

Consultation on the generic Offshore Transmission Owner (OFTO) licence for Tender Round 3

Consultation

Publication date: 7 October 2013
Response deadline: 2 December 2013

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Overview

During 2011 and 2012 we consulted on the generator build option for future tenders under the enduring regime. We published our key decisions on future generator build tenders in July 2013. The first tender round under the enduring regime, Tender Round 3, is due to start in early 2014.

We are consulting on the drafting of the OFTO licence for Tender Round 3 with a focus on the key changes to the licence since Transitional Tender Round 2 implementing, as appropriate, our key decisions on future generator build tenders. We are also consulting on how biddable indexation will be evaluated during the tender process.

Context

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

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

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

Now that the Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations 2013 are in force, we are ready to start running tender exercises under the enduring regime. This document sets out the proposed drafting for licences to be granted under future generator build tenders, specifically under Tender Round 3.

Associated documents

[Generic Offshore Licence for Transitional Tender Round 2 \(Version 1.5\)](#)

[Offshore Electricity Transmission: Statement on future generator build tenders, July 2013](#)

[The Electricity \(Competitive Tenders for Offshore Transmission Licences\) Regulations 2013, February 2013](#)

[KPMG report on Offshore Transmission: An Investor Perspective, December 2012](#)

[Offshore Electricity Transmission: Consultation on licence policy for future tenders, November 2012](#)

Contents

Executive Summary	iv
1. Indexation of revenue	1
Biddable indexation evaluation parameters	1
The real discount rate	2
The inflation assumption	3
Licence drafting	5
2. Refinancing of external debt	7
Refinancing gain share parameters	7
Calculating the refinancing gain and associated revenue adjustment	9
Profiling refinancing gains	9
Calculating the present day gain: the discount rate	10
Sharing the gains: the proportion to be shared with consumers	11
Licence drafting	13
3. Availability incentive – capacity weighting mechanism	14
Background	14
Licence drafting	15
Determining the values of <i>a</i> and <i>b</i>	16
4. Financial security	18
Financial security	18
Financial institution for the security	18
Indexation of the financial security	19
5. Sulphur Hexafluoride (SF₆) emissions reporting	20
6. Other licence drafting changes	23
7. Next Steps	32
Appendices	33
Appendix 1 - Consultation responses and questions	34
Appendix 2 – Additional information on the capacity weighting mechanism	37
Appendix 3 - Glossary	40
Appendix 4 - Feedback questionnaire	45
Appendix 5 - Generic OFTO licence for Tender Round 3	Separate Document
Appendix 6 - Generic OFTO licence for Tender Round 3 (redline from generic OFTO licence for Transitional Tender Round 2 V1.5)	Separate Document
Appendix 7 - OFTO Availability Incentive (ARUP Report)	Separate Document
Appendix 8 - Reporting template for Sulphur Hexafluoride (SF ₆) emissions (Excel)	Separate Document
Appendix 9 - Illustrative revenue model for the generic OFTO licence for Tender Round 3 (Excel)	Separate Document

Executive Summary

Ofgem¹ grants transmission licences to Offshore Transmission Owners (OFTOs) through a competitive tender process. These licences confer a set of obligations, incentives and entitlements on the OFTO.

A transmission licence broadly comprises two parts. The first part sets out the standard conditions, sections A and E of which apply to all OFTOs². These are not the subject of this consultation. The second part sets out the conditions which apply specifically to each transmission business. For OFTOs the modified conditions are called 'amended standard conditions'. Whilst these amended standard conditions are specific to each OFTO, in practice the amended standard conditions in each OFTO licence are very similar.

In this document we consult on the drafting of the generic amended standard conditions (the 'generic OFTO licence') for generator build tenders, specifically those under Tender Round 3 (TR3). The licence drafting builds on the generic OFTO licence used in Transitional Tender Round 2 (TR2)³ implementing, as appropriate, key decisions on future generator build tenders. The main changes to the generic OFTO licence for TR3 are summarised below.

Indexation of revenue

In the July statement on future generator build tenders (the 'July Statement')⁴ we set out our decision to allow bidders to bid the proportion of their revenue to be indexed to inflation. We consult here on the licence drafting to implement this decision and the parameters for evaluating bids with different proportions of revenue indexed.

In order to compare bids with different proportions of revenue indexation we need to convert them to a net present value using a real discount rate and an inflation assumption. For the real discount rate we propose to use the social time preference rate as published by HM Treasury⁵. For inflation, we propose to use a market implied inflation figure.

Refinancing gain share

Following our decision in the July Statement to introduce a refinancing gain share, we are consulting on various parameters necessary for calculating the refinancing gain as well as the licence drafting.

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 [Transmission Licence Standard Conditions](#)

³ [Generic OFTO licence for Transitional Tender Round 2 \(V1.5\)](#)

⁴ [Offshore Electricity Transmission: Statement on future generator build tenders](#)

⁵ The social time preference rate is found in the [Green Book published by HM Treasury](#).

We propose that:

- the OFTO will calculate the refinancing gain in accordance with the principles set out in the licence and Ofgem will subsequently review the calculation, with the option to make changes, where the original calculation has not been made in accordance with the licence, prior to issuing a direction specifying the revenue adjustment.
- refinancing gains will be shared either through an annual adjustment to revenues over the remaining life of the default 20 year revenue period or as a lump sum. We would decide this on a case by case basis with the expectation that the profile of the gain share would mirror the profile of the gain.
- the blended equity Internal Rate of Return (IRR) 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.
- refinancing gains will be shared 50:50.

Availability incentive - capacity weighting mechanism

The capacity weighting mechanism will weight outages based on the proportion of capacity available during a particular outage, with higher capacity outages penalised more heavily. This is intended to incentivise OFTOs to take smaller capacity outages where economic to do so. We consult on the proposed licence drafting and the detailed parameters of the mechanism.

Financial security

The licence requires the OFTO to procure financial security no later than 5 years before the OFTO's revenue stream is due to end. This financial security is maintained until the end of the revenue period.

We propose that the value of the financial security should increase annually over the 5 years it is in place in line with base transmission revenue. We also propose that the financial security should be lodged with an institution with a credit rating equivalent to at least an "A-" with a credit rating agency recognised by Ofgem (currently S&P, Moody's, Fitch and DBRS) residing in a country with a credit rating of at least "A".

Sulphur Hexafluoride (SF₆) emissions reporting

Sulphur Hexafluoride (SF₆) is a potent greenhouse gas which is increasingly used in electrical switchgear equipment, including in OFTO systems. In order to monitor the extent to which OFTOs are contributing to SF₆ emissions we propose to introduce a reporting requirement in the licence. We consult on the proposed licence drafting.

Next steps

Following this consultation on the licence we expect to publish a revised version of the generic OFTO licence ahead of the Invitation to Tender stage (ITT) for TR3.

1. Indexation of revenue

Chapter Summary

In the July statement on future generator build tenders (the 'July Statement') we announced our decision to allow bidders to bid the proportion of their revenue to be indexed to inflation. This chapter sets out the proposed licence drafting to implement biddable indexation. It also sets out our minded-to positions on the discount rate and inflation assumptions to be used to compare bids as part of the evaluation of bids during the tender process.

Question box

Question 1.1: Are there any other options or implications you think we should consider in determining the parameters to use for implementing biddable indexation?

Question 1.2: Do you agree with the rationale we set out for adopting the parameters identified in paragraph 1.6 as minded-to positions?

Question 1.3 Do you agree that using the breakeven inflation, calculated in accordance with the method described in paragraph 1.15, is a suitable market implied inflation figure to use in evaluating biddable indexation bids?

Question 1.4 Are there any other options we should consider when selecting a market implied inflation figure?

Question 1.5: Do you agree with the proposed amendment to the calculation of Base Transmission Revenue (BR) to implement biddable indexation?

Biddable indexation evaluation parameters

- 1.1. The July Statement included a decision to adopt a policy of biddable indexation for Tender Round 3 (TR3). This would allow bidders to bid what proportion of the revenue stream they would like to have indexed to the Retail Prices Index (RPI).
- 1.2. Bids based on biddable indexation will consist of two key numbers.
 1. A first year tender revenue stream (TRS) requirement.
 2. A percentage representing the proportion of that TRS that will increase with RPI over the length of the revenue term.
- 1.3. The proportion of TRS not indexed to RPI will remain constant in nominal terms. Bidders are likely to opt for different proportions of TRS to be indexed

based on their capital structure. Given the natural index linked costs an OFTO faces we expect bidders to opt for the proportion of TRS indexed to be in the range 15-100%. This will mean that their bids would not be directly comparable in real terms to the extent that the proportion of revenue indexed in each bid is not the same.

- 1.4. The biddable indexation approach does not prevent bidders from making their own inflation assumptions in their bid models, just as in the transitional rounds. The inflation assumption to be used for evaluation purposes is separate to the inflation assumption in a bidder's model.
- 1.5. In order to compare bids on equal terms it is necessary to convert them to a net present value. Our proposed approach is to use an inflation assumption to project the actual cash flows for the default 20 year revenue period based on the proposed proportion of TRS indexed and then discount those cash flows to present values. We can then sum them to produce a total present value of revenues. In order to do this we need to consider the following parameters when evaluating biddable indexation bids:
 - the **real discount rate**
 - the **inflation assumption.**
- 1.6. For each of these parameters we set out below the arguments for and against various different options, along with the position that we are minded to adopt. In summary our minded-to position is that:
 - we will use the Social Time Preference Rate (STPR) as the real discount rate
 - we will use a market implied inflation figure for the inflation assumption.

