



Offshore Electricity Transmission: Consultation on implementation of the Generator Commissioning Clause in the Energy Act 2013

Consultation

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Contact: Catherine McArthur

Team: Offshore Transmission

Tel: 0203 263 2739

Email: offshore.enduring@ofgem.gov.uk

Overview:

We are seeking to implement new legislative provisions within the Energy Act 2013. These provisions will 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 document consults on our minded-to position for the point in the commissioning process when a completion notice would be issued for Generator build projects and how the new arrangements will be implemented through code and electricity transmission licence modifications. We also consider the practical application of the new arrangements, in particular how they will apply to projects that, at the time these 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 is needed to deliver the substantial investment required in transmission. In the case of offshore generation, 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).

To date, all tenders have been for Generator build projects, where the developer builds the transmission assets connecting its windfarm to the onshore electricity transmission system and Ofgem selects and licences an OFTO to take over and operate those assets.

The Generator Commissioning Clause in the Energy Act 2013 enables a developer to lawfully commission and operate offshore transmission assets for a limited period before transferring them to an OFTO.

Associated documents

- [Consultation on implementation of the Generator Commissioning Clause in the Energy Bill 2012-13](#)
- [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 Act 2013 is available on the legislation.gov.uk. The Generator Commissioning Clause is provided in Appendix 3.
- [Statement on future generator build tenders](#)
- [The Electricity \(Competitive Tenders for Offshore Transmission Licences\) Regulations 2013, February 2013](#)

Contents

Executive Summary	v
1. Introduction	1
Purpose of this document	1
Consultation history	1
Legal and regulatory context	2
How the Clause works	3
Document structure	3
Responding to this document	5
2. The Completion Notice Trigger Point	6
The Commissioning Process and the proposed splitting of the ION into ION Part A and ION Part B	6
Options in the August consultation for the completion notice issue point	7
Consultation responses on the completion notice issue point	10
Analysis of options for the completion notice trigger point	14
Assessment of options against the criteria	15
Consideration of timing of the completion notice trigger point	17
Our minded-to position with regards to the completion notice trigger point	20
Phased and staged projects	22
3. Implementation of the Generator Commissioning Clause	27
Projects in flight	27
Settlement metering arrangements	28
Projects overrunning the 18-month period of the Clause	29
4. Proposed Modifications to the Electricity Transmission Licence	30
Proposed transmission licence modifications	30
5. Proposed Code Modifications	32
Introduction	32
Proposed CUSC modifications	33
Proposed Grid Code modifications	34
6. Next Steps	36
Further publications	36
Timing of implementation of the Clause and full commencement	36
Appendices and Annexes	38
Appendix 1 - Consultation Response and Questions	39
Appendix 2 – Summary of responses to the August consultation	41
Appendix 3 – Generator Commissioning Clause	43
Appendix 4 – Interactions with other areas	48
Appendix 5 - Glossary	50
Appendix 6 - Feedback Questionnaire	57



Offshore Electricity Transmission: Consultation on implementation of the
Generator Commissioning Clause in the Energy Act 2013

**Annex 1 – Statutory consultation on the proposed modifications to the electricity
transmission licence** **Separate document**

Annex 2 – Proposed modifications to the CUSC **Separate document**

Annex 3 – Proposed modifications to the Grid Code **Separate document**

Executive Summary

This document summarises our minded-to positions on the implementation of the Generator Commissioning Clause (the “Clause”) in the Energy Act 2013. The Clause was developed jointly by DECC and Ofgem¹ to ensure that, following “full commencement” of the offshore transmission regime, a generator developer (a “developer”) can lawfully commission and operate offshore transmission assets before transferring them to an OFTO. Within this consultation we also outline proposed modifications to industry codes and consult in accordance with section 11A of the Electricity Act 1989 on changes to the electricity transmission licence needed to implement the Clause.

We outline options and provide our minded-to position on 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 changes to industry codes and the transmission licence. We also set out how the Clause will apply to projects ‘in flight’, by which we mean any offshore transmission projects that have already passed the completion notice trigger point but not transferred to an OFTO when the code and licence modifications implementing the Clause take effect.

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-month² period during which a developer can transmit electricity for the purposes of commissioning transmission assets without holding a transmission licence. In our August 2013 consultation on implementation of the Clause (the “August consultation”) we considered existing stages in the commissioning process when the completion notice could be triggered. We proposed to split the current Interim Operational Notification (ION) issued to a developer by the National Electricity Transmission System Operator (NETSO) as part of the commissioning process, into two parts: ION Part A and ION Part B. We proposed that the later of these two points, ION Part B, was our preferred option for triggering issue of the completion notice.

Following consideration of responses to the August consultation, in this document we have further considered options for the completion notice trigger point. We consider three options and outline that ION Part B is our minded-to position for when

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.

² The Clause includes a provision whereby the 18-month period could be reduced to 12 months by notice by the Secretary of State within 2 to 5 years from Clause commencement, where the Secretary of State considers this is appropriate.

completion notices should be issued. It is the option that best meets the requirements of the Clause, and is the earliest and most appropriate point at which transmission assets could be said to be technically ready for use. It is also clearly visible to the NETSO and can be applied in a clear and consistent way to projects. Finally, we believe 18 months from ION Part B should provide sufficient opportunity to resolve outstanding commissioning issues and to transfer the transmission assets to the OFTO. This also ensures that the period of time during which a developer can operate transmission assets is limited, in line with the intent of the Clause.

Projects in flight

In the August consultation we considered options for how the Clause should apply to projects in flight. We proposed that for such projects a completion notice will be issued when both full commencement has occurred and the code and licence modifications to implement the Clause have taken effect. This will give such projects 18 months from that point to complete commissioning and transfer the offshore transmission assets. This will not impose any additional requirements on these projects or give them any less time than future projects subject to the Clause. Respondents to the August consultation were supportive of this approach and this now forms our minded-to position for projects in flight.

Settlement metering

In the August consultation we identified a potential interaction with a Modification Proposal (P294) raised to the Balancing and Settlement Code (BSC) in June 2013. P294 proposed that settlement metering should be required at the offshore boundary point from the beginning of the commissioning period, rather than at the onshore boundary point as it is currently. P294 was submitted to Ofgem for decision on 14 November 2013 and our decision was published on 19 December 2013. We consider that the Clause could be implemented successfully without any further changes to the BSC.

Next steps

In this consultation we seek stakeholders' views on our minded-to positions for implementation of the Clause. We welcome responses to this consultation by 24 February 2014. We intend to publish our final decision in spring 2014, when we will also provide an update on the timing of full commencement and an indication of when we expect the code and licence modifications to take effect. Subject to the code and transmission licence modifications coming into effect in line with our proposed timelines, we might expect NGET to commence issuing completion notices from June or July 2014.

1. Introduction

Chapter Summary

This chapter provides background on previous consultation on the Clause, how the Clause works and the legal and regulatory context.

Purpose of this document

- 1.1. In this document we summarise responses to Consultation on implementation of the Generator Commissioning Clause in the Energy Bill 2012-13 published in August 2013¹ (the "August consultation") and consider the feedback and alternative options suggested by respondents. We also provide our further analysis and set out our minded-to positions for implementing the Generator Commissioning Clause (the "Clause") and the necessary accompanying modifications to codes and the electricity transmission licence (the "transmission licence").

Consultation history

- 1.2. The August consultation considered options and outlined our proposals for implementing the Clause following full commencement and the Clause coming into force. In particular we consulted on the trigger for NETSO to issue a completion notice, which will indicate the beginning of the final 18-month period during which a developer should finalise commissioning activity and transfer the assets to an OFTO. The consultation included the proposed transmission licence and code modifications that would implement our proposals, and we sought input on these proposed modifications.
- 1.3. We also consulted on the proposed approach to projects in flight. These projects will have passed the completion notice trigger point when the code and transmission licence modifications come into force but will not yet have transferred to an OFTO.
- 1.4. In the August consultation we stated that our preferred option for the completion notice trigger point was when ION Part B was issued to the developer (the commissioning process, including ION Part B, is explained

¹ <https://www.ofgem.gov.uk/ofgem-publications/82949/consultationontheimplementationofthegeneratorcommissioningclause30082013.pdf>

further in Chapter 2). Our preferred option for the treatment of projects in flight was that completion notices would be issued to all such projects at the same time, once the code and transmission licence modifications have taken effect and full commencement has occurred.

- 1.5. The code modifications proposed as part of the August consultation involved modification of the Connection and Use of System Code (CUSC), including the Construction Agreement and Bilateral Connection Agreement (BCA), and the Grid Code. We also proposed modifications to the transmission licence as part of that consultation. The modifications proposed primarily involved modifying Section C of the transmission licence and we also proposed modifications to definitions within Section A of the transmission licence.
- 1.6. We noted in the August consultation that there is an interaction between the implementation of the Clause and a modification to the Balancing and Settlement Code (BSC), P294. The final modification report for P294 was submitted to Ofgem for decision on 14 November 2013 and we published our decision on 19 December 2013².
- 1.7. We have reviewed the responses received to the August consultation and have considered them, alongside further analysis (including in conjunction with the NETSO) when coming to our minded-to positions.

Legal and regulatory context

- 1.8. The offshore transmission regulatory regime applies to all electricity transmission at or above 132kV in Great Britain's (GB) offshore waters³ from an offshore developer. The offshore transmission regulatory regime is currently partially commenced. This means that before the transfer of transmission assets to a licensed OFTO, conveyance of electricity at 132kV is legally classified as distribution, not transmission. Although distribution is a prohibited activity requiring a licence or exemption, the Electricity (Class Exemptions from the Requirement for a Licence) Order 2001⁴ enables developers to commission offshore transmission assets lawfully.
- 1.9. Government intends to fully commence the offshore regulatory regime in due course, which means the regime will apply to all offshore systems at and

² <https://www.ofgem.gov.uk/ofgem-publications/85347/bscp294d.pdf>

³ 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.

⁴ SI 2001 No. 3270

above 132kV. As a result, conveying electricity over transmission assets for the purposes of supply (including commissioning) will be classified as transmission. Developers conveying electricity over these assets will therefore be in breach of the prohibition on transmission without a licence or exemption.

- 1.10. To address this, and to ensure that developers can continue to lawfully commission transmission assets offshore before transferring them to an OFTO under the Generator build model⁵, DECC and Ofgem worked together to develop the Generator Commissioning Clause within the Energy Act 2013. The Clause permits transmission by developers without a licence or exemption for the purposes of commissioning transmission assets during a defined 'commissioning period' leading to OFTO licence grant.
- 1.11. Given that the Clause was developed specifically to enable developers to commission transmission assets under Generator build, the minded-to positions outlined in this document relate only to Generator build projects.

How the Clause works

- 1.12. The Clause provides that transmission over an offshore transmission system can take place during a commissioning period if it takes place before a completion notice is issued or during a period of 18 months⁶ from the day on which the completion notice is issued. To implement the Clause we need to identify the appropriate point in the commissioning process for offshore transmission assets at which a completion notice should be issued. Under the Clause the completion notice will be issued by the NETSO to indicate that it would be possible to carry on the activity of transmission for the purposes of supply by making the transmission system available for use. From the point at which a completion notice is issued, a developer will have a period of 18 months in which to complete its commissioning activities and transfer the assets to the OFTO. After this 18-month period, if the developer continues to operate the assets, that developer will be in breach of the prohibition on transmission without a licence.
- 1.13. The Clause is part of the Energy Act 2013. For further information regarding the legal framework, please refer to the August consultation.

