

Guidance on the offshore transmission owner licence for Tender Round 4 (TR4)

Publication date: 6 April 2016

Contact: Jessica Housden

Team: Competitive Networks

Tel: 020 7901 7254

Email: Jessica.Housden@ofgem.gov.uk

Overview:

This document provides guidance on the offshore transmission owner (OFTO) licence. The conditions of the licence are a key part of the regulatory framework that underpins the offshore transmission regime. The licence confers a set of obligations, incentives and entitlements on the OFTO.

This guidance note explains how the licence for Tender Round 4 (TR4) reflects offshore transmission policy by explaining the purpose and mechanics of each licence condition. We aim to aid stakeholders' understanding of the purpose and mechanics of the licence; it is not intended to be a substitute for the licence. If this guidance contradicts any part of the licence then the licence takes precedence.

This guidance corresponds to the OFTO licence for TR4. Separate guidance is available for licences under earlier tender rounds.

Context

Great Britain continues to be a global leader in the development of offshore wind energy. Since 2009, we have run competitive tenders to select and licence Offshore Transmission Owners (OFTOs) to own and operate the assets that connect offshore wind farms to the onshore network.

From the outset the offshore transmission regime has encouraged innovation and attracted new sources of technical expertise and finance, whilst ensuring that grid connections are delivered efficiently and effectively. In 2014 we published a study by CEPA/BDO who found that using tendering saved between £200m and £400m in our first tender round. We have also recently published a further study by CEPA¹ which evaluated the benefits of competition delivered by tender rounds two and three. This has indicated further savings of between £428m and £749m.

We have completed 14 OFTO tenders to date, and another project is currently at the preferred bidder stage. This has resulted in total OFTO investment of approximately £2.9bn in offshore transmission networks. Across Tender Round 4 (TR4) and Tender Round 5 (TR5) – which we expect to commence later this year – we anticipate another six OFTOs will be appointed, with a total value in excess of £2bn.

TR4 will be run under The Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations 2015. The licences conferred to OFTOs include a set of obligations, incentives and entitlements on the OFTO. This guidance note is intended to help stakeholders understand the mechanisms of the licence and its underlying policy intent. It particularly focuses on the OFTO specific licence conditions, including the revenue entitlement. It is not intended to be a substitute for the licence. If this guidance contradicts any part of the licence, then the licence shall take precedence.

¹ <https://www.ofgem.gov.uk/publications-and-updates/evaluation-of-tender-round-2-and-3-benefits>

Associated Documents

[Generic Offshore Transmission Owner \(OFTO\) Licence for Tender Round 4 \(TR4 V1\)](https://www.ofgem.gov.uk/publications-and-updates/generic-offshore-transmission-owner-ofto-licence-TR4-version-1) (April 2016) <https://www.ofgem.gov.uk/publications-and-updates/generic-offshore-transmission-owner-ofto-licence-TR4-version-1>

[Open letter on the Authority's approach towards exceptional events for offshore transmission owners](https://www.ofgem.gov.uk/publications-and-updates/open-letter-authority%E2%80%99s-approach-towards-exceptional-events-offshore-transmission-owners) (October 2014) <https://www.ofgem.gov.uk/publications-and-updates/open-letter-authority%E2%80%99s-approach-towards-exceptional-events-offshore-transmission-owners>

[Enforcement Guidelines on Complaints and Investigations](https://www.ofgem.gov.uk/sites/default/files/docs/2014/09/enforcement_guidelines_12_september_2014_published_version_0.pdf) (September 2014) https://www.ofgem.gov.uk/sites/default/files/docs/2014/09/enforcement_guidelines_12_september_2014_published_version_0.pdf

[Offshore Transmission Owner Regulatory Instructions and Guidance](https://www.ofgem.gov.uk/publications-and-updates/offshore-transmission-owner-regulatory-instructions-and-guidance-transitional-tender-round-3-licensees) (March 2014) <https://www.ofgem.gov.uk/publications-and-updates/offshore-transmission-owner-regulatory-instructions-and-guidance-transitional-tender-round-3-licensees>

[Guidance on the Offshore Transmission Owner \(OFTO\) of Last Resort Mechanism](https://www.ofgem.gov.uk/publications-and-updates/guidance-offshore-transmission-owner-ofto-last-resort-mechanism-0) (February 2014) <https://www.ofgem.gov.uk/publications-and-updates/guidance-offshore-transmission-owner-ofto-last-resort-mechanism-0>

[Transmission Licence Standard Conditions](https://epr.ofgem.gov.uk/Content/Documents/Electricity%20transmission%20full%20set%20of%20consolidated%20standard%20licence%20conditions%20-%20Current%20Version.pdf) <https://epr.ofgem.gov.uk/Content/Documents/Electricity%20transmission%20full%20set%20of%20consolidated%20standard%20licence%20conditions%20-%20Current%20Version.pdf>

Contents

Context	2
Associated Documents	3
Contents	4
Executive Summary	7
1. Introduction	8
Background	8
Standard conditions	8
OFTO specific conditions	8
Development of the licence for TR4	9
2. Terms of the Licence and Schedules	11
Terms of the licence	11
Schedule 1: Specified Area	11
Schedule 2: Revocation	11
3. Standard Conditions	13
Section A	13
Section B	13
Section C	13
Section D	13
Section E	13
4. Amended Standard Conditions E12 – A	15
Amended Standard Condition E12 – A1: Definitions and Interpretation	15
Amended Standard Condition E12 – A2: Market Rate Revenue Adjustment	15
Amended Standard Condition E12 – A3: Post Tender Revenue Adjustment	15
5. Amended Standard Conditions E12 – B	16
Amended Standard Condition E12 – B1: Transmission System Area	16
Amended Standard Condition E12 – B2: Activities Restrictions	16
6. Amended Standard Conditions E12 – C	17
Amended Standard Condition E12 – C1: Conduct of the Transmission Business	17
Amended Standard Condition E12 – C2: Separation and Independence of the Transmission Business	17
Amended Standard Condition E12 – C3: Restriction on use of certain information	18
Amended Standard Condition E12 – C4: Appointment of Compliance Officer	18
7. Amended Standard Conditions E12 – D	19
Amended Standard Condition E12 – D1: Offshore Regulatory Reporting	19
Amended Standard Condition E12 – D2: Equity Transaction Reporting Requirement	19
8. Amended Standard Conditions E12 – J	21
Revenue Conditions	21
Amended Standard Condition E12 – J1: Not Used	21
Amended Standard Condition E12 – J2: Restriction of Transmission Revenue: Revenue from Transmission Owner Services	21
Amended Standard Condition E12 – J3: Restriction of Transmission Revenue: Allowed Pass-through Items	23

Amended Standard Condition E12 – J4: Restriction of Transmission Revenue: Annual Revenue Adjustments	26
Other conditions	34
Amended Standard Condition E12 – J5: Restriction of Transmission Revenue: Adjustments	34
Amended Standard Condition E12 – J6: Provision of Information to the System Operator	34
Amended Standard Condition E12 – J7: Duration of the Revenue Restriction Provisions	34
Amended Standard Condition E12 – J8: Allowances in respect of Security Costs	34
Amended Standard Condition E12 – J9: Basis of Transmission Owner Charges	35
Amended Standard Condition E12 – J10: Excluded Services	35
Amended Standard Condition E12 – J11: The Network Innovation Competition	36
Amended Standard Condition E12 – J12: Sulphur Hexafluoride Reporting Requirements	36
Appendix 1: Glossary	37

Executive Summary

We grant offshore transmission owner (OFTO) licences through competitive tenders. OFTO licences impose obligations, incentives and entitlements on the OFTO. These are set out in the following parts of the licence:

The terms of the licence set out the legal power under which we grant licences and determine when the licence comes into effect.