The real discount rate

- 1.7. We have considered two options for this parameter.
 1. The Social Time Preference Rate (STPR).
 2. The equity Internal Rate of Return (IRR) from bidders' models.
- 1.8. The key consideration when assessing which discount rate to use is whose time preference each rate reflects. For use in assessing indexation bids it is appropriate to use a rate which reflects the time preferences of the party who has to pay. In this case it will be consumers.
- 1.9. The STPR is commonly used in government cost benefit analyses when looking at the trade-off between current and future costs and benefits. For this

purpose HM Treasury provide guidance in the form of the publicly available Green Book which states that the social time preference rate for government cost benefit analyses should be 3.5% in real terms⁶. The fact that the STPR reflects consumer preferences for receiving social benefits sooner rather than later means it is the appropriate rate to use when discounting bids into net present value terms. This approach would therefore be clear and consistent for all bidders.

- 1.10. We note that HM Treasury's estimate of the STPR is only one estimate of the STPR and that others may have different views. In particular it is possible that the STPR of consumers may be different to that of taxpayers. The Joint Regulators Group (JRG)⁷ concluded that the HM Treasury's estimate of 3.5% was appropriate to use in cost benefit analyses where benefit accrued to the 'public'. It therefore seems reasonable to use this rate of 3.5%⁸ when attempting to reflect the time preferences of consumers.
- 1.11. The alternative option is to use the equity IRR stated in the financial model used at financial close. However, the equity IRR reflects the time preferences of shareholders rather than consumers and so is not appropriate. Moreover, this option would mean that different bidders would be evaluated with different discount rates, which we do not believe provides an acceptable basis for fair comparison of bids.

The inflation assumption

- 1.12. We have considered the following two options for inflation assumptions to use when evaluating biddable indexation bids.
 1. Market implied inflation.
 2. Official inflation target set by the Bank of England.
- 1.13. We are minded to use a market implied inflation figure when calculating the net present value of biddable indexation bids. Such a market implied figure could be relatively easily determined from market data as available through, for example, the Bank of England website. We believe that this provides an objective value for commonly held perceptions of future inflation. Whilst market implied inflation figures are not inflation forecasts they do indicate the inflation rate that market participants are using when trading inflation-linked securities. By contrast, official inflation targets may or may not represent market expectations about inflation at any given point in time.

⁶ See the [Green Book](#) (HM Treasury).

⁷ See '[Discounting for CBAs involving private investment but public benefit](#)' The application of the STPR discussed in this document is different though it is significant that the JRG considered it suitable to use 3.5% when considering benefit arising to the 'public'.

⁸ Or as updated by HM Treasury.

- 1.14. Bidders will be informed prior to bid submission of the inflation assumption that will be used for evaluation purposes. We will provide this rate in the Invitation to Tender (ITT) document. We set out in paragraph 1.15 below an example of the approach we might take for determining the inflation assumption.
- 1.15. The breakeven inflation⁹ implied by zero coupon index-linked gilts (ILGs), for example, provides a reasonable measure of market implied inflation for use in evaluating bids. However, whilst we are seeking a 20 year inflation figure the yields on long-dated ILGs are depressed compared to 10 year ILGs. This is due to distortions in the market for longer dated gilts, particularly as a result of accounting requirements on pension schemes. This, in turn, creates a distortion in breakeven inflation estimates¹¹. The Competition Commission has typically considered that 10 year ILGs are free of this distortion and sufficiently reflective of the long-term risk-free rate¹⁰. This suggests that 10 year breakeven inflation is sufficiently reflective of inflation expectations on long-dated bonds and would be appropriate. As at 26 September 2013 this breakeven inflation figure¹¹ was 3.08%. This approach to determining breakeven inflation is an established method and is used in setting the real cost of debt for onshore network price controls. We believe that using a rate determined this way would provide bidders with sufficient clarity to understand how their bid will be evaluated.
- 1.16. There would be complexity involved in using an inflation assumption derived from official inflation targets since we would need a measure of RPI inflation, whilst the official target is set in terms of Consumer Prices Index (CPI). There have been studies of the relationship between RPI and CPI but we believe that the adjustment required would not provide sufficient clarity to stakeholders, particularly as the size of the adjustment may need to change over time.

Question Box

Question 1.1: Are there any other options or implications you think we should consider in determining the parameters to use for implementing biddable indexation?

Question 1.2: Do you agree with the rationale we set out for adopting the parameters identified in paragraph 1.6 as minded-to positions?

⁹ Breakeven inflation is the difference between the yield on nominal gilts and the yield on index-linked gilts of a similar maturity.

¹⁰ For example, in its recommendation of the cost of capital for Heathrow and Gatwick airports. See: A report on the economic regulation of the London airports companies (Heathrow Airport Ltd and Gatwick Airport Ltd) - [Report by the Competition Commission](#)

¹¹ Series name: [Yield from British Government Securities, 10 year Inflation Zero Coupon](#). Series code: IUDMIZC. (Bank of England).

Question 1.3 Do you agree that using the breakeven inflation, calculated in accordance with the method described in paragraph 1.15, is a suitable market implied inflation figure to use in evaluating biddable indexation bids?

Question 1.4 Are there any other options we should consider when selecting a market implied inflation figure?

Licence drafting

1.17. In order to implement biddable indexation, a change is required to the way the OFTO's revenue is calculated in amended standard condition E12-J2 (Restriction of Transmission Revenue: Revenue from Transmission Owner Services). This change is set out in the generic OFTO licence (Appendices 5 and 6), reflected in the revenue model (Appendix 9) and explained below.

1.18. Under Transitional Tender Rounds 1 and 2 (TR1 and TR2) the licensee's Adjusted Tender Revenue (ATR) is the annual revenue the licensee is entitled to before adjustments for indexation and length of revenue year. It comprises the following terms:

$$\text{ATR} = \text{TRS} + \text{MRA} + \text{PTRA}$$

where:

- **TRS** – Tender Revenue Stream: this is the revenue established through the tender process.
- **MRA** – Market Rate Revenue Adjustment: this accounts for the difference (if any) between rates assumed for the purpose of the TRS at licence grant and the market rates on the date on which the MRA is directed (normally the date of financial close).
- **PTRA** – Post Tender Revenue Adjustment: this accounts for the difference (if any) between the indicative asset transfer value for the purpose of the tender process and the final transfer value following the completion of the Authority's final assessment of costs (where this occurs after the licence is granted).

1.19. For projects to date, 100% of the ATR has been adjusted for inflation (in line with RPI) to calculate the licensee's Base Transmission Revenue (BR).

1.20. In order to implement biddable indexation, the calculation of BR has to be modified. The proposed amendment is to remove the calculation of ATR and instead calculate BR using the values of TRS, MRA and PTRA directly. The proposed calculation of BR will also introduce two new biddable indexation (BI) terms, BI_{TRS} which is a constant between 0 and 1 representing the

proportion of the TRS indexed to RPI, and BI_{RA} which is a constant between 0 and 1 representing the proportion of the MRA and PTRA indexed to RPI¹².

- 1.21. In the proposed new calculation, the TRS is multiplied by the constant BI_{TRS} and the Revenue Indexation Adjustment Term (RIT). This calculation is repeated for MRA and PTRA using the BI_{RA} constant. These two parts are summed together to give the annual revenue indexed to inflation. The TRS is also multiplied by $(1-BI_{TRS})$ and the MRA and PTRA are multiplied by $(1-BI_{RA})$. These two parts are added together to calculate the revenue not indexed to RPI.
- 1.22. The Base Transmission Revenue (BR) is the sum of the revenue indexed to RPI and the revenue not indexed to RPI.

Question box

Question 1.5: Do you agree with the proposed amendment to the calculation of Base Transmission Revenue (BR) to implement biddable indexation?

¹² Where bidders are expecting to make use of the MRA, they would need to clarify in their ITT bid the proportion of the MRA they would like to have indexed to RPI. All bidders would also need to clarify the proportion of the PTRA they would expect to be indexed to RPI were it to be used.

2. Refinancing of external debt

Chapter Summary

In the July Statement we announced our decision to introduce a refinancing gain share of OFTO senior debt. In this chapter we consult on various parameters necessary for calculating the refinancing gain and associated revenue adjustments as well as the licence drafting to implement these changes.

Question box

Question 2.1: Are there any other options or implications you think we should consider in determining the parameters to use for implementing a refinancing gain share?

Question 2.2: Do you agree with the rationale we set out for adopting the parameters identified in paragraph 2.3 as minded-to positions?

Question 2.3: Do you think the scope of the refinancing gain share, and in particular the definition of the debt¹³ to which it will apply, is appropriate?

Question 2.4: Do you have any views on the proposed licence drafting for the refinancing gain share set out in amended standard condition E12-J3 (Restriction of Transmission Revenue: Allowed Pass-through items) of the Licence (Appendices 5 and 6)?

Refinancing gain share parameters

- 2.1. One of the decisions in the July statement relates to our policy for treating refinancing gains realised by OFTOs. We decided to introduce a gain share mechanism within the OFTO licence in relation to refinancing of OFTO senior debt. We are consulting on using the term 'external debt' rather than 'senior debt' since the debt we identify through the licence definition will be debt provided by banks and capital markets rather than shareholders. We believe this definition is more appropriate since it is possible that a corporately financed bid may have senior and subordinated loans which ought to be outside of the scope of the gain share as per the originally stated policy intention. Conversely there may be external mezzanine or junior debt which ought to be in scope. The definition of 'external debt' is included in the licence for consultation. In this document we use the term 'external debt' to be consistent with the version of the licence drafting we are consulting on.

¹³ Defined in amended standard condition E12-A1 (Definitions and Interpretation) of the generic OFTO licence (Appendices 5 and 6).

