰ <http://www.nationalgrid.com/uk/Electricity/Codes/systemcode/contracts/>

³¹ <http://www.nationalgrid.com/uk/Electricity/Codes/gridcode/gridcodedocs/>

³² The industry codes consist of the BSC, CUSC, Grid Code, System Operator-Transmission Owner Code (STC), Distribution Code and Distribution Connection and Use of System Agreement (DCUSA).

³³ <https://www.ofgem.gov.uk/licences-codes-and-standards/codes/industry-codes-work>

preferred option). This corresponds to when the system is permitted to export power onto the NETS as proposed in the licence i.e. that is when we consider it is available for use under the Clause.

- 5.5. For projects in flight, we propose modifications to the CUSC and Grid Code that require NGET to issue a completion notice for such projects within 10 business days of the date the licence and code modifications come into effect.
- 5.6. Consequently, we propose modifications to parts of the CUSC to clarify that an offshore transmission system built by the developer is not treated as forming part of the NETS until that system transfers to the relevant OFTO. This is consistent with our intention that such developers should not be exposed to all the obligations that would otherwise apply to an OFTO or TO carrying out the same activities. Once the offshore transmission system is owned or operated by an OFTO it will form part of the NETS.
- 5.7. The affected parts of the CUSC are as follows:
 - Section 1 – Applicability of Sections and related Agreements Structure - v1.10
 - Section 2 – Connection - v1.11
 - Section 11 - Interpretation and Definitions - v1.54
 - Schedule 2 Exhibit 1 - Bilateral Connection Agreement - v1.7
 - Schedule 2 Exhibit 3A – Offshore Construction Agreement – v1.4
 - Exhibit B - Connection Application - v1.13 (For Directly Connected Power Stations, Non Embedded Customers and Distribution Systems directly connected to the National Transmission System)
 - Exhibit C - Connection Offer - v1.6 (For Directly Connected Power Stations, Non Embedded Customers and Distribution Systems directly connected to the National Transmission System)

Effect of the proposed CUSC modifications

- 5.8. The proposed modifications to implement our proposals are summarised in the table provided at the beginning of Annex 2 with cross references to the relevant proposed modifications in the CUSC drafting also provided in that Annex.

Proposed Grid Code modifications

- 5.9. We are proposing modifications to particular parts of the Grid Code. The proposed modifications primarily relate to implementing the splitting of the ION into ION Part A and ION Part B and clarifying requirements around the connection point of the offshore transmission system until transfer to an OFTO.
- 5.10. The affected parts of the Grid Code are as follows:
- Operating Codes 2, 5, 7, 8 and 8 Appendix 1 (OC8A) and Appendix 2 (OC8B).
 - Compliance Process.
 - Glossary and Definitions.
- 5.11. The proposed modifications to implement our proposals are summarised in the table provided in Annex 3 with cross references to the relevant proposed modifications in the Grid Code drafting also provided in that Annex.

Embedded offshore transmission systems: application for distribution connected transmission system projects

- 5.12. At the beginning of the offshore transmission regime a limited number of projects were connecting offshore transmission assets into the onshore distribution network. As part of the implementation of the Clause we have considered whether such projects are likely to come forward in future, and how best to make provision for any such projects. Given regulatory arrangements offshore are now more established we do not believe it is likely that there will be many (if any) such projects coming forward in future.
- 5.13. Under the 2013 Tender Regulations one of the requirements to qualify a project for a tender exercise is that a developer has a Bilateral Connection Agreement ('BCA') with the NETSO. Any developer with a BCA is required to accede to the CUSC and adhere to the Grid Code. Therefore any requirements placed into the codes relating to the Clause will equally apply to such developers. We consider that the requirements under the CUSC and Grid Code mean that there is no need for additional requirements implementing the Clause to be placed in distribution codes for embedded transmission³⁴ projects and that any arrangements should be consistent with the arrangements proposed for directly connected offshore transmission systems.

³⁴ An embedded offshore transmission system is an offshore transmission system that connects to an onshore distribution system.