The schedules specify the area within which the OFTO can participate in electricity transmission and when we may revoke the licence.

Standard conditions are obligations for all transmission licensees.

Amended standard conditions E12 – A1 to A3 adjust the OFTO's revenue stream to account for changes in circumstances between the invitation to tender (ITT) bid submission and licence grant. E12-A1 also sets out the definitions used in the OFTO licence.

Amended standard conditions E12 – B1 to B2 define where and how the OFTO should operate its assets.

Amended standard conditions E12 – C1 to C4 introduce requirements on the way in which an OFTO can be structured and conduct itself.

Amended standard conditions E12 – D1 to D2 require the OFTO to measure and record information and to provide this information to us.

Amended standard conditions E12 – J1 to J12 set out the OFTO's revenue rights and incentives.

This guidance note explains the purpose and mechanics of these parts of the licence.

1. Introduction

Background

- 1.1. We² grant offshore transmission owner (OFTO) licences using competitive tender processes. The licence grants obligations, incentives and entitlements on the OFTO. This includes the right to a 20 year regulated revenue stream in return for providing transmission services.
- 1.2. The licence broadly comprises two parts. One part sets out the standard conditions which apply to all transmission owners. The other part sets out the conditions which are modified to meet the circumstances of each transmission business. The modified conditions may be amended standard conditions or special conditions. In addition there are terms of the licence enabling an OFTO to participate in the transmission of electricity.
- 1.3. To support the tender process, this guidance note provides an explanation of the components of the licence for participants in Tender Round 4 (TR4) and other interested stakeholders. In particular it explains the amended standard conditions set out in version TR4_V1 of the licence. This version of the licence is published on our website. A project specific version of this licence will be granted to the successful bidder.

Standard conditions

- 1.4. The standard conditions are obligations which apply to all transmission licences. Sections A and E of the standard conditions set out the obligations applicable to OFTOs.

OFTO specific conditions

- 1.5. We may need to modify the conditions of a licence to meet the circumstances of the specific transmission business. For example, for OFTOs we need to amend certain standard conditions to incorporate individual revenue entitlements. We have powers under the Electricity Act 1989 (the Act) to grant and modify licences.
- 1.6. We may modify licences under sections 11A to 11F or under section 8A of the Act. The Act requires us to consult ahead of making any changes to licences under either approach.

² The Gas and Electricity Markets Authority. Ofgem is the Office of the Authority. The terms "Ofgem" and "the Authority," "we" and "us" are used interchangeably in this letter.

Licence modification under sections 11A to 11F of the Act

- 1.7. Sections 11A to 11F of the Act allow us to modify the standard conditions and existing amended standard conditions of each OFTO licence once the licence has been granted. Sections 11A to 11F of the Act also allow us to incorporate new OFTO specific licence provisions into each OFTO licence as special conditions. We can exercise this power to incorporate OFTO specific revenue provisions following licence grant.
- 1.8. Under sections 11A and 11B of the Act we must publish a notice of proposed licence changes. The licence changes are then open to consultation for no less than 28 days. We then consider all consultation responses before deciding whether to implement the licence changes. If we then decide to modify the licence we publish a notice of our decision to proceed with the modifications. The licence modifications come into effect no earlier than 56 days after publication of this notice. Affected parties have the right to appeal during the 20 days following the publication of the decision notice.

Licence modification under section 8A of the Act

- 1.9. Section 8A of the Act allows us to modify the standard conditions of each OFTO licence at licence grant. These modifications can only be consulted on prior to licence grant.
- 1.10. Using powers under section 8A of the Act, the OFTO specific provisions can be incorporated into each OFTO licence as amended standard conditions. We expect to exercise this power to propose modifications to the standard conditions of each OFTO licence in order to incorporate the OFTO specific provisions in the licence at the time of licence grant. This approach provides certainty to each offshore transmission licensee and their funders regarding their revenue entitlements from the day the licence is granted, allowing them to achieve financial close.
- 1.11. Under section 8A of the Act we must publish a notice of the proposed licence changes. The licence changes are then open to consultation for no less than 28 days. We then consider all consultation responses before deciding whether to implement the licence changes at licence grant.
- 1.12. So far we have used powers under section 8A of the Act to incorporate project specific provisions, such as bespoke exclusions and Contingent Event Adjustment (CEA) terms, into OFTO licences. These modifications, which provide OFTOs different types of licence protection, are summarised in Annex 2.

Development of the licence for TR4

- 1.13. Version TR4_V1 of the OFTO licence was unchanged from the version used for TR3.

Guidance on the offshore transmission owner licence for Tender Round 4

- 1.14. We may consult on or provide further updates to the TR4 OFTO licence ahead of the Invitation to Tender Stage of TR4. Doing so would result in a TR4_V2 version of the generic licence in due course. This guidance would also be updated to summarise key changes.

2. Terms of the Licence and Schedules

Terms of the licence

- 2.1. The Terms of the Licence allow the OFTO to participate in the transmission of electricity and specify the date the licence comes into force. They also specify the transmission business specific conditions that the OFTO must comply with.

Schedule 1: Specified Area

- 2.2. This schedule sets out the specified area within which the OFTO can participate in electricity transmission. This is further limited by amended standard condition E12 - B1, which sets out the transmission system area.

Schedule 2: Revocation

- 2.3. This schedule describes when we may revoke the licence. We can revoke any licence under a number of specified circumstances. When considering licence revocation, we must consider our statutory duties. Grounds for revocation may include where:
- both the OFTO and we agree that the licence should be revoked
 - the OFTO has failed to comply with a final order or with a provisional order, or to pay any financial penalty by the due date
 - the OFTO fails to comply with an order made by the court under section 34 of the Competition Act 1998; an order made by us under sections 158 or 160 of the Enterprise Act 2002; an order made by the Competition and Markets Authority under sections 76, 81, 83, 84 and 161 of the Enterprise Act 2002; or an order made by the Secretary of State under sections 66, 147, 160 or 161 of the Enterprise Act 2002
 - the OFTO is in financial difficulty (subject to paragraphs 1(f), 2 and 3 of schedule 2 of the licence)
 - the OFTO has not been or has not continued to be certified by us in accordance with section 10D of the Electricity Act as complying with section 10A of the Electricity Act
 - we are satisfied that the licensee made a material misstatement of fact in making its application for the licence.

- 2.4. Further details on enforcement action and licence revocation can be found in Enforcement Guidelines on Complaints and Investigations³ and on our website.

³ [Enforcement Guidelines on Complaints and Investigations](#)

3. Standard Conditions

- 3.1. Standard conditions apply to all transmission licensees. Sections A and E apply to OFTOs. Section A sets out definitions and interpretations and clarifies which conditions have effect in the licence. Section E sets out the obligations and entitlements which apply to all OFTOs.

Section A

- 3.2. The conditions in section A take effect at licence grant.
- 3.3. Standard condition A1 sets out the definitions and interpretation of words and expressions used in the licence.
- 3.4. Standard conditions A2, A3, A5 and A6 allow us to direct whether sections C, D, B and E (respectively) have effect in the licence.
- 3.5. Standard condition A4 (Payments by the Licensee to us) obliges licensees who have section C of their licence in effect, to pay a licence fee to us.