- 2.2. In order to implement this policy of sharing refinancing gains we need to decide on the approach and parameters for calculating the refinancing gains and associated adjustments to allowed revenue. The four parameters in question are:
1. **How to calculate** the refinancing gain and associated revenue adjustment.
 2. The **profile** to be applied for the sharing of refinancing gains.
 3. The **discount rate** to be used when calculating the present day gain expected based on changes in future cash flows.
 4. The **proportion** of the gains to be shared for the consumer benefit.
- 2.3. For each of these parameters we set out below the arguments for and against various options along with the position that we are minded to adopt. In summary our minded-to views are that:
1. The OFTO in question will calculate the refinancing gain in accordance with the principles set out in the licence drafting (see paragraphs 2.22 to 2.25) and Ofgem will subsequently review the calculation, with the option to make changes, where the original calculation has not been made in accordance with the licence, prior to issuing a direction to specify the amount of the revenue adjustment.
 2. Refinancing gains will be shared either through an annual adjustment to revenues over the remaining life of the default 20 year revenue period¹⁴ or as a lump sum. We would decide this on a case by case basis, with the expectation that the profile of the gain share would mirror the profile of the gain.
 3. The blended equity IRR 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.
 4. Refinancing gains will be shared 50:50.
- 2.4. In developing our minded-to views on the parameters of the refinancing gain share and in drafting the refinancing gain share in the generic OFTO licence, we have had regard to the latest guidance published by HM Treasury on refinancing gain shares in Private Finance Initiative (PFI) contracts¹⁵.

¹⁴ This adjustment would be constant in real terms.

¹⁵ [HM Treasury: Private Finance 2 \(PF2\)](#)

Calculating the refinancing gain and associated revenue adjustment

- 2.5. We have considered three options for calculating the refinancing gain¹⁶ and associated revenue adjustment.
1. Ofgem calculates the adjustment.
 2. The OFTO who receives the gain calculates the adjustment.
- 2.6. We are minded to require the OFTO in question to calculate the refinancing gain and associated revenue adjustment. We believe that the OFTO is best placed to calculate the gain since it will be in full possession of the relevant information. Also, if the OFTO calculates the gain and shares their information with Ofgem, then Ofgem will be in a position to objectively review the calculations, which mitigates the risk of the OFTO incorrectly calculating the gain. Ultimately Ofgem will direct the amount of the revenue adjustment based on the OFTO's calculation.
- 2.7. If Ofgem were to calculate the gain then it would first need to obtain a significant amount of information from the OFTO and then review that information. This would be a significant regulatory burden, particularly if there were a need for several iterations of information provision.
- 2.8. If we were to implement our minded-to option we would make it a requirement of the licence that, in the event that an OFTO undertakes a refinancing, they must notify Ofgem of the refinancing and the associated gain. This must be accompanied by submission of calculations to show how the gain was calculated. Ofgem would then issue a direction specifying the amount of the gain. This would be based on the calculations presented, although it may result in a different gain if we believe that changes are required in order to bring the calculations in line with the principles for calculating refinancing gains contained within the licence (see paragraphs 2.22 to 2.25).

Profiling refinancing gains

- 2.9. Once a refinancing has taken place and a gain has been realised, this gain will need to be shared. There are three possible profiles for this gain share.
1. The gain is always shared as a lump sum payment by the OFTO through a one off reduction to its annual revenue.

¹⁶ "Refinancing gain" is defined in the attached licence drafting. Broadly the definition refers to the actual cash gain realised rather than the accounting gain recognised.

2. The gain is always shared as an annual adjustment to OFTO revenue over the remainder of the revenue period. The adjustment would be constant in real terms.
 3. The gain is shared on a case by case basis in a profile that matches the profile of the cash flows that give rise to the gain (ie, either a lump sum or an annual adjustment).
- 2.10. We are minded to determine the profile of the gain share on a case by case basis. We expect that our approach will be to match the profile of the gain share to the profile of the cash flows that give rise to the gain. We believe this is likely to be most manageable for all parties concerned from a cash flow perspective and shares risk and rewards appropriately between the OFTO and consumers. Whilst there is some additional complexity in calculating an adjustment in terms of changes to annual revenues, we are confident that the complexity will be manageable and not create an undue regulatory burden.
- 2.11. Whilst we expect that we might match the profile of the gain share to the profile of the gain, there may be instances in which this is not appropriate. For example, if following the profile of the gain would lead to increased TRS payments in future, this may not be appropriate. We would of course always seek to ensure that the cash flow impact on all affected parties was acceptable.
- 2.12. The cash flow profile of the actual gain might be either a lump sum or a series of annual savings. In the event that the gain arises as a series of annual cash flow savings, then requiring the gain share to be treated as a lump sum would cause a cash flow short fall for the OFTO. There would be a cost associated with filling this short fall which would have to be taken into account in the calculation of the overall gain. Incurring such a cost would not appear to be in consumers' best interests.
- 2.13. If the gain arose as a lump sum, then spreading the gain over the remainder of the revenue entitlement period introduces unnecessary complexity as well as a credit risk for the consumer. For example, if the OFTO were to have its licence revoked at some future point then consumers would not receive their full share of the gain, whilst the OFTO would have had more than its share.
- 2.14. In implementing this policy we are minded to use, for the calculation of the annual adjustment, the same discount rate as we use for calculating the gain in the first instance. The policy options for this parameter, along with our minded-to position are set out below.

Calculating the present day gain: the discount rate

- 2.15. It is possible that a refinancing gain may be realised from a reduction in the ongoing financing costs that an OFTO must pay. In order to calculate the net present value of such a gain we will need to set a discount rate. We have

considered two options for the discount rate used to calculate the net present value.

1. The blended equity Internal Rate of Return (IRR)¹⁷ from the financial model used to direct the MRA at financial close¹⁸.
 2. The Social Time Preference Rate (STPR)¹⁹.
- 2.16. The discount rate used should reflect the time preferences of the party whose gain is being shared, namely shareholders. We are therefore minded to use the blended equity IRR from the OFTO financial model used to direct the MRA when calculating the present value of a gain. We believe this is the most appropriate option because the gain is essentially a projected change in equity cash flows and therefore we should calculate the present value from the perspective of equity holders. We believe it is appropriate to use the rate from the financial model used to direct the MRA because it is objectively identifiable. Additionally, this reflects equity holders' original expectations for returns in the OFTO. Since it is relatively straightforward to identify the rate within the relevant model we do not believe the slight increase in complexity from using a different rate for each OFTO will create an unacceptable regulatory burden.
- 2.17. As detailed earlier, the STPR reflects the preference of consumers generally for receiving social benefits sooner rather than later. However, because it does not reflect the time preferences of the person who is creating the gain (namely the OFTO) we do not believe it is the appropriate discount rate to use in this scenario.

Sharing the gains: the proportion to be shared with consumers

- 2.18. We have considered three main options for the proportion of gains that should be shared for the consumer benefit.
1. Gains could be shared 50:50.
 2. Gains could be shared in a fixed ratio other than 50:50.

¹⁷ The blended equity IRR is the internal rate of return arising from all financing cash flows between the equity holders and the OFTO. Typically this will include payments for subscription of shares, receipt of dividends, lending of shareholder loans, repayment of shareholder loans and interest on shareholder loans.

¹⁸ The MRA is the market rate revenue adjustment and is usually directed on the day of financial close. In determining this adjustment Ofgem has to use a copy of the bidder's financial model.

¹⁹ We expect that if we were to use the social time preference rate (STPR) we would use the value specified in the [Green Book \(HM Treasury\)](#). This currently specifies the STPR as 3.5%.

3. Gains could be shared in different proportions linked to the size of the gain with more being shared for consumers from larger gains.
- 2.19. We are minded to share refinancing gains in the ratio 50:50 on the grounds that it is clear, simple and should provide sufficient incentive to continue to undertake refinancings. It is in consumer interests that refinancing takes place for two reasons. Firstly, it provides the potential for consumers to benefit from the refinancing gain share. Secondly, it allows lenders to recycle their capital, which frees them up to lend again on future projects and so reduce the cost of debt for the sector.
- 2.20. We have also considered sharing in a ratio other than 50:50. This would be a simple calculation however it is not clear what that ratio should be set at so as to ensure a fair share of the gain was enjoyed by both the OFTO and the consumer. Indeed, there are no clear arguments leading to a specific ratio other than 50:50. Setting the ratio is inherently a matter of judgement and given that there are essentially two parties involved, namely OFTOs and consumers, it seems appropriate to share the gain equally between them. We also note the good deal received by consumers at the outset as a result of competition and the need to avoid creating a refinancing gain share which could harm competition.
- 2.21. The final option we considered was giving consumers a greater share of larger gains. We do not believe this is such a suitable option because it is more complex and risks not incentivising OFTOs to pursue gains because their potential share in a large refinancing might be quite small. Conversely, there is no need for an OFTO to have a larger share of the gain for smaller gains if they are adequately incentivised to refinance with a 50% sharing proportion.

Question box

Question 2.1: Are there any other options or implications you think we should consider in determining the parameters to use for implementing a refinancing gain share?

Question 2.2: Do you agree with the rationale we set out for adopting the parameters identified in paragraph 2.3 as minded-to positions?

Question 2.3: Do you think the scope of the refinancing gain share, and in particular the definition of the debt²⁰ to which it will apply, is appropriate?

²⁰ Defined in amended standard condition E12-A1 (Definitions and Interpretation) of the generic OFTO licence (Appendices 5 and 6).

