

ET1 Price Control Financial Handbook

First publication: 1 February 2013

Effective date: 1 April 2013

Version 1.4 15 September 2014

Contact: Ofgem Regulatory Finance Team

Tel: 020 7901 7000

Email: regulatoryfinance@ofgem.gov.uk

Overview:

This is the ET1 Price Control Financial Handbook which forms part of Special Condition 5A (Governance of ET1 Price Control Financial Instruments) of the Electricity Transmission Licence held by onshore electricity transmission operators.

This document consists of:

- a) a description of the ET1 Price Control Financial Model (PCFM) and the Annual Iteration Process for it, used to calculate amounts to be added to the licensee's Opening Base Revenue Allowances during the course of the RIIO-T1 Price Control Period to derive a recalculated base revenue value;
- b) an overview of the ET1 Price Control Financial Methodologies under which revisions to the variable values in the PCFM are determined for the Annual Iteration Process, in accordance with the Special Conditions of the licence; and
- a series of Chapters containing the detailed methodologies relating to PCFM Variable Values.

The procedures relating to modification of this Handbook and the PCFM are contained in Special Condition 5A.

An up to date version of this Handbook and the PCFM (in Microsoft Excel® format) can be accessed on the Ofgem website.

Context

The RIIO-T1 price control arrangements are the first to apply Ofgem's RIIO framework (Revenue = Incentives + Innovation + Outputs). The RIIO approach places more emphasis on incentivising network owners and managers to achieve the outputs needed to deliver sustainable energy networks at value for money for existing and future consumers.

The RIIO-T1 price control is longer than the previous transmission price controls (known as TPCR), running for eight years instead of five. This provides for a longer period of settled price control arrangements and should facilitate improved strategic planning and a long term approach to electricity transmission infrastructure management.

However, the RIIO price control mechanisms are also more dynamic. Under the TPCR price controls, base revenue allowances typically representing over 80 per cent of network operation revenues, were set up-front for the whole of the price control period, changing only with RPI indexation. A number of significant adjustments to reflect activity levels and varying financial conditions were necessarily left in abeyance until the subsequent five-yearly review. Under RIIO-T1, comprehensive adjustments to base revenue will be made each year in respect of the licensee's Transmission Owner (TO) role and, for National Grid Electricity Transmission plc, System Operator (SO) role.

This more sophisticated approach involves an annual iteration of the ET1 Price Control Financial Model (PCFM) using updated variable values. This gives rise to a requirement for licence conditions and methodologies to govern the determination of revised PCFM Variable Values and the Annual Iteration Process.

This Handbook (which forms part of Special Condition 5A) sets out the required processes and methodologies. To promote transparency, up to date copies of both the Handbook and the PCFM will be maintained on the Ofgem website.



Associated documents

- a. ET1 Price Control Financial Model NGET / SPTL / SHETPLC www.ofgem.gov.uk search term "PCFM"
- b. RIIO-T1 Price Control Final Proposals

 http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/1 RIIOT1 FP overview dec12.pdf
- c. Update to Final Proposals SPTL and SHETPLC

 http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/SPTSHETLFPsupport.pdf
- d. Final Proposals SPTL & SHETPLC FP SPTL & SHETPLC

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Introduction

The ET1 Price Control Financial Handbook is one of the Price Control Financial Instruments referred to in Special Condition 5A (Governance of ET1 Price Control Financial Instruments) of the Electricity Transmission Licence. It describes the ET1 Price Control Financial Model ('PCFM') and the Annual Iteration Process for it, by which annual adjustments to the licensee's base revenues will be calculated. It also contains the Price Control Financial Methodologies ('the methodologies'), specified in relevant Special Conditions, which will be used to determine appropriate revisions to the variable values contained in the PCFM to facilitate calculations under the Annual Iteration Process. The methodologies also describe the intent and effects of revising the various PCFM Variable Values.

This Handbook, the constituent methodologies and the PCFM (together the Price Control Financial Instruments) form parts of Special Condition 5A. The Price Control Financial Instruments are subject to a formal change control process set out in that condition.

The PCFM Annual Iteration Process approach has been adopted because:

- it is consistent with the aims of the RIIO price control, embodying more 'real time' adjustments to financial allowances;
- it handles complex computational interactions between financial adjustments without the need for unwieldy algebra on the face of Special Conditions;
- it provides for consistent treatment of the Totex¹ aspects of the price control;
- it maintains transparency on adjustments to base revenues, since the licence, methodologies, PCFM and variable values will be published; and
- it allows stakeholders to keep abreast of base revenue² levels and to carry out business sensitivity analysis.

In any case of conflict of meaning, the following order of precedence applies:

- (i) the main text of the relevant licence condition(s),
- (ii) the Handbook and constituent methodologies, and
- (iii) the PCFM.

This Handbook refers to both Transmission Owner (TO) and System Operator (SO) for NGET. Whilst these are normally shown separately, on occasions we may refer to the TO only but the reference should be read as applying to both where appropriate.

¹ Total Expenditure – see Glossary

¹

² The PCFM only calculates base revenue and the annual adjustment to base revenues (the MOD term). It does not calculate the total allowed revenues of the licensee, the main difference being certain incentive revenues.



References to the Authority and Ofgem

The Gas and Electricity Markets Authority ("the Authority") is established by section 1 of Schedule 1 to the Utilities Act 2000. The Office of the Gas and Electricity Markets Authority ("Ofgem") is the office that supports the Authority.

In this Handbook the text refers to the Authority and Ofgem interchangeably.

Other terminology

Throughout this Handbook:

- (a) 'the licence' means an Electricity Transmission Licence containing Special Conditions held by an onshore electricity transmission network operator;
- (b) references to 'the licensee' include each electricity transmission network operator that holds an Electricity Transmission Licence containing Special Conditions;
- (c) 'this Handbook' means the ET1 Price Control Financial Handbook;
- (d) 'Special Condition' means a Special Condition contained in the Electricity Transmission Licence held by onshore electricity transmission network operators; and
- (e) 'Price Control Period' means the RIIO-T1 Price Control Period which runs from 1 April 2013 to 31 March 2021.

Where the meaning of other terms used in this Handbook is not clear from the context, they will either be defined/explained in the Chapter concerned or in the appended Glossary.



1. The ET1 Price Control Financial Model and the **Annual Iteration Process**

Overview

- Special Conditions 3A and 4A respectively specify the Opening Base Revenue 1.1 Allowance and, for National Grid Electricity Transmission plc (NGET), System Operator (SO) Opening Base Revenue Allowances³ for the licensee for each Relevant Year of the Price Control Period, reflecting the Authority's Final Proposals for the RIIO-T1 price control settlement.
- 1.2 The ET1 Price Control Financial Model (PCFM) has been designed to calculate amounts to be added to the licensee's Opening Base Revenue Allowances for each Relevant Year, to derive recalculated base revenue values which reflect the adjustment schemes specified in the licence and detailed in the methodologies in this Handbook. The adjustments fall into three broad categories:
 - legacy price control adjustments the close out of schemes and mechanisms from preceding Price Control Periods;
 - financial adjustments covering tax, pension and cost of debt issues; and
 - adjustments relating to actual and allowed Totex⁴ expenditure and the Totex Incentive Mechanism.
- The calculations take place under the Annual Iteration Process for the PCFM described below and are manifested as a PCFM output value for the term 'MOD' which is then applied as shown in the simplified⁵ formula below:

Base Revenue for year t = Opening Base Revenue Allowance for year <math>t + MOD foryear t.

For NGET, there is a similar term, 'SOMOD' which applies to the System Operator part of that licensee's price control. Information relating to the term MOD in this Chapter, and in Chapter 2 is also relevant to the term SOMOD in the context of the System Operator price control.

Price base

The PCFM works predominantly in a constant 2009-10 price base. This is consistent with the Opening Base Revenue Allowance values set down in the licence.

⁵ The full formula is shown in Special Condition 3A, paragraph 3A.5

³ Base revenue amounts are the largest components of the licensee's overall allowed revenues, but the other components, specified in the licence, should be taken into account in any assessment of total revenue allowances..

⁴ See Glossary



The value of the term MOD is calculated in 2009-10 prices. Indexation is provided for in the Base Transmission Revenue formula set out in the Special Conditions.

- 1.6 Some tax calculations internal to the PCFM use nominal prices, based on embedded RPI forecast data. The use of nominal prices in the PCFM tax calculations ensures that revenue allowance calculations more accurately reflect the profile of tax expenses of the licensee.
- 1.7 Where a methodology in this Handbook requires values to be deflated from a nominal price base, used in price control review information reporting, to the 2009-10 price base used in the PCFM, the following formula will be used:

$$value_{2009-10} = value_{nominal price year} \times \frac{RPI_{2009-10}}{RPI_{nominal price year}}$$

where:

value₂₀₀₉₋₁₀ means the deflated value in the 2009-10 price base;

value_{nominal price year} means the value in nominal prices, used in price control

review information reporting;

RPI₂₀₀₉₋₁₀ means the arithmetic average of the Retail Prices Index

(all items) figures published by the Office for National Statistics for each calendar month in Relevant Year 2009-10 rounded to three decimal places; and

 $\mathsf{RPI}_{\mathsf{nominal\ price\ year}} \qquad \mathsf{means\ the\ arithmetic\ average\ of\ the\ Retail\ Prices\ Index}$

(all items) figures published by the Office for National Statistics for each calendar month in the Relevant Year referred to in the price control review information in

question rounded to three decimal places.

Temporal convention

1.8 As indicated above, the MOD term is an amount added to the Opening Base Revenue Allowance figure for each Relevant Year t during the Price Control Period to derive a recalculated base revenue value. References in this Handbook to Relevant Years are made relative to that usage. For example, in a context where MOD_t applied in the formula for base revenue in 2015-16, a reference in the same context to Relevant Year t-1 would mean 2014-15 and so on.

The Price Control Financial Model and the Annual Iteration Process

1.9 The PCFM exists as a constituent part of Special Condition 5A (Governance of ET1 Price Control Financial Instruments). It has an input area for each licensee

⁶ In 2013-14, the first year of the Price Control Period, the licence specifies that the value of MOD is zero.



containing both fixed values and a PCFM Variable Values Table. The base revenue figure for each licensee for each Relevant Year of the Price Control Period is calculated using the fixed values, the PCFM Variable Values, and the formulae and functions embedded in the PCFM.

- 1.10 At the outset of the Price Control Period, the base revenue figures calculated by the PCFM, using the variable values subsisting at that time, constituted the Opening Base Revenue Allowance values for the licensee. Before the calculation of Opening Base Revenues Allowances, Ofgem commissioned an external audit of the functionality of the PCFM and obtained an audit letter which is published on the Ofgem website⁷.
- 1.11 Subject to paragraph 1.12, by 30 November in each Relevant Year t-1, or as soon as is reasonably practicable thereafter, Ofgem will determine whether any PCFM variable values for the licensee should be revised in accordance with the Special Conditions and methodologies referred to in Chapters 3 to 15 of this Handbook.
- 1.12 The last Relevant Year in which there will be an Annual Iteration Process for the ET1 Price Control Financial Model is Relevant Year 2019-20 for the purpose of determining the value of the term MOD for Relevant Year 2020-21. Some financial adjustments provided for under the RIIO-T1 final proposals will remain outstanding at the end of the Price Control Period, because relevant data will not be available in time for inclusion in the last Annual Iteration Process. For example, adjustments under the Totex Incentive Mechanism (see chapter 6) relating to actual and allowed expenditure levels in Relevant Years 2019-20 and 2020-21 will remain outstanding. For the avoidance of doubt, adjustments of this type will be addressed under the RIIO-T2 price control arrangements.
- 1.13 In order to facilitate the determination of revised PCFM Variable Values by 30 November, Ofgem will normally expect to apply the following annual cut-off dates:
 - (a) 30 September in respect of functional changes to the ET1 Price Control Financial Model; and
 - (b) 31 October in respect of information submitted by the licensee and used under the Price Control Financial Methodologies.
- 1.14 In applying the cut-off referred to in paragraph 1.13(b), Ofgem will, through business correspondence, apprise the licensee of any provisionality it has attached to information submissions, which might entail a restatement of the information by the licensee for the purpose of making a further revision to the PCFM Variable Value(s) concerned for use in a subsequent Annual Iteration Process.
- 1.15 The Authority will give the licensee at least 14 days notice of any revised PCFM Variable Values in accordance with requirements in the licence, to allow for any representations. The Authority will then (by 30 November in Relevant Year t-1, or as

⁷ Audit letter for NGET: http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/NGpkf.pdf
Audit letter for SPTL: http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/SPpkf.pdf
Audit letter for SHETPLC: http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/SHEpkf.pdf

soon as is reasonably practicable thereafter) specify any PCFM Variable Value revisions in a formal direction to the licensee. The direction will also include a 'screenshot' of the PCFM Variable Values Table for the licensee, showing the state of all variable values after the directed revisions, with revised values emboldened.

- 1.16 Having directed revisions to PCFM Variable Values for the licensee, Ofgem will carry out the Annual Iteration Process:
 - revised PCFM Variable Values will be inputted in the appropriate Relevant Year column of the PCFM Variable Values Table for the licensee;
 - the PCFM calculation functions will be re-run;
 - all calculated values within the PCFM will be automatically updated, including:
 - (i) the recalculated base revenue figure for the licensee for each Relevant Year of the Price Control Period, and
 - (ii) the modelled RAV balance for the licensee; and
 - the PCFM will output the value of MOD for Relevant Year t for the licensee.
- 1.17 The output value of MOD_t for the licensee will reflect the difference between the recalculated base revenue figure for the licensee for Relevant Year t (in the PCFM) and the Opening Base Revenue Allowance (PU term) set down in the licence. It will also reflect the difference between the recalculated base revenue figures held in the PCFM for Relevant Years t-1 and earlier before the Annual Iteration Process and the recalculated base revenue figures for the licensee held in the PCFM for the same years after the Annual Iteration Process. The PCFM calculations will apply appropriate Time Value of Money Adjustments to the calculation of MOD_t , so that the licensee will be in the same economic position as if adjustments to Base Transmission Revenue for years prior to Relevant Year t had been notified to it in the Relevant Year concerned.
- 1.18 Changes to base revenue figures calculated under the Annual Iteration Process may be upwards or downwards and, accordingly, the value of MOD_t may be positive or negative. A key point to note is that once the value of MOD has been directed for a particular Relevant Year, it is not retrospectively changed as a result of a subsequent Annual Iteration Process the value becomes a matter of record alongside the Opening Base Revenue Allowance value for the same year.
- 1.19 The steps of the Annual Iteration Process are specified in Special Condition 5B (Annual Iteration Process for the ET1 PCFM).
- 1.20 The Authority will issue a direction to the licensee giving the value of MOD_t by 30 November in each Relevant Year $t\text{-}1^8$ or as soon as reasonably practicable thereafter. In practice, it is expected that the value of MOD_t will be included in the direction of revised PCFM Variable Values referred to in paragraph 1.15. The value of MOD_t in the direction will be stated in £m to one decimal place.

⁸ The first such direction will be given by 30 November 2013.



- 1.21 The deadline of 30 November in Relevant Year t-1 for the direction of PCFM Variable Value revisions and for the value of MOD_t reflects:
 - the deadline of 31 July in Relevant Year t-1 by which the licensee must submit its price control information returns (covering activity in Relevant Year t-2) to Ofgem; and
 - the need for the licensee to have confirmation of its base revenue in time to calculate and issue its use of system charges.
- 1.22 In the unlikely event that the Authority does not direct a value for MOD_t by 30 November in Relevant Year t-1, paragraphs 11 to 13 of Special Condition 5B specify that:
 - the Annual Iteration Process will stand uncompleted;
 - the Authority will complete the Annual Iteration Process as soon as reasonably practicable by directing a value for MOD_t; and
 - in the intervening period, the value of MOD_t shall be held to be equal to the value ascertained by:
 - (i) taking a copy of the ET1 Price Control Financial Model in its state following the last completed Annual Iteration Process (excluding the effect of any functional modifications under Special Condition 5A made after the completion of that Annual Iteration Process);
 - (ii) using the selection facilities on the user interface sheet contained in that copy to select:
 - the name of the licensee; and
 - the Relevant Year equating to Relevant Year t; and
 - (iii) recording the values of the term MODt for the licensee that is shown as an output value.
- 1.23 Table 1.1 below summarises the timings for the Annual Iteration Process during the Price Control Period.



	Annual Iteration Process						
PCFM AIP Functional month change cut- off		Regulatory reporting information cut-off	Proposed PCFM Variable Value revisions	AIP completed and MODt directed	Relevant Year t in which MOD _t applies		
Nov-13	30 Sep 13	31 Oct 13	15 Nov 13	30 Nov 13	2014-15		
Nov-14	30 Sep 14	31 Oct 14	15 Nov 14	30 Nov 14	2015-16		
Nov-15	30 Sep 15	31 Oct 15	15 Nov 15	30 Nov 15	2016-17		
Nov-16	30 Sep 16	31 Oct 16	15 Nov 16	30 Nov 16	2017-18		
Nov-17	30 Sep 17	31 Oct 17	15 Nov 17	30 Nov 17	2018-19		
Nov-18	30 Sep 18	31 Oct 18	15 Nov 18	30 Nov 18	2019-20		
Nov-19	30 Sep 19	31 Oct 19	15 Nov 19	30 Nov 19	2020-21		

State of the ET1 Price Control Financial Model

- 1.24 As mentioned in paragraph 1.9 above, the PCFM exists as a constituent part of Special Condition 5A and will be maintained by Ofgem in its official records. The state of the PCFM remains constant unless and until changed by either:
 - (a) an Annual Iteration Process which will change PCFM Variable Values and recalculated values which are directly or indirectly dependent upon them; or
 - (b) a modification of the PCFM under the procedures set out in Special Condition 5A (Governance of ET1 Price Control Financial Instruments).
- 1.25 Ofgem will keep a log of modifications to the PCFM and publish this log on its website.
- 1.26 A copy of the PCFM in its latest state will be maintained on the Ofgem website. This will allow the licensee and other stakeholders to make copies of the PCFM so that they can:
 - use their own forecasts of PCFM Variable Value revisions to forecast base revenue positions and to conduct sensitivity analysis; and
 - reproduce the calculation of MOD_t by 30 November in each Relevant Year t-1.

The Annual Iteration Process is necessarily complex in some respects, but the PCFM is designed to be as 'user friendly' as possible.



1.27 An updated copy of the PCFM will be uploaded to the website by 30 November each year (after each Annual Iteration Process) with the electronic file name "ET1 PCFM" followed by "November 20XX" (where 20XX represents the calendar year containing the month of November in Relevant Year t-1).

Error of functionality in the PCFM

- 1.28 In the event that an error of functionality is discovered in the PCFM, the following procedure would be followed:
 - the issue would be considered at the earliest opportunity by the ET1 Price Control Financial Model Working Group (see next section) and a corrective modification determined by Ofgem;
 - if the functional error had distorted the calculation of a previously directed value of the term MOD, the determined modification would include any adjustments necessary to correct for that distortion on an NPV neutral basis in the next calculation of the term MOD; and
 - the procedure in Special Condition 5A for modifications to the PCFM would be followed.

The ET1 Price Control Financial Model Working Group

- 1.29 Ofgem will facilitate an industry expert working group to review issues arising with respect to the form or usage of the PCFM. The terms of reference for The ET1 Price Control Financial Model Working Group ('the working group') are set out below.
- 1.30 In accordance with the provisions of Part A of Special Condition 5A (Governance of ET1 Price Control Financial Instruments), the Authority will have regard to any views expressed by the working group when assessing whether any proposed modification of the PCFM would be likely to have a significant impact on the licensee or other stakeholders.