Document structure

- 1.14. This document has five further chapters:
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⁵ Under the generator build model, the generator will construct the transmission assets, and the OFTO will operate, maintain and decommission the transmission assets.

⁶ The Clause includes a provision whereby the 18 month period could be reduced to 12 months by notice by the Secretary of State within 2 to 5 years from Clause commencement, where the Secretary of State considers this is appropriate.

- Chapter 2 provides an overview of the commissioning process and proposals from our August consultation relating to the trigger point for the completion notice. We consider the views and evidence provided in response to the August consultation, further analyse the options for when a completion notice could be triggered and present our minded-to position. We have also provided a number of case studies to demonstrate how our proposals would apply to different system configurations for staged and phased projects.
 - Chapter 3 explains how the Clause will be implemented for projects in flight and provides an update on the BSC modification P294.
 - Chapter 4 outlines the final proposed transmission licence changes for implementation of the Clause contained in the accompanying Section 11A consultation.
 - Chapter 5 outlines the final proposed code modifications for implementation of the Clause.
 - Chapter 6 provides information on next steps that we will be taking to finalise our proposals on implementation of the Clause, further publications and an overview of expected timings for code and transmission licence modifications taking effect.
- 1.15. 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 a summary of responses to the August consultation.
 - Appendix 3 provides the full text of the Clause.
 - Appendix 4 identifies linkages with other work areas to ensure that the new arrangements are aligned as appropriate.
 - Appendix 5 provides a glossary of terms used throughout this document.
 - Appendix 6 provides a feedback questionnaire.
- 1.16. We have also provided copies of the change marked text of the transmission licence and CUSC and Grid Code as follows:
- Annex 1 provides a Section 11A consultation on the proposed transmission licence modifications.
 - Annex 2 provides the proposed CUSC modifications, including the Construction Agreement and BCA.
 - Annex 3 provides the proposed Grid Code modifications.

Responding to this document

- 1.17. We welcome comments from respondents on all issues in this document. Particular issues on which we are seeking feedback are highlighted in the relevant chapters. Respondents who wish their responses to 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.
- 1.18. We welcome responses by 24 February 2014. All responses should be sent to: offshore.enduring@ofgem.gov.uk.

2. The Completion Notice Trigger Point

Chapter Summary

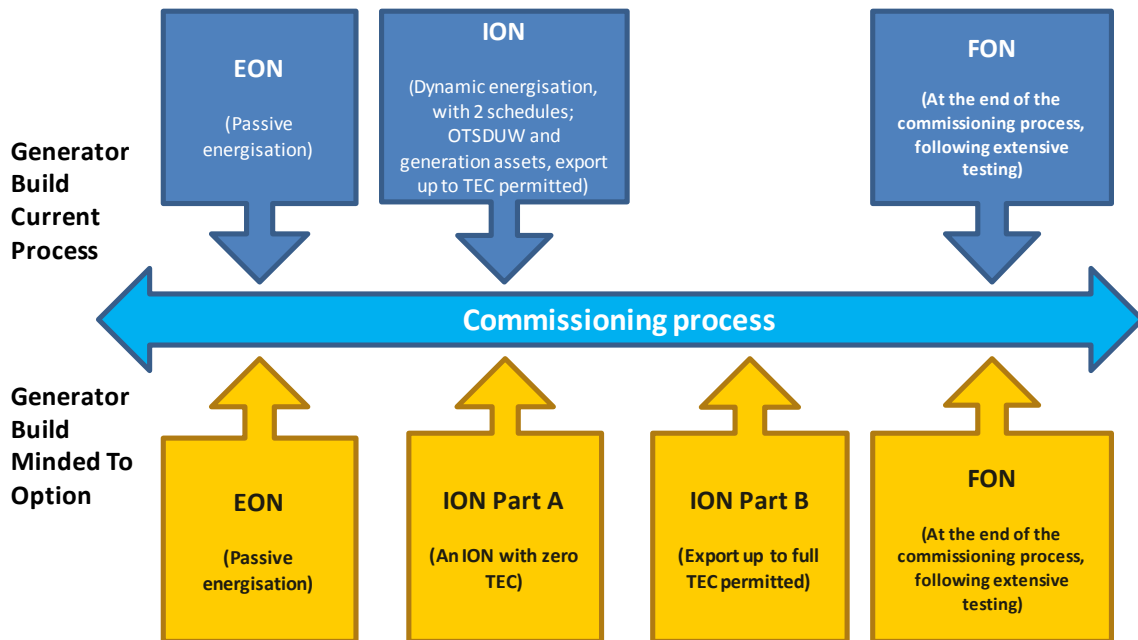
This chapter provides an overview of the commissioning process and summarises views and evidence provided in response to the August consultation. It further analyses the options for when a completion notice could be triggered and presents our minded-to position. We have also provided a number of case studies to demonstrate how our proposals would apply to different system configurations for staged and phased projects.

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

- 2.1. In the August consultation we considered the existing stages of the commissioning process that could signify points at which the offshore transmission assets are technically ready for operation and hence could be made available for use in line with the Clause. The points considered included the current Interim Operational Notification (ION) and the Final Operational Notification (FON).
- 2.2. In addition to considering the stages in the existing commissioning process, we proposed splitting the current ION into two separate instruments: ION Part A and ION Part B. Under current Generator build commissioning arrangements, the developer receives a single ION, with the NETSO permitting export rights by reference to Transmission Entry Capacity (TEC) at this point. Under the proposed split, ION Part A would be the point at which dynamic energisation or the ability to import/export reactive power occurs and would indicate when it is necessary for the developer to start connecting to the offshore transmission system. ION Part B would indicate the point at which active power can be exported over the system onto the National Electricity Transmission System (NETS).
- 2.3. The Energisation Operational Notification (EON) would continue to be the point in the commissioning process at which passive energisation is permitted. ION Part A would be issued with no right to export and ION Part B would be the point at which the right to export up to full TEC is permitted.
- 2.4. Responses to the August consultation were unanimous in their support for this proposed splitting of the ION, noting increased flexibility and transparency. **We are therefore minded, for the purposes of commissioning Generator build offshore transmission systems, to split the current ION into two separate instruments: ION Part A and ION Part B.**

- 2.5. Figure 2.1 illustrates the proposed new ION Part A and ION Part B as compared to the current Generator build commissioning process.

Figure 2.1: Overview of the minded-to Generator build commissioning process showing ION Part A and ION Part B



Options in the August consultation for the completion notice issue point

- 2.6. As set out in our August consultation, 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 purpose of supply in respect of a particular offshore transmission system. In order to implement the Clause it is therefore necessary to judge at what point in the commissioning process it would be possible for the offshore transmission system 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 system.
- 2.7. We interpret the point at which it would be possible for the offshore transmission system 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, this refers to the requirement in the Clause that the completion notice indicates that these assets can be made available for use.
- 2.8. In the August consultation we identified four options for potential points of technical readiness for the issuance of the completion notice:

- ION Part A;
- ION Part B;
- The latter of ION Part B or the lifting of the 20% restriction on the number of turbines within a Power Park Module (PPM) triggered by the completion of a voltage control test (the “20% restriction”); and
- FON.

2.9. Of these options, ION Part B and the latter of ION Part B or the lifting of the 20% restriction were considered viable points at which the completion notice could be issued, although we identified ION Part B as our preferred option. ION Part A was discounted on the basis that the offshore transmission system may not be connected all the way through to the offshore substation at this point, while the FON was discounted as the assets would have potentially been in use for a number of years at this point.

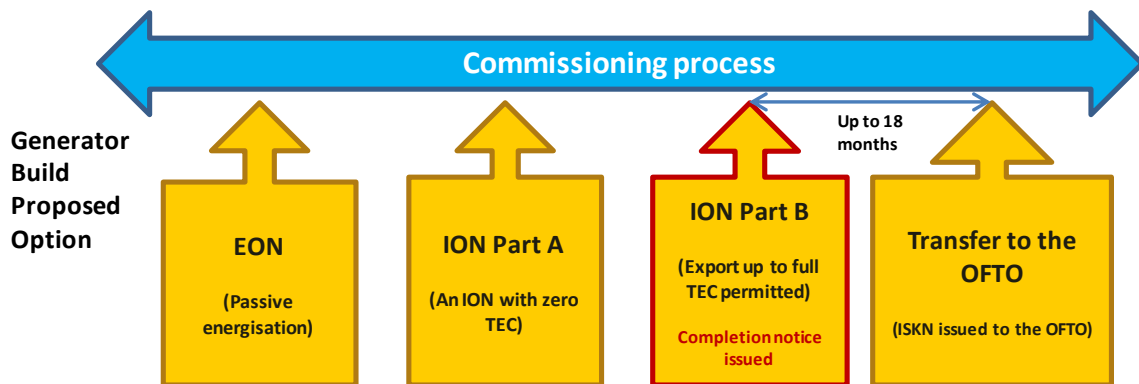
ION Part B

2.10. Under ION Part B, the completion notice would be issued when a developer can first export active power over the offshore transmission system onto the NETS. In the August consultation we considered:

- ION Part B to be the best point at which an offshore transmission system could be said to be technically ready and made available for use in line with the requirements of the Clause.
- ION Part B to be the first point at which a developer can transmit and earn revenue from generation.
- 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 system can be transferred.

2.11. Figure 2.2 gives an overview of how issuing the completion notice at ION Part B would apply.

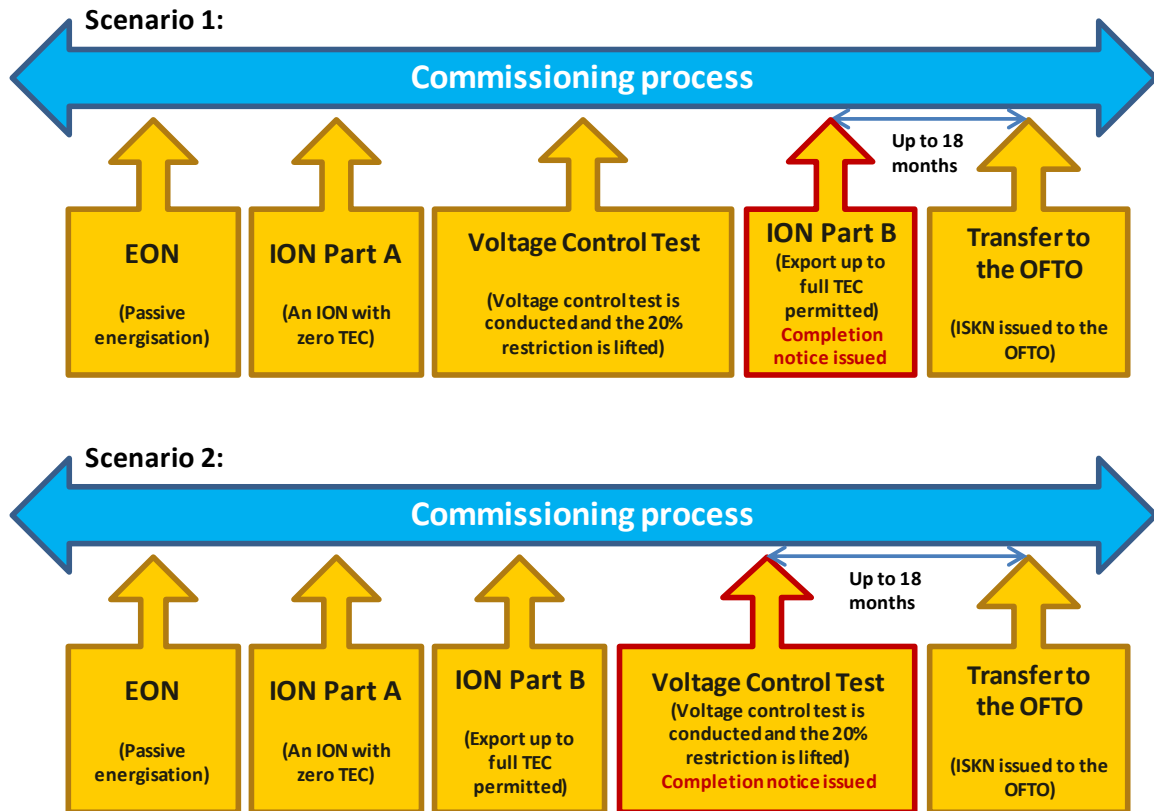
Figure 2.2: Overview of ION Part B, the preferred option for the completion notice trigger point in the August consultation