Licence drafting

- 2.22. We propose to implement the refinancing gain share as a pass-through item in amended standard condition E12-J3 (Restriction of Transmission Revenue: Pass-through items). A pass-through allows the OFTO's revenue to be adjusted either upwards or downwards for certain costs incurred or savings made by the licensee. The proposed drafting of the pass-through is set out in amended standard condition E12-J3 of the generic OFTO licence (Appendices 5 and 6) and implements the minded-to positions set out above.
- 2.23. The proposed licence drafting sets out the financial transactions which could qualify for a refinancing gain share and those which are exempt from sharing the gains of a refinancing. In broad terms, the OFTO will be required to share the gains of any refinancing of external debt. The only exemption to the refinancing gain share is where the refinancing is required to rescue the OFTO from financial difficulty. We do not think it would be in the best interest of consumers to share any gain from such a refinancing as it may jeopardise the financial stability of the OFTO which we do not believe would be in the wider interest of consumers.
- 2.24. The proposed licence drafting sets out that the licensee must notify the Authority at least three months ahead of when a refinancing is expected to take place and provide the Authority with sufficient information, including the value of the proposed gain and gain share and calculations to show how they are calculated, for the Authority to direct the value of the refinancing gain share (RFG). Failure to notify the Authority of an expected refinancing in accordance with the licence requirement would be a breach of the licence condition.
- 2.25. The licence also describes the way the refinancing gain and RFG are required to be calculated and sets out the process through which the RFG is determined by Ofgem.

Question Box

Question 2.4: Do you have any views on the proposed licence drafting for the refinancing gain share set out in amended standard condition E12-J3 (Restriction of Transmission Revenue: Allowed Pass-through items) of the Licence (Appendices 5 and 6)?

3. Availability incentive – capacity weighting mechanism

Chapter Summary

Following our decision in the July statement to introduce a capacity weighting mechanism to the availability incentive, this chapter consults on the proposed licence drafting for the mechanism.

Question box

Question 3.1: Do you have any views on the drafting of the capacity weighting mechanism in the generic OFTO licence?

Question 3.2: Do you agree with our rationale for setting the proposed values of a and b at $a=1$ and $b=1.3$?

Question 3.3: Do you agree with our proposed approach to use the same values of a and b for all projects in TR3?

Background

- 3.1. The availability incentive is designed to incentivise the OFTO to maximise system availability and repair faults promptly. As set out in the July statement, the generic OFTO licence for TR3 will include an availability incentive that will build on the incentive used in TR2 and introduce a capacity weighting mechanism that will weight outages based on the proportion of transmission capacity available during a particular outage, with higher capacity outages penalised more heavily. This will mean that, for a two export cable system, for example, the OFTO would incur lower availability incentive penalties if it took each cable out for one hour in sequence than if it took both cables out for one hour simultaneously.
- 3.2. Before drafting the licence for the capacity weighting mechanism we contracted ARUP to produce a report examining the affect of different capacity weightings on OFTO revenue for various offshore transmission configurations and for different outage scenarios. ARUP's findings have been published alongside this report (Appendix 7).
- 3.3. As well as ARUP's analysis on the impact of the capacity weighting mechanism on the OFTO, we have also considered the potential impact of the capacity weighting mechanism on generators. Given the intermittency of wind power and the typical load profile on offshore windfarms, a generator would be likely

to be able to export more power if the OFTO took multiple small capacity outages rather than taking these outages as one larger capacity outage and therefore such an approach to the incentive mechanism would be beneficial.

- 3.4. The capacity weighting mechanism in the OFTO's availability incentive is aimed at better reflecting these values in the OFTO's availability incentive through:
- lowering penalties for smaller capacity outages, potentially leading to a lower TRS bid at the ITT stage; and
 - incentivising the OFTO to take smaller capacity outages where this is possible and cost effective.
- 3.5. Further detail on the capacity weighting mechanism is provided in Appendix 2.
- 3.6. The algebra to implement the capacity weighting mechanism is set out in Part A of amended standard condition E12-J4 (Restriction of Transmission Revenue: Annual Revenue Adjustments).
- 3.7. A revenue model including the capacity weighting mechanism is provided in Appendix 9.

Licence drafting

- 3.8. The capacity weighting mechanism uses two constants, a and b , to determine how each outage is weighted according to the proportion of the total capacity that is unavailable. The weighted capacity of an outage is calculated as follows:

$$\text{weighted capacity (\%)} = a \times C^b$$

where:

- C represents the capacity of the outage measured as a proportion of the total capacity of the OFTO's transmission system and therefore is a value between 0 and 1.
 - a is the coefficient of C
 - b is the exponent of C
- 3.9. The mechanisms under TR1 and TR2 are structured such that a and b are both equal to 1. In this case the penalty received is linearly proportional to the total volume of the outage (the capacity multiplied by the duration of the outage). This means that a 1 hour outage of 100% capacity would receive the same penalty as two separate 1 hour outages of 50% capacity.

- 3.10. Changing the value of a has the effect of scaling up (when a is greater than 1) the capacity of an outage. Changing the value of b has the effect of weighting outages according to their capacity. To incentivise smaller outages b needs to be greater than 1. Figures A2.1 and A2.2 in Appendix 2 show how the values of a and b affect the relative availability incentive penalties received for different capacity outages of a given duration.

Determining the values of a and b

- 3.11. We propose that a should not be changed from the value 1 for TR3 for those 100% capacity outages which are unavoidable (unplanned or necessary as a result of asset configuration) as the current penalty under TR2 is already an incentive to minimise the number and duration of these outages and we believe OFTOs should not be additionally penalised under the capacity weighting mechanism.
- 3.12. We believe that the value of b should be set such that penalties under the availability incentive for different sized capacity outages reflect the relative impact of different sized capacity outages to the generator. Given that the generator is likely to lose more revenue during a large capacity outage than during equivalent multiple small capacity outages we propose that b should be increased above 1 in order to introduce a capacity weighting element to the availability incentive.
- 3.13. Having considered the analysis presented by ARUP (Appendix 7) and having considered the potential impact of the capacity weighting mechanism on generators we propose that the value of b is set at 1.3 for TR3.
- 3.14. Overall **our proposed values of a and b for the generic OFTO licence for TR3 are $a=1$ and $b=1.3$** . We propose that these will be the values for all projects in TR3.
- 3.15. The impact of the proposed values of a and b on penalties is shown by the red line in Figure 3.1 on the following page. The blue line shows the relationship between outage capacity and availability incentive penalty for TR1 and TR2.

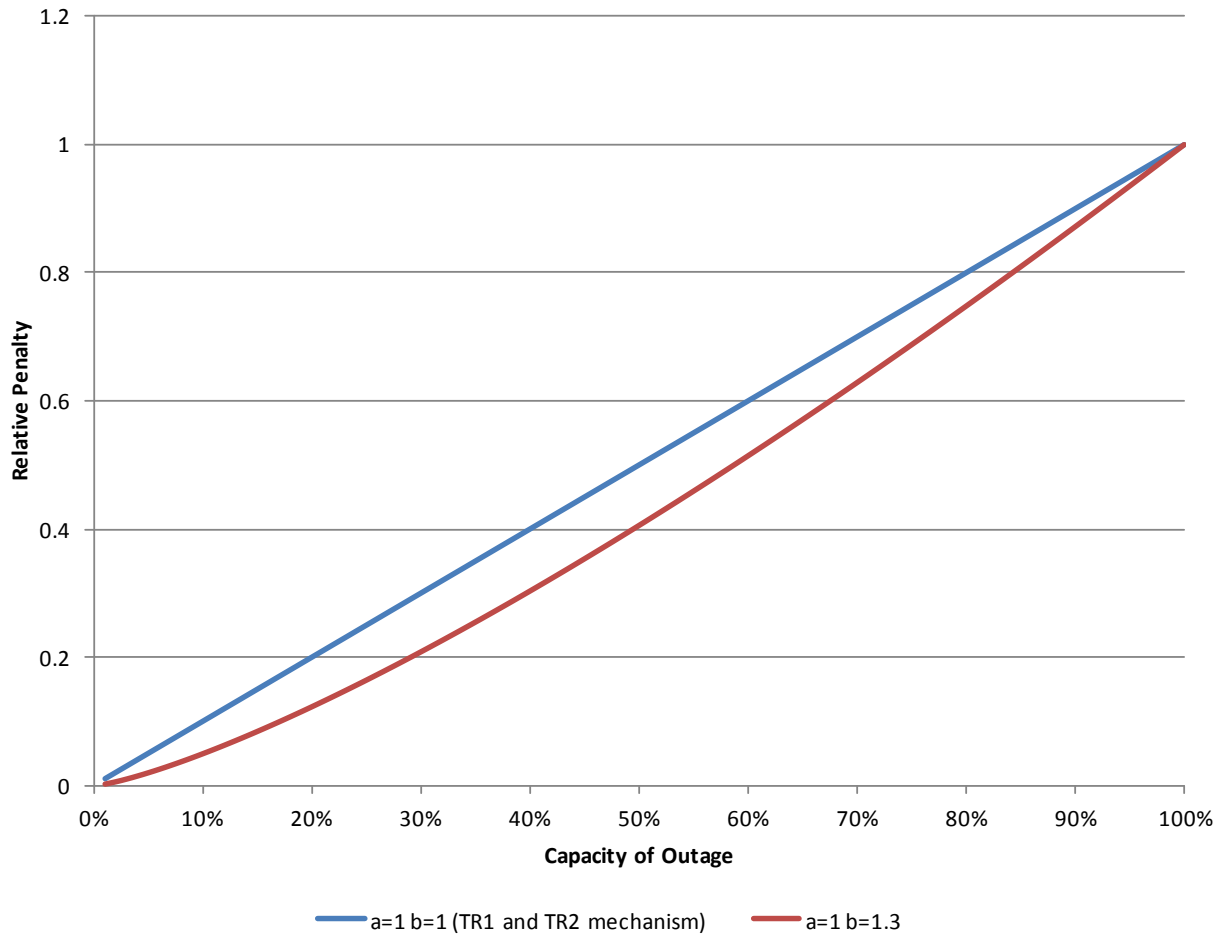


Figure 3.1: Graph showing the impact of a and b (capacity weighting mechanism) on penalties under the availability incentive

Question box

Question 3.1: Do you have any views on the drafting of the capacity weighting mechanism in the generic OFTO licence?