Section B

- 3.6. Section B of the standard conditions sets out conditions that apply to the Scottish transmission owners (TOs) and the National Electricity System Operator (NETSO). The conditions in section B are in effect at licence grant. We issue a section B direction using powers under standard condition A5 following licence grant so that section B does not have effect in the OFTO licence.

Section C

- 3.7. Section C of the standard conditions sets out the conditions that apply to the NETSO. It does not have effect in the OFTO licence.

Section D

- 3.8. Section D of the standard conditions sets out the conditions that apply to the Scottish TOs. It does not have effect in the OFTO licence.

Section E

- 3.9. Section E of the standard conditions sets out the conditions that apply to all OFTOs. These conditions are not in effect at licence grant. We issue a section

E direction using powers under standard condition A6 following licence grant so that they have effect in the OFTO licence.

- 3.10. We do not discuss the standard conditions in any further detail in this document.

4. Amended Standard Conditions E12 – A

Amended Standard Condition E12 – A1: Definitions and Interpretation

- 4.1. This provides the definitions and interpretations for the amended standard conditions.

Amended Standard Condition E12 – A2: Market Rate Revenue Adjustment

- 4.2. This condition establishes the process for adjusting the OFTO's revenue to reflect the difference between market rates which support the tender revenue stream published as part of the section 8A consultation and the actual market rates that apply on the day of financial close. This ensures that the OFTO is not affected by underlying movements in market rates, where this was the basis of its invitation to tender (ITT) submission. This includes interest rates, retail price index swap rates, gilt rates, index linked gilt rates and bond spreads.
- 4.3. Where the OFTO revenue is affected by market rates, the OFTO is required to prepare a statement outlining the proposed methodology to calculate the market rate revenue adjustment (MRA). This statement must meet the criteria outlined in the licence and be approved by us. At financial close, we will determine the value of the MRA, where applicable, in accordance with this methodology statement and direct the value of the MRA term in amended standard condition E12 – J2.

Amended Standard Condition E12 – A3: Post Tender Revenue Adjustment

- 4.4. For some projects it may not be possible for us to complete our final assessment of the costs of developing and constructing the transmission assets sufficiently ahead of commencing the section 8A consultation. For these projects, the section 8A tender revenue stream will be based on an indicative transfer value. This condition establishes the process for adjusting the revenue stream if we finalise the cost assessment after the section 8A consultation commences but before licence grant and determine the difference between the indicative transfer value and the final transfer value of the transmission system. This difference in transfer value will determine the post tender revenue adjustment (PTRA) term. The PTRA term will be determined as soon as reasonably practical and, in any event, no later than the date of asset transfer.

5. Amended Standard Conditions E12 – B

Amended Standard Condition E12 – B1: Transmission System Area

- 5.1. This condition defines the specific transmission system and location for which the licence is granted. This includes the onshore and offshore connection point, map of the transmission system area and diagram of the transmission system circuit.

Amended Standard Condition E12 – B2: Activities Restrictions

- 5.2. This sets out restrictions on where the OFTO should operate its assets. It prevents the OFTO from undertaking system operator activities and transmission activities outside the area specified in E12 – B1.

6. Amended Standard Conditions E12 – C

Amended Standard Condition E12 – C1: Conduct of the Transmission Business

- 6.1. This condition ensures that no party can gain an unfair commercial advantage due to the conduct of the offshore transmission business. It prohibits OFTOs from sharing premises or resources with the SO or with associated businesses authorised to generate, or supply electricity.

Amended Standard Condition E12 – C2: Separation and Independence of the Transmission Business

- 6.2. Amended standard condition E12 - C2 requires the OFTO to make arrangements so they comply with the obligations in standard conditions E6 (Prohibition of cross-subsidies) and E7 (Restriction on Activity and Financial Ring Fencing) and amended standard condition E12 - C1. It requires the licensee to produce an Ofgem-approved compliance statement describing the arrangements that the OFTO has adopted to comply with the above conditions. The OFTO is also obliged to establish separate boards for the transmission business and associated businesses and must describe the implementation of this obligation in the statement.
- 6.3. The onus is on the OFTO to ensure sufficient information is included in the compliance statement so as to provide us with a full understanding of the systems in place. While we are not responsible for prescribing the content of the statement, as a minimum we expect that:
- a separate compliance statement is required under each licence
 - should we grant a licence to an affiliate or related undertaking of an OFTO and the provision of external services are shared between the licensed businesses, the statement should demonstrate how these services will be allocated to the licensed business to which the statement refers.
- 6.4. We can consent to the OFTO not having to comply with some or all of the requirements of the conditions listed in 7.2 above. The decision whether or not to grant consent will be decided on a case by case basis. Where we have granted such consent, the licensee's compliance statement should include the evidence supplied in support of the consent. We would expect to see:
- the OFTO company structure and board structure, including structure diagrams

- any procedures governing existing or new contractual arrangements with any entity, affiliate or business that is included in any consent
 - any monitoring arrangements to ensure continued compliance.
- 6.5. The successful bidder should provide us with their draft compliance statement in advance of licence grant in order to ensure the timescales laid down within the licence condition are met. The OFTO should take the necessary steps to ensure their statement can be approved within 30 days of licence grant, except where our consent provides for a longer period. The OFTO must publish its statement within 7 days of our approval.
- 6.6. Should there be any change in circumstances impacting on the validity of the compliance statement, the OFTO shall make all necessary revisions to the statement in order to bring it up to date. The revised statement is not deemed to be effective until it has been approved by us.

Amended Standard Condition E12 – C3: Restriction on use of certain information

- 6.7. This condition prevents the OFTO from sharing information relating to or deriving from the management or operation of the transmission business, which is treated as confidential information for the purposes of this condition. It does not prevent sharing information in specific circumstances detailed in the licence. For example, the OFTO may need to share information with consultants or advisers if arrangements are in place to safeguard the information or if required by law or any competent authority.

Amended Standard Condition E12 – C4: Appointment of Compliance Officer

- 6.8. This requires the OFTO to appoint a compliance officer to ensure compliance with standard conditions E6 (Prohibition of cross-subsidies) and E7 (Restriction on Activity and Financing Ring Fencing) and amended standard conditions E12 – C1 to E12 – C4. The OFTO shall establish a compliance committee to oversee and ensure the performance of the duties and tasks of the compliance officer. These tasks are set out in this condition. The OFTO must ensure that the compliance officer is neither engaged in the activities of the licensee's transmission system nor the activities of any associated business, except in the role of compliance officer, unless our consent is obtained.
- 6.9. The OFTO must also produce an annual report in a form approved by us that sets out the details of the activities undertaken by the compliance officer in that year, including any investigations conducted.

7. Amended Standard Conditions E12 – D

Amended Standard Condition E12 – D1: Offshore Regulatory Reporting

- 7.1. Amended standard condition E12 - D1 provides for the collection of certain information to allow us to monitor the revenue and sulphur hexafluoride (SF₆) emissions of the transmission business. It requires the OFTO to measure and record information in line with Offshore Transmission Owner Regulatory Instructions and Guidance⁴ and provide such information to us on the relevant dates.