Question box:

Question 5.1: In addition to the specific questions in Chapter 2 of this document, we invite comments on all aspects of the proposed drafting provided in Annexes 2 and 3. In particular, do you agree that the proposed code modifications adequately implement the provisions in the Clause and our proposals set out in this document? Please provide reasons to support your answer.

Question 5.2: Do you consider there are other code modifications that are needed to implement the Clause? Please provide evidence to support your answer.

6. Next Steps

Chapter Summary

This chapter outlines proposed future publications and details of the planned stakeholder workshop as part of this consultation.

Proposed future publications and implementation

6.1. Following this initial consultation we intend to consider any responses received before determining our final proposals. We anticipate setting out final proposals in a final consultation, which we anticipate will be published at the end of the year. We expect that this final consultation will include two documents, which will be published together:

- a Section 11A Licence modification consultation (for 28 days) prior to modifying the licence; and
- a final code modification consultation prior to modifying the relevant codes.

The code and licence change consultations will be split into two documents as we will be using different powers to give effect to the modifications.

6.2. For the licence modifications we will be using the Authority's powers under section 11A of the Act. Section 11A requires a minimum 28 day consultation before modifying the licence, and following the modification there will be a 56 day standstill period before those modifications take effect.

6.3. For the code modifications, as outlined earlier, we will be using the powers to be granted to the Authority under section 6H of the Clause. Sub-section 4 requires that the Authority consult before making modifications to codes (and the agreements that give them effect). Sub-section 5 provides that this consultation requirement can be fulfilled in advance of the passing of the Energy Act 2013. Therefore we have issued this initial consultation and plan to issue the final consultation before the Clause comes into force.

6.4. Following these consultations we expect to implement the necessary code and licence modifications so that they take effect later in 2014, after the Clause comes into effect.

Stakeholder engagement

6.5. We are inviting interested parties to attend a briefing session with Ofgem and NGET, in London (BIS Conference Centre, 1 Victoria Street) on 16 September 2013, 10.00am-12.30pm. We will be seeking initial feedback and would like to hear stakeholders' views on the proposals for implementation of the Clause. If you would like to attend this workshop, please email catherine.mcarthur@ofgem.gov.uk by 6 September 2013.

Appendices and Annexes

Index

Appendix	Name of Appendix	Page Number
1	Consultation response and questions	40
2	Generator Commissioning Clause	42
3	Interactions and interdependencies	47
4	Glossary	49
5	Feedback questionnaire	56

Annex	Name of Annex	Page Number
1	Proposed modifications to the electricity transmission licence	Separate document
2	Proposed modifications to the CUSC	Separate document
3	Proposed modifications to the Grid Code	Separate document

Appendix 1 - Consultation Response and Questions

Ofgem would like to hear the views of interested parties in relation to any of the issues set out in this document.

We would especially welcome responses to the specific questions which we have set out at the beginning of each chapter heading and which are replicated below.

Responses should be received by 25 October 2013 and should be sent to:

- Name: Catherine McArthur
- Team: Enduring Regime Implementation
- Address: 9 Millbank London, SW1P 3GE
- Telephone number: 0203 263 2739
- Email: offshore.enduring@ofgem.gov.uk

Unless marked confidential, all responses will be published by placing them in Ofgem's library and on its website www.ofgem.gov.uk. Respondents may request that their response is kept confidential. Ofgem shall respect this request, subject to any obligations to disclose information, for example, under the Freedom of Information Act 2000 or the Environmental Information Regulations 2004.

Respondents who wish to have their responses remain confidential should clearly mark the document/s to that effect and include the reasons for confidentiality. It would be helpful if responses could be submitted both electronically and in writing. Respondents are asked to put any confidential material in the appendices to their responses.