Question 3.2: Do you agree with our rationale for setting the proposed values of a and b at $a=1$ and $b=1.3$?

Question 3.3: Do you agree with our approach to use the same values of a and b for all projects in TR3?

4. Financial security

Chapter Summary

The licence requires the OFTO to procure financial security no later than 5 years before the OFTO's revenue stream is due to end. In this chapter we clarify aspects of the financial security.

Question box

Question 4.1: Do you agree with our proposed requirements for the credit rating of the financial institution holding the financial security?

Question 4.2: Do you agree with our proposal to increase the value of the financial security in line with base transmission revenue?

Question 4.3: Do you have any views on the licence drafting proposed in Part B of amended standard condition E12-J4 (Restriction of Transmission Revenue: Annual Revenue Adjustment)?

Financial security

- 4.1. Availability incentive penalties are paid in the year after they are accrued, with the potential to roll over for up to five years for a large outage (50% of base transmission revenue is the maximum penalty paid out over up to 5 years). The licence requires the OFTO to procure financial security no later than 5 years before the OFTO's revenue stream is due to end²¹. The security may be called upon to cover financial liabilities incurred through amended standard condition E12 – J4 (Part A: Transmission System Availability Incentive) which are not paid through the normal revenue adjustment method.
- 4.2. We consider it appropriate to clarify certain areas of the financial security, following feedback from stakeholders involved in TR1 and TR2. These areas are detailed below.

Financial institution for the security

- 4.3. The licence requires the OFTO to submit a notice to Ofgem no later than 5 years and 3 months before the OFTO's revenue stream is due to end, setting

²¹ For OFTOs with a 20 year revenue stream, the financial security must be in place no later than 16 years after the licence comes into force.

out the proposed financial security arrangements, including details of the independent financial institution with which the financial security will be held.

- 4.4. We propose that the financial security should be lodged with an institution with a credit rating equivalent to at least an "A-" with a credit rating agency recognised by Ofgem (currently S&P, Moody's, Fitch and DBRS) residing in a country with a credit rating of at least "A" unless otherwise agreed with Ofgem. This proposal aligns with the standard we set when an OFTO requests alternative credit rating arrangements under Standard Condition E11 (Credit Rating).

Question box

Question 4.1: Do you agree with our proposed requirements for the credit rating of the financial institution holding the financial security?

Indexation of the financial security

- 4.5. Licence drafting in Part B of amended standard condition E12-J4 (Restriction of Transmission Revenue: Annual Revenue Adjustment) makes it clear that a minimum of 50% of the base transmission revenue must be procured as financial security by no later than 16 years after the licence comes into force.
- 4.6. The TR2 licence provisions do not state whether the security should increase in line with base transmission revenue (which under TR1 and TR2 licences will be fully indexed but under TR3 licences may be partially or fully indexed).
- 4.7. We propose that the financial security should increase annually in line with base transmission revenue. In the final revenue year the value of the financial security should be based on the base transmission revenue as if that year were a full year. We believe this will ensure that the financial security remains a strong incentive on the OFTO to maintain its transmission system throughout the final five years of the OFTO's revenue period.
- 4.8. This annual increase in the financial security is reflected in new licence drafting in Part B of amended standard condition E12-J4 (Restriction of Transmission Revenue: Annual Revenue Adjustment).

Question Box

Question 4.2: Do you agree with our proposal to increase the value of the financial security in line with base transmission revenue?

Question 4.3: Do you have any views on the licence drafting proposed in Part B of amended standard condition E12-J4 (Restriction of Transmission Revenue: Annual Revenue Adjustment)?

5. Sulphur Hexafluoride (SF₆) emissions reporting

Chapter Summary

In order to monitor the extent to which OFTOs are contributing to SF₆ emissions we propose to introduce a reporting requirement in the licence. This chapter consults on the proposed licence drafting.

Question Box

Question 5.1: Do you agree with our decision to introduce a reporting requirement on SF₆ emissions?

Question 5.2: Do you have any views on the licence drafting of amended standard condition E12-J12 (Sulphur Hexafluoride Reporting Requirements)?

Question 5.3: Do you have any views on the proposed approach to reporting emissions?

- 5.1. Sulphur Hexafluoride (SF₆) is a colourless, odourless, non-toxic, non-flammable gas. It is also one of the most potent greenhouse gases with a lifetime of 3200 years. There are very few natural sinks for SF₆ meaning that virtually all emissions accumulate in the atmosphere. SF₆ has a Global Warming Potential (GWP) of 23,900 over 100 years (relative to carbon dioxide (CO₂) which has a GWP of 1 over 100 years)²².
- 5.2. SF₆ is an excellent insulator and is used for insulation and current interruption in the electricity industry (predominantly in switchgears). Where an OFTO owns switchgear or other equipment containing SF₆ it has to comply with various regulations surrounding disposal and handling of SF₆; however, there is no licence mechanism to monitor the amount of SF₆ used on offshore transmission assets.
- 5.3. We propose to introduce a simple monitoring and reporting requirement on OFTOs similar to the SF₆ data requirement in distribution licences²³. This information will enable us to assess the extent to which offshore transmission assets contribute to SF₆ emissions. However, whereas distribution licensees must report SF₆ emissions as part of their wider business carbon footprinting requirements and are publicly ranked based on their environmental performance, we do not propose, at this stage, to introduce a wider business

²² [Global Warming Potentials of greenhouse gases \(United Nations Framework on Climate Change\)](#)

²³ For more details see [the DCPR5 Regulatory Instructions and Guidance](#) (Cost and Revenue Reporting and Glossary of Terms)

carbon footprinting requirement on OFTOs. We feel that, at the moment, such a requirement would be disproportionate to the benefit it could bring. Nor do we propose to rank OFTOs by their SF₆ emissions because we recognise that reported annual emissions are likely to vary considerably year on year, depending on whether top-ups of SF₆ gas to the switchgear were required. Therefore we consider that a ranking system would not be meaningful.

- 5.4. The onshore transmission licences contain a financial incentive on licensees to minimise annual SF₆ emissions. We do not think this is appropriate for OFTOs because the onshore incentive is intended to incentivise licensees to replace older, leakier switchgear equipment. On offshore transmission systems the equipment installed will be new and is unlikely to require replacing during the initial revenue term, therefore there is no need to financially incentivise this behaviour. OFTOs are also bound by SF₆ regulations relating to the handling of SF₆ and the decommissioning of equipment containing SF₆²⁴.
- 5.5. The SF₆ reporting requirement is set out in amended standard condition E12-J12 of the generic OFTO licence (Appendices 5 and 6) and an example of the reporting template is provided in Appendix 8. The licence drafting sets out that the OFTO must provide annual information to Ofgem in the form set out in the reporting template. When reporting emissions the OFTO must provide data sources and explain the process by which the data was measured or derived.
- 5.6. The information we would look to request annually through amended standard condition E12-J12 is:
- **SF₆ Bank:** This is the total kilograms of sulphur hexafluoride (in kg) 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 S38²⁵.
 - **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.

²⁴ Department for Business, Innovation and Skills: [Managing fluorinated gases and ozone depleting substances](#)

²⁵ ENA Engineering Recommendation S38: Reporting of SF₆ Banks, Emissions and Recoveries

- 5.7. Each OFTO's SF₆ emissions emitted should be calculated according to the methods set out in ENA's Engineering Recommendation S38. OFTOs should not assume a percentage leakage rate to determine any element of SF₆ emitted and if an OFTO does not have measured records of SF₆ emitted, this should be highlighted in the accompanying commentary.

Question Box

Question 5.1: Do you agree with our decision to introduce a reporting requirement on SF₆ emissions?

Question 5.2: Do you have any views on the licence drafting of amended standard condition E12-J12 (Sulphur Hexafluoride Reporting Requirements)?

Question 5.3: Do you have any views on the proposed approach to reporting emissions?

6. Other licence drafting changes

Chapter Summary

Alongside the licence changes detailed in Chapters 1 to 5, we have proposed a number of other drafting changes to the licence. This chapter summarises these proposed changes.

Question Box

Question 6.1: Do you have any views on the licence drafting changes made to the generic OFTO licence for TR3?

Removing of the Incremental Capacity Utilisation Adjustment term

- 6.1. In the July statement we set out our decision to remove the Incremental Capacity Utilisation Adjustment term (ICUA) from the licence. The effect of this change is that all revenue adjustments for incremental capacity (the Incremental Capacity Incentive Adjustment term (ICA)) in future generator build tenders will now be assessed using the Additional Capacity Incentive Adjustment (ACA) term. This requires the licensee to submit a notice to Ofgem setting out its costs for providing the additional capacity. Ofgem then determines the revenue adjustment to cover efficient costs incurred.
- 6.2. In terms of licence drafting, the removal of the ICUA term from the licence only affects Part C of amended standard condition E12-J4 (Restriction of Transmission Revenue: Annual Revenue Adjustments). In Part C of amended standard condition E12-J4 the calculation of ICUA has been removed and the ICUA term has been removed from the calculation of ICA.

Extending the definition of “Market Rates”

- 6.3. We propose to include “bond spreads” under the definition of “Market Rates” in amended standard condition E12-A1 (Definitions and Interpretation). This is to incorporate flexibility into the calculation of the Market Rate Revenue Adjustment (MRA), to accommodate alternative funding solutions such as capital market solutions.

Including income from incremental capacity as part of the total revenue used to calculate the availability incentive

- 6.4. We propose to amend equation 10 in amended standard condition E12-J4 (Restriction of Transmission Revenue: Annual Revenue Adjustments). The effect of this proposed amendment would be to include revenue from incremental capacity as part of the overall revenue against which the availability incentive is calculated.