Terms of reference

Purposes of the working group

- 1.31 The purposes of the working group are:
 - (i) to review the ongoing effectiveness of the PCFM in producing a value for the term MOD for each Relevant Year;
 - (ii) to provide, when requested by the Authority, its views on the impact of any proposed modifications to the PCFM in accordance with Part A of Special Condition 5A; and
 - (iii) to provide such views or recommendations to the Authority with regard to the PCFM as it sees fit.



Composition

- 1.32 The composition of the group will be:
 - Ofgem (chair);
 - Ofgem (secretary);
 - one representative per licensee; and
 - ENA representative (optional).

Timing and duration of the group's work

- 1.33 The working group's incumbency will run from 1 April 2013 to 31 March 2021.
- 1.34 The group will meet at least once between 1 January and 31 July during each calendar year, but may meet more frequently if required, in particular in relation to the provision of views on the impact of proposed PCFM modifications (see paragraph 1.31(ii)).
- 1.35 Representatives may attend meetings in person, or at the discretion of the chair, through video or telephone conferencing facilities.
- 1.36 A meeting of the working group will be quorate, for the purpose of expressing a view or recommendation in respect of the PCFM, if at least one representative from Ofgem (which may be the chair), and three licensee representatives (each from a different licensee) are present.

Resources

1.37 Meeting facilities will be provided or coordinated by Ofgem. Ofgem will keep notes of key points of discussion and views expressed at meetings, and of any recommendations made by the working group with respect to the PCFM.



- 2.1 The ET1 Price Control Financial Methodologies set out in this Handbook describe the basis for a range of annual adjustments to the licensee's Opening Base Revenue Allowances for the purposes of the RIIO-T1 price control arrangements.
- 2.2 The main purpose of each methodology is to set out the way in which one or more PCFM Variable Values are to be revised for the purposes of the Annual Iteration Process for the ET1 Price Control Financial Model (PCFM) under which values of the term MOD_t are calculated (see Chapter 1). Any revised PCFM Variable Values determined under the methodologies will replace (over-write) the existing values contained in the PCFM Variable Values Table (blue box) for the licensee in the PCFM as part of the Annual Iteration Process.
- 2.3 The methodologies are presented in Chapters 3 to 15 of this Handbook and are referenced in the associated Special Conditions of the licence. As constituent parts of this Handbook, the methodologies are part of Special Condition 5A (Governance of ET1 Price Control Financial Instruments) and are subject to the modification provisions set out in that condition.
- 2.4 The methodologies are subordinate to the Special Conditions of the licence. If there is any inconsistency between a licence condition and a methodology, then the licence condition takes precedence.

Methodologies in this Handbook

2.5 The PCFM Variable Values to be determined under the methodologies in this Handbook are listed in Table 2.1 below. PCFM Variable Values whose names begin with "SO" are applicable to National Grid Electricity Transmission plc only and relate to the System Operator aspects of its business.

Table 2.1 - PCFM Variable Values

No	PCFM Variable Value	Special Condition	Description	Type of variable value
	Specified finar	ncial adjustn	nents_	
1	EDE SOEDE	6D/7C	Pension Scheme Established Deficit	revenue allowance
2	APFE SOAPFE	6D/7C	Pension Scheme Administration costs and Pension Protection Fund (PPF) levy	revenue allowance

No	PCFM Variable Value	Special Condition	Description	Type of variable value
3	TTE SOTTE	6D/7C	Tax liability – tax trigger events	revenue allowance
4	TGIE SOTGIE	6D/7C	Tax liability – gearing/interest costs	revenue allowance
5	CDE SOCDE	6D/7C	Allowed percentage cost of debt	percentage
	Totex Incenti	ve Mechanisr	<u>n</u>	
6	ALC	6C	Actual load related capex expenditure	actual expenditure
7	ARC	6C	Actual asset replacement capex expenditure	actual expenditure
8	AOC	6C	Actual other capex expenditure	actual expenditure
9	ACO SOACO	6C/7B	Actual controllable opex	actual expenditure
10	ANC SOANC	6C/7B	Actual non-operational capex	actual expenditure
	Allowed Totex	c expenditure	e adjustments	
11	IAEEPS/ SOIAEEPS	6H/7D	Uncertain costs - enhanced physical site security	allowed expenditure
12	IAEBT	6Н	Uncertain costs – BT 21 st Century (SHETPLC only)	allowed expenditure
13	IAEWL	6H	Uncertain costs – compensation costs for land owners for wayleaves (SHETPLC only)	allowed expenditure
14	IAESSCM	6H	Uncertain costs – Exceptional Subsea Cable Fault Costs	allowed expenditure
15	IAEWR	6H	Uncertain costs – workforce renewal (SPTL only)	allowed expenditure
16	IAENLUM	6Н	Uncertain costs – non-load related work costs	allowed expenditure
17	WWE	61	Baseline and strategic wider works expenditure	allowed expenditure

No	PCFM Variable Value	Special Condition	Description	Type of variable value
18	IWW	6J	Incremental wider works (NGET only)	allowed expenditure
19	GCE	6F	Generation connections volume driver	allowed expenditure
20	EPIE	6G	Enhancements to pre-existing infrastructure	allowed expenditure
21	IRM	6E	Innovation roll out mechanism	allowed expenditure
22	UCE	6K	Undergrounding volume driver (NGET only)	allowed expenditure
23	DRI	6L	Demand related infrastructure volume driver (NGET only)	allowed expenditure
24	SOEMRES	7D	Electricity Market Reform Enduring Solution	allowed expenditure
	Legacy price	control adjus	stments	
25	LAR/ SOLAR	6A/7A	Legacy price control adjustments to allowed revenue	true-up revenue allowance
26	LRAV/ SOLRAV	6A/7A	Legacy price control adjustments to RAV	true-up RAV additions

- 2.6 Specified financial adjustments (numbers 1 to 5 in Table 2.1) relate to the adjustment mechanisms set out in the 'Finance Supporting Document' in the RIIO-T1 Final Proposals⁹. Overviews of the adjustments and the methodologies for determining revisions to the associated PCFM Variable Values are contained in Chapters 3 to 5 of this Handbook.
- 2.7 The Totex Incentive Mechanism (numbers 6 to 10 in Table 2.1) applies to any overspend or under spend by the licensee against its RIIO-T1 Totex expenditure allowances. An overview of the mechanism and the methodology for determining revisions to the associated PCFM Variable Values is contained in Chapter 6 of this Handbook.

⁹ For Scottish Power Transmission Ltd (SPTL) and SHE Transmission Plc (SHETPLC) see covering letter with licence consultation Licence consultation letter



- 2.8 Allowed Totex expenditure adjustments (numbers 11 to 24 in Table 2.1) cover a range of Totex adjustment schemes under which allowed expenditure can be adjusted under a specified formula or through an application and assessment process. The methodologies for determining revisions to the associated PCFM Variable Values are contained in Chapters 7 to 14 of this Handbook.
- 2.9 Legacy price control adjustments relate to activities which took place in the Price Control Period prior to RIIO-T1 but in respect of which a financial adjustment is required because:
 - the outturn data for Relevant Year 2012/13 was not available when Opening Base Revenue Allowances for the Price Control Period were set;
 - cost totals for items subject to true-up or logging-up were not available when Opening Base Revenues Allowances for the Price Control Period were set;
 - it is possible for pre-RIIO-T1 expenditure allowances to be adjusted under the terms of a RIIO-T1 Special Condition; or
 - there is an anomalous position, acknowledged by Ofgem and the licensee, that needs to be corrected.

Processing of different types of PCFM Variable Value under the Annual Iteration Process

2.10 In general terms, the different types of variable value specified in Table 2.1 are processed under the Annual Iteration Process for the PCFM in the following ways:

Allowed expenditure

These amounts are modelled, subject to Totex Capitalisation Rates, as:

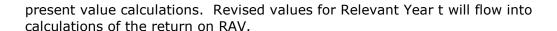
- (i) fast money flowing directly to the recalculated base revenue figure for the Relevant Year to which the allowed expenditure relates; and
- (ii) additions to the licensee's RAV in the Relevant Year to which the allowed expenditure relates, generating a slow money adjustment to allowed revenues through the allowed return and depreciation.

Revenue allowance

These amounts flow directly to the recalculated base revenue figure for the Relevant Year to which the adjustment circumstance relates (although there will also be ancillary financial effects under the modelling treatment).

Percentage

This type of variable value applies to the cost of corporate debt. As well as return, interest and tax calculations, corporate debt costs influence net



Actual expenditure

This type of variable value applies to the Totex Incentive Mechanism only and revised values affect fast and slow money calculations for the Relevant Years concerned. These values will be obtained from the licensee's Regulatory Instructions and Guidance (RIGs) data tables relating to Relevant Year t-2. Since the RIGs data tables contain values in nominal prices, these will be deflated to a 2009-10 price base using published RPI data (as set out in paragraph 1.7), so that they are consistent with the 2009-10 price base used in the PCFM. The price base calculation will be made prior to direction into the PCFM.

True-up revenue allowance

These amounts will flow directly to the recalculated base revenue figure for Relevant Year 2013-14, because they relate to activity levels or outturn values for the Price Control Period prior to RIIO-T1 except for NGET where they will be spread over the RIIO-T1 period (on an NPV neutral basis).

True-up RAV additions

These additions to the licensee's RAV generate a slow money adjustment to allowed revenues through the cost of capital return and depreciation.

Consequential adjustments

2.11 During the Annual Iteration Process, appropriate automatic adjustments are also made as a consequence of revisions to PCFM Variable Values. For example, in some circumstances, as a result of automatic updates to the licensee's net debt and RAV figures under the Annual Iteration Process, updated equity issuance allowances could also be included in recalculated base revenue figures for the Relevant Years concerned.

A typical revision

- 2.12 The ET1 Price Control Financial Methodologies describe the normal timing sequence for each PCFM Variable Value. For example, in relation to the Actual Load Related Capex Expenditure (row 6 in Table 2.1) the normal sequence would be:
 - activity level takes place in Relevant Year t-2;
 - activity level reported to Ofgem by 31 July in Relevant Year t-1;
 - revised PCFM Variable Value used in Annual Iteration Process to take place by 30 November in Relevant Year t-1 or as soon as reasonably practical thereafter (the variable value in the column equating to Relevant Year t-2 on



- the PCFM Variable Values Table is the one which is revised, since that is when the activity level took place); and
- incremental change to recalculated revenue position for Relevant Year t-2 flows through to value of MOD_t ie it affects base revenue in Relevant Year t.
- 2.13 A number of the Special Conditions provide for PCFM Variable Values to be directed for Relevant Years outside the normal sequence. Where this is the case, the procedures are explained in the relevant methodologies in this Handbook.



Part 1 - Overview

- 3.1 The Opening Base Revenue Allowances ('PU' values) for the licensee set down in the table at Appendix 1 to Special Condition 3A (Restriction of Transmission Network Revenue) include allowances for:
 - (a) Pension Scheme Established Deficit repair expenditure; and
 - (b) Pension Scheme Administration and Pension Protection Fund (PPF) levy expenditure,

for each Relevant Year of the Price Control Period.

- 3.2 For NGET, the opening Base SO Internal Revenue allowances ('SOPU' values) set down in the table at Appendix 1 to Special Condition 4A (Restriction on System Operator Internal Revenue) include similar allowances relating to the System Operator part of its business.
- 3.3 These allowances are represented, respectively, by the opening EDE, APFE, SOEDE and SOAPFE values¹⁰ held in the PCFM Variable Values Table(s) for the licensee, contained in the ET1 Price Control Financial Model (PCFM) and are expressed in 2009-10 prices. Opening EDE, APFE, SOEDE and SOAPFE values are based on modelling assumptions and parameters applicable at the outset of the Price Control Period, consistent with Ofgem's pension principles (see paragraph 3.6).
- 3.4 The allowance levels will be updated during the Price Control Period by revising EDE, APFE, SOEDE and SOAPFE values for the purposes of the Annual Iteration Process for the PCFM. This Chapter sets out:
 - the reasons for updating allowances;
 - the methodologies for determining revised EDE, APFE, SOEDE and SOAPFE values;
 - · the expected timing of revisions; and
 - the effect on the licensee's allowed revenues of revising EDE, APFE, SOEDE and SOAPFE values for the Annual Iteration Process.
- 3.5 In the context of Pension Scheme Established Deficit repair and Pension Scheme Administration/PPF levy expenditure, we refer to "allowances" rather than "allowed expenditure". This is because, subject to the reasonableness tests referred to in this Chapter, EDE, APFE, SOEDE and SOAPFE values are added in full to

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¹⁰ as at 1 April 2013



recalculated base revenue figures in the PCFM under the Annual Iteration Process. It should be noted, however, that revisions to EDE, APFE, SOEDE and SOAPFE values will have ancillary effects on other calculations under the Annual Iteration Process which also feed into recalculated base revenue figures.

Price control pension principles

- 3.6 Ofgem's price control pension principles are set out in full in the March 2011 decision on strategy for the RIIO-T1 price control (the March Strategy Document), together with the updated guidance notes in the Final Proposals, to which reference must be made¹¹. In summary, they include the following key points:
 - customers should expect to fund the efficient cost of providing a competitive employment package including pension costs in line with comparative benchmarks;
 - customers should only fund the portion (of a wider group's pension costs) that is attributable to the transmission business;
 - customers should not fund pension costs arising from a material failure of stewardship;
 - pension costs should be assessed actuarially, using reasonable assumptions in line with current best practice;
 - under or over funding positions in preceding Price Control Periods should be reflected in allowances, subject to being economic and efficient; and
 - customers will not fund the costs of providing enhanced pension benefits granted under severance arrangements which have not been matched by increased contributions.

Pension Scheme Established Deficit

- 3.7 For the purposes of Special Condition 6D (Specified financial adjustments Transmission Owner), 7C (Specified financial adjustments System Operator) and this Chapter, the term 'Pension Scheme Established Deficit' means the difference between the assets and corresponding liabilities within a defined benefit pension scheme, sponsored by the licensee, which are:
 - attributable to the licensee's transmission business; and
 - attributable to pensionable service up to and including 31 March 2012.

The proportion of a wider group pension scheme deficit which is attributable to the licensee's transmission business and to pensionable service up to and including 31 March 2012 will be determined in accordance with the pension deficit allocation methodology published by Ofgem. This amount may be adjusted by Ofgem acting

¹¹ Strategy decision finance

reasonably and consistently with the price control pension principles and informed by the results of the reasonableness review.¹²

- 3.8 The Authority may, following bilateral discussions, agree with the licensee that a different value Pension Scheme Established Deficit Adj (PSED_{ADJ}), be substituted for the Pension Scheme Established Deficit (PSED) for the purposes of the methodology in this chapter provided that:
 - (a) the licensee is one of the licensees named in paragraph 3.9;
 - (b) its use will result in revised EDE values which give rise to allowances which both parties consider to be more appropriate; and
 - (c) its use for determining any revision to EDE values is without prejudice to:
 - (i) the meaning of the term Pension Scheme Established Deficit given in paragraph 3.7; and
 - (ii) a reversion to the use of the licensee's PSED in any subsequent determination of revised EDE values for the licensee.
- 3.9 The licensees referred to in paragraph 3.8(a) are:
 - National Grid Electricity Transmission plc;
 - SHE Transmission plc (SHETPLC); and
 - Scottish Power Transmission Ltd (SPTL)
- 3.10 If the Authority and the licensee decide that PSED_{ADJ} should be used in place of PSED for the purpose of determing revised EDE values then:
 - (a) the PSED_{ADJ} will be used in place of the PSED for the licensee as indicated in subsequent paragraphs of this chapter; and
 - (b) the Authority will include a statement specifying that a PSED_{ADJ} value has been used in any direction of a revised EDE value for the purpose of an Annual Iteration Process.
- 3.11 For NGET, the Pension Scheme Established Deficit is further divided between the Transmission Operator (TO) and System Operator (SO) parts of its transmission business in accordance with Ofgem's pension deficit allocation methodology.
- 3.12 Allowances for Pension Scheme Established Deficit repair are set at/revised to levels intended to allow the licensee to clear its Pension Scheme Established Deficit (by making payments to the pension scheme's trustees) over a 15 year period, which began on 1 April 2012 (immediately following the Cut-Off Date) and ends on 31 March 2027. The RIIO-T1 Price Control Period ends on 31 March 2021, but EDE and SOEDE values will be determined having regard to the Pension Scheme Established Deficit repair completion date of 31 March 2027.

¹² See March Strategy Document

Pension Scheme Administration and PPF levy

- 3.13 For the purposes of Special Conditions 6D, 7C and this chapter, Pension Scheme Administration means the range of activities that pension scheme trustees are required by legislation to undertake or commission in running the pension scheme. It includes, without limitation, the keeping of scheme records, scheme management and administration, scheme policy and strategy, the provision of information to scheme members, the calculation and payment of benefits and liaison with tax and regulatory authorities, and the preparation of valuations. It does not include investment management fees which are remunerated by deduction from investment returns or costs which are the responsibility of the licensee, such as the costs of advisors to the licensee on managing or advising it on any and all aspects of its relationship with the trustees including recovery plans.
- 3.14 Pension Scheme Administration expenditure refers to payments made by the licensee to cover the proportion of Scheme Administration Costs attributable to its transmission business.
- 3.15 The Pension Protection Fund charges an annual levy on eligible pension schemes. PPF levy expenditure refers to payments made by the licensee (or the pension scheme) to cover the proportion of this levy attributable to its transmission business.
- 3.16 For NGET, these two items of expenditure are apportioned between the TO and SO part of its transmission business.

Costs and adjustments outside the scope of this Chapter

Pension costs for service after 31 March 2012

3.17 Pension costs attributable to the licensee, but which relate to pensionable service on or after 1 April 2012 will be considered as a constituent part of labour costs for price control purposes. This includes costs relating to any incremental deficit which accrues in relation to such service, ascertained in accordance with the pension deficit allocation methodology. These costs fall outside the scope of Special Conditions 6D, 7C and this Chapter.

Temporal conventions

3.18 For the purposes of Special Conditions 6D, 7C and this Chapter, "Relevant Year t" means the Relevant Year in which a value for the term MOD, calculated through a particular Annual Iteration Process¹³, is used in the formula for the licensee's Base Transmission Revenue/ SO Internal Revenue¹⁴. References to Relevant Year t-1 etc should be construed accordingly.

¹³ and/or SOMOD for NGET

¹⁴ See Special Condition 3A (Restriction of Transmission Network Revenue) and 4A (Restriction of System Operator Internal Revenue).



3.19 A reference to, for example, the EDE value for 2015-16 means the EDE value in the 2015-16 column of the PCFM variable Values Table for the licensee contained in the ET1 Price Control Financial Model.

Part 2 - Updating allowances through the Annual Iteration Process

- 3.20 The licensee's allowances for Pension Scheme Established Deficit repair, Pension Scheme Administration and PPF levy expenditure will be updated during the Price Control Period to reflect:
 - information contained in pension scheme actuarial valuation reports provided by the licensee to Ofgem; and
 - actual deficit funding payments, and pension scheme administration and PPF levy expenditure information contained in the licensee's price control review information submitted to Ofgem.
- 3.21 Special Conditions 6D and 7C require the Authority to determine annually whether any EDE, APFE, SOEDE or SOAPFE values should be revised. However, the intention is that the values will actually be revised on two occasions during the Price Control Period, driven by the triennial scheme valuation cycle indicated in the timetable below.