The latter of ION Part B or the lifting of the 20% restriction

- 2.12. In the August consultation we also considered the latter of ION Part B or the lifting of the 20% restriction, which is currently a standard part of the ION issued by NGET, as a possible completion notice issue point.
- 2.13. The voltage control test associated with the 20% restriction is undertaken to test the system's capabilities in controlling the voltage, to ensure that the voltage control system is not a potential risk to the operation of the NETS. The relevant Grid Code extract was set out in the August consultation.
- 2.14. As shown in Figure 2.3, it would not be necessary to fulfil these criteria in a particular order. The developer would have control over when to conduct the voltage control test that triggers the lifting of the 20% restriction and, consequently, when the completion notice would be issued (ie whether this occurs at ION Part B or after).
- 2.15. Advice from NGET confirmed that there would not be a technical need to conduct the voltage control test before ION Part B is issued. Rather it would be up to the developer to plan its construction programme to determine how best to manage its risk and therefore the timing of when it wishes to conduct the voltage control test. In doing so, developers would need to consider that they would not be permitted to operate more than 20% of the turbines until they had completed the voltage control test and NGET had lifted the restriction. Note that NGET have confirmed that the 20% restriction relates to the number of turbines in operation, not 20% of the TEC associated with the project.

Figure 2.3: The latter of ION Part B or the lifting of the 20% restriction, showing when a completion notice would be issued under two scenarios.



Consultation responses on the completion notice issue point

ION Part B

2.16. Of the ten responses received, four agreed that ION Part B represented the best point at which to issue the completion notice. Of the four supportive responses, three were from non-developers and one from a developer. The remaining six responses, from developers, were not supportive of ION Part B as the best point at which to issue the completion notice. Further detail on the responses is provided below:

- The four responses received in support indicated that issuing the completion notice at ION Part B would be clear, consistent and unambiguous, whilst also reflecting the point at which the transmission assets might be considered to be technically ready.
- Three of the developer respondents considered that ION Part B was not the point at which the transmission assets could be said to be technically ready and able to carry on activity to which section 4(1)(b) of the Clause

applies (ie ready to be made available for use) because they considered that there was a risk that the transmission assets could fail shortly after commencing active export.

- Four of the developer respondents expressed concern that ION Part B does not allow enough testing of the system post-commencement of active power export, prior to a completion notice being issued. As such their view was that it would not provide sufficient flexibility to address potential failure of the transmission assets shortly after active power export commences, and would therefore be too early a point at which to issue the completion notice. As such, they indicated that issuing the completion notice at ION Part B raised significant challenges in relation to rectifying any technical issues and finalising commercial negotiations with an OFTO, and in particular how this might place additional pressure on the developer to transfer the assets to an OFTO within 18 months.

2.17. Of the six responses that disagreed with ION Part B as the issue point, five cited previous project experience as justification that issuing a completion notice at ION Part B would be too early. Of these, two respondents cited their general experience to date, but provided no details of any specific projects to support this justification. One respondent stated that it took on average 17 months for Tender Round 1 (TR1) and Tender Round 2 (TR2) projects to progress from Preferred Bidder (PB) stage to asset transfer and OFTO licence grant. This was stated as evidence that completing an asset transfer in 18 months from ION Part B would be challenging.

2.18. The London Array project (a TR2 project) was presented by three developer respondents as an example of where a fault occurred after the proposed completion notice trigger point that would have made asset transfer and OFTO licence grant within 18 months challenging. One respondent stated that "London Array had a failure of the export system and 19 months were required to achieve the OFTO transfer from the issuing of the equivalent of ION Part B". The explanation of the fault is set out further in Appendix 2.

2.19. We consider the above points raised by respondents in relation to the timing of the completion notice trigger point for TR1 and TR2 projects in paragraph 2.40.

The latter of ION Part B or the lifting of the 20% restriction

2.20. Of the ten consultation responses received, three provided views on the latter of ION Part B or the lifting of the 20% restriction as a potential completion notice issue point:

- A developer respondent considered that the lifting of the 20% restriction could play a role as part of a proposed package of conditions prior to issuing the completion notice. The response also noted that linking the

proposed trigger point to the lifting of the 20% restriction would not be expected to give it “unnecessary significance”.

- A developer respondent expressed concern that the lifting of the 20% restriction would not provide any additional comfort to the developer, as it may be necessary to undertake the required test prior to ION Part B. The developer further noted that the associated voltage control tests were undertaken prior to ION Part B on many of its sites to date. However, further and more specific details of these projects were not provided to support these views. The developer also did not provide evidence of whether there was a need to conduct the test earlier than ION Part B or whether this reflected how their construction and commissioning programme was conducted on previous projects to date.

2.21. We have considered the latter response further, with advice from NGET. NGET have advised that it would not be necessary to conduct the voltage control test earlier than ION Part B, although it is possible to do so. It would be up to the developer to determine the timing. NGET further confirmed that there would be no adverse effects of undertaking the voltage control test after ION Part B and that undertaking the test at this point would work within the scope of the majority of projects.

Additional requirements and further completion notice trigger point options

2.22. Of the consultation responses that disagreed with completion notices being issued at ION Part B, several proposed alternative options for consideration. All of these responses identified a concern with transferring inside the 18-month period from ION Part B as the primary driver behind the proposal of alternative options. A number of reasons were identified for why completion notices should be issued later in the commissioning process:

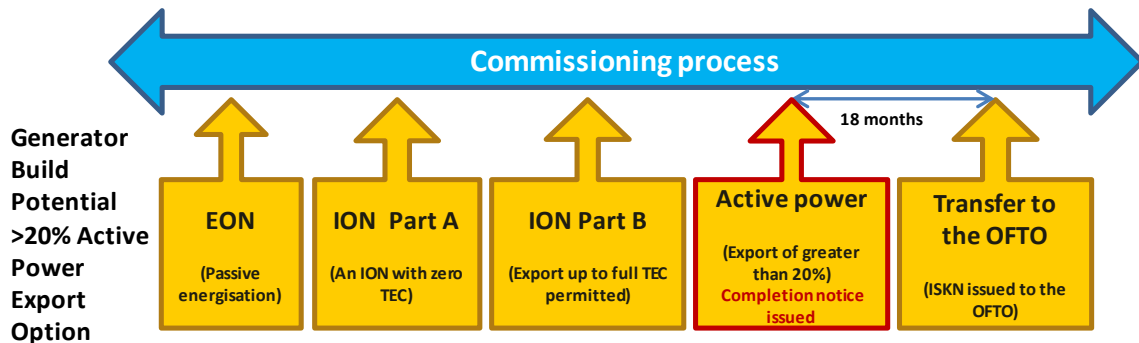
- The majority of developer responses identified a desire for additional flexibility or time in the commissioning process before a completion notice is issued.
- Six developers considered that demonstrating a reasonable load level on the transmission systems would aid commercial negotiations with an OFTO, by allowing additional time to undertake testing. These developers believed that this would not only provide additional assurance that the transmission assets are ready for use, but would provide additional time to allow for any technical issues to be rectified, should they arise.
- Two further options were proposed for the completion notice trigger point: active power of greater than 20%; and the lifting of the 70% restriction on the number of turbines that can be operational triggered by the completion of a voltage control test (the “70% restriction”).
- Of the responses regarding load level, all indicated that a figure of 20% active power export would be an appropriate point at which to issue the

completion notice. These stakeholders believed that this point would be visible to NGET, provide greater confidence that the system will be ready to transmit and give developers a greater degree of flexibility and control over when the completion notice would be issued.

- The respondent proposing the lifting of the 70% restriction set out that it would be visible to NGET, as it is tied to a specific event in the commissioning process.

- 2.23. We have considered the above responses further, in the context of whether these might reflect viable alternative options for triggering the completion notice in line with the requirements of the Clause.
- 2.24. We discounted the lifting of the 70% restriction as an option in the August consultation, as we considered that this occurs too late in the process to be compatible with the intent of the Clause. It should also be noted that in response to the August consultation several respondents noted that at 20% export they considered they would have sufficient comfort that the transmission system could be made available for use. We therefore continue to consider that the lifting of the 70% restriction is too late in the commissioning process to issue a completion notice and have therefore not considered this option further.
- 2.25. Under the other option proposed, represented below in Figure 2.4, the completion notice would be issued once an established percentage of active power export has been achieved. Respondents proposed that this should occur at 20% of registered capacity, and also indicated that, through both operational metering and settlement data, levels of active power export would be visible to NGET. Having engaged with NGET, we can confirm that the operational metering (which is visible to NGET) is not considered to be sufficiently precise to determine the trigger point accurately, which would mean that it is unlikely that NGET could issue completion notices based on this information alone. Instead it would be necessary for NGET to receive information from Elexon (the body responsible for settlement and balancing arrangements) and determine based on this information when a particular project reaches 20% of active power export. Nevertheless, we have considered the viability of this option further, as set out below.

Figure 2.4: Active power export of greater than 20%, showing when a completion notice would be issued



Analysis of options for the completion notice trigger point

2.26. In line with the August consultation responses and the findings and analysis set out earlier in this chapter, we have considered a shortlist of three options for when completion notices should be issued:

- Option 1: ION Part B;
- Option 2: the latter point of ION Part B or the lifting of the 20% restriction; and
- Option 3: active power export of greater than 20%.

2.27. We have assessed these options against the following criteria, as we consider that any option for the completion notice trigger point must be consistent with these criteria in order to be robust and enforceable in line with the requirements of the Clause:

1. **Compatibility with the Clause:** The extent to which the option satisfies the requirement in the Clause that a completion notice is issued where "it would be possible to carry on an activity to which section 4(1)(b) applies by making available for use that system". We consider this means that a completion notice should be issued at a point that the system is technically ready.
2. **Clarity and consistency:** The extent to which the option represents a clear point that can be consistently applied to all qualifying projects, and is visible to NGET as NETSO. This will ensure the process is efficient, fair, transparent and not unnecessarily burdensome to administer.

2.28. In order to supplement assessment against the above criteria, and to address some of the responses to the August consultation, we have also considered

the extent to which the options would reasonably enable a developer to transfer the transmission system to an OFTO within 18 months.