Next steps: Having considered the responses to this consultation, Ofgem intends to determine our final proposals. We anticipate setting out final proposals in a final policy consultation, which we anticipate will be published at the end of the year. Refer to Chapter 6 for further detail on next steps. Any questions on this document should, in the first instance, be directed to:

- Name: Catherine McArthur
- Team: Enduring Regime Implementation
- Address: 9 Millbank London, SW1P 3GE
- Telephone number: 0203 263 2739
- Email: offshore.enduring@ofgem.gov.uk

CHAPTER: Two

Question box

Question 2.1: Do you agree with our proposal to split the ION into an ION Part A and ION Part B? Please provide reasons to support your answer.

Question 2.2: Do you agree with our assessment of the options for the completion notice trigger point? Please provide reasons to support your answer.

Question 2.3: Do you agree that ION Part B represents the best trigger point for the completion notice? Please provide reasons to support your answer.

Question 2.4: Are there any other points in the commissioning process that you feel we haven't considered in the options above that would be a more appropriate point for triggering the completion notice? Please provide reasons to support your answer.

CHAPTER: Three

Question 3.1: Do you agree that the proposed approach, that projects in flight be issued a completion notice when the code and licence modifications take effect and full commencement has occurred, is the most appropriate approach for such projects? Please provide reasons to support your answer.

Question 3.2: Do you consider any other possible approaches we have not outlined would be a more suitable solution for projects in flight? It should be noted that options are limited by the scope of the Clause.

CHAPTER: Four

Question 4.1: We invite comments on all aspects of the proposed drafting provided in Annex 1. In particular, do you agree that the proposed licence modifications adequately implement the provisions in the Clause and our proposals set out in this document? Please provide reasons to support your answer.

Question 4.2: Do you consider there are other licence modifications that are needed to implement the Clause? If so, please provide details.

CHAPTER: Five

Question 5.1: In addition to the specific questions in Chapter 2 of this document, we invite comments on all aspects of the proposed drafting provided in Annexes 2 and 3. In particular, do you agree that the proposed code modifications adequately implement the provisions in the Clause and our proposals set out in this document? Please provide reasons to support your answer.

Question 5.2: Do you consider there are other code modifications that are needed to implement the Clause? Please provide evidence to support your answer.

Appendix 2 – Generator Commissioning Clause

Generator Commissioning (Clause 138, Energy Bill 2012-13)

PART 6, CHAPTER 2 MISCELLANEOUS *Offshore transmission*

138 Offshore transmission systems

(1) EA 1989 is amended as follows.

(2) In section 4 (prohibition on unlicensed supply), after subsection (3A) insert—

“(3AA) Subsection (3A) is subject to section 6F (offshore transmission during commissioning period).”

(3) After section 6E insert—

“6F Offshore transmission during commissioning period

(1) For the purposes of this Part a person is not to be regarded as participating in the transmission of electricity if the following four conditions are met.

(2) The first condition is that the transmission takes place over an offshore transmission system (“the system”) or anything forming part of it.

(3) The second condition is that the transmission takes place during a commissioning period (see section 6G).

(4) The third condition is that—

(a) a request has been made to the Authority in accordance with the tender regulations for a tender exercise to be held for the granting of an offshore transmission licence in respect of the system,

(b) the Authority has determined in accordance with those regulations that the request relates to a qualifying project, and

(c) the system, or anything forming part of it, has not been transferred as a result of the exercise to the successful bidder.

(5) The fourth condition is that—

(a) the person who is the developer in relation to the tender exercise is also the operator of a relevant generating station, and

(b) the construction or installation of the system is being or has been carried out by or on behalf of, or by or on behalf of a combination of, any of the following—

(i) the person mentioned in paragraph (a);

(ii) a body corporate associated³⁵ with that person at any time during the period of construction or installation;

(iii) a previous developer;

(iv) a body corporate associated with a previous developer at any time during the period of construction or installation.

(6) For the purposes of subsection (1), it does not matter whether or not the person mentioned in that subsection is the developer in relation to the tender exercise.

(7) For the purposes of subsection (5)(b)(iii) and (iv), a person is a "previous developer" in relation to the system if—

(a) the person does not fall within subsection (5)(a), but

(b) at any time during the period of construction or installation, the person was the developer in relation to the tender exercise.