Table 3.1 - Expected timetable for EDE, APFE, SOEDE and SOAPFE value revisions

Actuarial defined benefit pension scheme valuation as at	Expected receipt of scheme valuation by Ofgem	Pension deficit allocation methodology information provided and decision made on whether to use a PSED _{ADJ} value	Reasonableness review completed	Revised PCFM Variable Values directed for Annual Iteration Process no later than:	EDE and SOEDE values revised for Relevant Year	APFE and SOAPFE values revised for Relevant Years
31 March 2012 and 2013	7 July 2014	30 September 2014	31 October 2014	30 November 2014	2015-16 onwards	2013-14 and 2015- 16 to 2020-2021
31 March 2016	7 July 2017	30 September 2017	31 October 2017	30 November 2017	2018-19 onwards	2014-15 to 2020-21 (excluding 2017-18)
31 March 2019	7 July 2020	30 September	31 October 2020	n/a	n/a	n/a

	2020		

Note: The reasonableness review of the valuations as at 31 March 2019 will inform the reset and true up in RIIO-T2.

- 3.22 For licensees whose scheme valuation dates differ to those shown in the first column of Table 3.1, licensees are required to provide either a full valuation (provided it is also used to determine the schemes deficit recovery plan) or an updated valuation at these dates. The approach which should be used by licensees to produce an updated valuation is defined in Ofgem's pension deficit allocation methodology.
- 3.23 Ofgem will direct revised EDE, APFE, SOEDE and SOAPFE values at other times, if that is necessary to reflect any revised timetable of information availability or process completion. However, in those circumstances, the PCFM Variable Values would still be determined in accordance with the procedures set out in this Chapter.
- 3.24 As set out in paragraph 3.5, revised EDE, APFE, SOEDE and SOAPFE values feed directly into the recalculated base revenue figures in the PCFM for applicable Relevant Years through the Annual Iteration Process. Incremental changes to recalculated base revenue figures for years earlier than Relevant Year t will, subject to a Time Value of Money Adjustment, be brought forward and reflected in the calculation of the terms MOD and SOMOD to be directed for Relevant Year t. For the avoidance of doubt, such a revision will not have any retrospective effect on a previously directed value of the term MOD or SOMOD.

Reasonableness review

- 3.25 In accordance with Special Conditions 6D and 7C after receiving the whole (or substantially the whole) of each scheme valuation data set, Ofgem will commission a review of those valuations and of the reasonableness of the licensee's Pension Scheme Established Deficit funding levels. That review will assist Ofgem in determining whether a licensee's pension costs are efficient. The expected completion times for the reasonableness reviews due to take place during the Price Control Period are shown in Table 3.1. The data set comprises:
 - the actuarial valuation of the licensee's pension scheme(s), being either a full triennial valuation as at the date specified in Table 3.1 (ie 31 March 2012, 2013, 2016 and 2019) or an update of the last preceding full triennial valuation (where the full valuation is not concurrent) with the asset and liability values rolled forward to the above date(s) on the basis set out in the pensions deficit allocation methodology document;
 - the scheme's statement of funding principles;
 - the scheme's statement of investment principles; and
 - the completed deficit allocation methodology tables and other pension data tables and supporting documents specified in the price control review cost information regulatory instructions and guidance (RIGs) document provided under Standard Condition B15 (Regulatory Instructions and Guidance).



Determination and direction of revised EDE and SOEDE values by 30 November 2014

3.26 Subject to paragraph 3.28, revised EDE and SOEDE values will be determined by 30 November 2014 for each Relevant Year from 2015-16 to 2020-21 (or as soon as reasonably practical thereafter) using the methodology set out in Table 3.2 below. Each step is carried out in respect of EDE values to be determined and separately, for NGET, in respect of SOEDE values to be determined. This includes determining the actual Cut-Off Date Pension Scheme Established Deficit as at 31 March 2012 which will use a full triennial valuation or updated valuation as at that date. A full valuation will be used where there is a full triennial valuation as at that date. Otherwise, an updated valuation of the last preceding full triennial valuation will be used, with the asset and liability values rolled forward to the 31 March 2012 on the basis defined in the pension deficit allocation methodology document.

Table 3.2 - Process for determining revised EDE and SOEDE values to be directed by 30 November 2014

Row	Timing	<u>Event</u>	
1	By 7 July 2014	Ofgem obtains the actuarial scheme valuations for the licensee's defined benefit pension scheme as at both 31 March 2012 and 2013 prepared on the basis set out in paragraph 3.25 and scheme datasets and commences a reasonableness review of all network operator's valuations as at 31 March 2013 (ie full valuations or 31 March 2012 valuations rolled forward to 31 March 2013).	
2	By 31 July 2014	Ofgem receives price control review information from the licensee covering Relevant Year 2012-13 and 2013-14.	
3	By 30 September 2014 Licensee submits deficit allocation information and indicative Pension Scheme Established Deficit figure as at 31 March 2012 and the movements to 31 March 2013 in accordance with the deficit allocation methodology.		
4	By 31 October 2014	(a) Ofgem carries out reasonableness review of information submitted by licensee on the latest valuations, ie 31 March 2013 valuations; and(b) determines the PSED as at 31 March 2013.	"A"
4(a)		Where relevant agree a $PSED_{ADJ}$ value with the licensee (see paragraphs 3.8 to 3.10).	"A ₁ "
5		PSED (or if appropriate $PSED_{ADJ}$) as at 31 March 2013 deflated to 2009-10 prices using actual RPI data determined in accordance with paragraph 1.7.	"B"

6		Remaining deficit repair period established as 12 years (2026-27 minus 2014-15).	
7		Annual Pension Scheme Established Deficit repair allowance in 2009-10 prices computed as:	"C1"
		= "B" / ((1-(1+DR)^ -12) / LN(1+DR))	
		Where:	
		DR is the discount rate determined by a benchmarking process against energy network operators pre-retirement discount rates as applied in their valuations in step 1 and moderated against similar rates reported by occupational pension schemes in Great Britain; and	
		LN returns the natural logarithm of the subject value.	
		If there is a surplus shown by the valuation, B and C1 are set to zero and paragraph 3.28 below applies.	
Adjustment relating to licensee payment history in 2012-13 and RIIO-T1 period			
8		Ofgem obtains actual deficit repair payment attributable to the licensee:	"D ₂₀₁₂₋
	By 31 October 2014	(a) Ofgem obtains relevant portion (ie the portion attributable to the Pension Scheme Established Deficit for the licensee's transmission business ¹⁵) of actual deficit repair payments made by licensee in 2012-13 and 2013-14, excluding any actual amounts relating to contingent asset costs (ED).	"D ₂₀₁₃ - "14"
		(b) Adjust for any disallowed costs for the Relevant Year arising from Ofgem's reasonableness review (DC).(c) Deflate to 2009-10 prices using actual RPI data determined in accordance with paragraph 1.7.	
		Steps (a) to (c) are computed for each Relevant Year as:	
		= (ED-DC) * (RPI ₂₀₀₉₋₁₀ /RPI _{year})	
		The formula for $D_{2012-13}$ is as follows:	
		$(ED_{2012-13} - DC_{2012-13}) * (RPI_{2009-10} / RPI_{2012-13})$	
		The formula for $D_{2013-14}$ is as follows:	
		$(ED_{2013-14} - DC_{2013-14}) * (RPI_{2009-10} / RPI_{2013-14})$	

¹⁵ Split into TO and SO for NGET

	Where:	
	"ED _{year} " is the licensee portion of Established Deficit repair payments during the Relevant Year, in nominal prices excluding any actual amounts relating to contingent asset costs.	
	"DC _{year} " is the value of disallowed costs in the Relevant Year arising from Ofgem's relevant reasonableness review.	
	"RPI ₂₀₀₉₋₁₀ " means the arithmetic average of the Retail Prices Index (all items) figures published by the Office for National Statistics for each calendar month in Relevant Year 2009-10 rounded to three decimal places;	
	"RPI _{year} " means the arithmetic average of the Retail Prices Index (all items) figures published by the Office for National Statistics for each calendar month in the Relevant Year referred to in the price control review information in question rounded to three decimal places.	
9	Obtain the pre-existing EDE/SOEDE allowance (excluding any true up adjustments and also excluding, where relevant, any allowances for contingent asset costs) in 2009-10 prices for each year (E_{year}) for comparison to licensee's actual deficit repair payment:	"E ₂₀₁₂ - 13" "E ₂₀₁₃ - 14"
10	Obtain the difference between the pre-existing allowances and actual payments and adjust for tax and the time value of money.	"F"
	 a) To ensure the correct treatment of costs after considering the impact of corporation tax, where the licensee has taxable profits in the year, there is a need to deduct the value of corporation tax (attributable to relevant deficit repair payments and allowances) to give the post-tax value of deficit repair payments and allowances for the year in question. This is calculated at the actual rate of corporation tax applicable to the Relevant Year (CT_{year}). If the licensee does not have taxable profits for the year, this step is omitted. b) Adjust for the Time Value of Money Adjustment through to the date where EDE allowance values will be revised, ie 1 April 2015. c) To obtain the correct value to include in the PCFM this 	

	tay adjusted value	
	tax adjusted value.	
	Steps (a) to (c) are computed for each Relevant Year as set out below:	
	The formula for F ₂₀₁₂₋₁₃ is as follows:	
	The formula for F ₂₀₁₃₋₁₄ is as follows:	
	The value of "F" is:	
	"F" = $F_{2012-13} + F_{2013-14}$	
	Where:	
	"CT _{year} " is the actual rate of Corporation Tax applicable in the Relevant Year, or is zero if the licensee does not have taxable profits for the year.	
	"CT ₂₀₁₅₋₁₆ " is the actual rate of Corporation Tax applicable in the Relevant Year that EDE/SOEDE values are revised, ie Relevant Year 2015-16, or is zero if the licensee does not have taxable profits for the year.	
	"WACC _{year} " is the Vanilla Weighted Average Cost of Capital attributable in the Relevant Year.	
11	Spread the difference between the pre-existing allowance and actual payment evenly over the remaining 12 years of the notional 15-year funding period:	"G1"
	The adjusting amount relating to each Relevant Year is computed as (in 2009-10 prices):	
	"G1" = value "F" / ((1-(1+DR)^ -12) / LN(1+DR))	
	Where:	
	DR is the discount rate determined using the methodology described in row 7.	
	The value "G1" may be either positive (if actual payments are	

	greater than the pre-existing allowances), or negative (if actual payments are less than the pre-existing allowances).	
12	Obtain revised EDE and SOEDE values for the remaining years of RIIO-T1, ie for each Relevant Year from 2015-16 to 2020-21.	
	This is determined as: "C1" + "G1".	
	Note 2015-16 will remain the first Relevant Year for which EDE and SOEDE values are revised in the event that the adjustment is delayed by one or more years.	

3.27 The adjustment contained in Row 11 of Table 3.2 deals with a situation where for 2012-13 and 2013-14 the licensee has previously paid across more, or less, than the allowance (EDE/SOEDE value excluding true ups and contingent asset allowances) it was given for a particular Relevant Year.

Scheme surplus

3.28 If the difference between the assets and corresponding liabilities referred to in paragraph 3.7 represents a surplus position for the Established Deficit as at 31 March 2013, then the values for "C1" at step 7 in Table 3.2 above will be revised to zero pending the next review process set out in Table 3.3. The policy position with regard to pension scheme surpluses is set out in the March 2011 Strategy document and, as applicable, the relevant Final Proposals.

Determination and direction of revised EDE and SOEDE values by 30 November 2017

3.29 Subject to paragraph 3.31, revised EDE and SOEDE values will be determined by 30 November 2017 for each Relevant Year from 2018-19 to 2020-21 using the methodology set out in Table 3.3 below. Each step is carried out in respect of EDE values to be determined and separately, for NGET, in respect of SOEDE values to be determined.

Table 3.3 - Process for determining revised EDE and SOEDE values to be directed by 30 November 2017

Row	<u>Timing</u>	<u>Event</u>	<u>Value</u>
1	By 7 July 2017	Ofgem obtains the actuarial scheme valuation (on the basis set out in paragraph 3.25) for the licensee's defined benefit pension scheme as at 31 March 2016 and scheme datasets and commences a reasonableness review of all network operators' valuations as at 31 March 2016.	
2	By 31 July 2017	Ofgem receives price control review information from licensee covering Relevant Years 2014-15; 2015-16 and 2016-17.	

3	By 30 September 2017	Licensee submits deficit allocation information and indicative Pension Scheme Established Deficit figure relating to service up to 31 March 2012 as at 31 March 2013 and the movements to 31 March 2016 in accordance with the deficit allocation methodology.		
4	By 31 October 2017	Ofgem carries out reasonableness review of information submitted by licensee and determines the PSED as at 31 March 2016.	"A"	
4(a)		Where relevant agree a $PSED_{ADJ}$ value with the licensee (see paragraphs 3.8 to 3.10).	"A ₁ "	
5		PSED (or if appropriate $PSED_{ADJ}$) Established Deficit amount as at 31 March 2016 deflated to 2009-10 prices using actual RPI data determined in accordance with paragraph 1.7.	"B"	
6		Remaining deficit repair period established as 9 years (2026-27 minus 2017-18)		
7	By 31 October 2017	Annual Pension Scheme Established Deficit repair allowance in 2009-10 prices computed as: = "B" / ((1-(1+DR)^ - 9) / LN(1+DR)) Where: DR is the discount rate determined by a benchmarking process against energy network operators pre-retirement discount rates as applied in their valuations at step 1 and moderated against similar rates reported by occupational pension schemes in Great Britain; and LN returns the natural logarithm of the subject value If there is a surplus shown by the valuation B and C2 are set to zero and paragraph 3.31 below applies.	"C2"	
Adjust	Adjustment relating to licensee payment history in RIIO-T1 period			
8	By 31 October 2017	Ofgem obtains actual deficit repair payment attributable to the licensee: a) Obtain relevant portion (ie the portion attributable to the licensee's transmission business ¹⁶) of actual deficit repair payments made by licensee during 2014-15, 2015-16 and 2016-17, excluding any actual amounts relating to contingent asset costs (ED). b) Adjust for any disallowed costs for the Relevant Year identified in Ofgem's reasonableness review (DC).	"D ₂₀₁₄ - 15" "D ₂₀₁₅ - 16" "D ₂₀₁₆ - 17"	

¹⁶ Split into TO and SO for NGET

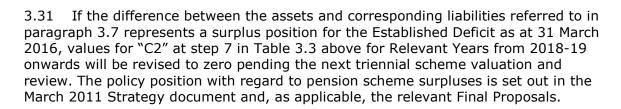
	c) Deflate to 2009-10 prices using actual RPI data determined in accordance with paragraph 1.7. Steps (a) to (c) are computed for each Relevant Year as: = (ED-DC) * (RPI ₂₀₀₉₋₁₀ /RPI _{year}) The formula for D ₂₀₁₄₋₁₅ would be as follows: (ED ₂₀₁₄₋₁₅ - DC ₂₀₁₄₋₁₅) * (RPI ₂₀₀₉₋₁₀ / RPI ₂₀₁₄₋₁₅) The formula for D ₂₀₁₅₋₁₆ is as follows: (ED ₂₀₁₅₋₁₆ - DC ₂₀₁₅₋₁₆) * (RPI ₂₀₀₉₋₁₀ / RPI ₂₀₁₅₋₁₆) and for D ₂₀₁₆₋₁₇ : (ED ₂₀₁₆₋₁₇ - DC ₂₀₁₆₋₁₇) * (RPI ₂₀₀₉₋₁₀ / RPI ₂₀₁₆₋₁₇) Where: "ED _{year} " is the licensee portion of Established Deficit repair payments during the Relevant Year, in nominal prices. "DC _{year} " is the value of disallowed costs in the Relevant Year arising from Ofgem's relevant reasonableness review. "RPI ₂₀₀₉₋₁₀ " means the arithmetic average of the Retail Prices Index (all items) figures published by the Office for National Statistics for each calendar month in Relevant Year 2009-10 rounded to three decimal places. "RPI _{year} " means the arithmetic average of the Retail Prices Index (all items) figures published by the Office for National Statistics for each calendar month in the Relevant Year referred to in the price control review information in question rounded to three decimal places.	
9	Obtain the pre-existing EDE/SOEDE annual allowances for 2014-15 as set out in Final Proposals and for 2015-16 and 2016-17 reset at 1 April 2015 (ie value C1 established at step 7 in table 3.2 above) in 2009-10 prices for each year (E _{year}), in each case excluding any true-up allowances and any contingent asset allowance amounts.	"E _{2014-15"} "E _{2015-16"} "E _{2016-17"}

10	Obtain the difference between the pre-existing allowances and actual payment and adjust for tax and the time value of money.	"F"
	a) To ensure the correct treatment of costs after considering the impact of corporation tax, where the licensee has taxable profits in the year, there is a need to deduct the value of corporation tax (attributable to relevant deficit repair payments and allowances) to give the post-tax value of deficit repair payments and allowances for the year in question. This is calculated at the actual rate of corporation tax applicable to the Relevant Year (CT _{year}). If the licensee does not have taxable profits for the year, this step is omitted.	
	 b) Adjust for the Time Value of Money Adjustment through to the date where EDE allowance values will be revised, ie 1 April 2018. c) To obtain the correct value to include in the PCFM this value is then divided by (1-CT₂₀₁₈₋₁₉) to give the correct tax adjusted value. 	
	Steps (a) to (c) are computed for each Relevant Year as set out below:	
	The formula for F ₂₀₁₄₋₁₅ is as follows:	
	The formula for F ₂₀₁₅₋₁₆ is as follows:	
	The formula for F ₂₀₁₆₋₁₇ is as follows:	
	The value of "F" is:	
	"F" = $F_{2014-15} + F_{2015-16} + F_{2016-17}$	

	Where:	
	"CT _{year} " is the actual rate of Corporation Tax applicable in the Relevant Year, or is zero if the licensee does not have taxable profits for the year.	
	"CT ₂₀₁₈₋₁₉ " is the actual rate of Corporation Tax applicable in the Relevant Year that EDE/SOEDE values are revised, ie Relevant Year 2018-19, or is zero if the licensee does not have taxable profits for the year.	
	"WACC _{year} " is the Vanilla Weighted Average Cost of Capital attributable in the Relevant Year.	
11	Spread the difference between the pre-existing allowance and actual payment evenly over the remaining 9 years of the notional 15-year funding period.	"G2"
	The adjusting amount relating to each Relevant Year is computed as (in 2009-10 prices):	
	= value "F" / ((1-(1+DR)^ -9) / LN(1+DR))	
	Where:	
	DR is the discount rate determined using the methodology set out in row 7.	
	The value "G2" may be either positive (if actual payments are greater than the pre-existing allowance), or negative (if actual payments are less than the pre-existing allowances).	
12	Obtain revised EDE and SOEDE values for the remaining years of RIIO-T1, ie for each Relevant Year from 2018-19 to 2020-21.	
	This is determined as: "C2" + "G2" (above) + "G1" (from Table 3.2 above).	

3.30 The adjustment contained in Row 11 of Table 3.3 deals with a situation where the licensee has previously paid across more, or less, than the allowance (EDE/SOEDE values excluding any true-ups and also excluding, where relevant, any contingent asset allowances) it was given for a particular Relevant Year.