- 6.5. This change is proposed because we believe that additional capacity remunerated under the incremental capacity incentive adjustment (ICA) should be subject to the same availability incentive as the original transmission assets transferred to the OFTO.
- 6.6. This amendment would not change the principle that the maximum availability incentive penalty in one year would be 10% of revenue. The amendment would mean that the revenue against which the availability incentive is calculated is base transmission revenue (BR) plus ICA, not just BR.

Amending the Tender Fee Cost Adjustment pass-through

- 6.7. The Tender Fee Cost Adjustment pass-through allows the OFTO to pass through the costs of any Tender Fees incurred in the course of the tender process which resulted in them being granted a transmission licence.
- 6.8. In accordance with regulation 29(5) and (6) of the 2013 Tender Regulations, Ofgem is required to undertake an aggregation exercise as soon as reasonably practicable after a Tender Round is finished, in order to identify whether the Authority's total tender costs have been exceeded. In this case, Ofgem must repay any excess to the relevant party.
- 6.9. We propose to update to the Tender Fee Cost Adjustment pass-through in amended standard condition E12-J3 (Restriction of Transmission Revenue: Allowed Pass-through Items) to require the OFTO to repay any tender fees reimbursed in accordance with paragraph 6.8.

Condition E12-J7 (Duration of the Revenue Restriction Provisions)

- 6.10. Amended standard condition E12 -J7 (Duration of the Revenue Restriction Provisions) is an existing condition in the transmission licences granted to OFTOs as part of TR1 and TR2. The purpose of this condition is to enable the licensee to make a formal request for the disapplication of the charge restriction conditions (in whole or in part) which set out how the OFTO's revenue is calculated.
- 6.11. We propose to include a new obligation on the OFTO to provide a statement of reasons when making a disapplication request along with any further information required to enable the Authority to assess the request.
- 6.12. We also propose to update the OFTO's right to deliver a disapplication notice to the Authority. The proposed amendments bring it up to date with the current wording of Section 11A of the Electricity Act 1989.
- 6.13. We also propose to modify the structure of amended standard condition E12-J7 to make it clearer and easier to understand.

Condition E12-J10 (Excluded Services)

- 6.14. Amended standard condition E12-J10 (Excluded Services) is an existing condition in the transmission licences granted to OFTOs under TR1 and TR2. The purpose of this condition is to set out the basis on which certain services provided by the OFTO may be treated as excluded services.
- 6.15. We propose to modify this condition to make clear that payments made by the System Operator to the OFTO in respect of Network Innovation Competition (NIC) funding are an excluded service. However, any charges arising from any activity carried out by the OFTO under the NIC which results in Returned Royalty Income (as defined in amended standard condition E12-J11 (The Network Innovation Competition)) are not classed as revenue from excluded services.
- 6.16. For completeness, we propose to modify this condition to enable the Authority to direct the OFTO to start treating an activity as an excluded service as well as direct them to stop treating an activity as an excluded service.
- 6.17. We also propose to modify the structure of amended standard condition E12-J10 to make it clearer and easier to understand.

Other licence drafting changes

- 6.18. Alongside the licence changes detailed above, we have proposed a number of drafting changes to the licence to improve clarity and consistency throughout the licence. These are summarised in the tables on the following pages and can be seen easily in the marked up version of the licence in Appendix 6. In drafting the licence we have taken into consideration the changes made to the onshore transmission licences as part of RIIO-T1 price control²⁶ and have made the OFTO licence consistent with these licence conditions where the licence conditions cover the same subject matter and where we consider that the drafting should be consistent in the interests of best regulatory practice.

Question Box

Question 6.1: Do you have any views on the licence drafting changes made to the generic OFTO licence for TR3?

²⁶ Modifications to the Special Conditions held by [National Grid](#), [SP Transmission Limited](#) and [Scottish Hydro Electric Transmission plc](#)

Licence Condition	Name of Licence Condition	Purpose of the Condition	Proposed changes
Part I	Terms of the Licence	Allows the OFTO to participate in transmission of electricity subject to the terms and conditions in the licence and specifies the date the licence comes into force.	No changes.
Part II	Standard Conditions	Sets out the standard licence conditions in effect and not in effect when the licence is granted.	No changes to the standard conditions in effect and not in effect. Minor drafting changes to the note on the standard conditions for clarity.
Part III	Amended Standard Conditions	Sets out the standard licence conditions amended in the generic OFTO licence.	No changes to which standard conditions are proposed to be amended. Changes to the amendments to those conditions are set out in E12-A1 to E13 below.

Licence Condition	Name of Licence Condition	Purpose of the Condition	Proposed changes
E12-A1	Definitions and Interpretation	Provides the definitions for the amended standard conditions and sets out how the licence should be interpreted.	<p>To include new paragraphs 1 and 2 to set out the purpose of the condition and to remove existing paragraph 5 as not required.</p> <p>To move all definitions used in the amended standard conditions to this condition.</p> <p>To change the definition of 'Average Specified Rate' as we consider it appropriate to be consistent with onshore transmission licences.</p> <p>To define all licence algebra terms used outside their initial equation.</p> <p>To introduce new definitions of 'Disapplication Date', 'Disapplication Request' and 'Disapplication Notice' for the purposes of condition E12-J7.</p> <p>To update the definition of 'Financial Close Protocol' for clarity.</p> <p>To extend the definition of 'Market Rates' to include 'bond spreads'. See Chapter 6 for more detail.</p> <p>To introduce new definitions of 'Services Capability Specification' and 'Services Reduction Risk'.</p> <p>To update the definition of 'Transmission Services Reduction' for clarity.</p> <p>To remove the definition of 'ex post assessment' as it is not used in the licence.</p> <p>Other minor drafting changes proposed to correct references to the amended standard conditions.</p>

Consultation on the generic Offshore Transmission Owner (OFTO) licence for Tender Round 3

Licence Condition	Name of Licence Condition	Purpose of the Condition	Proposed changes
E12-A2	Market Rate Revenue Adjustment	Establishes the process for adjusting the revenue stream to reflect the difference between market rates assumed for the purpose of 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.	To move the definitions of 'Financial Close Protocol' and 'Market Rates' to E12-A1. Other drafting changes proposed to set out the purpose of the condition more clearly and to remove unnecessary wording.
E12-A3	Post Tender Revenue Adjustment	Establishes the process for adjusting the revenue stream to reflect (where applicable) the difference between the indicative transfer value used in the section 8A licence consultation and the final transfer value determined by asset transfer.	Drafting changes proposed to ensure consistency with E12-A2 where appropriate and to clarify that the Authority's estimate and assessment of transmission system costs are calculated in accordance with the Tender Regulations.
E12-B1	Transmission System Area	Sets out the specific transmission system and location for which the licence is granted.	Minor drafting changes proposed to correct defined terms.
E12-B2	Activities Restrictions	Sets out restrictions on where the licensee can participate in electricity transmission.	To update references to the Electricity Act 1989. Other drafting changes proposed to paragraph 2(b) to clarify the meaning of this paragraph.
E12-C1	Conduct of the Transmission Business	Ensures that no party can obtain an unfair commercial advantage due to the conduct of the licensee.	Drafting changes proposed to make it clearer who the licensee must procure separate equipment from and who the licensee must ensure obtains no commercial advantage as a result of the licensee's transmission business.
E12-C2	Separation and Independence of the Transmission Business	Sets out that the licensee must produce a statement detailing how it meets the business separation and independence requirements in the licence.	To replace references to a 'transmission licensee that holds a co-ordination licence' to the System Operator.
E12-C3	Restriction of certain information	Sets out when the licensee can share information relating to the management and operation of the transmission business.	To move definitions moved to condition E12-A1. To replace references to a 'transmission licensee that holds a co-ordination licence' to the 'System Operator'.

Consultation on the generic Offshore Transmission Owner (OFTO) licence for Tender Round 3

Licence Condition	Name of Licence Condition	Purpose of the Condition	Proposed changes
E12-C4	Appointment of a Compliance Officer	Sets out the process for appointing a compliance officer and their duties.	Minor drafting changes proposed.
E12-D1	Offshore Regulatory Reporting	Sets out the information a licensee must provide to the Authority to monitor its revenue and sulphur hexafluoride emissions.	To include paragraphs 2(a)(v) and 7(e) to cover reporting of sulphur hexafluoride emissions. To clarify the reporting arrangements for licences granted between 1 Jan and 31 March (paragraph 8). To clarify that for licences granted between 1 April and 31 December, the Authority would issue a consent if it agreed to change the standard reporting requirements for an OFTO.
E12-J1	Restriction of Transmission Revenue: Definitions	Used to set out the definitions used in conditions E12-J2 to E12-J10.	To remove the definitions of 'metered' and 'unit' as they are not used in the licence. To move all other definitions to E12-A1. To change the name of this condition to 'Not Used'.
E12-J2	Restriction of Transmission Revenue: Revenue from Transmission Owner Services	Determines how much revenue the licensee is entitled to in each relevant year.	To introduce Biddable Indexation. See Chapter 1 for more detail. To correct references to defined terms.
E12-J3	Restriction of Transmission Revenue: Allowed Pass-through Items	Adjusts the licensee's revenue for certain costs that the OFTO may incur or savings that it may make which are difficult to quantify at the bid stage of the tender process.	Introduction of the Refinancing Gain Share. See Chapter 2 for more detail. To make minor drafting changes to the wording of the Decommissioning, Marine and Coastal Act 2009 and Income Adjusting Event pass-throughs for clarity. To update to the Tender Fee Cost Adjustment pass-through. See Chapter 6 for more detail.