Assessment of options against the criteria

Option 1

- 2.29. As set out in our August consultation, ION Part B represents the earliest point at which a transmission system could be said to be complete and technically ready to export power onto the NETS. Once ION Part B has been issued for all parts of the system, transmission can commence across the whole system. As such, we consider Option 1 to be consistent with the intent of the Clause, as the transmission system can be considered to be technically ready at ION Part B.
- 2.30. In terms of clarity and consistency, the completion notice trigger point would be clear and visible to NGET, as the trigger for the completion notice would be tied to a specific event within the commissioning process. NGET would therefore be able to take a consistent approach, ensuring equitable treatment of all projects and developers.
- 2.31. We consider examples of how the Clause would apply to staged and phased projects in more detail later in this chapter. However, the application of each of the options to staged projects is particularly relevant to our assessment against the criteria set out above. We set out in the August consultation that under the Clause, where a qualifying project, as determined under the Tender Regulations, 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. As such, under this option a project with multiple stages would receive multiple ION Part Bs; however, the completion notice would only be issued when ION Part B has been issued for the last stage of the project, ie when TEC has been permitted for all stages of the developer's system. We therefore consider that this option ensures fair and equitable treatment of projects under the Clause, as the completion notice would be triggered for all projects once all of the transmission system that comprises the qualifying project has reached ION Part B and is technically ready.

Option 2

- 2.32. Upon initial consideration, option 2 appears to provide additional flexibility and/or time in relation to triggering issue of the completion notice. It is possible that this may enable developers to mitigate, to some extent, the risk of technical faults that may arise at an early stage of operation. However, the nature and extent of any such mitigation is not clear given that we have not seen sufficient evidence that the lifting of the 20% restriction provides any additional assurance as to the technical readiness of the system, as compared to ION Part B. In addition, we have not seen evidence to indicate that the

system is not technically ready at ION Part B. As such, we do not consider option 2 to be as compatible with the intent of the Clause as option 1.

- 2.33. We have undertaken further work with NGET following the August consultation to understand in detail how option 2 would apply to staged projects. NGET has clarified that under this option, the voltage control test would be conducted separately for each PPM within a project's system, rather than for each stage or for the project system as a whole. While some offshore transmission systems to date have had one PPM, we are aware of a number of projects that have multiple PPMs. The number of PPMs is at the discretion of the developer and is not necessarily the same as the number of stages in a project, ie there is not a need for a separate PPM for each stage. NGET has advised that as each voltage control test is conducted, the restriction to 20% of turbines is lifted on that PPM.
- 2.34. Under this option, and in line with the approach that the completion notice should be issued when the last stage of a qualifying project reaches the proposed completion notice trigger point, the completion notice would be issued after the latter of ION Part B and the lifting of the 20% restriction have been completed in respect of the whole transmission system. This would only occur after the restriction has been lifted in relation to all PPMs in that system. This would mean that under a scenario where a staged project has multiple PPMs, the developer would potentially be able to operate at full TEC (ie reach the ION Part B point for all stages) before seeking to lift the restriction on the final PPM and triggering a completion notice. As such, a developer could potentially operate all stages of the transmission assets for long periods of time before triggering the completion notice, which is contrary to the intent of the Clause to explicitly limit this period. Additionally, and also contrary to the intent of the Clause, the completion notice under this scenario would be triggered considerably later than the point at which all of the system is first technically ready and being made available for use across all stages.
- 2.35. In terms of clarity, the completion notice trigger point for option 2 would be clear and visible. ION Part B would be tied to a specific event within the commissioning process and NGET would be responsible for the lifting of the 20% restriction following the voltage control test. Whilst NGET would be able to issue a completion notice consistently, we do not believe it would lead to equitable treatment for all projects. As outlined above, the number of PPMs in a system can be determined by the developer and does not necessarily align with the stages of a project. This could mean that under option 2 a completion notice might be issued at a relatively different stage for projects with a single or multiple PPMs. On this basis we do not consider that the effect of option 2 would necessarily be consistent for all projects.

Option 3

- 2.36. Upon initial consideration, option 3 appears to provide additional flexibility and/or time in relation to triggering issue of the completion notice. It is possible that this may enable developers to mitigate, to some extent, the risk

of technical faults that may arise at an early stage of operation. However, the nature and extent of any such mitigation is not clear given that we have not seen sufficient evidence to indicate that active power export of greater than 20% would provide any additional assurance as to the technical readiness of the transmission system, as compared to ION Part B. In addition, as stated in paragraph 2.32, we have not seen evidence to indicate that the system is not technically ready at ION Part B. As such, we do not consider option 2 to be as compatible with the intent of the Clause as option 1.

- 2.37. Furthermore we consider that, as Option 3 is related to an established percentage of active power export being achieved, it is dependent on a particular level of development of the generation assets rather than being based primarily on the readiness of the transmission system. As such, the option does not relate to a particular test or point of development of the transmission system and we do not consider that the option is compatible with the intent of the Clause in this regard.
- 2.38. We have also undertaken further work to consider how this option might work in practice, particularly for staged or more complex projects. Similarly to option 2, for large or more complex projects there could be multiple metering points associated with measuring active power export. As such, this may create additional complexity in identifying when 20% active power export in relation to the whole system has been reached, and could result in inconsistent treatment of projects with a single metering point or multiple metering points. Also similarly to option 2, under a scenario where a staged project has multiple metering points, the developer would potentially be able to operate at full TEC (ie reach the ION Part B point for all stages) before reaching the point of 20% active power export in relation to the whole system. As such, a developer could potentially operate all stages of the transmission assets for long periods of time before triggering the completion notice, which is not compatible with the intent of the Clause to explicitly limit this period.
- 2.39. Furthermore, as set out within paragraph 2.25, the operational metering relating to active power export is not considered to be sufficiently precise to determine the trigger point accurately, which would mean that it is unlikely that NGET could issue completion notices based on this information alone. Instead it would be necessary for NGET to receive information from Elexon and determine based on this information when a particular project has reached 20% of active power export. This option would require a third party (Elexon) to be involved in the process of issuing a completion notice. This may limit NGET's ability to ensure consistent, transparent and equitable treatment to each developer and project and is not an administratively efficient solution.

Consideration of timing of the completion notice trigger point

- 2.40. We consider below the points raised in the consultation responses relating to the timing of the completion notice trigger point from which the 18-month period in the Clause will run. As the Clause has been enacted and will come

into force in February 2014, the 18-month period is not the subject of consultation. We have focussed this analysis on whether the completion notice trigger point would reasonably enable a developer to transfer the transmission system to an OFTO within 18 months.

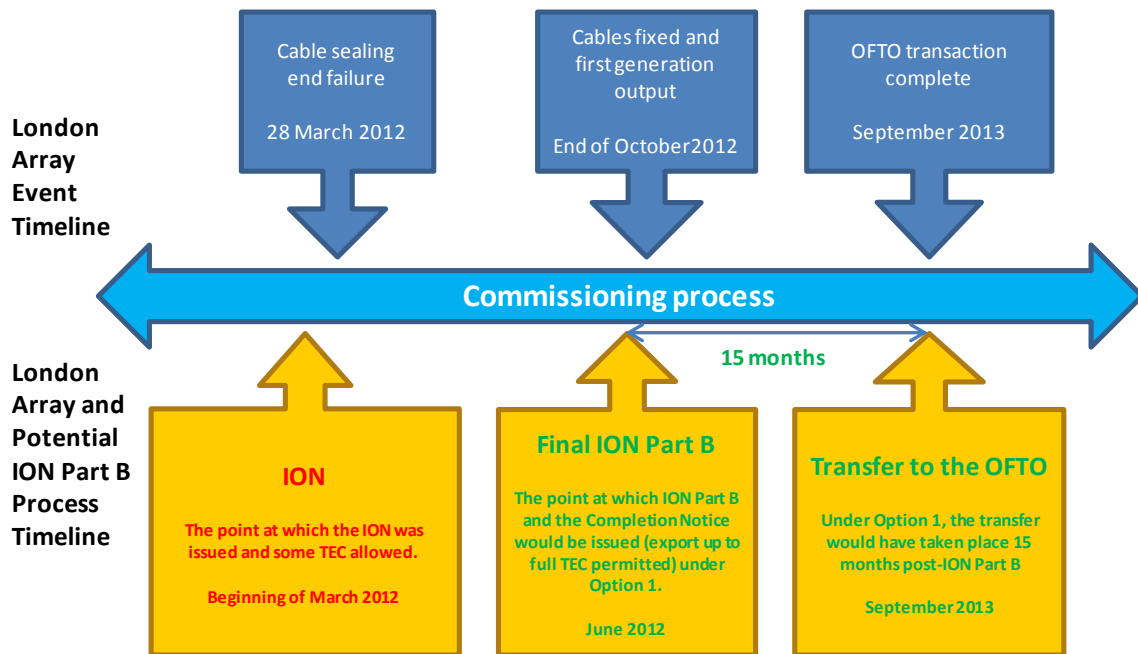
- 2.41. As part of our analysis we have, with advice from NGET, considered the time duration between option 1: ION Part B and OFTO licence grant for the London Array and other TR1 and TR2 projects. We have considered the ION Part B option as this was the subject of most consultation responses and also as it reflects the point in the commissioning process that is most readily and consistently identifiable from previous projects. We have considered the London Array project separately, as this was specifically referred to in several consultation responses.
- 2.42. Before setting out our findings, it is worth clarifying the following limitations to this analysis, which mean that the findings should not be treated as definitive in terms of how the Clause will apply to future projects:
- Some early projects were developed (designed, procured and in some cases constructed) prior to the regulatory regime having been designed and/or implemented and therefore had to adapt subsequently, such as to allow separate control of transmission and generation. This has had implications for timely completion of asset transfer.
 - The TR1 and TR2 projects were not subject to a requirement to transfer within a specified time limit, as will apply to projects in future. This may affect the programming of construction and commissioning activities in order to reduce the period between commissioning and OFTO licence grant in future.
 - Many TR1 and TR2 offshore windfarm projects have themselves faced technical and contractual challenges that have been new for the industry, again impacting on timing.
 - The offshore transmission regime was new and involved many first of a kind issues, during the running of TR1 tenders in particular. There have been significant lessons learned by all parties involved that should bring benefits for future tenders in terms of achieving timely transfer of assets to an OFTO.

London Array

- 2.43. London Array has been considered as a particular example as it was offered by a number of respondents as a recent, staged project that was subject to an unforeseeable technical fault. We have undertaken analysis, with advice from NGET, on the point at which London Array would have received a completion notice if ION Part B were used as the completion notice trigger. The findings of

our analysis on the London Array project are set out below and represented in Figure 2.5.

Figure 2.5: London Array and the potential ION Part B completion notice trigger point



2.44. As outlined earlier, a completion notice will not be issued until the whole system comprising a qualifying project has reached the relevant trigger point. In the case of a staged project such as London Array, the completion notice would not be issued until the last stage reached the trigger point. London Array had a number of stages, each of which had TEC associated with them. While London Array received some TEC with their ION in March 2012, they received TEC for their final stage in June 2012. Therefore, should a completion notice have been issued to London Array at the ION Part B point, the completion notice would have been issued in June 2012 when TEC had been permitted for the final stage. In this instance, the transfer to the OFTO would have taken place 15 months after the completion notice trigger point, rather than the 19 months indicated in stakeholder responses. This is despite London Array suffering an unforeseeable technical fault.