Amended Standard Condition E12 – D2: Equity Transaction Reporting Requirement

- 7.2. Amended standard condition E12-D2 places an obligation on OFTOs to collect and provide to us details of any transaction that involves the issue, sale or buy back of shares in the OFTO, and/or any transaction that results in a change in an ultimate controller of the OFTO. It requires the OFTO to provide details such as the date and the value of transaction and, where applicable, the number of shares involved and/or the percentage now controlled by a new ultimate controller.
- 7.3. Under this condition, the first submission must occur by 31 July following the date of transaction. However, OFTOs will benefit from an extended reporting deadline when the transaction occurs in the first quarter of the year (1 January – 31 March). For such transactions, the first reporting deadline is 31 July in the year following the year of transaction.
- 7.4. Where interests in OFTOs are traded as part of wider transactions involving the transfer of shares in a parent company of the OFTO, the scope of the reporting obligation is limited to the value placed on the OFTO.
- 7.5. If an OFTO is unable to obtain details of the transaction, for example for confidentiality reasons, it may apply to us, under this condition, for consent to omit this information from its reporting.
- 7.6. Where practical, the information to be provided to us should be presented in the following format:

⁴<https://www.ofgem.gov.uk/publications-and-updates/offshore-transmission-owner-regulatory-instructions-and-guidance-transitional-tender-round-3-licensees>

Guidance on the offshore transmission owner licence for Tender Round 4

Date	Equity sold by:	Equity sold to:	Number of shares sold:	Price per share:	Total value of sale	Resulting shares held by selling party		Resulting shares held by purchasing party	
[dd/mm/yy]	[Name]	[Name]	[a]	£ [b]	£[c] = $a \times b$	[n.]	[%]	[n]	[%]

8. Amended Standard Conditions E12 – J

Revenue Conditions

- 8.1. The licence entitles OFTOs to earn revenue from providing transmission services. Amended standard conditions E12 – J2 to E12 – J4 define the revenue entitlement for each year running from 1 April to 31 March.

Amended Standard Condition E12 – J1: Not Used

- 8.2. This condition is not used.

Amended Standard Condition E12 – J2: Restriction of Transmission Revenue: Revenue from Transmission Owner Services

- 8.3. This condition determines how much revenue the OFTO is entitled to in a given year t . This is defined as $OFTO_t$ and it comprises the following terms:

$$OFTO_t = \text{Base Revenue}_t + \text{Pass Through Revenue}_t + \text{Performance Availability Revenue}_t - \text{Correction Factor}_t$$

E12 – J2 determines the value of the base revenue and the correction factor. We discuss pass through revenue and performance availability revenue in the sections on amended standard conditions E12 – J3 and E12 – J4 respectively.

Base Revenue

- 8.4. The OFTO's base transmission revenue (base revenue) is the revenue the OFTO is entitled to before adjustments. This is defined as BR_t and it comprises the following terms:

- *TRS – Tender Revenue Stream*: this is the revenue established through the tender process.
- *MRA – Market Rate Revenue Adjustment*: this accounts for the difference between rates assumed for the purpose of the tender revenue stream and the market rates on the date of financial close, where the OFTO's invitation to tender (ITT) submission was based on market rates. See paragraph 4.2 for more information.
- *PTRA – Post Tender Revenue Adjustment*: this accounts for the difference between the indicative transfer value for the purpose of the

tender process and the final transfer value following the completion of our final assessment of costs. See paragraph 4.4 for more information.

- *PR – Proportion of Revenue:* OFTO revenues are paid from 1 April to 31 March of a given year. This term adjusts the OFTO’s revenue for the first and last years of the OFTO’s revenue stream, as these are unlikely to be full years.
- *RIT – Revenue Indexation Term:* This adjusts a proportion of OFTO revenue (as defined by BI_{TRS} , BI_{MRA} and BI_{PTRA} described below) for inflation. This is calculated as the percentage increase in RPI from September to September.
- BI_{TRS} – a biddable indexation constant which represents the proportion of the TRS to be indexed in line with inflation.
- BI_{MRA} – a biddable indexation constant which represents the proportion of the MRA to be indexed in line with inflation.
- BI_{PTRA} – a biddable indexation constant which represents the proportion of the PTRA to be indexed in line with inflation.

8.5. The base revenue (BR_t) is essentially the sum of the TRS, MRA and PTRA each adjusted wholly or partially for inflation. In the first and final revenue years, the base revenue is also adjusted to take account of the partial year.

8.6. Base revenue (BR_t) is calculated as follows:

$$BR_t = PR_t(TRS_t(RIT_t \times BI_{TRS} + (1-BI_{TRS})) + MRA_t(RIT_t \times BI_{MRA} + (1-BI_{MRA})) + PTRA_t(RIT_t \times BI_{PTRA} + (1- BI_{PTRA})))$$

Correction Factor

8.7. The correction factor is designed to account for the difference between $OFTO_t$ (i.e. what the OFTO should receive in a year) and the revenue the OFTO actually recovers (i.e. the OFTO’s forecast of $OFTO_t$ which they invoice to the National Electricity Transmission System Operator (NETSO)). The correction factor adjusts for this difference in the following relevant year. It also adjusts the difference by the Bank of England’s (of any other bank as we may direct) Official Bank Rate to ensure that the net present value of the adjustment is neutral. OFTOs may have an incentive to forecast for large over recoveries of revenue because of the net present value effect. To counter this, there is a penalty interest of 4 per cent on the over-recovered revenue if the over-recover is more than 4 per cent of $OFTO_t$. The correction factor is defined in the licence as K_t .

- 8.8. Possible reasons for differences between $OFTO_t$ and the revenue the OFTO actually receives include:
- human error
 - unforeseen changes to revenue due to changes to the incremental capacity adjustment (discussed as part of amended standard condition E12 – J4)
 - unforeseen changes to revenue due to pass through costs (discussed as part of amended standard condition E12 – J3).
- 8.9. We have designed the availability incentive so that OFTOs will have reasonably accurate information on which to base their forecasts. This is discussed as part of amended standard condition E12 – J4. We do not anticipate the need to include availability incentive calculations in the correction factor.

Amended Standard Condition E12 – J3: Restriction of Transmission Revenue: Allowed Pass-through Items

- 8.10. This licence condition adjusts the OFTO's revenue for certain costs that may arise but are difficult to predict as part of the bidding process. These costs are passed through to consumers. This mirrors the onshore approach. The revenue adjustment for pass through costs is defined as PT_t and it comprises the following terms:

$$PT_t = LF_t + RB_t + CEL_t + DC_t + IAT_t + TPD_t + TCA_t + MCA_t - RFG_t$$

- 8.11. The following terms adjust the OFTO's revenues for changes in licence fees, network rates, Crown Estate lease costs and tender fees respectively and are generally self-explanatory:
- *LF – licence fee cost adjustment*: to cover licence fee costs
 - *RB – network rates cost adjustment*: to cover network rates costs
 - *CEL – Crown Estate lease cost adjustment*: to cover Crown Estate lease costs
 - *TCA – tender fee cost adjustment*: to cover the fees paid to us for the costs of running the tender process. This pass through can also be used to recover from the OFTO any refund of tender fees it may receive from us.

- 8.12. The remaining terms may require further explanation:

DC – decommissioning cost adjustment

- 8.13. The OFTO is liable for its decommissioning obligations, which are set by government. The value of the tender revenue stream will be based on the legislative requirements on decommissioning in force during the tender process. However, the legislative requirements could change before the end of the revenue stream entitlement period, which could lead to additional decommissioning costs which the OFTO would not have been aware of during the tender process.
- 8.14. If a change of law requires additional decommissioning obligations, the OFTO can pass through any increase in efficient costs, if agreed by us.