Consultation on the generic Offshore Transmission Owner (OFTO) licence for Tender Round 3

Licence Condition	Name of Licence Condition	Purpose of the Condition	Proposed changes
E12-J4	Restriction of Transmission Revenue: Annual Revenue Adjustments	Adjusts the licensee's revenue according to performance. It is made of two main parts: the availability incentive and the incremental capacity incentive adjustment	To update the availability incentive to include income from incremental capacity as part of the revenue used to calculate the value of the availability incentive penalty or incentive. See Chapter 6 for more detail. To introduce the capacity weighting mechanism. See Chapter 3 for more detail. To clarify the value of the financial security. See Chapter 4 for more detail. To move all definitions to E12-A1.
E12-J5	Restriction of Transmission Revenue: Adjustments	Incentivises the OFTO to correctly calculate its revenue	This condition has been drafted to make it clearer what the OFTO's obligations are when it over or under recovers its allowed revenue.
E12-J6	Provision of Information to the System Operator	Requires the licensee to inform the System Operator of their revenue forecasts for this year and the coming year.	To include paragraph 1 to set out the purpose of the condition.
E12-J7	Duration of the Revenue restriction Provisions	Sets out the process that the licensee must follow if it wishes to disapply part, or all, of the revenue restriction provisions.	To move all definitions to E12-A1. Drafting changes proposed. See Chapter 6 for more details.
E12-J8	Allowances in respect of Security Costs	Allows the Authority to compensate the licensee for any reasonable costs incurred during a 'security period'.	To move all definitions to E12-A1. To include paragraph 1 to set out the purpose of the condition. Drafting changes suggested to ensure terms are used consistently.
E12-J9	Basis of Transmission Owner Charges	Sets out that the licensee must produce an annual charging statement setting out how it will charge the System Operator for transmission owner services and excluded services.	To include paragraph 1 to set out the purpose of the condition. To clarify the process for updating the charging statement.

Consultation on the generic Offshore Transmission Owner (OFTO) licence for Tender Round 3

Licence Condition	Name of Licence Condition	Purpose of the Condition	Proposed changes
E12-J10	Excluded Services	The licensee can provide certain services which are not provided for by the revenue restriction conditions. This condition sets out the basis on which certain activities may be classed as excluded services.	To move all definitions to E12-A1. Drafting changes proposed. See Chapter 6 for more details.
E12-J11	The Network Innovation Competition	Sets out the funding arrangements for successful projects under the Network Innovation Competition, an annual competition to fund innovative low carbon or environmental projects.	To move all definitions to E12-A1. Other minor drafting changes proposed to paragraph 10.
E12-J12	Sulphur Hexafluoride Reporting requirements	Sets out the reporting requirements for sulphur hexafluoride emissions.	New condition. See Chapter 5 for more details.
E13	System Operator - Transmission Owner Code (STC)	Sets out that references to special conditions in the STC should have effect as if they said 'amended standard conditions'	To update the name of condition E12-J1. To add condition E12-J12.
Part IV	Special Conditions	Sets out any Special Conditions in effect in the licence. In the OFTO licence there are no Special Conditions.	No changes proposed.
Schedule 1	Specified Area	Sets out the area in which the OFTO can participate in electricity transmission.	No changes proposed
Schedule 2	Revocation	Sets out when the Authority may revoke the licence.	No changes proposed

7. Next Steps

OFTO licence

- 7.1. Following the consultation we expect to publish a revised version of the generic OFTO licence ahead of the Invitation to Tender stage (ITT) for TR3.

TR3 launch

- 7.2. At the present time we anticipate that TR3 will comprise two generator build projects. We will publish relevant tender documentation ahead of commencement of TR3, including the tender rules, cost recovery methodology, and stage-specific tender documents. We plan to hold a launch event in the coming months, before commencement of TR3 in early 2014.

Appendices

Appendix	Name of Appendix	Page Number
1	Consultation responses and questions	34
2	Additional information on the capacity weighting mechanism	37
3	Glossary	40
4	Feedback questionnaire	45
5	Generic OFTO licence for TR3	Separate document
6	Generic OFTO licence for TR3 (Redline from generic OFTO licence for TR2 V1.5)	Separate document
7	ARUP Report - OFTO Availability Incentive	Separate document
8	Reporting template for Sulphur Hexafluoride (SF ₆) emissions (Excel)	Separate document
9	Illustrative revenue model for the generic OFTO Licence for TR3(Excel)	Separate document

Appendix 1 - Consultation responses and questions

- 1.1. Ofgem would like to hear the views of interested parties in relation to any of the issues set out in this document.
- 1.2. 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.
- 1.3. Responses should be received by 2 December and should be sent to:

Hannah Evans
Senior Policy Analyst, Offshore Transmission
9 Millbank
London
SW1P 3GE

Tel: 020 791 7258
Email: offshore.enduring@ofgem.gov.uk
- 1.4. 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.
- 1.5. 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.
- 1.6. Any questions on this document should, in the first instance, be directed to Hannah Evans (details above).

CHAPTER 1 : Indexation of revenue

Question 1.1: Are there any other options or implications you think we should consider in determining the parameters to use for implementing biddable indexation?

Question 1.2: Do you agree with the rationale we set out for adopting the parameters identified in paragraph 1.6 as minded-to positions?

Question 1.3 Do you agree that using the breakeven inflation, calculated in accordance with the method described in paragraph 1.15, is a suitable market implied inflation figure to use in evaluating biddable indexation bids?

Question 1.4 Are there any other options we should consider when selecting a market implied inflation figure?

Question 1.5: Do you agree with the proposed amendment to the calculation of Base Transmission Revenue (BR) to implement biddable indexation?

CHAPTER 2: Refinancing of external debt

Question 2.1: Are there any other options or implications you think we should consider in determining the parameters to use for implementing a refinancing gain share?

Question 2.2: Do you agree with the rationale we set out for adopting the parameters identified in paragraph 2.3 as minded-to positions?

Question 2.3: Do you think the scope of the refinancing gain share, and in particular the definition of the debt to which it will apply, is appropriate?

Question 2.4: Do you have any views on the proposed licence drafting for the refinancing gain share set out in amended standard condition E12-J3 (Restriction of Transmission Revenue: Allowed Pass-through items) of the Licence (Appendices 5 and 6)?

CHAPTER 3: Availability incentive – capacity weighting mechanism

Question 3.1: Do you have any views on the drafting of the capacity weighting mechanism in the generic OFTO licence?

Question 3.2: Do you agree with our rationale for setting the proposed values of a and b at $a=1$ and $b=1.3$?

Question 3.3: Do you agree with our approach to use the same values of a and b for all projects in TR3?

CHAPTER 4: Financial security

Question 4.1: Do you agree with our proposed requirements for the credit rating of the financial institution holding the financial security?

Question 4.2: Do you agree with our proposal to increase the value of the financial security in line with base transmission revenue?

Question 4.3: Do you have any views on the licence drafting proposed in Part B of amended standard condition E12-J4 (Restriction of Transmission Revenue: Annual Revenue Adjustment)?

CHAPTER 5: Sulphur Hexafluoride (SF₆) emissions reporting

Question 5.1: Do you agree with our decision to introduce a reporting requirement on SF₆ emissions?

Question 5.2: Do you have any views on the licence drafting of amended standard condition E12-J12 (Sulphur Hexafluoride Reporting Requirements)?

Question 5.3: Do you have any views on the proposed approach to reporting emissions?

CHAPTER 6: Other licence drafting changes

Question 6.1: Do you have any views on the licence drafting changes made to the generic OFTO licence for TR3?

Appendix 2 – Additional information on the capacity weighting mechanism

- 1.1. Following Chapter 3 this appendix provides more detail on the capacity weighting mechanism.
- 1.2. In the TR2 availability incentive, unavailability is the number of megawatt hours (MWh) in a month that the licensee is unable to export (compared to the maximum number of MWh that could be exported if the total capacity of the cable were available). The monthly unavailability is weighted using the seasonal weightings (W_{iy}) and summed across an incentive period (Jan-Dec) to calculate the annual weighted unavailability (WU_y) in MWh. This is then used to work out the availability incentive penalty or bonus for that year²⁷.
- 1.3. The capacity weighting mechanism alters the way availability is calculated over an incentive period. In the capacity weighting mechanism each individual outage is weighted based on the proportion of transmission capacity available during the outage. The capacity of each outage (C_{xi}) measured as a percentage of total capacity is multiplied by two constants, a and b , in the form aC_{xi}^b to calculate the weighted capacity of each outage. This is then multiplied by the duration of the outage in hours (D_{xi}) and the capacity of the assets to give the weighted energy outage (WEO_{xi}) in MWh. The WEO_{xi} for each outage are summed over a month and then weighted using the seasonal weighting (W_{iy}). The monthly weighted (both capacity and seasonal) unavailability (MWU_{iy}) is then summed over an incentive period (Jan-Dec) to calculate the annual weighted unavailability (WU_y) in MWh. The availability incentive penalty or bonus is then calculated in the same way as TR2 projects.
- 1.4. The values of a and b alter how each outage is weighted. Figure A2.1 below shows how the values of a and b affect the relative availability incentive penalties received for different capacity outages of a given duration.

²⁷ The subscripts x , i and y denote an event, a calendar month and an incentive year (Jan-Dec) respectively. For example the monthly weighted unavailability ($MWU_{i,y}$) is calculated for each month in each incentive year.