Other TR1 and TR2 projects

2.45. We have undertaken analysis of the other TR1 and TR2 projects that have completed to date in order to determine the period between (a potential) ION Part B issue point and asset transfer/licence grant. There are limits to the conclusions we can draw from this analysis, as for the majority of these projects there was no readily identifiable ION Part B point, as the process to date had been for a single ION to be issued at the equivalent of ION Part A. However NGET has recently adopted the practice of issuing an ION with zero

TEC (equivalent to ION Part A), and then permitting export by reference to TEC at a separate point (equivalent to ION Part B) for some projects, including London Array. As such we have calculated the average time taken between these two points for such projects to give an indication of how we might be able to estimate commissioning timelines for TR1 and TR2 projects that received only a single ION at an early point.

- 2.46. Based on this analysis, we consider an average of 16 months to be a fair estimation of the time taken for TR1 and TR2 projects to progress from an estimated ION Part B point to asset transfer/licence grant. This closely reflects the estimate of 17 months from Preferred Bidder stage that was stated in some stakeholder responses.
- 2.47. It should be noted that the 16 month figure represents an average across all TR1 and TR2 projects that have completed to date. There were circumstances within a minority of the projects that mean those projects took considerably longer than this to progress to asset transfer/licence grant. We consider in those cases there were significant, albeit low probability, project-specific technical issues to cause this delay. We therefore consider that calculating an average time taken to progress from an estimated ION Part B to asset transfer/licence grant across all TR1 and TR2 projects could potentially be misleading where there are such outlier projects. As such, we have also calculated that the median figure for TR1 and TR2 projects to progress from the estimated ION Part B point to asset transfer/licence grant was 14 months.

Analysis against completion notice options

- 2.48. On the basis of our assessment of evidence relating to London Array and other TR1 and TR2 projects, we consider there is evidence to conclude that 18 months from an ION Part B completion notice trigger point would provide sufficient opportunity to resolve outstanding commissioning issues and to transfer the transmission assets to the OFTO.

Our minded-to position with regards to the completion notice trigger point

- 2.49. **Based on the analysis above, we are minded that Option 1: ION Part B best fits our criteria for the completion notice trigger point.**

- 2.50. This is because we consider:

- That option 1 best meets the requirements of the Clause. While the alternative options may provide additional flexibility, we continue to believe that ION Part B best represents a point at which "it would be possible to carry on an activity to which section 4(1)(b) applies by making available for use that system". That is, we consider that it is the earliest and most appropriate option to provide technical assurance that the transmission

system can be made available for use for the transmission of electricity for the purposes of supply. While we recognise that some developers have concerns about the risk of a failure of the transmission system occurring after this point, we consider that there is insufficient evidence to substantiate views that a transmission system would not be technically ready at ION Part B.

- It represents a clear and unambiguous point for both developers and NGET, as ION Part B would be tied to a specific event in the commissioning process. It also applies in a clear and consistent way to staged and more complex projects. This will allow NGET to treat all developers and projects in a transparent, equitable and consistent manner.
- On the basis of our assessment of TR1 and TR2 projects, we consider that 18 months from ION Part B should provide sufficient opportunity to resolve outstanding commissioning issues and to transfer the transmission assets to the OFTO. This also ensures that the period of time during which a developer can operate transmission assets is limited, in line with the intent of the Clause. Going forwards, we would expect developers to factor in the Clause, and the associated time period, into their planning, such that the process may become more efficient and allow the developer to mitigate the risk of not transferring to the OFTO within the 18-month period.

2.51. We recognise that some developer stakeholders have concerns about the risk of a transmission system failure occurring after a completion notice has been issued. Some stakeholders have suggested that such a situation could be managed by making provision to pause the 18-month period, or by re-issuing a completion notice once a fault has been repaired such that the 18-month period re-starts at a later point. We have considered such approaches but do not consider that there is scope within the Clause to either pause or re-start the 18-month period given the Clause explicitly states that a developer will have 18 months from the point that a completion notice is issued. Those approaches would therefore not comply with the conditions of the Clause.

2.52. We consider the best way to manage any situation where a transmission asset failure prevented a developer from transferring within 18 months would be to consider the appropriate treatment on a case by case basis. Several stakeholders noted in responses to the August consultation that they considered case by case treatment of projects in such circumstances to be appropriate.

Question box

Question 2.1: Do you consider, based on the analysis presented, that Option 1: ION Part B is the best point at which to issue a completion notice in line with the requirements of the Clause? Please provide evidence in support of any other option.

Question 2.2: Do you have any further comments about our minded-to completion notice trigger point?

Phased and staged projects

- 2.53. During the consultation period, we held a stakeholder event at which a number of questions around implementing the Clause in relation to phased and staged projects were raised. We recognise there is a need for clarity on how completion notices will be issued for different system configurations and the difference between a 'phase' and a 'stage' in this regard. We have provided further explanation below of how we would expect completion notices to be issued for our minded-to position of Option 1: ION Part B. This is illustrated through case studies of different types of system configurations.
- 2.54. As outlined in the August consultation, a project may be constructed in multiple phases and/or stages. The following definitions explain 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. A phase would be equivalent to a single qualifying project under the 2013 Tender Regulations⁷.
 - Stage: within a phase (and as such within a single qualifying project), assets may be constructed in discrete groups over a period of time. We use the term stage to refer to each discrete group of assets. A stage may also refer to where a developer's BCA (as agreed with NGET) requests that TEC is permitted in several increments within a single qualifying project where the developer intends to commission a transmission system in distinct stages, usually several months apart. We refer to such a scenario as 'staged TEC' in the remainder of this document.
- 2.55. As set out earlier, 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 the offshore transmission system that has been determined to be a qualifying project, not readiness of the individual assets. We would therefore expect that each qualifying project would have only one completion notice.
- 2.56. **Our minded-to position in relation to a staged project is therefore that the completion notice will be issued when ION Part B has been received for all stages of the qualifying project.**

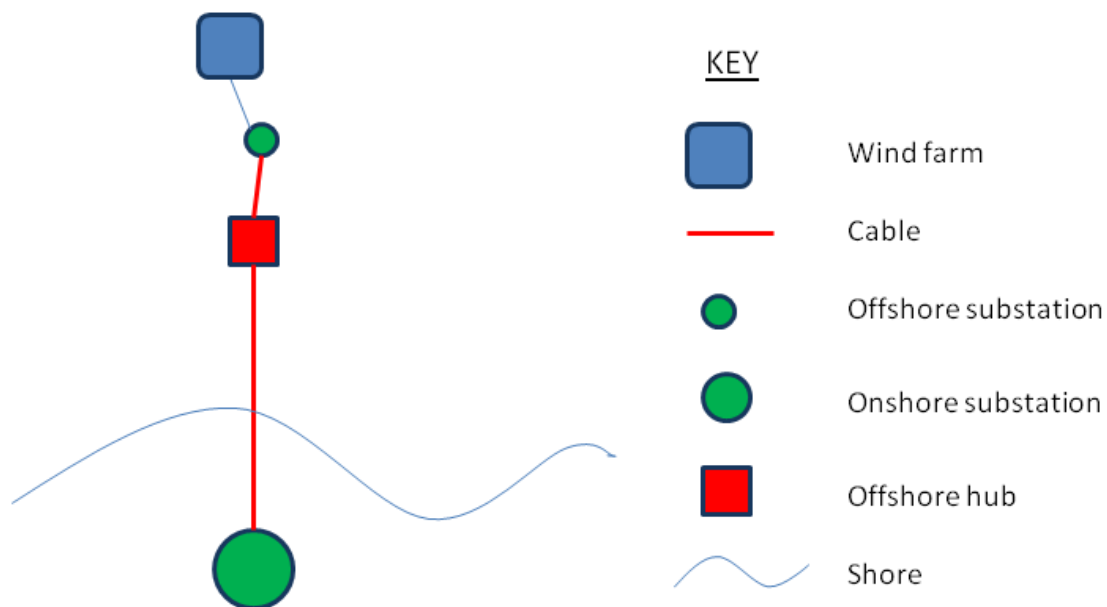
⁷ As defined under Schedule 1, para 1 (for an OFTO build project) and Schedule 1, para 2 (for a Generator build project)

- 2.57. Any subsequent phase of an offshore wind project would be a separate qualifying project and would therefore receive a separate completion notice.
- 2.58. The three examples below show how the Clause will apply to different types of staged and/or phased system configurations and when a completion notice would be issued under our minded-to position. These examples are for illustrative purposes only; they are not intended to reflect any particular projects.

Example 1: Single-stage qualifying project

- 2.59. All the transmission assets for a simple qualifying project (eg. a single export cable radial system), such as that shown in Figure 2.6, are built out in one stage. For this project operation to TEC is permitted in a single stage for the total amount specified in the developer's BCA relating to the qualifying project.

Figure 2.6: A single-stage qualifying project.

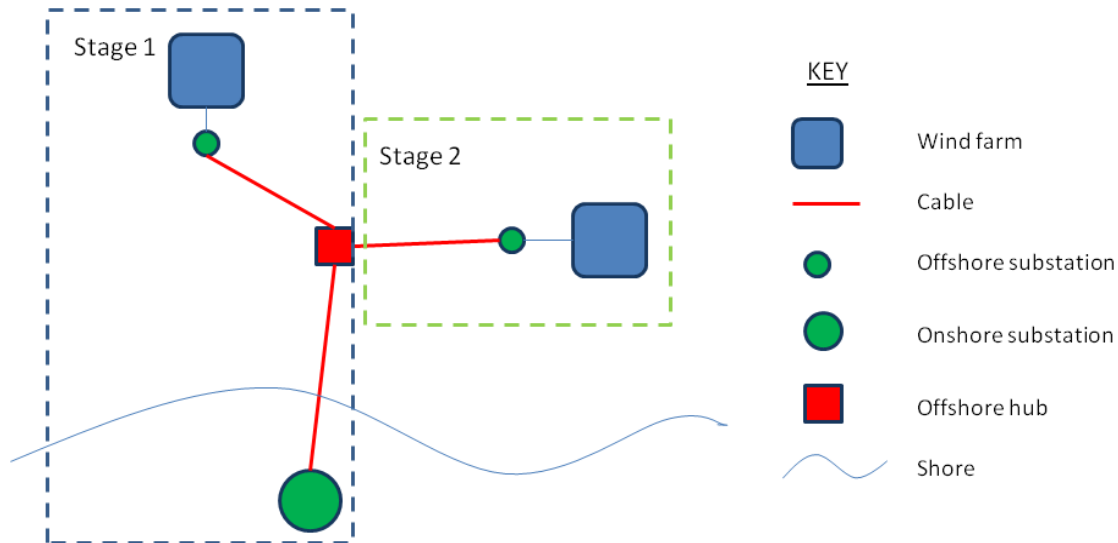


- 2.60. The single stage receives an ION Part B and commences export in September 2014. The completion notice is triggered when the ION Part B is issued. The commissioning period for this project will then continue for 18 months from September 2014, ending in March 2016.

Example 2: Multiple stages within a single qualifying project

- 2.61. For a multiple-stage qualifying project, like that shown in Figure 2.7, the transmission assets making up a qualifying project are built out in two or more stages. A completion notice will be issued when the final stage receives an ION Part B.

Figure 2.7: A multiple-stage qualifying project.