Scheme surplus



Direction of revised EDE and SOEDE values

3.32 The Authority will direct revised EDE and SOEDE values by no later than 30 November 2014 and 30 November 2017 (or as soon as reasonably practical thereafter) in accordance with the procedure set out in Part D of Special Condition 6D and Part D of Special Condition 7C.

Part 4 - Pension Scheme Administration and PPF levy allowances

- 3.33 The licensee's actual costs in respect of scheme administration costs and PPF levies will be reported under the annual Regulatory Reporting cycle in accordance with Standard Condition B15 (Regulatory Instructions and Guidance) of the licence.
- 3.34 Revised APFE and SOAPFE values will be determined in accordance with the steps set out below by 30 November 2014 and 30 November 2017.

Values to be directed by 30 November 2014

- (i) The actual aggregated Pension Scheme Administration and PPF levy expenditure reported by the licensee in its price control review information submissions for Relevant Year 2013-14 will be obtained.
- (ii) The expenditure amounts in (i) will be deflated to 2009-10 prices using actual RPI data.
- (iii) The aggregate price control allowance (in 2009-10 prices) for Pension Scheme Administration and PPF levy expenditure for that year set out in the relevant Final Proposals will be obtained, to which is added the annual adjustment threshold amount of £1m.
- (iv) If the amount referred to in step (iii) is exceeded by the amount in step (ii), the excess amount only will be added to the pre-existing amount allowance at the price control for that item.
- (v) If the amount at (ii) is less than the pre-existing price control allowed value at (iii), then no revision to the price control value will be made.
- (vi) The excess at (iv) will be added to the pre-existing APFE and SOAPFE values to determine the revised APFE and SOAPFE values for Relevant Year 2013-14.
- (vi) Ofgem will review Pension Scheme Administration and PPF levy costs based on actual costs incurred in previous years and known changes to the PPF levies advised by the PPF and, subject to them being

considered efficient, reset the existing APFE and SOAPFE values for Relevant Years 2015-16, 2016-17 and 2017-18. Revised APFE and SOAPFE values for the years 2018-19, 2019-20 and 2020-21 will be reset at this stage but will be subject to further revision in November 2017.

Values to be directed by 30 November 2017

- (i) The actual aggregated Pension Scheme Administration and PPF levy expenditure reported by the licensee in its price control review information submissions for Relevant Years 2014-15, 2015-16 and 2016-17 will be obtained.
- (ii) The expenditure amounts in (i) will be deflated to 2009-10 prices using actual RPI data.
- (iii) The aggregate price control allowance (in 2009-10 prices) for Pension Scheme Administration and PPF levy expenditure for each of those years set out in the relevant Final Proposals as updated in step (vii) above by 30 November 2014 is obtained, to which is added the annual adjustment threshold amount of £1m.
- (iv) For each of the Relevant Years 2014-15, 2015-16 and 2016-17 for which the amount referred to in step (iii) is exceeded by the corresponding amount in step (ii), the excess amount only will be added to the relevant Admin and PPF Levy allowance (ie the pre-existing price control allowance for 2014-15 or the reset allowances for 2015-16 or 2016-17 (as reset by 30 November 2014 at step (vii) above)).
- (v) For each of the Relevant Years 2014-15, 2015-16 and 2016-17 for which the amount at (ii) is less than the corresponding amount at step (iii), no revision to the relevant Admin and PPF Levy allowance (ie the pre-existing price control allowance for 2014-15 or the reset allowances for 2015-16 or 2016-17 (as reset by 30 November 2014 at step (vii) above)) will be made.
- (vi) Any excess amounts at (iv) will be added to the pre-existing APFE and SOAPFE values for the Relevant Year or years to determine the revised APFE and SOAPFE values for Relevant Years 2014-15, 2015-16 and 2016-17.
- (vii) Ofgem will review Pension Scheme Administration and PPF levy costs based on actual costs incurred in previous years and known changes to the PPF levies advised by the PPF and, subject to them being considered efficient, reset the existing APFE and SOAPFE values for Relevant Years 2018-19, 2019-20 and 2020-21.

Direction of revised APFE and SOAPFE values

3.35 The Authority will direct revised APFE and, as applicable, SOAPFE values no later than 30 November 2014 and 30 November 2017 (or as soon as reasonably practical thereafter) respectively as computed above in accordance with the



procedure set out in Part D of Special Condition 6D and Part D of Special Condition 7C.

Part 5 - Processing of revised EDE, SOEDE, APFE and SOAPFE values under the Annual Iteration Process

- 3.36 EDE, SOEDE, APFE and SOAPFE values, as revised are included in full in recalculated base revenue figures in the PCFM under the Annual Iteration Process. Revisions to the values will have ancillary effects on other calculations under the Annual Iteration Process which also feed into recalculated base revenue figures.
- 3.37 Incremental changes to recalculated base revenue figures for years earlier than Relevant Year t will, subject to a Time Value of Money Adjustment, be brought forward and reflected in the calculation of the term MOD/SOMOD to be directed for Relevant Year t. For the avoidance of doubt, such a revision will not have any retrospective effect on a previously directed value of the term MOD or SOMOD.
- 3.38 EDE, SOEDE, APFE and SOAPFE values are not added to RAV and are not subject to the Totex Incentive Mechanism.



4. Tax liability allowances - financial adjustment methodologies

Part 1 - Overview

- 4.1 The Opening Base Revenue Allowances ('PU' and 'SOPU' values) for the licensee set down in the tables in Special Condition 3A (Restriction of Transmission Network Revenue) and Special Condition 4A (Restriction of System Operator Internal Revenue) include tax liability allowances which are modelled at the outset of the Price Control Period to take account of:
 - (a) existing and announced corporation tax rates and writing down allowance rates;
 - (b) existing legislation, case law, accounting standards and HM Revenue & Customs (HMRC) policy; and
 - (c) modelled levels of gearing and corporate debt interest payments.
- 4.2 Part B of Special Conditions 6D and 7C provides for adjustments to be made to the licensee's tax liability allowances¹⁷ during the Price Control Period commencing 1 April 2013 through the Annual Iteration Process for the ET1 Price Control Financial Model (PCFM) for MOD and SOMOD. Changes to the factors referred to at subparagraphs 4.1(a) and (b) are referred to as 'tax trigger events' and the methodology for adjustments is set out in Part 2 of this Chapter. Changes to the factors referred to at sub-paragraph 4.1(c) are referred to as 'tax clawbacks' and the methodology for adjustments is set out in Part 3 of this Chapter.

Temporal conventions

4.3 For the purposes of Special Conditions 6D and 7C and this Chapter, "Relevant Year t" means the Relevant Year in which a value for the term MOD and SOMOD, calculated through a particular Annual Iteration Process, will be used in the formula for the licensee's Base Transmission Revenue (or System Operator Internal Revenues).

Annual Iteration Process

- 4.4 The adjusting of the licensee's tax liability allowances and regulatory tax losses balance (see paragraph 4.11) is carried out through the Annual Iteration Process for the ET1 Price Control Financial Model. The PCFM Variable Values Table (for both the TO and the SO) for the licensee contains rows for PCFM Variable Values for tax liability allowance adjustments driven by:
 - tax trigger events ('TTE' and 'SOTTE' values); and
 - tax clawbacks ('TGIE and 'SOTGIE' values').

 $^{^{17}}$ References in this Chapter to tax liabilities are references to liabilities for corporation tax only and not to any other type of taxation.



- 4.5 TTE, SOTTE, TGIE and SOTGIE values represent £m amounts. As at 1 April 2013, the TTE, SOTTE, TGIE and SOTGIE values for the licensee for each Relevant Year will be zero. Part B of Special Condition 6D (Specified financial adjustments Transmission Owner) and 7C (Specified financial adjustments System Operator) provides for any revisions to TTE, SOTTE, TGIE and SOTGIE values to be directed after determination under the methodologies in this Chapter.
- 4.6 Subject to paragraph 4.7, revisions to TTE, SOTTE, TGIE and SOTGIE values feed into the recalculated base revenue figures and/or the regulatory tax losses balance (see paragraph 4.11) for applicable Relevant Years in the PCFM, through the Annual Iteration Process. Incremental changes to recalculated base revenue figures for years earlier than Relevant Year t are, subject to a Time Value of Money Adjustment using WACC, brought forward and reflected in the calculation of the term MOD and SOMOD to be directed for Relevant Year t. For the avoidance of doubt, such changes will not have any retrospective effect on a previously directed value of the terms MOD or SOMOD.
- 4.7 Any recalculation of the licensee's tax liability allowances necessarily includes an iterative modelling aspect: an increased allowance gives rise to an increased liability which requires an increased allowance and so on. The effect can be either positive or negative. This 'tax allowance on tax allowance' issue is dealt with as follows:
 - In respect of tax trigger adjustments, revised TTE and SOTTE values (determined using the tax trigger calculation tool referred to in the methodology in Part 2 of this chapter) incorporate the iterative calculations and no further processing is required as part of the Annual Iteration Process.
 - In respect of tax clawback adjustments, revised TGIE and SOTGIE values (determined under the methodology in Part 3 of this chapter) do not incorporate the iterative calculations and these are instead factored into recalculated base revenue figures by functionality within the PCFM as part of the Annual Iteration Process.
- 4.8 It should be noted that underlying tax liability allowances for the licensee within the PCFM might also be changed under the Annual Iteration Process as a consequence of other variable value changes, such as increases in allowed Totex expenditure. However, these changes are distinct from the specific adjustments to tax liability allowances under the methodologies in this Chapter. Assumptions in respect of the allocation of component elements of allowed Totex expenditure to capital allowance pools and revenue expenditure in the PCFM as set out in the Final Proposals will not be updated in the Price Control Period.

Price bases for tax calculations

4.9 The PCFM works in constant 2009-10 prices, with all inputs and outputs in this price base. Where applicable, financial amounts which are expressed in later nominal prices will be deflated to 2009-10 prices in accordance with paragraph 1.7 before being used to determine revised TTE, SOTTE, TGIE and SOTGIE values.



4.10 The PCFM uses nominal prices for some internal tax calculation functions. For this purpose, the PCFM refers to RPI forecast values set at the outset of the Price Control Period and hard coded into the PCFM.

Regulatory tax losses

4.11 In some instances, the approach to calculating tax liability allowances could imply that the licensee could receive a negative allowance. In such cases, the price control treatment is to model a zero allowance; and to record the tax loss arising as a 'regulatory tax loss' figure, to be deducted from the taxable profits before the tax is calculated for any tax liability allowances which would otherwise be allocated to the year concerned or later years. The regulatory tax loss balance attributable to each Relevant Year (together with a running total) is held within the PCFM and regulatory tax losses are referred to where applicable in the methodologies in this Chapter.

Group tax arrangements

- 4.12 For the purposes of the methodology set out in Part 2 of this Chapter, tax liabilities, allowances and trigger events are considered on a notional 'licensee business' basis, and consequently the following are disregarded in the assessment of tax liabilities and allowances for price control purposes:
 - the claim or surrender of group tax relief (including consortium relief);
 - interest payments (including any coupon on any debt instrument or preference share dividend) and receipts which are not tax deductible or chargeable under HMRC rules for the purposes of computing the licensee's taxable profits, including but not limited to adjustments for transfer pricing and the "worldwide" debt cap; and
 - any other adjustments required in Appendix 1 of the July 2009 decision letter.
- 4.13 For the purposes of the methodology set out in Part 3 of this Chapter, levels of debt, interest and gearing are considered at licensee level, as opposed to any other level with respect to the corporate or ownership group of which the licensee is a member.

Part 2 - Adjustments driven by tax trigger events - methodology

4.14 The methodology set out in this Part provides for the licensee's tax liability allowances to be adjusted (subject to a threshold described below) to take account of tax trigger events. This means that consumers will derive a benefit when tax liability costs fall materially, and the licensee will be appropriately reimbursed when they rise.

¹⁸ Clawback of Tax Benefit due to excess gearing clawback



4.15 There are two types of tax trigger event for the purposes of tax liability allowance adjustments:

Type A

Type A events consist of:

- changes to corporation tax rates, applicable to one or more Relevant Years;
 and
- changes to capital allowance rates applicable to one or more Relevant Years.

Type B

Type B events consist of other factors (exogenous to the licensee, its owners or controllers) which cause a change to the licensee's notional tax liabilities for one or more Relevant Years including:

- changes to applicable legislation;
- the setting of legal precedents through case law;
- changes to HMRC interpretation of legislation; and
- changes in accounting standards.
- 4.16 Where a Type B event changes the allocation of allowable expenditure into different capital allowance pools, or introduces new capital allowance pools, the PCFM will only be adjusted for the scale of the change driven by the policy. The applicable allocation and allowance rates will be adjusted to take into account the new expected allocation basis from the introduction of a new capital allowance pool or pools. There is no adjustment of allocations to licensee's actual allocations for Relevant Years up to the date of the change. We will work with licensees to quantify changes to allocations where these are not straightforward.
- 4.17 Type B events will only be taken into account where the licensee has demonstrably used reasonable endeavours to minimise any increase in its tax liabilities.

Materiality threshold and 'deadband'

4.18 A materiality threshold is applied to tax trigger events during the Price Control Period and a £m threshold amount for each Relevant Year is included amongst the fixed values on the Tax Trigger sheet for the licensee in the ET1 PCFM.



- 4.19 The materiality threshold for each Relevant Year is fixed for the Price Control Period and set out in RIIO-T1 Final Proposals for NGGT and NGET¹⁹; and the RIIO-T1 Final Proposals update letter for SHETPLC and SPTL²⁰.
- 4.20 A change to notional tax liability allowances for a particular Relevant Year is only applied where one or more trigger events result in a change to the licensee's tax liability allowance for that year whose absolute value is greater than the threshold amount. Furthermore, any change to the tax liability allowance (upward or downward) is limited to the amount which is in excess of the threshold amount for the year concerned.
- 4.21 Where the change to the licensee's tax liability allowance for a particular Relevant Year is below the threshold, subsequent tax trigger events, relating back to that Relevant Year could cause the threshold amount to be exceeded. In that case, a change to the licensee's tax liability allowance for the Relevant Year concerned (a revised TTE/SOTTE value) would be determined once the threshold has been exceeded. Note that there is no retrospective adjustment to MOD terms already directed. Adjustments become component parts of future MOD calculations only.
- 4.22 For the avoidance of doubt, a regulatory tax loss figure attributable to a particular Relevant Year is not taken into account for the purposes of deciding whether the threshold amount has been exceeded for that year.

Accounting standards

- 4.23 The licensee's tax liability calculations are subject to:
 - changes to applicable legislation;
 - the setting of legal precedents through case law;
 - · changes to HMRC interpretation of legislation; and
 - changes in accounting standards applicable to preparation of the licensee's statutory accounts.²¹
- 4.24 The accounting frameworks to be applied by the licensee for the purpose of computing tax liabilities are:
 - UK GAAP in respect of Relevant Years 2013-14 and 2014-15; and
 - for each subsequent Relevant Year either:
 - o EU-IFRS, if adopted for use by the licensee; or

¹⁹ http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/1 RIIOT1 FP overview dec12.pdf

http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/SPTL_SHETPLC_UpdateLetter%2021_12_2012.pdf

²¹ Section 385 of the Companies Act 2006 refers.



Notification of tax trigger events

Type A trigger events

- 4.25 Ofgem will, by 30 September in each Relevant Year t-1, notify the licensee of the Type A trigger events which it proposes to take into account in determining any revised TTE/SOTTE values for use in the Annual Iteration Process that is required to take place by 30 November in that same Relevant Year t-1. It is, however, open to the licensee to contact Ofgem in advance of 30 September in each Relevant Year t-1 to discuss the current view of Type A events. If Ofgem does not notify the licensee by 30 September in any year, the adjustments will be made in the subsequent year.
- 4.26 The notification from Ofgem will specify the corporation tax rate change(s) or changes to rates of capital allowances concerned and the Relevant Years to which they relate.
- 4.27 If, after receiving the notification referred to in paragraph 4.25, the licensee considers that a Type A trigger event has occurred, which has not been included in the notification, it should contact Ofgem within 14 days and provide details of the event concerned. If Ofgem agrees that a further Type A trigger event has occurred, it will notify the licensee by 31 October in the same Relevant Year t-1.
- 4.28 If any Type A trigger event is left out of account when it ought to have been included in the determination of a revised TTE/SOTTE value (either because it was not included in a notice or otherwise) the position will be rectified in a subsequent revision of the TTE/SOTTE value(s) concerned. In such a case, the functionality of the PCFM means that a Time Value of Money Adjustment would be applied.

Type B trigger events

- 4.29 The licensee must notify Ofgem not later than 30 September in each Relevant Year t-1 of all the Type B trigger events that it becomes aware of, except those which have been previously notified. This requirement applies equally to events which could be expected to increase or to reduce the licensee's tax liability allowances.
- 4.30 If the licensee fails to notify Ofgem of any events it becomes aware of, or should be aware of, then subject to the licensee demonstrating that it uses reasonable endeavours to identify all Type B trigger events this may not be held a breach of the licence conditions. We will deal with each event on its merits on a case-by-case basis.

- 4.31 The notification referred to in paragraph 4.29 should include, in respect of each Type B trigger event:
 - (a) a description of the event;
 - (b) the changes in tax liability allowances which the event is considered to cause and the Relevant Years to which they relate;
 - (c) the calculations (including all relevant parameters and values) which the licensee used to arrive at the amounts referred to in sub-paragraph b). In performing these calculations the licensee should include a 'tax allowance on tax allowance' factor as explained in paragraph 4.7 but should ignore the tax trigger deadband which is adjusted for in paragraph 4.40;
 - (d) any relevant information provided by HMRC in relation to the event;
 - (e) evidence of mitigating measures which the licensee has taken to minimise any additional liabilities arising from the event; and
 - (f) whether the licensee agrees or disagrees with HMRC, whether they may contest it; and how they intend to report it in the tax submissions and their statutory and regulatory accounts.
- 4.32 The licensee's notification should also state whether the licensee considers that the materiality threshold (see paragraph 4.18) has been exceeded for the Relevant Year(s) concerned, taking into account the total net amount of tax liability changes (upward and downward) included in the current notification and any previous notifications.
- 4.33 Ofgem will review any notifications given to it by the licensee under paragraph 4.29 and may ask the licensee:
 - for additional information in respect of one or more of the notified events; and/or
 - to submit the results of agreed upon audit procedures, specified by Ofgem and carried out by the licensee's Appropriate Auditors²², to assist in confirming the appropriateness and accuracy of the licensee's calculations.
- 4.34 Ofgem will inform the licensee by 31 October in the same Relevant Year t-1 whether, in respect of each Type B trigger event:
 - it has agreed the change in the tax liabilities figure calculated by the licensee;
 - it has determined a different change in tax liabilities figure from that calculated by the licensee; or

²² As defined in Standard Condition B1 of the Electricity Transmission Licence

- it has decided that consideration of any change in tax liabilities should be deferred until further/better information is available.
- 4.35 Where Ofgem determines a different change in tax liabilities figure from that calculated by the licensee or decides that consideration of any change in tax liabilities should be deferred, it will set out its reasons and/or calculations. The licensee has the right to reply setting out its objections, which Ofgem will consider.
- 4.36 Ofgem will also notify the licensee by 31 October in each Relevant Year t-1, of any Type B trigger events that it proposes to take into account that have not been included in a notification sent to Ofgem by the licensee. The licensee has the right to reply setting out its objections, which Ofgem will consider.
- 4.37 The final quantification and adjustment for any type B trigger event will be deemed to have occurred when the licensee and HMRC conclude the agreement of the licensee's tax liabilities for the Relevant Year concerned. This means that the final quantification will typically either confirm a prior value of TTE/SOTTE or revise a value of TTE/SOTTE for a Relevant Year t-2 or earlier. The adjustment to TTE/SOTTE values will be directed in accordance with paragraphs 4.43 to 4.45.