IAT – income adjusting event

- 8.15. Certain other events or circumstances that were not predicted at licence grant may result in increased or decreased costs or expenses. The licence defines the circumstances which may be considered income adjusting events. An income adjusting event may arise from an event or circumstance that:
- constitutes force majeure under the System Operator – Transmission Owner Code (STC)
 - results from an amendment to the STC
 - is considered and approved by us as an income adjusting event.
- 8.16. The increase or decrease in costs and/or expenses must also exceed a threshold. The threshold is determined on a project basis and is driven by the capacity of the assets. For TR4 projects the threshold is £1 million.
- 8.17. The OFTO must give notice to us of an income adjusting event. The licence sets out what the notice must contain and the process to be followed.

TPD – temporary physical disconnection payment

- 8.18. Under the Connection and Use of System Code (CUSC), the NETSO makes payments to generators if an outage on the national electricity transmission system (NETS) interrupts a generator's connection. These are known as Relevant Interruptions. The NETSO can require payment from the licensee to cover compensation costs if the outage is on part of the licensee's system.
- 8.19. Certain outages are identified as Allowed Interruptions in the CUSC and in the bilateral connection agreement (BCA) between the NETSO and the generator. The OFTO is not liable for any payments for outages identified as Allowed

Interruptions. There are no formal restrictions on what can be included as an allowed interruption in the BCA. We would expect the NETSO would include parts of the NETS where there is not full redundancy, as is largely the case offshore.

- 8.20. This pass through allows the OFTO to recover any compensation costs it is required to make to NETSO.

MCA – Marine and Coastal Access Act 2009 cost adjustment

- 8.21. The OFTO may be liable for obligations under the Marine and Coastal Access Act 2009, which are set by government. This pass through provides protection for any additional costs of complying with additional obligations that did not apply to the OFTO at the time of bidding.
- 8.22. If obligations under the Marine and Coastal Access Act 2009 change, the OFTO can pass through any increase in efficient costs, if agreed by us.

RFG – Refinancing Gain Share

- 8.23. If the OFTO plans to undertake a refinancing of its external debt⁵ that it believes will lead to a gain it must inform us and provide an outline of the terms of the refinancing at least three months in advance of when the refinancing is expected to take place. We will assess the notification and request further information from the OFTO as is necessary to assess the refinancing gain and for us to direct the value of the refinancing gain share.
- 8.24. As part of any additional information requested, we are likely to require the OFTO to provide an updated financial model and the values of the financial gain and financial gain share along with evidence of how these values were calculated.
- 8.25. For the avoidance of doubt the OFTO does not need to notify us of any refinancing that will not lead to a gain, unless it is an exempt refinancing (see paragraphs 8.29-8.30)
- 8.26. The refinancing gain should be calculated in accordance with the principles set out in the licence, where the refinancing gain is an amount equal to the greater of zero and (A-B). (A-B) represents the difference in the net present value of distributions predicted to be made to shareholders and affiliates of the licensee before and after the refinancing takes place.

⁵ Defined in amended standard condition E12-A1 as 'debt of the licensee provided directly or indirectly by a party who is not a shareholder of the licensee'.

- 8.27. The blended equity internal rate of return from the relevant OFTO's financial model used at financial close will be used as the discount rate to calculate the present value of the refinancing gain.
- 8.28. The value of the refinancing gain share will be directed by us and shall equal 50 per cent of the refinancing gain. We can direct the refinancing gain to be paid as a lump sum in one year or as an annual amount over a number of years. In any event, we anticipate that the profile of the refinancing gain share will match the profile of the refinancing gain except where this approach would lead to a refinancing gain share pass through that increased overall OFTO revenue in some years.
- 8.29. Some refinancings, known as exempt refinancings, are exempt from the refinancing gain share. An exempt refinancing is a refinancing undertaken to remove the OFTO from financial distress.
- 8.30. If the OFTO plans to undertake what it thinks is an exempt refinancing, irrespective of whether it will lead to a gain, it must notify us in writing, ideally three months in advance. We will then determine whether the refinancing falls under the definition of exempt refinancing.

Amended Standard Condition E12 – J4: Restriction of Transmission Revenue: Annual Revenue Adjustments

- 8.31. This licence condition adjusts the OFTO's revenue depending on performance. It also places obligations on the OFTO to maintain the assets in line with good industry practice. There are two main parts to this condition: the availability incentive and incremental capacity adjustments.

Part A: Transmission system availability incentive

- 8.32. The availability incentive is a combination of obligations and an incentive. The obligations require the OFTO to repair and maintain the assets; the incentive encourages behaviour to maintain asset availability.

Obligations

- 8.33. This condition requires the OFTO to operate its transmission assets in line with good industry practice and standard condition E15 (Obligation to provide transmission services) to minimise the effect and duration of any transmission outage. Standard condition E15 requires the OFTO to ensure that its assets are capable of transmission.
- 8.34. To complement this obligation, the licence places a number of reporting requirements on the OFTO. It must report to us any service reduction expected to be over 21 days, including details of:
- the effect that it will have on the OFTO's transmission services

- the cause of the outage
- the actions taken to repair the outage and minimise its effect
- the expected timescales for repair of the outage.

8.35. If overall OFTO availability is below 80⁶ per cent in a calendar year (incentive period) or 85⁷ per cent over two calendar years then the OFTO must provide us with a written statement, within three months of the end of the calendar year, setting out how they are complying with the obligation to provide transmission services in accordance with good industry practice.

8.36. As with all licence conditions, if the OFTO does not comply with this obligation it could be subject to enforcement action. Licence revocation is the ultimate sanction available to us where other remedies have failed to resolve performance issues.

Incentives

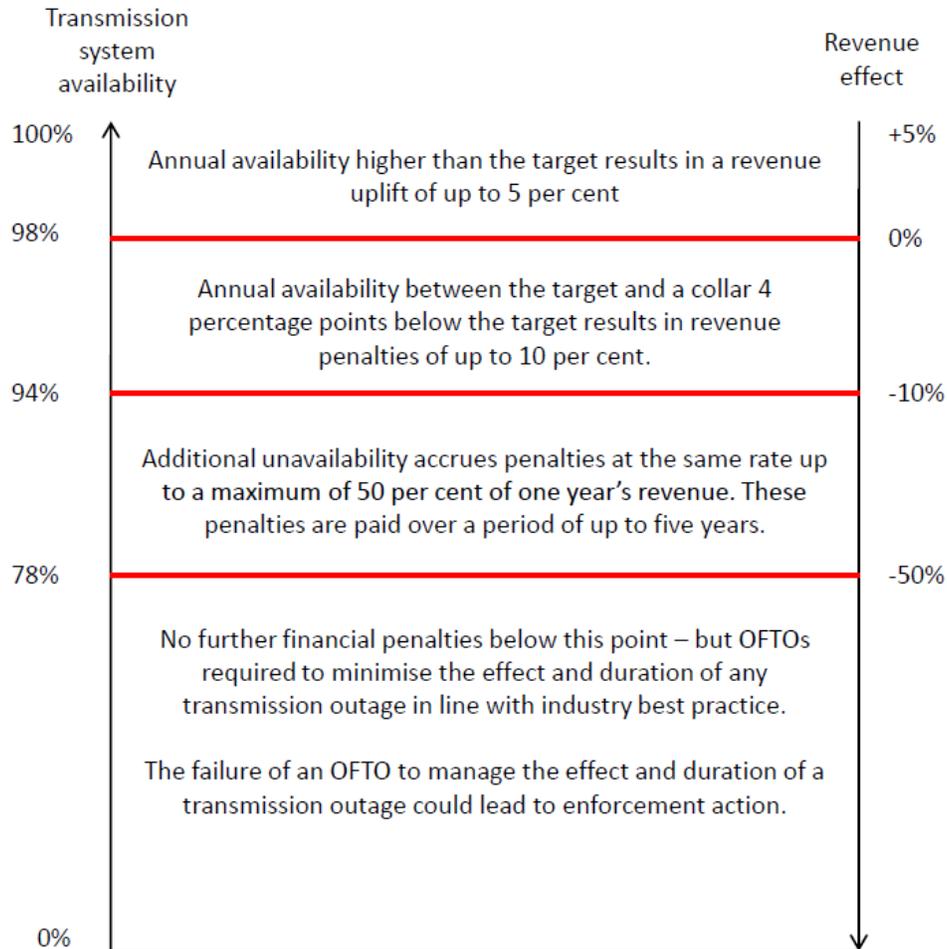
8.37. The OFTO also faces an incentive to encourage it to maintain availability. The incentive is based on the OFTO's performance against an availability target. For TR4, the target is 98 per cent. The incentive rewards OFTOs by up to 5 per cent of annual revenue (base revenue plus revenue from incremental capacity) if they exceed the annual availability target and penalises them by up to 10 per cent of annual revenue when they fall below it.