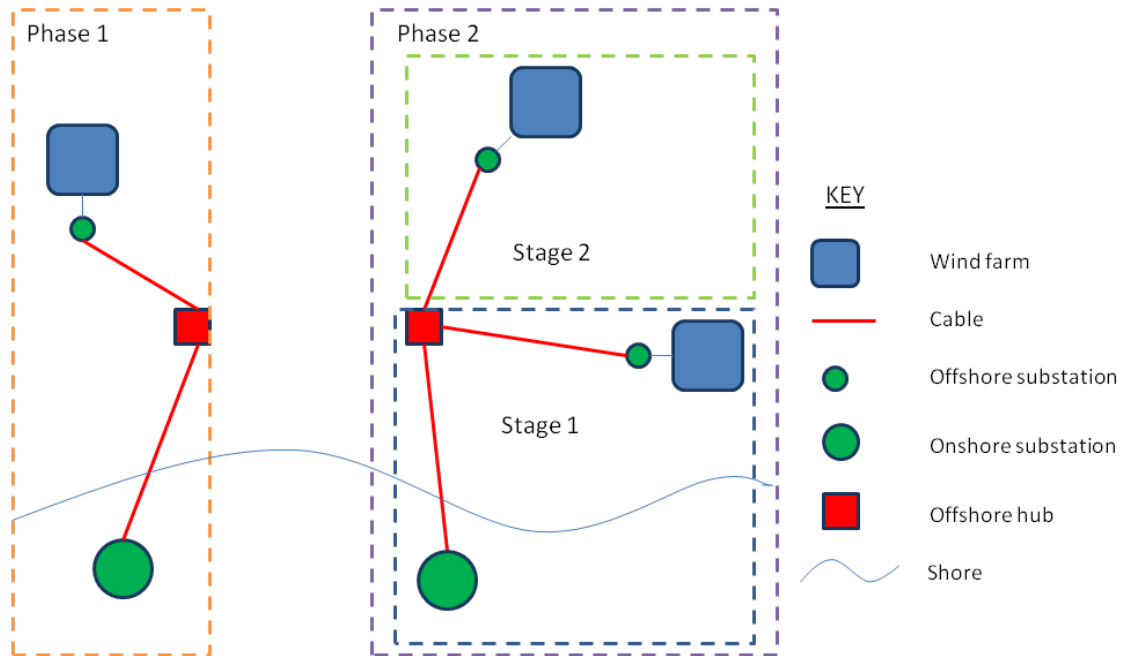


2.62. For this project, TEC relating to the qualifying project is staged in the developer's BCA. Stage 1 receives an ION Part B permitting operation at less than the total overall project TEC (eg. for half of the overall TEC) and commences export in July 2014. Stage 2 receives an ION Part B permitting operation at the remaining TEC and starts export in December 2014. The completion notice is issued when ION Part B has been received for both stages such that operation at full TEC is permitted, in this case in December 2014. The commissioning period for this project will then continue for 18 months from December 2014, ending in June 2016.

Example 3: A multiple-phase development comprising more than one qualifying project

2.63. In the case of a multiple-phase development comprising more than one qualifying project, such as the example in Figure 2.8, a separate completion notice will be issued for each of the two qualifying projects.

Figure 2.8: A multiple-phase development comprising two qualifying projects.



- 2.64. For this project Phase 1 receives an ION Part B in September 2014. As Phase 1 has a single stage it will be issued with a completion notice when the first and only ION Part B is issued. The commissioning period for Phase 1 will then continue for 18 months from September 2014, ending in March 2016.
- 2.65. Stage 1 of Phase 2 receives an ION Part B in January 2017, Stage 2 of Phase 2 receives an ION Part B in May 2017. The completion notice for Phase 2 is issued when both Stages 1 and 2 have received an ION Part B, in this case in May 2017. The commissioning period for Phase 2 will continue for 18 months from May 2017, ending in November 2018.

Interactions with coordinated network development

- 2.66. Policy is currently being developed and implemented for projects involving coordination, such as wider network benefit investment (WNBI) and generator-focused anticipatory investment (GFAI).⁸ Where any such projects are taken forward under Generator build, they will also be subject to the Clause and a completion notice will be issued for each project. We have not identified any reasons why our minded-to completion notice trigger point

⁸ <https://www.ofgem.gov.uk/ofgem-publications/75429/statement-proposed-framework-enable-coordination-update-our-december-consultation.pdf>

would not be appropriate for projects involving GFAI and WNBI. As and when any such projects come forward to be tendered, we will consider whether any adjustments to the completion notice trigger point are necessary to reflect future coordinated network design.

Question Box:

Question 2.3: Do you feel that any further clarification is necessary to aid your understanding of how the Clause will work in practice for phased and /or staged projects? If so, please stipulate which points require further clarification.

Question 2.4: Do you consider that there are WNBI or GFAI projects that would create a need for us to consider further the implementation of the Clause at this stage?

3. Implementation of the Generator Commissioning Clause

Chapter Summary

In this chapter we outline how the Clause will apply to projects in flight and interactions with the BSC.

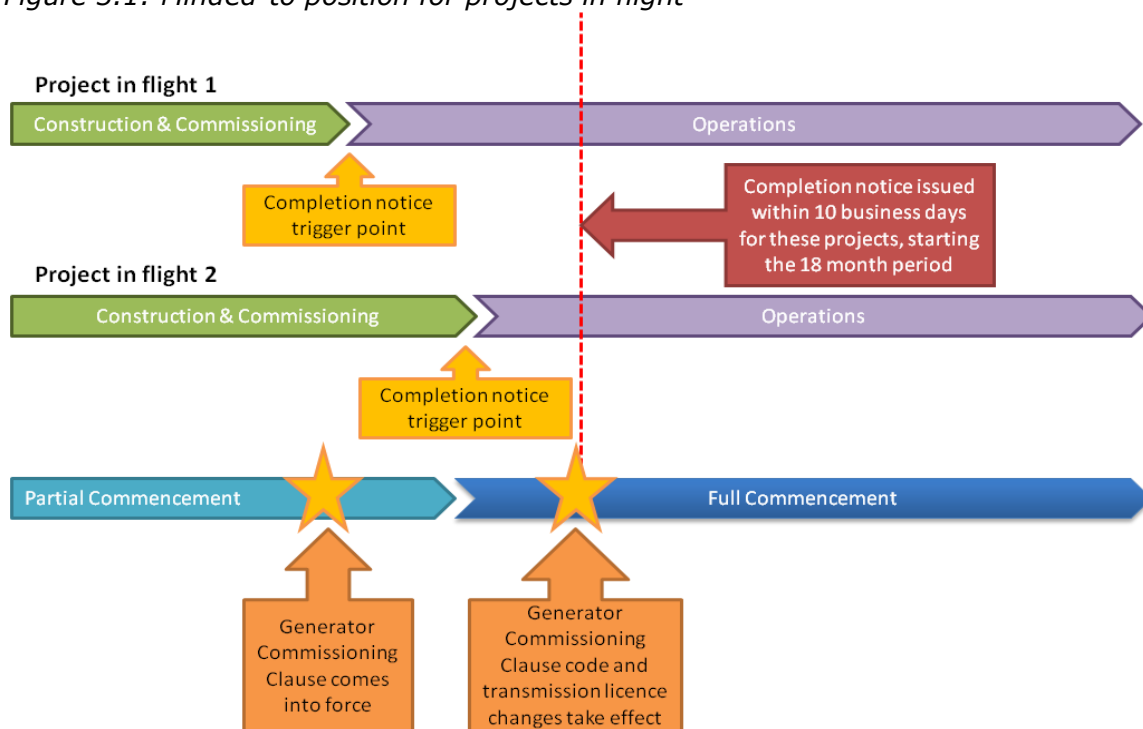
Projects in flight

- 3.1. We are aware that there may be a small number of projects in flight, that is, projects that have already passed the completion notice trigger point (ie. our minded-to position of ION Part B) but not transferred to an OFTO when the code and transmission licence modifications implementing the Clause take effect. As part of implementing the Clause we propose to make provision for arrangements within the codes to address how such projects are to be treated. We propose to set the requirement for NETSO to issue a completion notice for projects in flight through modifications to the transmission licence and the CUSC.
- 3.2. In the August consultation, we considered three options for how the Clause could be implemented for projects in flight. These options were:
 - completion notices not issued for projects in flight;
 - completion notices issued for each project as soon as possible (which will vary depending on whether a project is already over 132kV, and hence already transmission at Clause commencement, or becomes so on full commencement); and
 - completion notices issued for all projects in flight at the same time (once code and transmission licence modifications come into force and full commencement has occurred).
- 3.3. Our preferred option identified in the August consultation was that completion notices be issued for all projects in flight at the same time, once both code and transmission licence modifications have taken effect and full commencement has occurred.
- 3.4. No respondents disagreed with this approach and the majority were supportive of it, although one respondent requested reassurance that this approach would not disadvantage projects in flight relative to their current position. As stated in the August consultation, our preferred approach gives projects in flight no less time than that given to other projects subject to the Clause. It may result in projects in flight having longer than 18 months to carry out commissioning activities from the point at which the transmission assets were made available for transmission until they should be transferred

to the OFTO. As such we do not consider that projects in flight would be at a disadvantage to other projects under such arrangements once the Clause is implemented.

- 3.5. **Our minded-to position is therefore that a completion notice will be issued for all projects in flight at the same time when the code and transmission licence modifications come into effect and full commencement has occurred.**
- 3.6. As set out in Chapter 5, we are minded to make modifications to the CUSC that require NGET to issue a completion notice for such projects within 10 business days of the date the transmission licence and code modifications come into effect.
- 3.7. This is represented in Figure 3.1 below. For further information on the timing of full commencement and code and transmission licence modifications taking effect, please refer to Chapter 6.

Figure 3.1: Minded-to position for projects in flight



Question box

Question 3.1: Do you have any comments in relation to our minded-to position for implementation of the Clause in respect of projects in flight?

Settlement metering arrangements

- 3.8. In the August consultation we outlined the potential implications of the Clause for the BSC. Implementation of the Clause requires a change to the definition

of 'offshore transmission system', meaning that Generator build transmission assets will be defined as an offshore transmission system but will not form part of the NETS until transfer to an OFTO. We identified a need for clarification going forward as to whether such offshore transmission systems should be part of the Total System prior to transfer because of a possible impact on current settlement metering arrangements.

BSC modification proposal

- 3.9. In June 2013 a proposed modification P294 to the BSC was submitted to Elexon for consideration. P294 considered the current metering arrangements during generator commissioning of offshore transmission systems.
- 3.10. P294 proposed that settlement metering should only be required at the offshore point from the beginning of the commissioning period, because Generator build offshore transmission systems will be included in the definition of Total System. Elexon convened a Working Group to consider this modification application, which submitted its final report to Ofgem for approval on 14 November 2013⁹. We published our decision to approve P294 on 19 December 2013.¹⁰ We consider that the Clause can be implemented successfully without any further associated changes to the BSC.

Projects overrunning the 18-month period of the Clause

- 3.11. Stakeholder feedback has indicated a desire for clarity around the arrangements that would apply where a project cannot be transferred to an OFTO within 18 months of a completion notice being issued. If an offshore transmission system has not been transferred to an 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 system beyond this point, it would be participating in transmission without a licence. Under the Electricity Act, transmission for the purpose of giving or enabling supply without a licence or an exemption is an offence.
- 3.12. In assessing whether enforcement action, including prosecution of any such offence, is in the public interest, the Secretary of State and Ofgem will consider the factors relating to any non-compliance on a case-by-case basis.
- 3.13. We would expect developers to seek their own legal advice in such circumstances.