Logging of trigger events

- 4.38 Ofgem will keep a log of tax trigger events which have been subject to notifications by it or by licensees showing for each event:
 - a description of the event and whether it was Type A or Type B;
 - the name of the party who notified the event (Ofgem or licensee);
 - the date of notification;
 - the amount of any change in the licensee's tax liabilities which has been determined under the procedures set out below; and
 - details of any events for which a determination is in abeyance and a description of the outstanding actions to be taken.

Determination and direction of revised TTE and SOTTE values

Determination of revised TTE and SOTTE values using the tax trigger calculation tool

- 4.39 The design of the ET1 PCFM includes additional functionality meaning that a copy of the ET1 PCFM (held on Ofgem's website) can be used as a tax trigger calculation tool, as an adjunct to the Annual Iteration Process.
- 4.40 Once a tax trigger event has taken place at any point in the RIIO-T1 Price Control Period, then after 31 October in each Relevant Year t-1, Ofgem will generate a *duplicate copy* of the ET1 PCFM, in its state following the last completed Annual Iteration Process, but including any subsequent functional modifications under

Special Condition 5A for use as the tax trigger calculation tool. It will then take the following steps to determine TTE and SOTTE values for each licensee:

- (i) All of the other PCFM Variable Value revisions which have been determined for use in the prospective Annual Iteration Process (and which Ofgem expects to include in the notices of proposed Variable Value revisions to licensees) will be applied to the Variable Values Table. The correct Relevant Year will be selected using the PCFM year t selector on the User interface worksheet of the PCFM.
- (ii) All of the existing TTE and SOTTE values will be re-set to zero.
- (iii) Any existing values in the yellow input cells on the tax trigger worksheet will be cleared.
- (iv) The 'Tax allowance (pre-losses) before tax trigger' amount for the licensee for each Relevant Year shown on the tax trigger worksheet will be noted:
- (v) The PCFM copy will be put into 'tax trigger tool mode' using the selector on the User Interface worksheet of the PCFM.
- (vi) Changes to corporation tax rates or writing down allowance rates (reflecting Type A trigger events) will be input into the yellow input cells in the appropriate rows and Relevant Year columns on the tax trigger worksheet.
- (vii) The tax trigger macro calculation programmed into the workbook will be run.
- (viii) The aggregate changes to the licensee's tax liability allowances determined in respect of all Type B trigger events (whether notified during Relevant Year t-1 or on an earlier occasion) will be input into the yellow input cells on the 'Tax Trigger' row of the 'B event value' section in the appropriate Relevant Year columns on the tax trigger worksheet. This value should include the iterative tax allowance on tax allowance factor referred to in paragraph 4.7.
- (ix) The tax trigger macro calculation will be re-run.
- (x) The 'tax allowance (pre-losses) before tax trigger' referred to at step (iv) will be deducted from the 'Tax allowance' that has been calculated based on the new inputs (including both Type A and Type B trigger events).
- (xi) The absolute value of the amount obtained under step (x) will be ascertained.
- (xii) If the absolute value ascertained at step (xi) is less than the deadband amount (which is a fixed amount for each Relevant Year), the tax trigger adjustment is shown as zero; otherwise step (xiii) applies.
- (xiii) If the value calculated at step (xi) is greater than the deadband amount then:
 - (i) if the amount obtained under step (x) is negative, the tax trigger adjustment is shown as that amount plus the deadband ; or

- (ii) if the amount obtained under step (x) is positive, the tax trigger adjustment is shown as that amount minus the deadband amount.
- 4.41 Subject to paragraph 4.42, the relevant amounts obtained under step (xii) or (xiii) will then be determined to be the TTE/SOTTE values for the licensee for each Relevant Year where the deadband has been exceeded. Where these values differ from the TTE/SOTTE values shown on the Variable Values Table for the licensee in the ET1 PCFM (following the last completed Annual Iteration Process), Ofgem will direct that the TTE/SOTTE values concerned are to be changed in accordance with the process set out in Part B of Special Conditions 6D and 7C, as appropriate, and referred to below.
- 4.42 The process set out in paragraph 4.40 will be re-performed, if any of the PCFM Variable Values, referred to at step (i) are changed, to ensure that accurate TTE values are available for the Annual Iteration Process.

Notes on the tax trigger calculation - set out in 4.40

- The two stage calculation process referred to in steps (vii) and (ix) allows the tax trigger calculation tool to take full account of the interrelationship between Type A and Type B events.
- The nullification of existing TTE/SOTTE values referred to in step (ii) together with the inclusion of all determined changes to the licensee's tax liabilities referred to in step (viii) ensures that the determination of TTE/SOTTE values under step (xiii) is on a consistent basis and accurately applies the materiality threshold/ deadband applicable to each Relevant Year.
- the inclusion of all available revisions to other PCFM Variable Values under step (i) ensures that the tax allowance calculation is as up to date as possible for each Relevant Year.
- Once a tax trigger event has occurred in any prior year, the tax trigger calculation will need to be run in all subsequent years, even if no tax trigger event occurs in the year of running the calculation.

Direction of revised TTE and SOTTE values

- 4.43 The Authority will direct any revisions to TTE and SOTTE values for the licensee by 30 November in each Relevant Year t-1, having given the licensee at least 14 days notice of the values which it proposes to direct.
- 4.44 Revised TTE and SOTTE values can be directed in respect of a particular Annual Iteration Process for any Relevant Year during the Price Control Period, including for years later than year t.
- 4.45 The procedure for the Authority's direction of revised TTE and SOTTE values is set out in Part D of Special Conditions 6D and 7C.

Part 3 - Adjustments driven by gearing levels and corporate debt interest costs ('tax clawback') - methodology

- 4.46 At the outset of the Price Control Period, modelling assumptions are made about financing requirements, gearing levels and corporate debt costs for each of the licensee's transmission owner (TO) and system operator (SO) parts of the business. These result in modelled levels of tax deductible interest costs and tax relief for each of the TO and SO. The TGIE and SOTGIE adjustments are to be calculated separately for each of the TO and the SO, where applicable, both are referred to as the licensee below (and references to TGIE should be taken to include SOTGIE).
- 4.47 If the licensee operates at a higher level of gearing than the modelled level, it stands to benefit from the tax value of higher levels of deductibility. We apply a mechanism which 'claws back' this benefit for consumers by updating the licensee's tax liability allowances using the methodology set out in this Part. It should be noted that there is no provision to give additional tax allowances to the licensee if it chooses to operate at a level of gearing lower than the modelled one.

Determination and direction of revised TGIE and SOTGIE values

- 4.48 As a function of each Annual Iteration Process of the PCFM, for each year in the period 2013-14 to 2020-21 inclusive, updated figures for the expected amount of tax deductible interest payable by the licensee are calculated. These are shown as core and non-core elements in the Finance and Tax worksheet.
- 4.49 After 30 September in each Relevant Year, Ofgem will obtain the most recently modelled figure for tax deductible interest payable by the licensee in Relevant Year t-2, and all prior years, from a copy of the ET1 PCFM, in its state following the last completed Annual Iteration Process (but including any functional modifications under Special Conditions 6D and 7C)²³.
- 4.50 The licensee is required to submit its price control cost reporting pack by 31 July in each Relevant Year t- 1^{24} , in accordance with Standard Special Condition B15 (Regulatory Instructions and Guidance) of its electricity transmission licence and the Price Control Cost Reporting Rules: Instructions & Guidance ('RIGs') issued under that condition.
- 4.51 Ofgem will obtain from the 'tax clawback data table' in that submission:
 - (i) the licensee's view of its adjusted net debt figure as at 31 March in Relevant Year t-2 for the purposes of this calculation; and

²³ The determination in respect of Relevant Year t-2 will use the data subsisting immediately after the preceding Annual Iteration Process, which will have taken place by 30 November in Relevant Year t-2. It will not therefore have been updated in respect of information reported by the licensee during Relevant Year t-1. However, the annual re-performance of the determination for preceding years will ensure that finalised figures are subsequently taken into account.

²⁴ subject to any changes to Standard Condition B15.

- (ii) the adjusted amount of tax deductible net interest payable by the licensee during Relevant Year t-2, measured on an accruals basis.
- 4.52 The criteria, which the licensee must observe in reporting each of these adjusted items, are set out in the Cost and Revenue Reporting RIGs; and Ofgem reviews the licensee's reporting in this regard.
- 4.53 Ofgem will obtain from the PCFM:
 - The licensee's indicative RAV (including any Shadow RAV) balance²⁵ in 2009-10 prices as at 31 March in Relevant Year t-2 and inflate to year end prices for Relevant Year t-2, using the arithmetic average of the RPI data for March of Relevant Year t-2 and April of Relevant Year t-1; and
 - The modelled figure for tax deductible interest payable by the licensee in Relevant Year t-2.

Applicability tests

4.54 Ofgem will use two tests – a gearing level test and a positive tax benefit test - to determine the TGIE and SOTGIE value for the licensee in respect of Relevant Year t-2.

Gearing level test

- 4.55 Ofgem will divide the licensee's net debt figure as at 31 March in Relevant Year t-2 (see paragraph 4.51(i)) into the licensee's indicative RAV (including any Shadow RAV) balance as at 31 March in Relevant Year t-2 in nominal prices to obtain an actual calculated gearing ratio.
- 4.56 If the actual calculated gearing ratio established under paragraph 4.55, expressed as a percentage, is greater than the notional level of gearing as set out in the Final Proposals for each licensee, then the positive tax benefit test will be performed. If the positive tax benefit test is not performed then TGIE is zero.

Positive tax benefit test

- 4.57 Ofgem will subtract the "interest" as set out in the PCFM in the Finance and Tax worksheet in Relevant Year t-2 (see paragraph 4.49) from the adjusted tax deductible interest payable reported by the licensee and treated as a positive value (see paragraph 4.51(ii)) for Relevant Year t-2. If the resultant amount is positive then the clawback has been triggered.
- 4.58 If the amount is zero or negative meaning there is no positive tax benefit, the clawback is not triggered and the value of TGIE is zero. If the clawback has been triggered, Ofgem will multiply the result in 4.57 by the corporation tax rate for the licensee (as hard coded in the PCFM) to derive the licensee's benefit figure which becomes TGIE.

²⁵ As set out at the foot of the "Finance & Tax" worksheet in the PCFM.



4.59 TGIE and SOTGIE values can only be zero or positive. The mechanics of the PCFM will produce a negative adjustment to tax allowances as intended by the positive tax benefit test.

Interaction with unutilised regulatory tax losses

4.60 If for any Relevant Year the licensee has a clawback but no modelled profits subject to tax then the net positive tax benefit amount calculated in 4.57 is added to the regulatory tax losses balance for the licensee. This will be utilised against future core taxable profits as set out in Part 4 below.

Direction of TGIE and SOTGIE values

- 4.61 TGIE and SOTGIE values will be directed in respect of Relevant Year t-2 and each prior Relevant Year in the Price Control Period. This is because the figures used in determining them are obtained from the licensee's annual cost reporting return which contains data relating to Relevant Year t-2 and prior years²⁷.
- 4.62 If, for any reason, the net debt or tax deductible interest figures submitted by the licensee or the RAV used in the model or modelled interest costs that have been used in determining TGIE/SOTGIE values are subject to amendment, the following procedure will be followed for the next Annual Iteration Process:
 - Ofgem will re-perform the gearing level test and, if applicable, the positive tax benefit test to determine whether any revised TGIE/SOTGIE value should be determined and directed in respect of the Relevant Year to which the amended figures relate. For this purpose, Ofgem will use a copy of the PCFM in its state following the last completed Annual Iteration Process to obtain an updated RAV value and modelled figure for tax deductible interest payable by the licensee.
 - If a revised TGIE/SOTGIE value is directed for a year earlier than Relevant Year t-2, any resultant changes to recalculated base revenue figures for years earlier than Relevant Year t-2 calculated under an Annual Iteration Process will, subject to a Time Value of Money Adjustment, be brought forward and reflected in the calculation of the term MOD and SOMOD to be directed for Relevant Year t. For the avoidance of doubt, such a revision will not have any retrospective effect on a previously directed value of the term MOD and SOMOD.
- 4.63 The Authority will direct TGIE/SOTGIE values for the licensee by 30 November (or as soon as reasonably practicable thereafter) in each Relevant Year t-1, having given the licensee at least 14 days notice of the values which it proposes to direct.
- 4.64 The procedure for the Authority's direction of revised TGIE/SOTGIE values is set out in Part D of Special Condition 6D and 7C.



- 4.65 Subject to paragraph 4.69, a positive TTE/SOTTE value will increase the recalculated base revenue figure for the Relevant Year concerned by the same amount.
- 4.66 Subject to paragraph 4.69, a negative TTE/SOTTE value will decrease the recalculated base revenue figure for the Relevant Year concerned by the equivalent amount.
- 4.67 Subject to paragraph 4.69, a positive TGIE/SOTGIE value will decrease the recalculated base revenue figure for the Relevant Year concerned by:
 - the amount of the value²⁶; and
 - a 'tax allowance on tax allowance' factor calculated by functionality within the PCFM (see paragraph 4.7).
- 4.68 As noted at paragraph 4.59, TGIE/SOTGIE values can only be zero or positive.
- 4.69 If there is any unutilised regulatory tax losses balance for the licensee, any change to recalculated base revenue under paragraph 4.65, 4.66 or 4.67 will be partially or fully abated to take account of that balance, and the regulatory tax losses balance held within the ET1 PCFM will be updated accordingly.
- 4.70 For the avoidance of doubt, regulatory tax losses are not carried back and offset against tax liability allowances for Relevant Years earlier than the Relevant Year to which the regulatory tax loss concerned is attributable.

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²⁶ Subject to a price base adjustment factor applied under the PCFM functionality (see paragraph 1.6 in chapter 1).

5. Corporate debt - allowed percentage cost financial adjustment methodology

Overview

- 5.1 The allowed revenue totals for each licensee include amounts to cover the efficient cost of raising finance for the transmission business from external sources. This is commonly referred to as the 'cost of capital'. Cost of capital allowances are calculated as a percentage return on the licensee's Regulatory Asset Value (RAV). The percentage represents Ofgem's estimate of the weighted average cost of capital (WACC)²⁷ for the transmission business. The Vanilla WACC is determined using a pre-tax cost of corporate debt percentage, a post-tax real cost of equity percentage and a weighting (notional gearing) percentage.
- 5.2 Under the RIIO-T1 price control the cost of equity and notional gearing percentages are fixed for the whole of the Price Control Period. However, the corporate debt cost percentage is updated on an annual basis with reference to a trailing average index of debt costs. The update is effected through the annual iteration of the ET1 Price Control Financial Model (PCFM).
- 5.3 The use of an indexed corporate debt percentage means that allowed revenues are appropriately updated to reflect debt market conditions. As a result, consumers will derive a benefit when debt costs fall whilst licensees and their investors are provided with assurance that higher, efficiently incurred debt costs will be funded.
- 5.4 The basis for updating the cost of debt index percentage value by revising PCFM Variable Values for the licensee's allowed TO percentage cost of corporate debt ('CDE' values) is established in Special Condition 6D (Specified financial adjustments Transmission Owner). Special Condition 6D requires revised CDE values to be determined in accordance with the methodology in this Chapter.

National Grid Electricity Transmission plc (NGET) – System Operator price control

5.5 Special Condition 7C (Specified financial adjustments – System Operator) of NGET's licence provides for PCFM Variable Values for the licensee's allowed SO percentage cost of corporate debt ('SOCDE' values) to be determined in accordance with the methodology in this Chapter. The SOCDE value for any Relevant Year is the same as the CDE Value for the same year so references hereafter to CDE include SOCDE.

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²⁷ see Glossary

Temporal conventions

• For the purposes of Special Condition 6D, 7C and this Chapter, "Relevant Year t" means the Relevant Year in which a value for the term MOD, or as applicable SOMOD, calculated through a particular Annual Iteration Process, is used in the formula for the licensee's Base Transmission Revenue/Maximum SO Internal Revenue²⁸.

Methodology for determining revised PCFM Variable Values for the cost of corporate debt

- 5.6 At the outset of the Price Control Period (1 April 2013), the CDE value for every Relevant Year will be the pre-tax cost of debt percentage for the licensee set down in RIIO-T1 Final Proposals or other relevant decision documents relating to licensees who were 'fast-tracked' in respect of the RIIO-T1 price control review.
- 5.7 Revised CDE values are to be derived using the pounds sterling indices of bonds issued by non-financial institutions which have a remaining maturity of 10 or more years contained in the Markit iBoxx® database of bond market data.
- 5.8 A revised CDE value will be determined in accordance with the methodology set out below and directed in respect of each Annual Iteration Process for Relevant Year t and subsequent Relevant Years.
- 5.9 The following steps are to be followed to determine the revised CDE value:

Step 1

Establish the 'trading days period²⁹' to be used in relation to the particular Annual Iteration Process:

Annual Iteration Process taking place not later than:	Trading days period	
30 November 2013	1 November 2003 to 31 October 2013	
30 November 2014	1 November 2004 to 31 October 2014	
30 November 2015	1 November 2005 to 31 October 2015	
Et seq	Et seq	

²⁸ See Special Conditions 3A (Restriction on Transmission Network Revenue) and 4A (Restriction of System Operator Internal Revenue).

²⁹ Trading days as published in the Markit iBoxx® database



Step 2

For each day in the trading days period ascertained under Step 1, calculate the average of the annual yield figures from the following two iBoxx Sterling Non-Financial Indices:

(i). A 10+ index Markit iBoxx series reference: DE000A0JY837; and

(ii). BBB 10+ index Markit iBoxx series reference: DE000A0JZAH1

The above indices will be sourced from the Markit data service, to which Ofgem is subscribed. The A 10+ index covers bonds rated "A+", "A", and "A-" according to Markit iBoxx's published methodology and the BBB 10+ index covers bonds rated "BBB+", "BBB", and "BBB-". Each index only produces one annual yield figure for each day. Therefore, the average for each day is calculated as:

"A 10+ index" annual yield figure for day + "BBB 10+ index" annual yield figure for day

2

Step 3

For each day in the trading day period ascertained under Step 1, obtain a 'breakeven inflation' figure for 10-year government-issued bonds by applying the following formula:

$$\pi = (1 + i) / (1 + r) - 1$$

where:

 π is the Ofgem imputed breakeven inflation figure.

is the Yield from British Government Securities, 10 Year Nominal Zero
 Coupon – series reference IUDMNZC; and

r is the Yield from British Government Securities, 10 Year Real Zero Coupon – series reference IUDMRZC.

The above series will be sourced from the statistics page on the Bank of England's website.³⁰ In the event that the above data series does not include an entry that exactly matches the date from the Markit iBoxx series, the nearest older entry is to be used.

³⁰ http://www.bankofengland.co.uk



Step 4

For each day in the trading day period ascertained under Step 1, deflate the average of the annual yield figures obtained under Step 2 using the Bank of England's 'breakeven inflation' figure obtained under Step 3, using the following formula:

$$CoD = (1 + iBoxx) / (1 + \pi) - 1$$

where:

CoD is the daily deflated average of the annual yield figures;

iBoxx is the average of the annual yield figures obtained under Step 2; and

 π is the Ofgem imputed breakeven inflation figure obtained under Step 3.