8.38. The OFTO collects its maximum annual revenue uplift if it achieves 100 per cent availability. It receives the maximum annual penalty, 10 per cent of annual revenue, if its availability falls to a collar set 4 percentage points below the target of 98 per cent. If availability falls below the collar the OFTO then continues to accrue penalties at the same rate, up to a maximum of 50 per cent of a year's revenue (which occurs at 20 percentage points below the target availability). These penalties are paid over a period of up to five years. During that time additional penalties can be incurred for future payment. However the maximum annual penalty for unavailability remains at 10 per cent of annual revenue throughout the 20 year incentive period.

8.39. The diagram below shows how unavailability affects revenue for an OFTO with a 98 per cent revenue target.

⁶ To note: this figure is 75 per cent in TR1 licences.

⁷ To note: this figure is 80 per cent in TR1 licences.



8.40. The availability incentive is subject to two weighting mechanisms, the seasonal weighting mechanism and the capacity weighting mechanism:

- **Seasonal weighting:** Offshore generators are likely to have higher revenue at certain times of the year than others. This could be due to higher anticipated prices or a higher quantity of electricity generated. Therefore OFTOs are incentivised to place a higher value on maintaining availability in the months that generators value it the most. The incentive is weighted depending on the estimated generation revenues of the connected wind farm. This means the incentive is worth more in months with high forecast revenues and less in months with low forecast revenues.
- **Capacity Weighting:** Offshore generation is dependent on wind speed therefore wind farms often generate less than their full capacity. This means that a generator would prefer OFTOs to take partial capacity outages in sequence, rather than take the whole transmission system off the system at once, because partial outages taken in sequence will allow the wind farm to export some or all of its power during this period. The

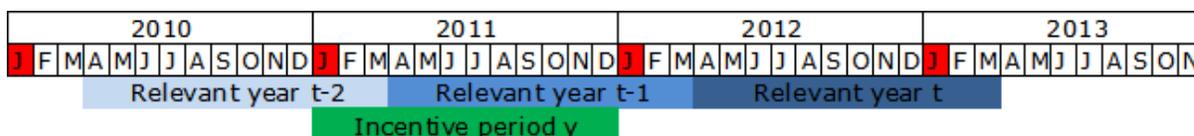
capacity weighting mechanism encourages OFTOs to take smaller capacity outages where it is possible and cost effective to do so.

Timing of Calculations and Payments

8.41. Availability performance in a given year does not impact revenue in that year. This is because the NETSO needs enough time to use revenue forecasts to make transmission network use of system (TNUoS) charging calculations. The NETSO requires firm data by 1 January each year. At this point, there are still 3 months remaining in the time period in which OFTOs are paid their annual revenue. To resolve this issue, the incentive defines two different time periods:

1. Relevant year t – this is a year beginning on 1 April of each calendar year and ending on March 31 of the following calendar year. This is the period in which the OFTO is paid its annual revenue.
2. Incentive period y – this is the twelve month period commencing 1 January of relevant year t-2 and ending 31 December of relevant year t-1. This is the period in which availability performance is calculated.

8.42. The relationship between the two is illustrated in the diagram below.



8.43. The following section discusses the mechanics of the availability incentive. Please note in which time period each takes effect.

Mechanics

How is availability calculated?

8.44. Each outage is weighted according to the capacity of the transmission system that is unavailable. The percentage of the transmission system that is not available during an outage, x , in month, i , ($C_{x,i}$) is weighted by two constants, a and b (defined in the licence) as follows:

$$WCR_{x,i} = a(C_{x,i})^b$$

8.45. The weighted capacity reduction of each outage, x , in a month, i , ($WCR_{x,i}$), is a percentage.

- 8.46. The weighted energy outage ($WEO_{x,i}$) of each outage is measured in megawatt hours (MWh) and is calculated by multiplying the $WCR_{x,i}$ of each outage by the duration of the outage ($D_{x,i}$) and the capacity of the transmission system. The capacity of the system is defined as the minimum of the transmission entry capacity (TEC) of the wind farm and the normal capability limits (NCL) of the OFTO assets. The calculation is:

$$WEO_{x,i} = WCR_{x,i} \times D_{x,i} \times \text{minimum (TEC, NCL)}$$

- 8.47. The weighted energy outages for each outage, x , in a month, i , are added together to give the monthly capacity weighted unavailability ($RWU_{i,y}$) in MWh:

$$RWU_{i,y} = \sum_x WEO_{x,i}$$

- 8.48. The monthly seasonal weighting is incorporated by multiplying the monthly capacity weighted unavailability ($RWU_{i,y}$) by the weighting term ($W_{i,y}$), given in Annex A of amended standard condition E12 – J4, for that month. The monthly values are then summed to arrive at the total weighted annual unavailability for year y (WU_y) in MWh. WU_y is then divided by MA_y (the maximum weighted annual availability) to give the percentage total annual weighted unavailability for incentive period y , TU_y . MA_y is not simply the transmission system capacity multiplied by the number of hours in a year. This is because while the monthly weightings do average out to 100 per cent over the year, months are not all the same length. Therefore MA_y is the sum of the maximum weighted availability of each month in incentive period y . The monthly maximum weighted availability is calculated by multiplying the monthly total capacity ($TC_{i,y}$) by the weighting term for that month ($W_{i,y}$).

How are the annual and five year caps applied?

- 8.49. The paid out unavailability (PO_y) is the total unavailability in incentive period y that affects the revenue stream in relevant year t . It will be between 0 and 6 per cent because at 6 per cent annual unavailability the OFTO reaches the 10 per cent annual revenue impact cap.
- 8.50. If the percentage total annual weighted unavailability (TU_y) is greater than paid out unavailability (PO_y) the extra unavailability is carried forward up to a total availability cap, $TCAP_y$. $TCAP_y$ is the total annual availability that can affect the OFTO revenue stream over five years. In most years $TCAP_y$ takes a value of 22 per cent. If one of the five years is a partial year $TCAP_y$ is given a pro-rata value to reflect this.

How does the paid out unavailability impact the revenue stream?