(8) In this section—

"associated", in relation to a body corporate, is to be construed in accordance with paragraph 37 of Schedule 2A;

"developer", in relation to a tender exercise, means any person within section 6D(2)(a) (person who makes the connection request, including any person who is to be so treated by virtue of section 6D(4));

"offshore transmission" has the meaning given by section 6C(6);

"offshore transmission licence" has the meaning given by section 6C(5);

"offshore transmission system" means a transmission system used for purposes connected with offshore transmission;

"operator", in relation to a generating station, means the person who is authorised to generate electricity from that station—

(a) by a generation licence granted under section 6(1)(a), or

(b) in accordance with an exemption granted under section 5(1);

"qualifying project" is to be construed in accordance with the tender regulations;

"successful bidder" and "tender exercise" have the same meanings as in section 6D;

³⁵ An extract of paragraph 37 of schedule 2A to the Electricity Act 1989 is provided below as part of this appendix for reference.

“relevant generating station”, in relation to an offshore transmission system,
means a generating station that generates electricity transmitted over the
system;

“the tender regulations” means regulations made under section 6C.

6G Section 6F: meaning of “commissioning period”

(1) For the purposes of section 6F(3), transmission over an offshore transmission system (or anything forming part of it) takes place during a “commissioning period” if it takes place at any time—

- (a) before a completion notice is given in respect of the system, or
- (b) during the period of 18 months beginning with the day on which such a notice is given.

(2) A “completion notice”, in relation to a transmission system, is a notice which—

- (a) is given to the Authority by the relevant co-ordination licence holder in accordance with the co-ordination licence, and
- (b) states that it would be possible to carry on an activity to which section 4(1)(b) applies by making available for use that system.

(3) The Secretary of State may by order amend subsection (1) so as to specify a period of 12 months in place of the period of 18 months.

(4) An order under subsection (3) may be made only so as to come into force during the period—

- (a) beginning 2 years after the day on which section 127 of the Energy Act 2013 comes into force, and
- (b) ending 5 years after that day.

(5) An amendment made by an order under subsection (3) does not apply in relation to any transmission of electricity over a transmission system if—

- (a) but for the making of the order, the person participating in the transmission would, by virtue of section 6F, have been regarded as not participating in the transmission, and
- (b) the determination mentioned in subsection (4)(b) of that section in relation to the system was made on or before the day on which the order is made.

(6) In this section—

“co-ordination licence” has the same meaning as in Schedule 2A (see paragraph 38(1) of that Schedule);

“relevant co-ordination licence-holder” has the meaning given by paragraph 13(4) of Schedule 2A.

6H Sections 6F and 6G: modification of codes or agreements

(1) The Authority may—

(a) modify a code maintained in accordance with the conditions of a transmission licence or a distribution licence;

(b) modify an agreement that gives effect to a code so maintained.

(2) The Authority may make a modification under subsection (1) only if it considers it necessary or desirable for the purpose of implementing or facilitating the operation of section 6F or 6G.

(3) The power to make modifications under subsection (1) includes a power to make incidental, supplemental, consequential or transitional modifications.

(4) The Authority must consult such persons as the Authority considers appropriate before making a modification under subsection (1).

(5) Subsection (4) may be satisfied by consultation before, as well as consultation after, the passing of the Energy Act 2013.

(6) As soon as reasonably practicable after making a modification under subsection (1), the Authority must publish a notice stating its reasons for making it.

(7) A notice under subsection (6) is to be published in such manner as the Authority considers appropriate for the purpose of bringing the matters to which the notice relates to the attention of persons likely to be affected by it.

(8) A modification under subsection (1) may not be made after the end of the period of 7 years beginning with the day on which section 127 of the Energy Act 2013 comes into force.”

(4) In section 64 (interpretation of Part 1), in subsection (1B) at the end insert “and section 6F”.