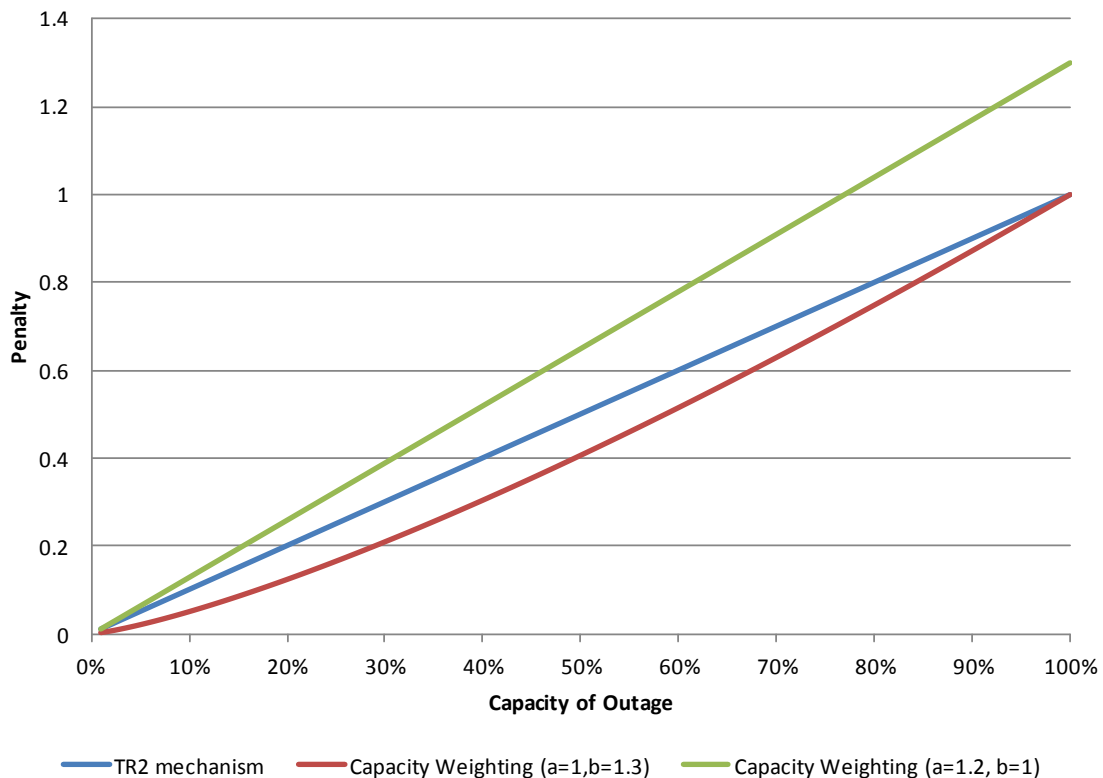


Figure A2.1: Graph showing the impact of a and b (capacity weighting mechanism) on penalties under the availability incentive

1.5. a is the coefficient of C_{xi} . The value of a affects the gradient of the line. Where a is greater than 1 (and $b=1$) the penalties for outages of all capacities increase relative to penalties under the TR2 mechanism. When $b=1$ the graph is still a straight line and penalties remain directly proportional to the capacity of the outage (as shown by the green line on Figure A2.1 above).

1.6. b is the exponent of C_{xi} . The value of b alters the curve of the line (as shown by the red line on Figure A2.1 above). When b is greater than 1 the line begins to curve such that multiple smaller capacity outages are penalised less than an equivalent large capacity outage. For example a 1 hour outage of 100% capacity would receive a larger penalty than the total penalty for two separate 1 hour outages of 50% capacity. The larger the value of b the more pronounced the difference in penalties between small and large capacity outages, as shown in Figure A2.2 below.

Consultation on the generic Offshore Transmission Owner (OFTO) licence for Tender Round 3

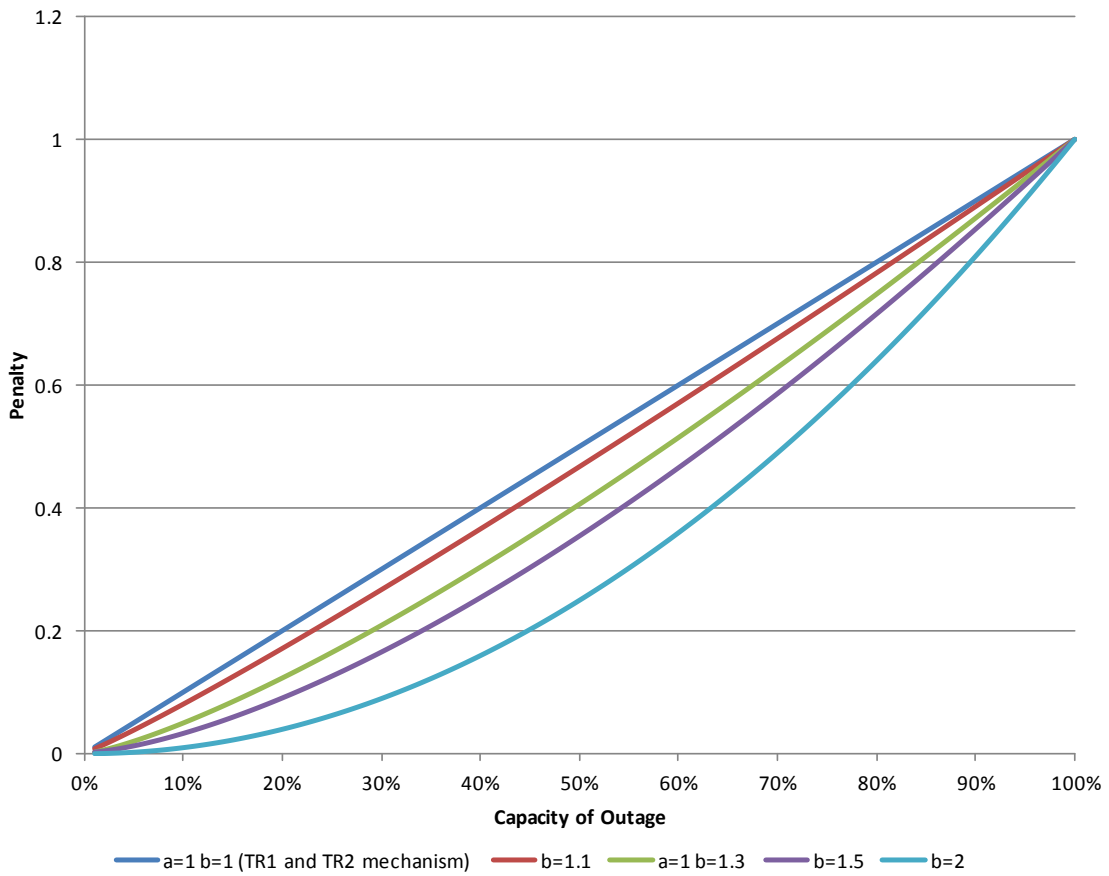


Figure A2.2: Graph showing the impact of the value of b on penalties under the availability incentive (where $a=1$)

Appendix 3 - Glossary

A

ACA

Additional Capacity Incentive Adjustment

ATR

Adjusted Tender Revenue

Authority

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

B

BI

Biddable Indexation

Base Transmission Revenue (BR)

The revenue calculated in accordance with the formula set out in paragraph 4 of amended standard condition E12-J2 (Restriction of Transmission Revenue: Revenue from Transmission Owner Services).

C

CO₂

The chemical formula for Carbon Dioxide.

CPI

The Consumer Prices Index is a measure of inflation that measures the change in consumer prices over time.

D

DECC

Department of Energy and Climate Change

E

[ENA](#)

Energy Networks Association

[Enduring Regime](#)

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

[EU](#)

The European Union

F

[Financial Close](#)

The process by which ownership of the offshore transmission assets is transferred from the developer to the OFTO.

G

[Generic OFTO licence](#)

Each Offshore Transmission Owner is granted a unique licence containing conditions specific to the particular circumstances of the project. These licences are modified from a base, 'generic' version of the licence.

[GWP](#)

Global Warming Potential. The Global Warming Potential represents how much a given mass of a chemical contributes to global warming over a given time period compared to the same mass of carbon dioxide. Carbon dioxide's GWP is defined as 1.0.

I

[ICA](#)

Incremental Capacity Incentive Adjustment

[ICUA](#)

Incremental Capacity Utilisation Adjustment

[ILGs](#)

Interest Linked Gilts

IRR

Internal Rate of Return

ITT

Invitation to Tender. The stage of a tender exercise during which bidders are invited to put forward their detailed proposals for providing transmission services. Its purpose is to enable Ofgem to identify the preferred bidder.

J

JRG

Joint Regulators Group. An association of the UK's economic and competition regulators.

July Statement

'Offshore Electricity Transmission: Statement on future generator build tenders', published 18th July 2013 on the Ofgem website.

M

MRA

Market Rate Revenue Adjustment. An adjustment to the base revenue determined under amended standard condition E12-A2.

MWh

Megawatt hours

N

Net Present Value

The discounted sum of future cash flows, whether positive or negative, minus any initial investment.

NIC

Network Innovation Competition

O

OFTO

Offshore Transmission Owner

P

PFI

Private Finance Initiative

PTRA

Post Tender Revenue Adjustment. An adjustment to the base revenue determined under amended standard condition E12-A3.

R

RIT

Revenue Indexation Adjustment Term

RPI

The Retail Prices Index 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.

S

SF₆

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

STPR

Social Time Preference Rate

T

TR1

Transitional Tender Round 1. The first tender round under the transitional regulatory regime for offshore transmission.

TR2

Transitional Tender Round 2. The second tender round under the transitional regulatory regime for offshore transmission.

TR3

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

Transitional regime

The initial offshore tender regime covering all projects that met the qualifying project requirements set out in the Electricity (Competitive Tenders for Offshore Transmission Licences) 2010 before 31 March 2012.

Transmission assets

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

TRS

Tender Revenue Stream

Appendix 4 - Feedback questionnaire

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

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

1.2. Please send your comments to:

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Ofgem
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London
SW1P 3GE
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