⁹ <http://www.elexon.co.uk/wp-content/uploads/2013/06/P294-Final-Modification-Report.zip>

¹⁰ <https://www.ofgem.gov.uk/ofgem-publications/85347/bscp294d.pdf>

4. Proposed Modifications to the 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 transmission licence modifications

- 4.1. In the August consultation, we consulted on proposed modifications to the standard conditions of the electricity transmission 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. At that time, we considered 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. Four respondents provided comments on the proposed changes to the transmission licence, set out in the August consultation.
- 4.3. One respondent felt that the transmission licence drafting was ambiguous as it depends on the CUSC to fully explain the intent. The obligation on the licensee is to issue the completion notice in line with the requirement of the Clause, which is reflected in the proposed drafting of the transmission licence. We consider that the proposed modifications to the transmission licence alongside the proposed modifications to CUSC and Grid Code provide clarity in the arrangements. No further change to the transmission licence is proposed.
- 4.4. One respondent felt that the transmission licence should be kept under review as it is dependent on the proposed option for the completion notice. Two respondents considered that further changes would be required to the transmission licence to address further development of the completion notice trigger point. The obligation on the licensee is to issue the completion notice in line with the requirement of the Clause, which is reflected in the transmission licence. As our minded-to position has not changed we do not propose any further change to the transmission licence.
- 4.5. One respondent suggested that the definition of completion notice should be included in standard condition C25 of the transmission licence, rather than condition C1, as it is only used in that condition. We agree and have amended the proposed transmission licence drafting to include the definition of completion notice in standard condition C25 of the transmission licence.

- 4.6. The same respondent was concerned that the proposed change to the definition of Offshore Transmission System could have unintended consequences. We have reviewed the use of the term Offshore Transmission System in the transmission licence and consider that our proposed amendment has no unintended consequences. No further change is proposed.
- 4.7. We set out the proposed transmission licence modifications in Annex 1, which includes our statutory consultation under section 11A of the Act. Given that our minded-to position has not changed from our preferred option in the August consultation, the majority of the proposed transmission licence modifications (as set out in Annex 1 of this consultation) remain unchanged from those consulted on in August 2013. 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 transmission licence, dated 5 August 2013, can be found on our website¹¹. Note that the modifications we propose to the transmission 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 transmission 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 transmission licence modifications that are needed to implement the Clause? If so, please provide details.

¹¹<https://epr.ofgem.gov.uk/Content/Documents/Electricity%20transmission%20full%20set%20of%20consolidated%20standard%20licence%20conditions%20-%20Current%20Version.pdf>

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 identified modifications to the CUSC and Grid Code in the August consultation that we consider necessary to implement the Clause, in particular issuing a completion notice for an offshore transmission system constructed by the developer. The proposed modifications to the relevant documents were deliberately limited to those modifications that are considered appropriate for the implementation of the Clause. Responses to the August consultation indicated that while some respondents disagreed with the proposed completion notice trigger point, there were no additional modifications necessary to implement our preferred option.
- 5.2. Given that our minded-to position has not changed from our preferred option in the August consultation, the majority of the proposed code modifications as part of this consultation remain unchanged.
- 5.3. However, we propose further minor changes to the CUSC and Grid Code to ensure consistency between the relevant provisions in these codes. We propose an amendment to the definition of "Safety Coordinator" in CUSC section 11 (Interpretation and Definitions) and an amendment to the definition of "OTSDUW Arrangements" in Grid Code Glossary and Definitions.
- 5.4. We have also made one minor amendment to Grid Code Compliance Process CP.6.6.3, by changing MW to Active Power, as suggested by one respondent.
- 5.5. 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 CUSC¹² and Grid Code¹³ can be found on the NGET website.

- 5.6. We discussed potential interaction of the Clause with the BSC in Chapter 3. We have not identified any need to propose modifications to other industry codes¹⁴ to implement the Clause. We consider that any subsequent or consequential modifications that may become necessary can be managed through the normal governance process for each code. Details of this governance process can be found on our website¹⁵.

Proposed CUSC modifications

- 5.7. In accordance with the proposed licence modifications set out in this document, we are minded that NGET should issue a completion notice on the date it has issued ION Part B (under the Grid Code) for all parts of an offshore transmission system to the developer (in accordance with our minded-to position).
- 5.8. For projects in flight, we are minded to make modifications to the CUSC 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.
- 5.9. Consequently, we are minded to make 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, as set out in the August consultation, 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.
- 5.10. The affected parts of the CUSC are as follows:
- Section 1 – Applicability of Sections and related Agreements Structure - v1.10
 - Section 2 – Connection - v1.12

¹² <http://www.nationalgrid.com/uk/Electricity/Codes/systemcode/contracts/>

¹³ <http://www.nationalgrid.com/uk/Electricity/Codes/gridcode/gridcodedocs/>

¹⁴ 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).

¹⁵ <https://www.ofgem.gov.uk/licences-codes-and-standards/codes/industry-codes-work>

- Section 11 - Interpretation and Definitions - v1.56
- 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

- 5.11. The proposed modifications to implement our proposals, with reasons, are set out 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.
- 5.12. There are definitions used in the proposed modified sections of the CUSC that are capitalised in the table and capitalised and in bold in the proposed drafting in the Annexes. These definitions are already defined in the CUSC and therefore those current definitions are not defined again in the Annex containing the table and drafting. Refer to the current version of the CUSC, which you can find on NGET’s website, if you need to refer to those definitions.

Proposed Grid Code modifications

- 5.13. We are also minded to make modifications to particular parts of the Grid Code. The 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.
- 5.14. The affected parts of the Grid Code are as follows:
- Operating Codes 5, 7, 8 and 8 Appendix 1 (OC8A) and Appendix 2 (OC8B).
 - Compliance Process.
 - Glossary and Definitions.
 - Planning Code.

- Connection Conditions¹⁶.
- Balancing Code 2 (BC2).

5.15. The proposed modifications to implement our proposals, with reasons, are set out 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.

5.16. There are definitions used in the proposed modified sections of the Grid Code that are capitalised in the table and capitalised and in bold in the proposed drafting in the Annexes. These definitions are already defined in the Grid Code as appropriate and therefore those current definitions are not defined again in the Annexes containing the table and drafting. Refer to the current version of the Grid Code, which you can find on NGET's website, if you need to refer to those definitions.

Question box:

Question 5.1: We invite comments on all aspects of the proposed drafting provided in Annexes 1 and 2. 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 evidence 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.

¹⁶ We have updated CC to reflect Grid Code Update Pack: Issue 5 – revision 6 of 13 December 2013, which can be found on NGET's website
<http://www.nationalgrid.com/uk/Electricity/Codes/gridcode/updates/>

6. Next Steps

Chapter Summary

Here we outline the plans for the implementation of minded-to positions in relation to the Clause. This includes details of future publications and an update on full commencement.

Further publications

- 6.1. We invite responses to this consultation by 24 February 2014.
- 6.2. Following the completion of this consultation we intend to consider responses and publish our decision on how we will implement the Clause in spring 2014. This decision will include the timeframes for when we expect code and transmission licence modifications to come into effect. We also expect to be in a position to indicate the anticipated timing of when government is likely to fully commence the offshore transmission regime, and how that interacts with our proposed timeframes.

Timing of implementation of the Clause and full commencement

Full commencement

- 6.3. 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. We consider this will reduce complexity in understanding which arrangements apply and ensure greater regulatory certainty.
- 6.4. We expect to provide further information on the timing of full commencement in our final decision document in spring 2014.

The Clause coming into force

- 6.5. The Clause will come into force two months after Royal Assent to the Energy Act 2013. Royal Assent was received on 18 December 2013, and as such the Clause will come into effect on 17 February 2014.
- 6.6. Once the Clause comes into force, it will apply to offshore systems that are over 132kV. However, for those offshore systems at 132kV, the transmission prohibition and therefore the Clause, will not apply until full commencement of the offshore transmission regime.

Code and transmission licence modifications coming into effect

- 6.7. Under Section 6H of the Clause, the Authority will have powers to make code modifications to implement the Clause. We also expect to make modifications to the transmission licence. We anticipate implementing the code and transmission licence modifications three or four months after the Clause comes into force (such that we can satisfy the 56-day 'standstill' period under section 11A of the Act to implement the transmission licence modifications, subject to consultation) and subject to full commencement. We will provide further information on the expected timing when we publish our decision document in spring 2014.
- 6.8. Subject to the code and transmission licence modifications coming into effect in line with these timelines, we might expect NGET to commence issuing completion notices from June or July 2014.

Appendices and Annexes

Index

Appendix	Name of Appendix	Page Number
1	Consultation Response and Questions	39
2	Summary of responses to the August consultation	41
3	The Generator Commissioning Clause	43
4	Interactions with other areas	48
5	Glossary	50
6	Feedback questionnaire	57

Annex	Name of Annex	Page Number
1	Section 11A Notice	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 24 February 2014 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.

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 2.1: Do you consider, based on the analysis presented, that Option 1: ION Part B is the best point at which to issue a completion notice in line with the requirements of the Clause? Please provide evidence in support of any other option.

Question 2.2: Do you have any further comments about our minded-to completion notice trigger point?

Question 2.3: Do you feel that any further clarification is necessary to aid your understanding of how the Clause will work in practice for phased and /or staged projects? If so, please stipulate which points require further clarification.

Question 2.4: Do you consider that there are WNBI or GFAI projects that would create a need for us to consider further the implementation of the Clause at this stage?

CHAPTER: Three

Question 3.1: Do you have any comments in relation to our minded-to position for implementation of the Clause in respect of projects in flight?

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 transmission 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 transmission licence modifications that are needed to implement the Clause? If so, please provide details.

CHAPTER: Five

Question 5.1: We invite comments on all aspects of the proposed drafting provided in Annexes 1 and 2. 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 evidence 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 – Summary of responses to the August consultation

The August consultation was an eight-week consultation, which closed on 25 October 2013. We received ten responses from a range of stakeholders – six developers, one OFTO, two industry bodies and NGET.

The Completion Notice Trigger Point

All respondents were supportive of Ofgem’s proposal to split the ION into Part A and Part B, noting the increased flexibility and transparency that this would provide.

Opinions were divided over the best trigger point for the completion notice. Four of the ten respondents agreed with our preferred option, that ION Part B would be the best trigger point, and agreed that ION Part B can be considered to be the point at which the transmission system is technically ready. However, the majority of developer respondents were concerned that the 18-month period after ION Part B is issued may not be long enough to resolve any technical issues associated with the transmission assets, expressing a desire for greater flexibility. Three respondents considered that the assets were not technically ready at this point and that the risk of failure was high. Five developer respondents stated that previous experience showed that ION Part B is too early. Some of these respondents cited problems faced on the first phase of London Array as an example. These developers said that London Array suffered a failure of the export system and 19 months were required to transfer from the equivalent of ION Part B. The following explanation of the fault was provided: *"[T]he 400kV cable sealing ends at Cleve Hill onshore substation failed on 28 March 2012, affecting the two export cables at the time. The sealing ends had been in service for 150 hours when the failure occurred. Following investigation it was decided that all of the cable sealing ends should be replaced, the works were planned for complete on 27 October 2013, 7 months later. The first turbine was installed in January 2012. The ION was first issued by National grid at the beginning of March 2012. The failure delayed first export and during the replacement works London Array was unable to export. The incident occurred during the later part of the ITT stage of the OFTO tender process and was resolved after the Preferred Bidder had been announced. First generation export occurred at the end of October 2012. The OFTO transaction completed in September 2013, 19 months after the ION was first issued".*

Some developer respondents noted that the 18-month limit could place them in a weaker position during commercial negotiations with the OFTO as they would have little choice but to transfer at 18 months even if the terms demanded by the OFTO were unfavourable.