Extract of paragraph 37 of schedule 2A to the Electricity Act 1989

Associated bodies corporate

37

(1) For the purposes of this Schedule, one body corporate is associated with another if one of them controls the other or a third body corporate controls both of them, and sub-paragraphs (2) to (6) set out the circumstances in which one body corporate ("A") controls another ("B").

(2) Where B is a company, A controls B if A possesses or is entitled to acquire—

- (a) one half or more of the issued share capital of B,
- (b) such rights as would entitle A to exercise one half or more of the votes exercisable in general meetings of B,
- (c) such part of the issued share capital of B as would entitle A to one half or more of the amount distributed if the whole of the income of B were in fact distributed among the shareholders, or
- (d) such rights as would, in the event of the winding up of B or in any other circumstances, entitle it to receive one half or more of the assets of B which would then be available for distribution among the shareholders.

(3) Where B is a limited liability partnership, A controls B if A—

- (a) holds a majority of the voting rights in B,
 - (b) is a member of B and has a right to appoint or remove a majority of other members,
- or
- (c) is a member of B and controls alone or pursuant to an agreement with other members, a majority of the voting rights in B.

(4) In sub-paragraph (3)(a) and (c) the references to "voting rights" are to the rights conferred on members in respect of their interest in a limited liability partnership to vote on those matters which are to be decided on by a vote of the members of the limited liability partnership.

(5) In any case, A controls B if A has the power, directly or indirectly, to secure that the affairs of B are conducted in accordance with A's wishes.

(6) In determining whether, by virtue of sub-paragraphs (2) to (5), A controls B, A is to be taken to possess—

- (a) any rights and powers possessed by a person as nominee for it, and
- (b) any rights and powers possessed by a body corporate which it controls (including rights and powers which such a body corporate would be taken to possess by virtue of this sub-paragraph).

Appendix 3 – Interdependencies and Interactions

Interaction between commissioning and the tender process

As indicated in Chapter 2, we consider that issuance of the completion notice in implementing the Clause should not be contingent on reaching a particular point in the Generator build tender process. The purpose of the completion notice is to indicate the technical readiness of the offshore transmission system. This is necessarily separate from the tender process albeit there is a consequent interaction between the two in practical terms. Ofgem runs tender exercises based on individual project needs and unnecessary and inappropriate constraints may be created by linking the two.

It is important to note that the commissioning process remains within the control of the developer (subject to requirements of the codes and interaction with NETSO), while the tender process is run by Ofgem, albeit involving close engagement with the developer. As such it will be within the developer's control when the issuance of the completion notice can be triggered. To some extent, Ofgem may adapt the timing of particular stages of a tender exercise in consultation with the developer if there is a project-specific need and if we considered it appropriate at the relevant time. As a result, we are not proposing a change to arrangements in relation to the tender process and are not consulting on tender process policy.

Having said that, given that these two processes will run in parallel and to give an indication of our expectations, we believe there would be limited benefit in announcing a preferred Bidder for a tender before the completion notice is issued. We consider that such uncertainty about the condition of the assets at that stage in the tender process would prolong due diligence and the process to financial close, which would have cost implications for all parties involved. However Ofgem will continue to make decisions about how to run tenders based on the requirements in the Tender Regulations and consideration of individual project needs.

Interest during construction (IDC)

Under the 2013 Tender Regulations, Ofgem determines the final transfer value that is paid by the OFTO to the developer based on our assessment of the costs of the completed offshore transmission assets that ought to have been economically and efficiently incurred. A component of the final transfer value is Interest During Construction (IDC). IDC is the allowance for the cost of financing the development and construction of electricity transmission assets. Currently the allowed IDC is the lower of an explicit cap rate and the rate submitted by the project developer (subject to economic and efficient justification).

To date, the IDC rate has been applied on a calendar basis (ie. a change to the cap would be applied to the remaining period of an ongoing project). The IDC ceases when each stage of expenditure on the transmission assets is finished, and only applies to costs that are deemed to be economically and efficiently incurred.