This step converts the nominal bond yields in the iBoxx data to a real cost of debt value.

Step 5

Calculate the arithmetic mean value of CoD across the trading days period ascertained under Step 1.

This arithmetic mean, expressed as a percentage, constitutes the revised PCFM Variable Value for the cost of corporate debt which will be directed and entered into the PCFM to two decimal places.

Non-availability of iBoxx or Bank of England data

- 5.10 If, for any reason, iBoxx data or Bank of England data is unavailable for an entire trading days period in time to determine revised PCFM Variable Values for the cost of corporate debt for any Annual Iteration Process, then for that Annual Iteration Process only, the trading days period concerned shall be deemed to have ended on the last trading day for which data has been published. If the data concerned is subsequently published, revised PCFM Variable Values for the affected Relevant Years will be directed.
- 5.11 If, for any reason, the iBoxx or Bank of England series identified above cease to be published, or if there is a material change in the basis of those indices, Ofgem will consult on alternatives, as well as on any reconciliation that may need to be undertaken between the above series and any replacements.



- 5.12 SHE Transmission plc (SHETPLC) is expected to carry out a large capital assets investment programme during the RIIO-T1 period in respect of which it may need to raise significant amounts of debt financing. Therefore, it can be expected that SHETPLC's effective cost of debt may be proportionately closer to current market rates than will be the case for other licensees.
- 5.13 To address this issue, the average annual yield figures used in calculating revised PCFM Variable Values for the cost of corporate debt for SHETPLC are subjected to a weighting process based on changes to SHETPLC's RAV during the RIIO-T1 period.
- 5.14 Revised PCFM Variable Values for the cost of corporate debt for SHETPLC are calculated in accordance with the following formula:

$$SHETL\ IV_t = \left[IV_t X \left(\frac{Opening\ RAV\ 2013-14}{Closing\ RAV\ t-1} \right) \right] + \left[\frac{Average\ of\ \textit{CoD}}{From\ 1\ Apr\ to} \times \left(\frac{Change\ in\ RAV\ for\ t-1}{Closing\ RAV\ t-1} \right) \right] + \sum_{2013-14}^{t-2} \frac{Average\ of\ \textit{CoD}}{S1\ Mar} \times \left(\frac{Change\ in\ RAV\ t-1}{Closing\ RAV\ t-1} \right) + \sum_{2013-14}^{t-2} \frac{Average\ of\ \textit{CoD}}{S1\ Mar} \times \left(\frac{Change\ in\ RAV\ t-1}{Closing\ RAV\ t-1} \right)$$

Where:

SHETPLC IV, means the revised TO CDE value for SHETPLC for Relevant Year t.

 ${
m IV_t}$ means the cost of debt index PCFM Variable Value for all other licensees determined under Steps 1 to 5 above.

RAV means the Regulatory Asset Value for SHETPLC (inclusive of 'shadow' RAV³¹) for the specified Relevant Years, expressed in nominal prices.

For this purpose, RAV values expressed in nominal prices will be obtained using the following procedure:

- after 31 October in Relevant Year t-1, Ofgem will take a copy of the PCFM in its state following the last completed Annual Iteration Process, but including any subsequent functional modifications under Special Condition 5A;
- Ofgem will apply to that copy, all of the prospective revised PCFM variable Values which it has by that time determined for use in the Annual Iteration Process that is required to take place by 30 November in that same regulatory year t-1³².
- Ofgem will run trial calculations using those values and extract the nominal RAV values which are generated within the copy model as a result.

³¹ See Glossary

³² For the purpose of the Annual Iteration Process itself these prospective values remain contingent upon the notification and direction processes specified in relevant Special Conditions



CoD

means a deflated average annual yield figure determined in accordance with the formula at Step 4 above, but in respect of the period specified in this formula.

5.15 It should be noted that the RAV values for SHETPLC, recorded in the PCFM, and used in calculating values of the term SHETPLC IV may subsequently be changed by other aspects of Annual Iteration Processes. In those instances, revised CDE values for SHETPLC will be calculated and directed for any affected Relevant Years.

Use of revised PCFM Variable Values in the Annual Iteration Process

- 5.16 The Authority will direct revised CDE³³ values by no later than 30 November in each relevant Year t-1 in accordance with Part D of Special Condition 6D (or Special Condition 7C). Notice of proposed revised values will be given to licensees at least 14 days before the date of the direction.
- 5.17 PCFM Variable Values for the cost of corporate debt will be directed together with all other types of PCFM Variable Value. Further information on the process is given in Chapters 1 and 2.
- 5.18 The data and spreadsheet used to calculate revised CDE values will be published on the Ofgem website together with the weighted index used for the SHETPLC calculations referred to above, and will be provided to the licensees with initial notification of the revised values.

³³ and SOCDE values for NGET



- 6.1 For RIIO-T1 Final Proposals Opening Base Revenue Allowances will have been modelled on the basis that actual Totex³⁴ expenditure levels are expected to equal allowed Totex expenditure levels (allowances). If actual (outturn) expenditure differs from allowances, for any Relevant Year during the Price Control Period, the Totex Incentive Mechanism (TIM) provides for an appropriate sharing of the incremental amount (whether an overspend or underspend) between consumers and licensees.
- 6.2 The ET1 Price Control Financial Model (PCFM) contains values for both actual Totex expenditure and allowed Totex expenditure levels which, as mentioned above, are initially equal to each other. Both the actual and allowed expenditure values contained in the PCFM can be varied for the purposes of applying the TIM through the Annual Iteration Process.

Actual Totex expenditure

- 6.3 Actual Totex expenditure is divided into several sub-divisions to facilitate varying tax pool treatments under the Annual Iteration Process calculations. This Chapter sets out the process by which the actual Totex expenditure values in the PCFM can be revised. It also describes the way in which revised figures for Totex flow into the calculation of the terms MOD_t and SOMOD_t^{35} .
- 6.4 Special Conditions 6C (Determination of PCFM Variable Values for Totex Incentive Mechanism Adjustments Transmission Owner) and 7B (Determination of PCFM Variable Values for Totex Incentive Mechanism Adjustments System Operator) provide for the Authority to determine revised PCFM Variable Values for the licensee relating to actual Totex expenditure levels. They also set out the procedures for the direction of those values so that they can be used for the Annual Iteration Process.

Allowed Totex expenditure

6.5 The procedures for determining and directing revised PCFM Variable Values relating to allowed Totex expenditure levels are covered in the Chapters of this Handbook shown in Table 6.1 below:

35 For National Grid Electricity Transmission plc (NGET) only

³⁴ See Glossary

Table 6.1 – Special Conditions with provisions to revise PCFM Variable Values relating to allowed Totex expenditure levels

Special Condition	PCFM Variable Value	Relating to	Handbook Chapter
6E	IRM	Innovation Roll-out allowed expenditure	12
6F	GCE	Baseline generation connection outputs and generation connections volume driver	10
6G	EPIE	Enhancement to Pre-existing Infrastructure	11
6H	IAEEPS	Enhanced Physical Site Security Costs	7
	IAEBT	BT 21st Century Costs (SHETPLC ³⁶ only)	
	IAEWL	Wayleave compensation costs (SHETPLC only)	
	IAESSCM	Exceptional Subsea Cable Fault Costs (SHETPLC only)	
	IAEWR	Workforce renewal (SPTL only) ³⁷	
	IAENLUM	Non-load related work costs (SPTL only)	
61	WWE	Wider Works allowed expenditure	8
63	IWW	Network development policy and the Wider Works volume driver (NGET ³⁸ only)	9
6K	UCE	Undergrounding uncertainty volume driver (NGET only)	13
6L	DRI	Demand related infrastructure volume driver (NGET only)	14
7D	SOIAEEPS SOEMRES	Enhanced Security Costs Electricity Market Reform Enduring Solution	7

SHE Transmission plc
 SP Transmission Ltd
 National Grid Electricity Transmission plc

Description of the Totex Incentive Mechanism

- 6.6 In the remainder of this Chapter, references to the term MOD should be taken to include SOMOD and references to Special Condition 6C should be taken to include Special Condition 7B.
- 6.7 The Totex Incentive Mechanism (TIM) applies adjustments to the Totex figure used in the fast/slow money modelling of recalculated base revenue figures under the Annual Iteration Process. The adjustments reflect the amount of under or over expenditure by the licensee against Totex allowances and the Totex Incentive Strength Rate (incentive strength) for each licensee. The incentive strength is a percentage figure specified in Special Condition 6C for each licensee. It represents the percentage that a licensee bears in respect of an overspend against allowances or retains in respect of an underspend against allowances. The adjustment that is made to the Totex figures is the Funding Adjustment Rate (often called the 'sharing factor') which is calculated as 1 - incentive strength. Applying the Funding Adjustment Rate to the over (or under spend) gives the amount that is added to (or subtracted from) the Totex allowances included in recalculated base revenues. Wherever the term "Totex Incentive Mechanism Adjustment" is used in the Special Conditions, it means an adjustment under the mechanism described in this paragraph.
- 6.8 The TIM uses the actual Totex expenditure values reported to Ofgem by 31 July each year (subject to any revisions that may be required for corrections of data or for expenditure that is not regarded as efficient) and adjusts revenues in the following Relevant Year via the MOD term. The incentive mechanism therefore operates with a two year lag.
- 6.9 Totex, once ascertained under the TIM, is apportioned using the Totex Capitalisation Rate applicable to the licensee, as:
 - fast money flowing directly to the recalculated base revenue figure for the Relevant Year to which the allowed expenditure relates; and
 - slow money additions to the licensee's RAV in the Relevant Year to which the allowed expenditure relates; the return on RAV and depreciation flowing to the recalculated base revenue figure for the Relevant Year.
- 6.10 Totex Capitalisation Rates are specified at Appendix 1 to Special Conditions 6C and 7B and are hard coded into the PCFM as fixed input values for the licensee. The SO has its own Totex Capitalisation Rate.
- 6.11 Under the Annual Iteration Process, the effects of this modelling treatment, (including any ancillary effects in respect of eg tax allowances) are reflected in the value of the term MOD_t .

Totex Incentive Mechanism - illustrative examples



6.12 Basic, illustrative examples of the calculation approach are set out below:

Opening position:	
allowed Totex expenditure:	100
assumed actual Totex expenditure:	100
over/underspend:	nil
Totex amount for fast/slow money treatment	100
Revised position – scenario 1:	
allowed Totex expenditure:	110
actual Totex expenditure	90
underspend:	(20)
incentive strength say 40% (or 0.4)	
Totex adjustment (1 - 0.4) X (20)	(12)
Totex amount for fast/slow money treatment 110 - 12	98
Revised position – scenario 2:	
allowed Totex expenditure:	110
actual Totex expenditure	120
overspend:	10
incentive strength say 40% (or 0.4)	
Totex adjustment (1 – 0.4) X 10	6
Totex amount for fast/slow money treatment	

6.13 The reduced Totex amount for fast/slow money treatment in scenario 1 represents a clawback of part of the underspend achieved by the licensee to benefit consumers. The increased Totex amount for fast/slow money treatment in scenario 2 represents a reimbursement of part of the overspend incurred by the licensee.

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Application of the TIM under the Annual Iteration Process

110 + 6

6.14 For the purposes of Special Condition 6C and this Chapter, "Relevant Year t" means the Relevant Year in which a value for the term MOD calculated through a

particular Annual Iteration Process, is used in the formula for the licensee's Base Transmission Revenue³⁹.

6.15 The opening values for actual Totex expenditure contained in the PCFM will be revised to reflect outturn values (in 2009-10 prices) reported by the licensee in its annual cost reporting submission, subject to review by Ofgem. The normal revision cycle will be:

Relevant Year t-2: Totex expenditure incurred;

Relevant Year t-1: Outturn expenditure levels reported to Ofgem by 31

July;

Relevant Year t-1: 31 October – cut off date for making revisions (that may

be required for corrections of data or for expenditure that is not regarded as efficient) to outturn expenditure levels to be taken account of in that year's Annual

Iteration Process

Relevant Year t-1: Revised PCFM Variable Values for actual Totex

expenditure determined and directed by the Authority by

30 November;

[and, as applicable, revised PCFM Variable Values for

categories of allowed Totex expenditure

determined/directed – see relevant Handbook Chapters]

Relevant Year t-1: Value for MOD_t directed by the Authority by 30

November;

Relevant Year t: Value for MOD_t effective in formula for licensee's Base

Transmission Revenue.

6.16 The Authority can determine and direct revised PCFM Variable Values for actual Totex expenditure for years earlier than Relevant Year t-2 for use in any Annual Iteration Process, but only where necessary to address a restatement of, or correction to, price control cost information submitted by the licensee.

6.17 Allowed Totex expenditure levels will be revised in accordance with the provisions of applicable scheme licence conditions and the associated methodologies in this Handbook. In instances where allowed Totex expenditure levels are revised for Relevant Year t-1 or later (in relation to the timeline set out in paragraph 6.15), the PCFM will automatically update expected actual Totex expenditure levels to equivalent amounts for those years. This is consistent with the modelling rationale described in the opening paragraph of this Chapter.

6.18 It should be noted that:

 each Annual Iteration Process re-runs the TIM calculations for each Relevant Year up to Relevant Year t-2 (for later years the TIM is neutral – see paragraph 6.17);

³⁹ See Special Conditions 3A (Restriction of Transmission Network Revenue).

- the outstanding effect of those calculations is reflected in the value of MOD_t;
 and
- the PCFM works in constant 2009-10 prices, but applies adjustments to ensure that the effect of PCFM Variable Value revisions are NPV neutral with respect to Relevant Year t.

Total expenditure ("Totex")

- 6.19 In the following section the term 'Totex' refers to both TO Totex and SO Totex.
- 6.20 In summary Totex consists of all the items of expenditure required for the licensee to carry on the transmission business with the exception of:
 - costs relating to de minimis activities;
 - costs relating to excluded services activities (with the exception of capex relating to sole use exit connections);
 - pension deficit repair payments relating to the Established Deficit and for the avoidance of doubt, all unfunded early retirement deficiency costs (ERDC) post 1 April 2004;
 - Pension Scheme Administration and PPF levy costs;
 - The non cash element of current service pension costs charged to the income statement in accordance with accounting standards;
 - costs associated with specific incentive schemes as detailed in the RIGs (eg TIRG);
 - statutory or regulatory depreciation and amortisation;
 - profit margins in payments to related parties (except where permitted);
 - costs relating to rebranding a company's assets or vehicles following a change of trading name or logo;
 - fines and penalties incurred by the licensee (including all tax penalties, fines and interest) except if, exceptionally, Traffic Management Act penalty costs can be shown to be efficient;
 - compensation payments made in relation to standards of performance;
 - bad debt costs and recoveries (which are subject to separate review);
 - costs relating to the network innovation allowance;
 - costs reported other than on a normal accruals basis;
 - costs in relation to pass-through items including:
 - business rates (except for business rates on non-operational buildings), and
 - Ofgem licence fees:
 - interest, other financing and corporation tax costs;

- · other items of expenditure as detailed in the RIGs; and
- costs relating to Electricty Market Reform preparatory costs, which are the subject of the section 11A direction dated 9 May 2014.
- 6.21 Further details on the reporting of expenditure items which are eligible for Totex treatment is given in the Cost and Revenue Reporting Regulatory Instructions and Guidance (RIGs) document referred to in Standard Condition B15 (Regulatory Instructions and Guidance) of the licence. The RIGs also detail other requirements for expenditure to be able to qualify as RAV additions.

6.22 It should also be noted that:

- any change in the Totex amount for the licensee under the TIM is included as an adjustment to fast/ slow money;
- pension deficit repair payments relating to any incremental deficit (ie not part of the Established Deficit) are considered to be part of the licensee's labour costs and as such are part of Totex; and
- customer contributions (which mainly relate to connection works) and other proceeds received (including from legal and insurance claims) that relate to the transmission business are treated as an offset to Totex expenditure, unless specifically subject to different treatment under the Cost and Revenue Reporting RIGs.

Determination of PCFM Variable Value revisions for actual Totex expenditure

- 6.23 Following a review by Ofgem, the Authority will, by 30 November (or as soon as reasonably practicable thereafter) in each Relevant Year t-1, determine that the PCFM Variable Values for Relevant Year t-2 (and prior RIIO-T1 years if necessary), shown in the first column of Table 6.2 below, should be revised to match the equivalent actual expenditure values in the licensee's annual cost reporting submission after any necessary adjustments.
- 6.24 As noted in paragraph 6.15, the Authority can also determine and direct revised PCFM Variable Values for actual Totex expenditure for years earlier than Relevant Year t-2 where that is necessary to address a restatement of, or correction to, price control cost information submitted by the licensee (including costs amended following any efficiency review by Ofgem).

Table 6.2 - PCFM Variable Values for actual Totex

PCFM Variable Value	Totex sub-division
ALC	Actual load related capex expenditure

ARC	Actual asset replacement capex expenditure
AOC	Actual other capex expenditure
ACO	Actual controllable opex expenditure
ANC	Actual non-operational capex
SOACO ⁴⁰	Actual controllable opex expenditure (system operator)
SOANC ⁴⁴	Actual non-operational capex expenditure (system operator)

6.25 The expenditure totals for each of the Totex sub-divisions set out in Table 6.2 will be ascertained from the cost and outputs reporting templates submitted by the licensee.

Notification and direction of revised PCFM Variable Values

- 6.26 The PCFM exists as a constituent part of Special Condition 5A (Governance of ET1 Price Control Financial Instruments). It has an input area for each licensee containing both fixed values and variable values. The values that can vary are contained in the PCFM Variable Values Table 6.1 for allowances and Table 6.2 for actual costs.
- 6.27 During each Relevant Year t-1, the Authority will determine whether any PCFM Variable Values for the licensee relating to actual Totex expenditure should be revised. Part C of Special Condition 6C (and 5B), requires the Authority to give the licensee at least 14 days notice of any such proposed revisions, to allow for any representations or objections. The Authority is required to have due regard to any representations received from the licensee and to give reasons for its decisions in relation to them.
- 6.28 The Authority is required to direct any PCFM Variable Value revisions by 30 November in Relevant Year t-1, so the notice of proposed values will be given no later than 15 November in the same year. In practice, the Authority will give notice of the proposed values as soon as practicably possible in Relevant Year t-1.
- 6.29 The Authority will carry out the Annual Iteration Process in accordance with Special Condition 5B (see Chapter 1).

⁴⁰ NGET only



Part 1 - Overview

- 7.1 Appropriate levels of allowed Totex⁴¹ expenditure for some transmission business activities/requirements, were uncertain at the time of the RIIO-T1 Final Proposals. For RIIO-T1 Final Proposals, Opening Base Revenue Allowances have been modelled using forecast values relating to these uncertain cost categories.
- 7.2 The ET1 Price Control Financial Model (PCFM) contains values relating to allowed Totex expenditure on uncertain cost categories that can be varied for the purposes of the Annual Iteration Process. This means that the term MOD_t included in the formula for the licensee's Base Transmission Revenue (and the term SOMOD_t included in the formula for internal costs revenue) can take account of up to date allowed expenditure levels for uncertain cost categories for the purposes of the Totex Incentive Mechanism described in Chapter 6 of this Handbook.
- 7.3 PCFM Variable Values relating to uncertain cost categories are stated in constant 2009-10 prices, consistent with the price base used in the PCFM and the values for the terms MOD and SOMOD. The allocation of allowed expenditure for uncertain cost categories into the Totex sub-divisions referred to in paragraph 6.3 of Chapter 6 is handled automatically under the Annual Iteration Process using fixed attribution rates contained in the PCFM.
- 7.4 Special Conditions 6H (Arrangements for the recovery of uncertain costs) and 7D (Arrangements for the recovery of SO uncertain costs)⁴² provide for the Authority to determine relevant adjustments to allowed Totex expenditure on uncertain cost categories following a proposal made either by the licensee or the Authority.
- 7.5 Special Conditions 6H and 7D also provide for the Authority to determine revised PCFM Variable Values for uncertain costs categories in accordance with the methodology set out in this Chapter to give effect to adjustments which have been determined. They also set out the procedures for the direction of revised PCFM Variable Values so that they can be used for the Annual Iteration Process.
- 7.6 The uncertain cost categories are set out in Table 7.1 below, alongside the applicable licence condition. Table 7.1 also shows the licensee(s) to whom each uncertain cost category applies and the name of the associated PCFM Variable Value.