Three respondents commented on the proposed alternative trigger point, the lifting of the 20% restriction following the voltage control test. One felt that this alternative would offer no additional comfort to developers as it may be necessary to conduct

the voltage control test that lifts the 20% restriction before receiving the ION Part B. Another suggested that the voltage control test be part of a set of criteria that must be fulfilled before the completion notice is triggered for a qualifying project.

An alternative trigger point proposed by six developer respondents was at the point that active power export has reached 20% of registered generation capacity. These respondents felt that the 20% active power export would show that the transmission assets were technically ready and would provide comfort to the OFTO.

Another respondent proposed the lifting of the 70% restriction as an alternative trigger point.

Projects in Flight

The majority of respondents agreed with the proposed approach to implementation of the Clause for projects in flight. Our proposed approach was that completion notices would be triggered for all projects in flight at the same time, when both full commencement has occurred and transmission licence and code modifications have come into force. Two respondents did not provide views on this question.

Phased and Staged Projects

One respondent requested greater clarification on definitions of phased and staged projects and how implementation of the Clause relates to these. The majority of respondents did not comment on our proposals.

Proposed modifications to the Transmission Licence and Codes

Most respondents agreed with the proposed modifications to implement our preferred option for the trigger point but those respondents who had proposed an alternative completion notice trigger point noted that this would require different modifications. One respondent suggested changes to the Grid Code to improve clarity and another proposed that two amended definitions in the transmission licence should be situated in Section C instead of Section A. Further details on stakeholder responses are provided in Chapters 4 and 5.

Appendix 3 – Generator Commissioning Clause

Generator Commissioning (Clause 147, Energy Act 2013)

PART 6, CHAPTER 2 MISCELLANEOUS

Offshore transmission

147 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 associated¹ 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

¹ An extract of paragraph 37 of schedule 2A to the Electricity Act 1989 is provided below as part of this appendix for reference.

- (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;
- “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”.

Schedule 2A

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 4 – Interactions with other areas

Interaction between commissioning and the tender process

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 may be limited benefit in announcing a Preferred Bidder for a tender before the completion notice is issued. We consider that uncertainty about the condition of the assets at that stage in the tender process may prolong due diligence and the process to financial close, which would likely 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). The aim of providing IDC to developers is to recompense them for the economic and efficient costs of financing the development and construction of the transmission assets. The level of IDC should reflect the average rate that the developer (or in the case of corporate supplied funds, its corporate parent) has incurred on the funds provided. Generally the funds will have come from providers of both equity and debt. The rate we will allow is the rate that an efficient and economic transmission company engaged in this type of activity has, or ought to have, incurred. It is not necessarily the rate that has been incurred by a developer on the generation element of the project. We have determined that IDC should be allowed up to the point where the transmission assets are available for use for the transmission of electricity. The Clause is concerned with a concept of completion that

applies when the whole system constituting a qualifying project reaches the point where it can be made available for use. Therefore the point at which IDC stops being accrued and the point at which the completion notice is issued will not necessarily be the same. For staged projects, IDC ceases for each stage of the project when the transmission assets built to that point are available for use for the transmission of electricity. Under our minded-to option, the completion notice will only be triggered when ION Part B has been issued for the last stage of the system.

In May 2013 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 published a consultation in October 2013 setting out a minded-to position², and published our decision on 18 December 2013³.

Contracts for Difference (CfDs)

Feedback from stakeholders during the August consultation queried whether our proposal to split the ION into ION Part A and ION Part B might be compatible with the draft requirements DECC has published for Contracts for Difference (CfDs). We understand that one of the conditions in the Accession Agreement in the draft CfD contract requires a generator to have received an ION.⁴ We have liaised with DECC on this point and they have indicated that they will take the commissioning process for offshore transmission assets into account in the CfD contract for Generator build projects. We have not identified any further interaction between the implementation of the Clause and CfDs, but we encourage stakeholders who have any concerns about this to contact DECC to discuss them.

² <https://www.ofgem.gov.uk/publications-and-updates/offshore-electricity-transmission-and-interconnector-policy-minded-position-interest-during-construction-idc>

³ https://www.ofgem.gov.uk/sites/default/files/docs/decisions/decision_letter_idc_0.pdf

⁴ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/227071/CfD_contract_a_minded.pdf In the draft CfD contract published in August 2013 this appeared as one of the Conditions Precedent.

Appendix 5 - Glossary

A

Authority

The Gas and Electricity Markets Authority established by section 1(1) of the Utilities Act 2000. The Authority governs Ofgem.

B

BCA

Bilateral Connection Agreement.

Boundary Point

Is defined in the BSC as “a point at which any Plant or Apparatus not forming part of the Total System is connected to the Total System”.

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 work we are undertaking to support the development of onshore and offshore transmission networks in a strategic and coordinated manner.

D

DECC

The Department of Energy and Climate Change, which is the government department responsible for, among other things, the introduction of the regulatory regime for offshore electricity transmission. It has responsibility for commencing the relevant sections of primary legislation and approves new and amended tender regulations.

Developer

The 2013 Tender Regulations define a 'developer' as 'any person within section 6D(2)(a) of the 1989 Act or within a developer group'. Section 6D(2)(a) of the Electricity Act 1989 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

E

Electricity Act

The Electricity Act 1989 as amended from time to time.

Energy Act 2013

Refers to the Energy Act that received Royal Assent on 18 December 2013.

Enduring Regime

The regulatory regime for offshore transmission for any project qualifying for a tender exercise after 31 March 2012.

EON

Energisation Operational Notification

EU

European Union

F

FON

Final Operational Notification

Full commencement

Full commencement is the extension of the offshore regulatory regime to apply to all OFTO build and Generator build offshore transmission assets at or above 132kV. The offshore regulatory regime is currently partially commenced and applies to projects conveying electricity from offshore at 132kV from the point of asset transfer to an OFTO.

G

GB

Great Britain.

Generator build

A model for the construction of offshore transmission assets. Under the Generator build option, the developer carries out the preliminary works, procurement and construction of the transmission assets. The OFTO operates, maintains and decommissions the transmission assets.

Generator Commissioning Clause

The Generator Commissioning Clause is clause 147 of the Energy Act 2013. Refer to Appendix 2 for full clause text.

Generator-Focused Anticipatory Investment

Investment that goes beyond the needs of immediate generation, providing offshore transmission capacity for specific future offshore generation projects.

Grid Code

An industry code covering technical aspects relating to connections to, and the operation and use of the NETS, amongst other things; and maintained by the NETSO pursuant to standard condition C14 of the transmission licence.

GW

Gigawatt.

I

Industry codes

The industry codes underpin the electricity wholesale and retail markets and define the terms under which industry participants can access the electricity networks including 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.

ION

Interim Operational Notification

Interim Section K Notification (ISKN)

A certificate issued by NGET to the OFTO listing the parts of the compliance process requiring completion.

K

kV

Kilovolts

kW

Kilowatts

M

MW

Megawatt

MWh

Megawatt hour

N

National Electricity Transmission System (NETS)

Means the system consisting (wholly or mainly) of high voltage electric lines owned or operated by transmission licensees within Great Britain, in the territorial sea adjacent to Great Britain and in any Renewable Energy Zone and used for the

transmission of electricity from one generating station to a sub-station or to another generating station or between sub-stations or to or from any interconnector and includes any electrical plant or meters owned or operated by any transmission licensee within Great Britain, in the territorial sea adjacent to Great Britain and in any Renewable Energy Zone in connection with the transmission of electricity.

NETSO

The National Electricity Transmission System Operator (NETSO) is the entity responsible for coordinating and directing the flow of electricity over the National Electricity Transmission System.

NGET

National Grid Electricity Transmission Plc. NGET owns and maintains the transmission system in England and Wales. It is also the NETSO for GB.

O

Offshore Transmission Owner (OFTO)

The holder of an offshore transmission licence.

Offshore Transmission System

A transmission system that is used for purposes connected with offshore transmission. An offshore transmission system is made up of transmission assets.

Ofgem

Office of Gas and Electricity Markets.

OTSDUW

Offshore Transmission System Development User Works.

P

PB (Preferred Bidder) Stage

The stage of a tender exercise during which the preferred bidder has to resolve certain matters in order that Ofgem may grant the offshore transmission licence.

Phase

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

Q

Qualifying project

An offshore transmission assets project in respect of which Ofgem determines that the developer has satisfied the requirements described in the Tender Regulations or will use its reasonable endeavours to satisfy the relevant qualifying project requirements within a period specified by Ofgem.

R

Radial connection

A single, standalone connection from one wind farm to shore.

S

Section 11A Consultation

A statutory consultation of at least 28 days required under Section 11A of the Electricity Act 1989. Such a consultation is conducted when the Authority intends to modify a licence.

Stage

Within a phase (and as such within a single qualifying project), assets may be constructed in discrete groups over a period of time. We use the term 'stage' to refer to each discrete group of assets. A stage may also refer to where a developer's BCA requests that TEC is permitted in several increments within a single qualifying project where the developer intends to commission a transmission system in distinct stages, usually several months apart.

T

Tender Regulations

The Tender Regulations are made under section 6C of the Electricity Act 1989 and set out the legal framework and powers for the Authority to run a competitive tender process for the grant of an offshore transmission licence in respect of an offshore transmission system. Currently the 2010 Tender Regulations (only for certain qualifying projects) and 2013 Tender Regulations are in force.

2013 Tender Regulations

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

Total System

Is currently defined in the BSC as "the Transmission System, each Offshore Transmission System User Asset and each Distribution System" where transmission system means the NETS.

Transitional regime

The offshore transmission regulatory regime covering all projects that met the qualifying project requirements set out in the 2010 Regulations before 31 March 2012.

Transmission Assets

Are defined in paragraph 1(3) of Schedule 2A of the Electricity Act 1989 as 'the transmission system in respect of which the offshore transmission licence is (or is to be) granted or anything which forms part of that system'. The transmission system is expected to include subsea export cables, onshore export cables, onshore and offshore substations, 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 Licence

The licence awarded under section 6(1)(b) of the Electricity Act 1989 authorising the NETSO or a Transmission Owner (TO) to participate in the transmission of electricity including an offshore transmission licence. The licence sets out a TO's rights and obligations as a transmission asset owner and operator.

Transmission Entry Capacity (TEC)

The contractually agreed maximum amount of electricity a developer can export onto the NETS.

TR1

Transitional Tender Round 1.

TR2

Transitional Tender Round 2.

TR3

Tender round 3

U

UK

United Kingdom.

Appendix 6 - Feedback Questionnaire

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

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

1.2. Please send your comments to:

Andrew MacFaul
Consultation Co-ordinator
Ofgem
9 Millbank
London
SW1P 3GE
andrew.macfaul@ofgem.gov.uk