Both the Clause and IDC involve a consistent concept of completion or technical readiness of the transmission assets. However IDC arrangements apply to each stage of a qualifying project as it is completed, whereas the Generator Commissioning Clause is concerned with a concept of completion that applies when the final stage in a qualifying project reaches that completion point.

For staged projects, IDC therefore ceases for each stage of the project when the transmission assets built to that point are available for use for the transmission of electricity to the onshore network.

In May this year we published an open letter on the proposed scope and timetable for a review of IDC policy for offshore electricity transmission (together with that for interconnectors). We expect to publish a consultation later this year setting out a 'minded-to' position.

Coordination Framework

In developing the proposed modifications to codes and the agreements that give them effect we have considered whether there would be any implications for the development of a framework to enable coordination of offshore transmission. We do not expect there to be any issues with the development of coordinated projects arising as a consequence of these proposed modifications. We will however monitor this matter as the coordination framework is developed and implemented, and consider whether it may be necessary to bring forward further modifications to generator commissioning arrangements in future to address any specific issues that may be identified.

Appendix 4 - Glossary

A

Authority

The Gas and Electricity Markets Authority, which governs Ofgem.

B

BCA

Bilateral Connection Agreement

BSC

Balancing and Settlement Code

C

Commissioning period

Under section 6G of the Generator Commissioning Clause a “commissioning period” is the period:

- (a) before a completion notice is given in respect of the system, or
- (b) during the period of 18 months beginning with the day on which such a notice is given.

The commissioning period is the period during which a generator may lawfully commission and operate transmission assets provided they satisfy the conditions of the Clause.

Completion notice

A completion notice under the Generator Commissioning Clause is a notification from the System Operator to the Authority to indicate that a transmission system can be made available for use. The effect of the completion notice is to trigger the final 18 month period to complete commissioning activities.

Connection and Use of System Code (CUSC)

The Connection and Use of System Code is the contractual framework for connection to, and use of, the National Electricity Transmission System.

Coordination

The term coordination refers to the work we are undertaking to support the development of an integrated onshore-offshore transmission system where

appropriate, to ensure the most economic and efficient outcome for consumers. This is achieved by identifying and delivering improvements to the network planning process and designing a framework for investment in coordinated network development to underpin the enduring regime.

D

DECC

Department of Energy and Climate Change

Developer

The 2013 Tender Regulations define the 'developer' as 'any person within section 6D(2)(a) of the Electricity Act 1989' (the 1989 Act) or within a developer group (where 'developer group' means two or more persons acting together for the purposes of developing a qualifying project). Section 6D(2)(a) of the 1989 Act defines such person as 'the person who made the connection request for the purposes of which the tender exercise has been, is being or is to be, held'. In practice, such person is also the entity responsible for the construction of the generation assets and, under Generator build, the transmission assets.

Distribution exemption

The Electricity (Class Exemptions from the Requirement for a Licence) Order 2001 SI 2001 No. 3270

Distribution Network Operator (DNO)

Distribution Network Operator means an entity that operates an electricity distribution network, which includes all parts of the network from 132kV down to 230V in England and Wales. In Scotland 132kV is considered to be a part of transmission rather than distribution so their operation is not included in DNOs' activities.

E

Electricity Act

Means the Electricity Act 1989, as amended from time to time.

Enduring regime

The regulatory regime for projects qualifying for offshore transmission tender exercises after 31 March 2012.

Energy Act

Means the Energy Act 2004.

EON

Energisation Operational Notification

EU

European Union.

F

FON

Final Operational Notification

Full commencement

Government has amended key definitions in the Electricity Act 1989 to extend the offshore transmission regulatory regime to all projects conveying electricity from GB offshore waters at or above 132kV, including projects in the Renewable Energy Zone (REZ). The amended definitions are partially commenced and currently apply to projects conveying electricity from offshore at 132kV from the point of asset transfer to an Offshore Transmission Owner (OFTO). Government intends to commence the regulatory regime in due course to apply it to all OFTO and generator built offshore assets at or above 132kV. This commencement of the full regulatory regime is what we refer to as 'full commencement'.