- 8.51. The availability incentive term (AI_t) is calculated by multiplying the OFTO's base revenue (BR_t) plus incremental capacity revenue (ICA_t) by the availability factor (see paragraphs 8.44 and 8.48) to identify the revenue impact on the OFTO using the following formula:

$$AI_t = (BR_{t-1} + ICA_{t-1}) \times AF_y$$

- 8.52. However, for licences where asset transfer occurs between 1 January and 31 March (inclusive) an alteration needs to be made to availability incentive equation to reflect the fact that these licences are starting (and finishing) one incentive period later than those licences granted between 1 April and 31 December (inclusive).

For licences granted between 1 January and 31 March, AI_t is calculated as shown in paragraph 8.51 except:

- in relevant year $t=2$ where $AI_2 = 0$
- in relevant year $t = 23$ where $AI_{23} = (BR_{21}/PR_{21}) \times PR_1 \times AF_{23}$

- 8.53. The availability factor (AF_y) used in the calculation of the Availability Incentive in paragraph 8.51 converts the percentage unavailability into a percentage impact on revenue and takes a value of between -10 per cent and +5 per cent. We achieve this conversion through the following equation:

$$AF_y = (CCAP_y - PO_y) \times (RCAP/PCAP_y)$$

- 8.54. In this equation:

- $CCAP_y$ is the annual credit availability cap. It is the maximum unavailability that can cause an increase in OFTO base revenue. It is calculated using the following equation:

$$CCAP_y = 2\% \times PR_{(t-1)}$$

except in cases where asset transfer occurs between 1 January and 31 March (inclusive), where in incentive period $y = 23$ it is calculated as

$$CCAP_{23} = 2\% \times PR_1$$

In most years $CCAP_y$ takes the value of 2 per cent (because target availability is 98 per cent). In partial years it is a pro-rata value.

- $(CCAP_y - PO_y)$ calculates the percentage point difference between the target availability of 98% and the paid out unavailability. It takes a value between +2 and -4.
- $RCAP$ is the annual revenue cap. This is set at 10 per cent.

- PCAP_y is the annual penalty availability cap. It is the maximum unavailability in percentage terms below the target availability (98 per cent) that can cause a negative impact on the OFTO base revenue in any given year. It is calculated using the following equation:

$$\text{PCAP}_y = 4\% \times \text{PR}_{(t-1)}$$

except in cases where asset transfer occurs between 1 January and 31 March (inclusive), where in incentive period $y = 23$ it is calculated as

$$\text{PCAP}_{23} = 4\% \times \text{PR}_1$$

In most years PCAP_y takes the value of 4 per cent. In partial years it is a pro-rata value.

Part B: Transmission System Availability Incentive: Supplementary Provisions

Additional Reporting Requirements

- 8.55. We require OFTOs to submit the monthly capacity weighted unavailability (RWU_{i,y}) every three months. They must also explain when availability falls below target availability in a month.

Financial Security

- 8.56. The licence incentivises OFTOs to continue to maintain their assets across the length of their revenue stream and ensures they do not have an incentive to behave in a manner to avoid future liabilities incurred through the availability incentive. For example, an OFTO may look to avoid these penalties by winding up its business if it experiences a major outage near the end of the revenue stream.
- 8.57. The licence achieves this by requiring the OFTO to procure financial security no later than sixteen years following licence grant. The security may be called upon to cover financial liabilities incurred through amended standard condition E12 – J4 (Part A: Transmission System Availability Incentive) which have not been paid through the normal revenue adjustment method. The remainder will be returned to the OFTO at the end of the revenue stream.
- 8.58. The financial security should equal no less than half of the OFTO's base revenue in each relevant year that it is in place. In the final revenue year, the value of the financial security is half of the base revenue, adjusted as if the final year were a full revenue year.
- 8.59. As mentioned above, under the regime, availability incentive liabilities are realised through the revenue stream. This is paid by the NETSO. As a result, we expect that the NETSO will be able to call on the security.

- 8.60. The licence allows the potential liabilities to be secured in a number of ways. For example, instruments such as letters of credit or bonds can be used, that can be drawn upon in the event of default to meet the OFTO's future liabilities.
- 8.61. The financial security must be lodged with an independent financial institution. We would expect this institution to have a credit rating of at least A- in a country with a rating of A unless we consent otherwise.

Part C: Incremental Capacity Incentive Adjustment

- 8.62. The NETSO may request that an OFTO make additional capacity available to new or existing generators. If requested, the OFTO is required⁸ to offer terms to the NETSO for providing the additional capacity as long the cost of such additional capacity does not exceed 20 per cent of the original investment cost. The additional capacity investment adjustment (ACA_t) in the licence is designed to compensate the OFTO for providing increased capacity.
- 8.63. The OFTO must submit a notice to us setting out, with supporting evidence, the revenue adjustment that it considers is required to remunerate the costs incurred in providing the additional capacity. The OFTO will include in its cost submission:
- the amount of additional capacity that it is contractually required to provide
 - the capital costs expected to be incurred in providing the additional capacity
 - any corresponding increase in operation and maintenance costs
 - the cost of financing the additional investment in the OFTO's transmission system.
- 8.64. We shall determine the revenue adjustment required to remunerate the efficient costs that we consider to have been reasonably incurred by the OFTO and will notify the OFTO of its determination of the costs. This notice will set the value of ACA_t .

Other conditions

Amended Standard Condition E12 – J5: Restriction of Transmission Revenue: Adjustments

⁸ Under the standard licence conditions and the System Operator- Transmission Owner Code (STC).

- 8.65. This condition incentivises the OFTO to correctly calculate its revenues. Firstly, it allows us to monitor recovery of revenues. It requires the OFTO to report any over or under recovery of annual allowed revenue by 3 per cent or more to us. In the case of an over recovery of 3 per cent or more, the OFTO shall not increase its charges in the next year unless it has demonstrated to our satisfaction that it will not over-recover again in that year. This condition also places similar restrictions on the OFTO if it over-recovers by 4 per cent or more in each of two successive years.

Amended Standard Condition E12 – J6: Provision of Information to the System Operator

- 8.66. This condition requires the OFTO to liaise with the NETSO to inform the TNUoS charge setting process. The OFTO must provide best estimates of its revenue and continue to review these estimates and inform the NETSO of significant changes. It also requires the OFTO to inform us of their estimates and any revisions to these estimates.

Amended Standard Condition E12 – J7: Duration of the Revenue Restriction Provisions

- 8.67. This condition outlines the process that the OFTO must follow if it wishes to disapply part or all of the revenue restriction licence conditions. The OFTO must make a written application for a disapplication in writing to us, specifying those charge restriction conditions to which the request relates. Except where we agree otherwise, no disapplication request will take effect until at least 20 years after licence grant.

Amended Standard Condition E12 – J8: Allowances in respect of Security Costs

- 8.68. The Secretary of State may direct, under section 34 of the Electricity Act 1989 (the Act), the OFTO to provide certain information or advice or to operate in a certain manner during a "security period". This condition allows us to compensate the OFTO for any reasonable costs that it has incurred due to this operation.

Amended Standard Condition E12 – J9: Basis of Transmission Owner Charges

- 8.69. This condition requires the OFTO to prepare a statement, approved by us, which sets out its charging methodology for:
- transmission owner services
 - connection to its transmission system

- outage changes.

8.70. The OFTO will invoice the NETSO for the items listed above.

Transmission Owner Services

8.71. The OFTO provides transmission owner services, and will invoice the NETSO for these services under the STC (they will invoice these as part of their TO general system charge). The TO general system charge should equal $OFTO_t$.