⁴¹ See Glossary

⁴² For National Grid Electricity Transmission plc (NGET) only



Table 7.1 - Uncertain cost categories

Uncertain cost	Licence Condition	Licensees affected	PCFM Variable Value name
Enhanced Physical Site Security Transmission Owner	6H	All	IAEEPS
Enhanced Security Costs - System Operator	7D	NGET	SOIAEEPS
BT _® 21 st Century Related Costs	6H	SHETPLC	IAEBT
Compensation Costs for Landowners for Wayleave	6H	SHETPLC	IAEWL
Exceptional Subsea Cable Fault Costs	6H	SHETPLC	IAESSCM
Work Force Renewal	6H	SPTL	IAEWR
Non-load related work costs	6H	SPTL	IAENLUM
Electricity Market Reform Enduring Solution	7D	NGET	SOEMRES

Overview of uncertain cost categories

- 7.7 Special Conditions 6H and 7D specify that any proposal for a relevant adjustment to an uncertain cost category must:
 - be based on information about actual or expected costs that was not available when the licensee's Opening Base Revenue Allowances were calculated;
 - take account of any prior relevant adjustments;
 - relate to a material amount;
 - relate to costs incurred or expected to be incurred after 1 April 2013; and
 - constitute an adjustment that cannot be made under the provisions of any other Special Condition of the licence.
- 7.8 The stipulation that proposals must take account of any prior relevant adjustments is intended to ensure that relevant costs are not ignored on the one hand, or double counted on the other.

Enhanced Physical Site Security - Transmission Owner



7.9 This category means the costs incurred, or expected to be incurred, by the licensee for the purposes of implementing any formal recommendation or requirement of the Secretary of State to enhance the physical security of any of the sites within the licensee's Transmission System.

Enhanced Security Costs - System Operator

7.10 This category is applicable to NGET only and means the costs incurred, or expected to be incurred, by the licensee for the purposes of implementing any formal recommendation or requirement of the Secretary of State to enhance the security of any of the IT systems required to operate the licensee's Transmission System.

BT® 21st Century Related Costs

7.11 This category is applicable to SHETPLC only. It means the costs incurred, or expected to be incurred, by the licensee for upgrading operational telecommunication systems resulting from the introduction of BT's 21st Century Networks programme, or such other BT Next Generation Network programme intended to have similar effect.

Compensation Costs for Landowners for Wayleave

7.12 This category is applicable to SHETPLC only. It means the costs incurred, or expected to be incurred, by the licensee in relation to the payment of reasonable claims to the parties to Wayleave Agreements and/or Deeds of Servitude held by the licensee, where such costs are reasonably incurred under the terms of Wayleave Agreements and/or Deeds of Servitude and which were not reasonably foreseen at the time of agreeing the relevant Wayleave Agreement or Deed of Servitude.

Exceptional SubSea Cable Fault Costs

7.13 This category is applicable to SHETPLC only. It means the costs incurred, or to be incurred by the licensee for the purposes of repairing exceptional faults that have been caused by third party or by environmental damage of subsea cables within the licensee's Transmission System, where these costs cannot be recovered from elsewhere.

Work Force Renewal Costs

7.14 This category is applicable to SPTL only. It means the costs incurred, or expected to be incurred, by the licensee in recruitment and training to ensure a sustainable work force that are not included in allowed Totex or recoverable through another Special Condition.

Non-load related work costs

7.15 This category is applicable to SPTL only. It means the costs incurred, or to be incurred by the licensee for the purposes of completing non-load related works that form part of the licensee's Transmission System that are triggered by the commencement or coordination of works to deliver a relevant wider works project.

Electricity Market Reform Enduring Solution

7.16 This category is applicable to National Grid Electricity Transmission plc (NGET) only and means the allowances for costs incurred, or expected to be incurred, by the licensee for the purposes of carrying on Electricity Market Reform functions (as defined in Chapter 5 of Part 2 of the Energy Act 2013).

Temporal conventions

- 7.17 For the purposes of Special Conditions 6H, 7D and this Chapter, "Relevant Year t" means the Relevant Year in which a value for the term MOD, calculated through a particular Annual Iteration Process⁴³, is used in the formula for the licensee's Base Transmission Revenue⁴⁴. References to Relevant Year t-1 etc should be construed accordingly.
- 7.18 A reference to, for example, *the IAEEPS value for 2015-16* means the IAEEPS value in the 2015-16 column of the PCFM Variable Values Table for the licensee contained in the ET1 Price Control Financial Model.
- 7.19 Where revisions to PCFM Variable Values are directed for Relevant Years earlier than Relevant Year t, the effect of using those revised values in the Annual Iteration Process for the ET1 Price Control Financial Model will, subject to a Time Value of Money Adjustment, be reflected in the calculation of the term MOD, or as applicable, SOMOD for Relevant Year t and, for the avoidance of doubt no previously directed value of the term MOD or SOMOD will be retrospectively affected.
- 7.20 Revisions to PCFM Variable Values directed for Relevant Years later than Relevant Year t do not feed into the calculation of the term MOD_t (or SOMOD_t) but (subject to further determinations) have status as values determined under the provisions of Special Condition 6H or, as applicable, 7D.

Part 2 - Determination of PCFM Variable Value revisions for uncertain cost categories

7.21 In the remainder of this Chapter, references to the term MOD should be taken to include the term SOMOD and references to Special Condition 6H should be taken to include Special Condition 7D.

Determinations in relation to proposed adjustments

⁴³ and/or SOMOD for NGET

⁴⁴ See Special Condition 3A (Restriction of Transmission Network Revenue).



- 7.22 Proposals for relevant adjustments in respect of uncertain cost categories can only be made by the licensee or the Authority during the application windows specified in Special Condition 6H and 7D. Proposals must be made in the form of notices given by the licensee to the Authority or vice versa.
- 7.23 Except for Electricity Market Reform Enduring Solution, following the end of each application window the Authority has four months to confirm, reject or vary the proposed adjustment in a determination decision. In the case of relevant adjustments in relation to Electricity Market Reform Enduring Solution Special Condition 7D specifies a relevant adjustment as a provisional allowance, and the Authority has until 30 October 2015 to make a decision following the close of the Electricity Market Reform Enduring Solution application window. In reaching a decision the Authority will:
 - consult with the licensee concerned and other interested parties;
 - have particular regard to the purposes of the licence condition; and
 - take no account of the general financial performance of the licensee under the price control arrangements.
- 7.24 If the Authority does not make a determination decision in relation to a duly submitted adjustment proposal within the four month period referred to in paragraph 7.23, then the adjustment is deemed to have been made, unless the decision is in relation to Electricity Market Enduring Solution. In that case, as set out in Special Condition 7D, the Authorty will make a decision as soon as reasonably practicable.

Determination of PCFM Variable Values

- 7.25 It follows from the timetable outlined in paragraphs 7.22 to 7.24 above that the Authority will only determine revised PCFM Variable Values relating to uncertain cost categories (as set out in Table 7.1) for use in the Annual Iteration Processes in the year in which an application window arises, except in relation to adjustments for Electricty Market Reform Enduring Solution. In that case, the revised PCFM Variable Values will be used in the Annual Iteration Processes in the year in which the determination of those values occurs.
- 7.26 The Annual Iteration Process will take place by 30 November, eg following the first reopener window in May 2015 the Annual Iteration Process will take place by 30 November 2015 in order to calculate the value of the terms MODt and SOMODt for Relevant Year 2016-17.
- 7.27 It should be noted that the determination can amend PCFM Variable Values for any years in the RIIO-T1 period.
- 7.28 The following procedures will be carried out by the responsible Ofgem teams to facilitate the determination of any revised PCFM Variable Values relating to uncertain cost categories for the Annual Iteration Processes referred to in paragraphs 7.25 to 7.27:

- except for Electricity Market Reform Enduring Solutions, on or shortly after 1
 June, a check will be made on whether any relevant adjustments were
 proposed during the application window which has just closed and the
 position noted;
- for Electricity Market Reform Enduring Solution:
 - on or shortly after 30 September 2014, the position will be noted on the provisional allowance specified in Special Condition 7D; and
 - on or shortly after 30 September 2015 a check will be made on whether relevant adjustments were proposed for the Electricity Market Reform Enduring Solution during the application window and the position noted;
- following receipt of a notice proposing an adjustment, or where the Authority proposes an adjustment, liaison will be maintained within Ofgem for the review of proposed adjustments and any determination made by the Authority will be noted; and
- on or shortly after 1 October the aggregate net adjustment (whether upward or downward) for the licensee in respect of each uncertain cost category will be ascertained by totalling the amounts of:
 - any determinations of relevant adjustments made by the Authority;
 - any adjustments duly proposed by the licensee, and not withdrawn, which have not been determined by the Authority; andeach aggregate net adjustment will be rebased to the 2009-10 price base used in the PCFM in accordance with paragraph 1.7 of this Handbook.
- 7.29 Each aggregate net adjustment ascertained under paragraph 7.28 will be added to the equivalent pre-existing PCFM Variable Value contained in the PCFM for the licensee and the resulting figure will be determined by the Authority to be the revised PCFM Variable Value for that uncertain costs category.
- 7.30 For the avoidance of doubt, under the procedures outlined in paragraphs 7.22 and 7.23 the Authority can determine a revision to the PCFM Variable Value relating to an uncertain cost category for any Relevant Year during the Price Control Period, where that is necessary to reflect the determination (or deeming) of a relevant adjustment in respect of that uncertain cost category.

Part 3 - Notification and direction of revised PCFM Variable Values

7.31 Special Conditions 6H and 7D provides for the licensee to be notified of any relevant adjustment determinations within 14 days of the making of the determination. However, consistent with the provisions of other Special Conditions providing for the determination of PCFM Variable Values, there is an additional formal procedure for the notification and direction of revised PCFM Variable Values, set out in Part C of Special Conditions 6H and 7D.



- 7.32 The Authority will give notice of the PCFM Variable Value revisions that it proposes to direct by 15 November, being at least 14 days before the deadline date for the direction of revised PCFM Variable Values which is 30 November. The notice will confirm that:
 - any revised PCFM Variable Value determinations have been made in accordance with Part B of Special Condition 6H and 7D, which cross refers to this Chapter of the ET1 Price Control Financial Handbook; and
 - the licensee has 14 days from the date of the notice in which to make any representations concerning the proposed PCFM Variable Value revisions.
- 7.33 The Authority is required to have due regard to any representations or objections made by the licensee and to give its reasons for any decisions in relation to them.
- 7.34 Further to paragraph 7.25, the Authority will not determine PCFM Variable Value revisions for uncertain cost categories by November in years in which there is no application window and no proposal has been duly made by the licensee or the Authority. In relation to Electricity Market Reform Enduring Solution, the Authority will not determine PCFM Variable Values for the enduring solution in 2015, if no proposals for Electricity Market Reform Enduring Solution is duly made. However, the overall direction issued in those years will include a facsimile of the PCFM Variable Values Table(s) for the licensee showing the post direction state of all PCFM Variable Values. This will serve to confirm the state of the PCFM Variable Values relating to uncertain cost categories.

Delay in direction of revised PCFM Variable Values

7.35 If the procedures set out in Special Conditions 6H, 7D, and in Parts 2 and 3 of this Chapter call for the Authority to direct revised PCFM Variable Values for uncertain cost categories by 30 November and if the Authority does not make such a direction, then Special Conditions 6H and 7D require that the values should be directed by the Authority as soon as is reasonably practicable to facilitate the notification and direction of the value of the term MOD_t under Special Condition 5B (Annual Iteration Process for the ET1 Price Control Financial Model).

8. Strategic wider works outputs allowed expenditure - financial adjustment methodology

- 8.1 The term 'Wider Works Outputs' refers to the National Electricity Transmission system and the need to reinforce or extend it to meet existing and future customer requirements . The reinforcement will provide additional transmission capacity and/or boundary transfer capability. The development of schemes must be in accordance with the planning criteria set out in the Network Development Policy.
- 8.2 The modelling of Opening Base Revenue Allowances for each licensee (set down in the table at Appendix 1 to Special Condition 3A) includes forecast amounts to cover expenditure on an agreed set of Baseline and Strategic Wider Works Outputs. However, it may be necessary to adjust the licensee's allowed expenditure levels and Base Transmission Network Revenue (upwards or downwards) during the course of the RIIO-T1 price control to reflect:
 - (i) amendments to Wider Works outputs;
 - (ii) additional Wider Works outputs; and
 - (iii) changes to the costs associated with Wider Works outputs.
- 8.3 The provisions for these types of adjustment are contained in Special Condition 6I (Specification of Baseline Wider Works Outputs and Strategic Wider Works Outputs and Assessment of Allowed Expenditure).
- 8.4 In addition, for NGET the allowed expenditure and Base Transmission Network Revenue will be adjusted to reflect the differences in the actual change of boundary transfer capabilities compared to the expected baseline amount of change in each year of the Price Control Period. The provisions in this respect are contained in Special Condition 6J (Allowed Expenditure for Incremental Wider Works).
- 8.5 Any adjustments to allowed expenditure of the type referred to above also need to be factored into the licensee's Total Allowed Totex figures for the purposes of the Totex Incentive Mechanism (see Chapter 6).
- 8.6 Required adjustments are applied through the Annual Iteration Process for the PCFM using revised PCFM Variable Values determined under Special Conditions 6I and 6J⁴⁵. These conditions include some licensee-specific determination provisions.

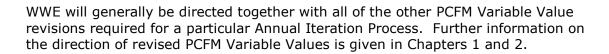
Temporal convention

8.7 For the purposes of Special Condition 6I and this Chapter, "Relevant Year t" means the Relevant Year in which a value for the term MOD, calculated through a particular Annual Iteration Process, is used in the formula for the licensee's Base Transmission Revenue.

⁴⁵ For SHETPLC the baseline value is zero.



- 8.8 The PCFM contains the forecast expenditure amounts referred to in paragraph 8.2 which were used in the calculation of Opening Base Revenue Allowances. These figures can be supplanted for calculations under the Annual Iteration Process by revision to the PCFM Variable Value WWE.
- 8.9 WWE values are determined in 2009-10 prices, consistent with the price base used in the PCFM.
- 8.10 Under the Annual Iteration Process, the updated allowed expenditure values are used in the calculation of new revenue figures for affected Relevant Years. These in turn feed through to the calculation of the term MOD for Relevant Year t.
- 8.11 The primary PCFM Variable Value revisions for WWE in respect of each Annual Iteration Process relate to Relevant Year t. However, there may be occasions when the Authority needs to direct that PCFM Variable Values entered for preceding years are to be revised to reflect a directed change to allowed expenditure for the year(s) concerned under Part D of Special Condition 6I. Part G of Special Condition 6I provides for revised values to be directed when appropriate. In Part H of Special Condition 6I, Table 6 (in NGET & SPTL's condition), and Table 5 (in SHETPLC) summarises the revised allowances and total WWE term for each year of the Price Control Period.
- 8.12 Because PCFM Variable Value revisions for WWE are entered against the Relevant Year t, the Annual Iteration Process also treats those allowed expenditure figures as provisional outturn expenditure figures in calculating the base revenue factor for that year (and hence the value of the MOD term). If this modelling assumption were not made, an apparent over/under spend equal to the value of the incremental change in allowed expenditure would inappropriately be included in the Totex Incentive Mechanism adjustment for the year concerned. This approach is consistent with the modelling of opening Base Transmission Revenue figures, in respect of which projected actual expenditure is considered to be the same as projected allowed expenditure. In due course, actual outturn expenditure levels for the year concerned are picked up through a subsequent Annual Iteration Process as part of revised PCFM Variable Values for the TO Totex Incentive Mechanism Adjustment under Special Condition 6C (Determination of PCFM Variable Values for Totex Incentive Mechanism Transmission Owner).
- 8.13 The first Annual Iteration Process for the PCFM in which any revised PCFM Variable values for WWE will be directed is the Annual Iteration Process that will take place not later than 30 November 2013 in order to establish the value of the term MOD for the Relevant Year beginning on 1 April 2014.
- 8.14 The Authority will direct revised PCFM Variable Values(s) for WWE by no later than 30 November, or as soon as reasonably practicable thereafter, in each Regulatory Year t-1 in accordance with paragraph 6I.44 (NGET & SPTL) and 6I.43 (SHETPLC) of Special Condition 6I. Notice of the proposed value(s) will be given at least 14 days before the date of the direction. Revised PCFM Variable Values for



Allowed Expenditure – Incremental Wider Works

8.15 The process to direct allowances for Incremental Wider Works (NGET only) is set out in Chapter 9.

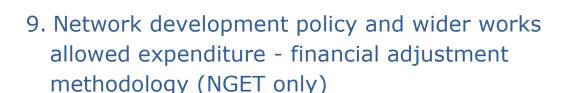
Processing of PCFM Variable Values for WWE under the Annual Iteration Process

- 8.16 Under the Annual Iteration Process, the licensee's updated allowed expenditure for Strategic Wider Works is allocated to the fast and slow money⁴⁶ totals held in the PCFM, in accordance with the Totex Capitalisation Rate (per cent) specified in the RIIO-T1 Final Proposals and at Appendix 1 of Special Condition 6C.
- 8.17 The allocations are used to update all relevant values relating to Totex expenditure for the PCFM Year concerned, notably the licensee's RAV balance. This facilitates the determination of base revenue factors for relevant PCFM Years through updated calculations for:
 - fast money components;
 - amounts of return and depreciation on the licensee's RAV balance;
 - tax allowances;
 - notional equity issuance costs and
 - Totex Incentive Mechanism Adjustments.

Effects of using revised PCFM Variable Values

- 8.18 As referred to in paragraph 8.11, the Authority may, for a particular Annual Iteration Process, need to direct the use of a revised PCFM Variable Value for one or more PCFM Years preceding the one which equates to Relevant Year t.
- 8.19 In such a case, any incremental changes to base revenue figures for those earlier PCFM Years calculated under the latest Annual Iteration Process will, subject to a Time Value of Money Adjustment, be brought forward and reflected in the calculation of the term MOD to be directed for Relevant Year t. For the avoidance of doubt, such a revision will not have any retrospective effect on a previously directed value of the term MOD.