G

GB

Great Britain

Generator build

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

Generator Commissioning Clause

The Generator Commissioning Clause is clause 138 of the Energy Bill currently before Parliament. Refer to Appendix 2 for full clause text.

Grid Code

The Grid Code covers technical aspects relating to connections to, and the operation and use of, the National Electricity Transmission System.

I

Industry codes

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

Interest during construction (IDC)

IDC is the allowance for the cost of financing the development and construction of electricity transmission assets.

ION

Interim Operational Notification

K

kV

Kilovolts

L

Licence Grant

Licence Grant means the grant of the Offshore Transmission Licence by the Authority to the successful bidder identified pursuant to section 6C of the Electricity Act 1989.

M

MVar

Mega volt-ampere reactive

MW

Megawatt

N

NETS

National Electricity Transmission System

NETSO

National Electricity Transmission System Operator. The entity responsible for coordinating and directing the flow of electricity over the national electricity transmission system.

NGET

National Grid Electricity Transmission. NGET owns and maintains the onshore high-voltage electricity transmission system in England and Wales. It is also the NETSO.

O

Ofgem

Office of Gas and Electricity Markets. Ofgem is used to refer to Ofgem, Ofgem E-Serve and the Gas and Electricity Markets Authority (the Authority) in this document.

OFTO

OFTO or Offshore Transmission Owner means the holder of an Offshore Transmission Licence, granted by the Authority.

OFTO build

Under the OFTO build option, the developer would obtain the connection offer and undertake high level design and preliminary works. A prospective OFTO would bid their approach to the procurement, financing, construction, operation, maintenance and decommissioning of transmission assets, and the costs associated with carrying out these activities.

Offshore Transmission Licence (OFTO licence)

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

OTSDUW

Offshore Transmission System Development User Works.

P

Phase

A phase consists of transmission assets with a shared level of certainty and timing of build out, and within a discrete location. For example, we would anticipate a single phase to comprise transmission assets with a shared investment decision and/or shared key contractual commitments.

Preferred bidder (PB)

Preferred bidder means, in relation to a qualifying project, the qualifying bidder determined by Ofgem following its evaluation of the bids received, to which Ofgem intends to grant the Offshore Transmission Licence subject to the satisfaction of the conditions specified by Ofgem.

Projects in flight

Projects in flight refers to those projects that have passed the point at which a completion notice (that would trigger the final 18 month period to complete commissioning activities) would be issued and where the transmission assets are operational but have not yet transferred to the OFTO, at the point the codes and licence modifications to implement the Generator Commissioning Clause come into effect.

S

Stage

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

Successful Bidder

A successful bidder means a preferred bidder to which Ofgem has determined to grant an offshore transmission licence.

System Operator – Transmission Owner Code (STC)

The STC defines the high-level relationship between the National Electricity Transmission System Operator and a Transmission Owner.

T

Tender Regulations

The Tender Regulations underpin the competitive tender process run by Ofgem to select and licence OFTOs under the regulatory regime. The regulations currently in force are the Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations 2013.

Transmission assets

Means the transmission system in respect of which the offshore transmission licence is (or is to be) granted or anything which forms part of that system. The transmission system is expected to include subsea export cables, onshore export cables, onshore and offshore substation, and any other assets, consents, property arrangements or permits required by an incoming OFTO in order for it to fulfil its obligations as a transmission operator.

Transmission Entry Capacity (TEC)

The contractually agreed maximum amount of electricity a developer can export onto the National Electricity Transmission System.

TR1

Transitional Tender Round 1

TR2

Transitional Tender Round 2.

TR3

Tender Round 3. The first tender round to be held under the enduring regulatory regime for offshore transmission.

Transmission Owner (TO)

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

2010 Tender Regulations

The Electricity (Competitive Tenders for Offshore Transmission Licences) 2010.

2013 Tender Regulations

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

Appendix 5 - Feedback Questionnaire

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

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

1.2. Please send your comments to:

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