Connection to its Transmission System

8.72. OFTOs will not be remunerated for connection costs through $OFTO_t$, so they will recover connection costs through the TO general system charge. The statement should contain the necessary detail to allow the NETSO to make a reasonable estimate of the charges for which it will become liable.

Outage Change

8.73. Where an OFTO is requested by the NETSO to rearrange a prearranged outage, the OFTO will be able to charge for efficiently incurred costs associated with this. Details on outage planning are contained in the System Operator – Transmission Owner Code (STC).

Amended Standard Condition E12 – J10: Excluded Services

8.74. The OFTO can provide certain services that are not covered by the revenue restriction conditions. The OFTO can charge for these excluded services at the market rate and they will not be included in the amount covered by their regulated revenue ($OFTO_t$). Outage changes are an example of an excluded service.

Amended Standard Condition E12 – J11: The Network Innovation Competition

8.75. The network innovation competition (NIC) is an annual competition. Electricity network companies compete for funding for research, development and demonstration of new technologies, operating and commercial arrangements. Funding will be provided for the best innovation projects which help all network operators understand what they need to do to provide environmental benefits and security of supply at value for money as Great Britain moves to a low carbon economy. This condition sets out the procedure for receiving funding through the NIC and the process for updating the NIC governance document.

Amended Standard Condition E12 – J12: Sulphur Hexafluoride Reporting Requirements

8.76. The OFTO must provide us, on an annual basis, with details of the sulphur hexafluoride (SF₆) emissions associated with its transmission business. This information forms part of the annual reporting requirements under amended standard condition E12 –D1 (Offshore Regulatory Reporting). The OFTO will be required to provide details of its:

- SF₆ bank: This is the total kilograms of SF₆ held by the OFTO at the start of each financial year, both for assets installed on the network and those held in inventory. Each OFTO's SF₆ bank should be calculated according to the methods set out in the Energy Networks Association's (ENA) Engineering Recommendation S38.⁹
- SF₆ emitted: This is the total kilograms of sulphur hexafluoride emitted during asset installation (only if gassed by the OFTO), service life and decommissioning. Service life emissions include those due to leakage (measured through top-ups), those measured during service activity requiring gassing and degassing, and those due to equipment failure resulting in the loss of all gas contained by the asset. The SF₆ emitted value should account for gas recovered. Each OFTO's SF₆ emissions should be calculated according to the methods set out in ENA's Engineering Recommendation S38.

⁹ ENA Engineering Recommendation S38: Reporting of SF₆ Banks, Emissions and Recoveries

Appendix 1: Glossary

A

The Act

The Electricity Act 1989

Asset Transfer

The transfer to the licensee of the transmission assets to which the licence relates.

Authority

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

B

Base Revenue

The transmission revenue of the OFTO before adjustments. It is calculated in accordance with the formula set out in amended standard condition E12-J2 (Restriction of Transmission Revenue: Revenue from Transmission Owner Services) of the Offshore Transmission Licence.

BCA

Bilateral Connection Agreement

Biddable Indexation

A proposed feature of the enduring regulatory regime allowing bidders in a Tender Exercise to specify the amount of their revenue they wish to be indexed to inflation.

CUSC

The Connection and Use of System Code

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.

Discount Rate

The annual percentage rate at which the present value of a future pound, or other unit of account, is assumed to fall away through time.

E

[Electricity Act](#)

The Electricity Act 1989 as amended from time to time.

[ENA](#)

Energy Networks Association

F

[Financial Close](#)

The process by which ownership of the offshore transmission assets is transferred. Often used to refer to a particular day or set of procedures.

G

[Generic OFTO Licence](#)

The non-specific version of the transmission licence which is modified with conditions specific to the particular circumstances of the project when it is granted to the OFTO.

I

[Invitation to Tender \(ITT\) Stage](#)

The stage of a Tender Exercise during which we may determine which Qualifying Bidder becomes the Preferred Bidder or whether to hold a BAFO stage. This stage starts from the distribution of the ITT Document to Qualifying Bidders by Ofgem, and includes the preparation, submission and evaluation of ITT Submissions.

L

[Licence Grant](#)

Following our determination to grant an Offshore Transmission Licence to the Successful Bidder, we confirm such determination in accordance with the Tender Regulations and grants such Offshore Transmission Licence to the Successful Bidder pursuant to section 6(1)(b) of the Electricity Act 1989.

M

[Market Rates Revenue Adjustment \(MRA\)](#)

An adjustment to the base revenue under Amended Standard Condition E12-A2 of the Offshore Transmission Licence to account for any difference between the market rates assumed in the TRS and the market rates on the date that the Offshore Transmission Licence comes into force.

N

[National Electricity Transmission System \(NETS\)](#)

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.

[National Electricity Transmission System Operator \(NETSO\)](#)

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

O

[Offshore Transmission Owner \(OFTO\)](#)

The holder of an Offshore Transmission Licence.

P

[Post-tender Revenue Adjustment \(PTRA\)](#)

An adjustment to the base revenue under Amended Standard Condition E12-A3 of the offshore transmission licence to account for any difference between the Indicative Transfer Value and the Final Transfer Value.

[Preferred Bidder \(PB\)](#)

In relation to a Qualifying Project, the Qualifying Bidder determined by Ofgem following its evaluation of the submissions received, to which Ofgem intends to grant the Offshore Transmission Licence subject to the satisfaction of the conditions specified by Ofgem in accordance with the Tender Regulations in force at that time.

R

[Retail Prices Index \(RPI\)](#)

Is a measure of inflation that measures the aggregate change in consumer prices over time. It differs from the Consumer Prices Index (CPI) in that it measures changes in housing costs and mortgage interest repayments, whereas CPI does not. They are calculated using different formulae and have a number of other more subtle differences.

S

[SF₆](#)

Sulphur Hexafluoride is a colourless, odourless, nontoxic and non-flammable greenhouse gas with a lifetime of 3200 years. It is used in the electricity industry for insulation and current interruption (predominantly in switchgears).

[Successful Bidder \(SB\)](#)

The Preferred Bidder in a Tender Exercise who has resolved the PB Matters to our satisfaction, such that we intend to grant to it an Offshore Transmission Licence.

[System Operator \(SO\)](#)

An entity responsible for coordinating and directing the flow of electricity over a transmission system. The SO for GB is the NETSO.

[System Operator – Transmission Owner Code \(STC\)](#)

The industry code that defines the high level relationship between the NETSO and Transmission Owners setting out the roles, responsibilities, obligations and rights etc of the NETSO and the Transmission Owners.

T

[Tender Revenue Stream \(TRS\)](#)

The revenue established through the tender process, which is the value set out in paragraph 4 of amended standard condition E12–J2 (Restriction of Transmission Revenue: Revenue from Transmission Owner Services) of the OFTO Licence.

[Tender Round](#)

One or more Tender Exercises being held or to be held by Ofgem, with a view to determining the Successful Bidders to whom Offshore Transmission Licences are to be granted for each Qualifying Project subject to such Tender Exercises, commencing on the date specified in a notice given in accordance with the Tender Regulations.

[Transmission Network Use of System \(TNUoS\) charges](#)

Charges made by the NETSO to users of the National Electricity Transmission System for the provision of transmission network services [to recover the tender revenue stream of all OFTOs according to the TNUoS charging methodology in the CUSC].

[Transmission Owner \(TO\)](#)

An owner of a high-voltage transmission system.