⁴⁶ See Glossary



- 9.1 The term 'Wider Works Outputs' refers to reinforcement of the national electricity transmission system to reinforce or extend it to meet existing and future customer requirements. The reinforcement will provide additional transmission capacity and/or boundary transfer capability. The development of schemes must be in accordance with the planning criteria set out in the Network Development Policy.
- 9.2 For NGET, Special Condition 6J provides a volume driver of allowances at specified boundary points to deliver incremental wider works outputs where those outputs and funding have not been provided elsewhere (ie not covered by Special Condition 6I). The baseline allowed expenditure and baseline profile for changes in transfer capability for incremental wider works is given in Special Condition 6J part A, Table 1.
- 9.3 Special Condition 6J sets out the basis of calculating adjustments to Totex allowances arising from the delivery of incremental wider works in accordance with the licensee's Network Development Policy, ie to adjust allowances where the actual delivered amount of incremental wider works on a boundary is different to the amount forecast in the baseline. In every year of iteration of the PCFM (denoted year t-1), it seeks to specify the total variance in allowance for each Relevant Year up to the latest reported (year t-2). The entire vector of allowances is potentially rewritten, changes being made retrospectively to allowances in the years of performance, not the year of reporting.

Temporal convention

- 9.4 For the purposes of Special Condition 6J, and this Chapter, "Relevant Year t" means the Relevant Year in which a value for the term MOD, calculated through a particular Annual Iteration Process, is used in the formula for the licensee's Base Transmission Revenue.
- 9.5 Required adjustments are applied through the Annual Iteration Process for the ET1 Price Control Financial Model (PCFM) using revised PCFM Variable Values determined under Special Condition 6J.

Allowed expenditure for Incremental Wider Works

9.6 The PCFM contains the baseline allowed expenditure referred to in paragraph 9.2 which were used in the calculation of Opening Base Revenue Allowances. These figures can be supplanted for calculations under the Annual Iteration Process by revised PCFM Variable Value IWW.



- 9.7 The IWW term is determined in accordance with the provisions of Special Condition 6J. Values for this term are determined in 2009-10 prices, consistent with the price base used in the PCFM.
- 9.8 Under the Annual Iteration Process, the updated allowed expenditure values are used in the calculation of recalculated base revenue figures for affected Relevant Years. These in turn feed through to the calculation of the term MOD for Relevant Year t.
- 9.9 The primary PCFM Variable Value revisions for IWW in respect of each Annual Iteration Process for NGET relate to the PCFM Year which equates to Relevant Year t-2. Revised IWW values will be calculated in accordance with Part C of Special Condition 6J.
- 9.10 Special Condition 6J sets out the stipulations and procedures governing the proposal and determination of the licensee's allowed expenditure levels in respect of incremental wider works. In summary these are:
 - The licensee shall submit to the Authority on or before 1 April 2013 (or such later date as the Authority may direct) a Network Development Policy ("the policy").
 - The policy shall include an explanation of the Network Development Policy objectives; an explanation of the licensee's proposed methodology and decision making processes; an explanation of other factors the licensee may also take into account to prioritise IWW outputs; and a description of how the licensee will work with interested stakeholders
 - Unless the Authority directs otherwise within two months of the date of submission of the statement by the licensee, the licensee must use reasonable endeavours to apply the methodology set out in that statement.
 - Before revising the methodology set out in the statement, the licensee must submit a copy of the proposed revisions to the Authority.
 - Unless the Authority otherwise directs within one month after receiving the proposed revisions, the licensee must use reasonable endeavours to apply the methodology in accordance with the proposed revisions.
- 9.11 Reference should be made to Special Condition 6J for the full and definitive procedures and requirements.

Determination and direction of revised IWW values

- 9.12 In order to facilitate the Annual Iteration Process that is required by Special Condition 5B for NGET:
 - (i) The licensee will report on relevant boundary transfer capability after 31 March 2013, verify the change transfer capability as the result of a IWW output that the licensee has delivered and on its actual expenditure

- incurred in accordance with Standard Condition B15 (Regulatory Instructions and Guidance);
- (ii) The Authority will ascertain the total amount of allowed expenditure for the licensee, (in 2009-10 prices) for IWW outputs delivered for each Relevant Year of the Price Control Period (see example below);
- (iii)The Authority will, by 30 November or as soon as reasonably practical thereafter, in each Relevant Year t-1 issue a direction, in accordance with the provisions of Part E of the condition, specifying the revised IWW values for each Relevant Year up to t-2; and
- (iv)The Authority may also revise the IWW value for a Relevant Year or years, notwithstanding that the IWW values concerned might have been previously revised, provided that:
 - (a) the revision is necessary to reflect a review by the Authority of the values of the term IWW pertaining to the earlier Relevant Years or to correct errors in relation to those values;
 - (b) the revised IWW value for the earlier Relevant Years is calculated in accordance with the formula set out in Part D; and
 - (c) the revised IWW value for the earlier Relevant Years is specified in a direction issued in accordance with the provisions of Part E of the condition.

Indicative Example

During the Price Control Period, the licensee reports that it has achieved boundary capability of 10MW in excess of the target value of 100MW. This delivery takes place in 2018-19. This is reported in 2019-20 and any direction will impact MOD for 2020-21. Where the Authority is satisfied that the change is the result of an IWW Output delivered by the licensee, the Authority will calculate the additional expenditure allowance for the incremental output delivered of 10MW (excess capability x UCA x RPE x weighting). This calculation will be performed in 2009-10 prices.

The Authority gives notice to interested parties that it intends to make a direction and then considers any representations in response to the Notice that are duly made and not withdrawn.

The Authority determines that opening IWW values should be revised to reflect the value of the 10MW incremental output delivery in year t-2 phased in accordance with Table 3 of ETC 6J. That is, allowances are amended for the years prior to that in which actual additional capacity is reported in the profile 2015-16 16 per cent; 2016-17 26 per cent; 2017-18 37 per cent and 2018-19 21 per cent.

10. Generation connection volume driver allowed expenditure - financial adjustment methodology

- 10.1 Special Condition 6F (Baseline generation connection outputs and generation connections volume driver) contains a mechanism for adjusting the licensee's allowed expenditure in respect of transmission business requirements where outputs are delivered (or in the case of SHETPLC are forecast to be delivered) in excess of the baseline forecast level.
- 10.2 The allowed expenditure is for transmission infrastructure works to provide a connection to one or more new generating stations or interconnectors.
- 10.3 Special Condition 6F specifies the mechanism by which adjustments to allowed expenditure levels can be determined by the Authority. They also provide for revisions to associated PCFM Variable Values (necessary to give effect to allowed expenditure adjustments) to be determined under the methodologies set out in this Chapter. In addition, they set out the procedure for revised PCFM Variable Values to be directed for the purposes of the Annual Iteration Process for the ET1 Price Control Financial Model.

Temporal convention

- 10.4 For the purposes of Special Condition 6F, and this Chapter, "Relevant Year t" means the Relevant Year in which a value for the term MOD, calculated through a particular Annual Iteration Process, is used in the formula for the licensee's Base Transmission Revenue.
- 10.5 Required adjustments are applied through the Annual Iteration Process for the ET1 Price Control Financial Model (PCFM) using revised PCFM Variable Values determined under Special Condition 6F. These conditions include some licensee-specific determination provisions.

Generation connection - local enabling works

- 10.6 The PCFM contains forecast expenditure amounts used in the calculation of opening Base Transmission Revenue allowances. These figures can be supplanted for calculations under the Annual Iteration Process by revised PCFM Variable Values (GCE values).
- 10.7 The GCE term is determined in accordance with the provisions of Special Condition 6F. Values for this term are determined in 2009-10 prices, consistent with the price base used in the PCFM.
- 10.8 Under the Annual Iteration Process, the updated allowed expenditure values are used in the calculation of new recalculated base revenue figures for affected



Relevant Years. These in turn feed through to the calculation of the term MOD for Relevant Year t.

- 10.9 The primary PCFM Variable Value revisions for GCE in respect of each Annual Iteration Process for SPTL relate to the PCFM Year which equates to Relevant Years up to t-2. For NGET the revisions relate to up to four years prior to Relevant Year t-2. For SHETPLC the revisions relate to up to four years before and after the Relevant Year.
- 10.10 Special Condition 6F sets out the stipulations and procedures governing the proposal and determination of the licensee's allowed expenditure levels in respect of generation connection. In summary these are:
 - The licensee will report annually on relevant generation connections and relevant installed asset rating completed (not NGET) and commissioned after 31 March 2013 and on its actual expenditure incurred in accordance with Standard Condition B15 (Regulatory Instructions and Guidance)
 - Revised GCE values will be calculated in accordance with Part B of Special Condition 6F.
 - For SHETPLC the GCE values will also be updated for forecast delivery with an
 ex post adjustment once outputs are delivered (if necessary because of
 differences in the amount of the output delivered or in the case of atypical
 connections because of differences in the actual costs compared to the
 forecast costs).
 - For NGET there is a separate unit cost allowance for the overhead line component.
 - The Authority will, by 30 November in each Relevant Year t-1 issue a
 direction, in accordance with the provisions of Part C of this condition (Part F
 SHETPLC), specifying the revised GCE values for Relevant Year t-2.
 - A direction issued by the Authority under the relevant paragraph (of Special Condition 6F) is of no effect unless the Authority has first:
 - (a) given notice to interested parties that it proposes to issue a direction under paragraph (16 - SPTL, 32 - SHETPLC, & 11 -NGET):
 - (i) specifying the date on which it proposes that the direction should take effect;
 - (ii) stating, where appropriate, that any GCE values have been determined in accordance with Part B of the condition; and
 - (iii) specifying the time (which must not be less than a period of 14 days) within which representations concerning the proposed direction may be made; and
 - (b) considered any representations in response to the notice that are duly made and not withdrawn.

- The Authority may also revise the GCE value for a Relevant Year or Relevant Years earlier than Relevant Year t-2 ('earlier Relevant Years'), notwithstanding that the GCE values concerned might have been previously revised, provided that:
 - the revision is necessary to reflect a review by the Authority of the values of the licence terms in Part B of the condition pertaining to the earlier Relevant Years or to correct errors in relation to those values;
 - (b) the revised GCE value for the earlier Relevant Years is calculated in accordance with the formula set out in Part B of Special Condition 6F; and
 - (c) the revised GCE value for the earlier Relevant Years is specified in a direction issued in accordance with the provisions of Part D of the condition.
- 10.11 If the Authority does not make a direction in relation to revised GCE values by 30 November, or as soon as reasonably practicable thereafter, then no revised GCE values will be used in the Annual Iteration Process that is required by Special Condition 5B to be undertaken by the Authority by 30 November in that same Relevant Year t-1. In those circumstances, the Authority will take full account of the position when determining and directing any revised GCE values in respect of the next Annual Iteration Process.
- 10.12 Reference should be made to Special Condition 6F for the full and definitive procedures and requirements.

Determination and direction of revised GCE values

GCE values

- 10.13 In order to facilitate the Annual Iteration Process that is required by Special Condition 5B for NGET and SPTL:
 - (i) The licensee will report on relevant generation connections and relevant installed asset rating completed (not NGET) and commissioned after 31 March 2013 and on its actual expenditure incurred in accordance with Standard Condition B15 (Regulatory Instructions and Guidance).
 - (ii) The Authority will ascertain the total amount of additional allowed expenditure for the licensee, (in 2009-10 prices) for additional outputs delivered for each Relevant Year of the Price Control Period (see example below); and
 - (iii) The Authority will, by 30 November in each Relevant Year t-1 issue a direction, in accordance with the provisions of Part C of 6F, specifying the revised GCE values for Relevant Year t-2.



During the Price Control Period, the licensee reports that it has achieved outputs of 10MW in excess of the target value of 100MW. Where the Authority is satisfied that this is the case it calculates the additional expenditure allowance for the incremental output delivered of 10MW (excess output x UCA x RPE x weighting). This calculation will be performed in 2009-10 prices.

The Authority gives notice to interested parties that it intends to make a direction and then considers any representations in response to the notice that are duly made and not withdrawn.

The Authority determines that opening GCE value of zero should be revised to reflect the value of the 10MW incremental output delivery in year t-2, phased in accordance with Table 4 of Special Condition 6F. That is, allowances are amended for the years including and prior to that in which the actual additional output is provided.

10.14 For SHETPLC the process differs as allowances are made in response to the forecast of additional generation connection capacity being made:

- (i). The licensee will forecast each year, for five years in advance, the level of relevant generation connections forecast to be installed and commissioned after 31 March 2013 and on its actual expenditure incurred in accordance with Standard Condition B15 (Regulatory Instructions and Guidance).
- (ii). The Authority will ascertain the total amount of additional allowed expenditure for the licensee, in 2009-10 prices) for additional outputs delivered for each Relevant Year of the Price Control Period; and
- (iii). The Authority will, by 30 November in each Relevant Year (following commencement of the Price Control Period) issue a direction, in accordance with the provisions of Part F of 6F, specifying the revised GCE values; and
- (iv). Once actual delivered outputs are known the Authority will recalculate allowances and correct allowances for prior years as necessary (either over or under delivery) by directing revised prior years GCE values.



11. Enhancements to pre-existing infrastructure allowed expenditure - financial adjustment methodology

- 11.1 Special Condition 6G (Mitigating the Impact of Pre-existing Infrastructure on the visual amenity of Designated Areas) contains a mechanism for adjusting the licensee's allowed expenditure to enable the visual impact of certain existing transmission infrastructure assets to be reduced.
- 11.2 'Mitigating the impact of Pre-existing Infrastructure' means a reduction in the visual impact of existing transmission assets, in National Parks, Areas of Outstanding Natural Beauty and National Scenic Areas ("designated areas") such that meet the licensee's criteria set out in its Mitigating the impact of Pre-existing Infrastructure Policy.
- 11.3 Special Condition 6G specifies the mechanism by which adjustments to allowed expenditure levels can be determined by the Authority. They also provide for revisions to associated PCFM Variable Values (necessary to give effect to allowed expenditure adjustments) to be determined under the methodologies set out in this Chapter. In addition, they set out the procedure for revised PCFM Variable Values to be directed for the purposes of the Annual Iteration Process for the ET1 Price Control Financial Model.

Temporal convention

- 11.4 For the purposes of Special Condition 6G, and this Chapter, "Relevant Year t" means the Relevant Year in which a value for the term MOD, calculated through a particular Annual Iteration Process, is used in the formula for the licensee's Base Transmission Revenue.
- 11.5 Required adjustments are applied through the Annual Iteration Process for the ET1 Price Control Financial Model (PCFM) using revised PCFM Variable Values determined under Special Condition 6G.

Mitigating the impact of Pre-existing Infrastructure in Designated Areas

- 11.6 The PCFM contains the forecast expenditure amounts (initially all zero) which were used in the calculation of Opening Base Revenue Allowances. These figures can be supplanted for calculations under the Annual Iteration Process by revised PCFM Variable Value EPIE.
- 11.7 The EPIE term is determined in accordance with the provisions of Special Condition 6G. Values for this term are determined in 2009-10 prices, consistent with the price base used in the PCFM.



- 11.8 Under the Annual Iteration Process, the updated allowed expenditure values are used in the calculation of new recalculated base revenue figures for affected Relevant Years. These in turn feed through to the calculation of the term MOD for Relevant Year t.
- 11.1. The primary PCFM Variable Value revisions for EPIE in respect of each Annual Iteration Process relate to Relevant Year t onwards.
- 11.9 Special Condition 6G sets out the stipulations and procedures governing the proposal and determination of the licensee's allowed expenditure levels in respect of Mitigating the impact of pre-existing infrastructure. In summary these are:
 - Before making a request to the Authority to specify Enhancing Pre-existing Infrastructure (EPI) Outputs in Table 1 of Special Condition 6G the licensee shall submit to the Authority a Mitigating Pre-existing Infrastructure Policy ("the policy").
 - The licensee must set out in its policy the objectives and methodology for identifying potential EPI Outputs on its transmission system.
 - The licensee may request that the Authority approve EPI Outputs during the Price Control Period where these proposed EPI Outputs are compliant with the licensee's Mitigating the impact of Pre-existing Infrastructure Policy which, pursuant to the provisions of Part A of the condition, has been approved by the Authority.
 - The Authority may specify EPI Outputs in Table 1 pursuant to the provisions of Part C of the condition.
 - Where the licensee has not delivered or has only partially delivered an EPI
 Output set out in Table 1, the Authority will, in calculating values for EPIE,
 adjust allowed expenditure in relation to the EPI Output to ensure only
 efficient costs are recovered.
 - The Authority may direct modifications to Table 1 in Part B and Table 2 in Part D in order to include or modify details, including the amount of allowed expenditure, of EPI Outputs through the provisions of Part C.
 - A direction issued by the Authority is of no effect unless the Authority has first:
 - (a) given Notice to interested parties that it proposes to issue a direction:
 - (i) specifying the date on which it proposes that the direction should take effect;
 - (ii) stating, where appropriate, that any output and/or allowed expenditure adjustments that have been determined in accordance with the condition;
 - (iii) provide an update on the remaining allowance available during RIIO-T1 to fund EPI outputs;
 - (iv) specifying the time (which must not be less than a period of 14 days) within which representations concerning the proposed direction may be made; and

- (b) considered any representations in response to the notice that are duly made and not withdrawn
- 11.10 If the Authority does not make a direction in relation to revised EPIE values by 30 November, or as soon as reasonably practicable thereafter, then no revised EPIE values will be used in the Annual Iteration Process that is required by Special Condition 5B to be undertaken by the Authority by 30 November in that same Relevant Year t-1. In those circumstances, the Authority will take full account of the position when determining and directing any revised EPIE values in respect of the next Annual Iteration Process.
- 11.11 Reference should be made to Special Condition 6G for the full and definitive procedures and requirements.

Determination and direction of revised EPIE values

- 11.12 In order to facilitate the Annual Iteration Process that is required by Special Condition 5B:
 - (i) The licensee will report annually on progress in delivering the EPI Outputs and its actual expenditure incurred to the Authority in accordance with Standard Condition B15 (Regulatory Instructions and Guidance).
 - (ii) The Authority will ascertain the total amount of additional allowed expenditure for the licensee, (in 2009-10 prices) in each Relevant Year of the Price Control Period (see example below).
 - (iii) The Authority will, by 30 November in each Relevant Year t-1 issue a direction, in accordance with the provisions of Part D of the condition, specifying the revised EPIE values for Relevant Year t.
 - (iv)Where the Authority directs any revised EPIE values relating to Relevant Years which are earlier than Relevant Year t, the effect of using those revised EPIE values in the Annual Iteration Process for the ET1 Price Control Financial Model will, subject to a Time Value of Money Adjustment, be reflected in the calculation of the term MOD for Relevant Year t and, for the avoidance of doubt, no previously directed value of the term MOD will be retrospectively affected.

Indicative Example

During the Price Control Period, the licensee identifies measures to mitigate the visual impact of some pre-existing infrastructure.

The licensee requests that the Authority approve this EPI output which is compliant with the licensee's Mitigating to Pre-existing Infrastructure Policy.

The Authority satisfies itself that:

- the proposed output is compliant with the agreed policy;
- the proposed costs of delivery are considered efficient; and
- there is sufficient funding available under the expenditure cap set out in Final Proposals.

The Authority gives notice to interested parties that it intends to make a direction and then considers any representations in response to the notice that are duly made and not withdrawn.

The Authority directs, prior to 30 November in Relevant Year t-1, revised additional expenditure allowances stated in 2009-10 prices.



Innovation roll out mechanism

- 12.1 The purpose of this Chapter of the price control financial Handbook is to set out the methodology to determine the values relating to Innovation Roll-out allowed expenditure ('IRM' values) and the Relevant Year to which those revisions relate.
- 12.2 The provisions for determining revised IRM values are contained in Special Condition 6E (The Innovation Roll-out Mechanism). All IRM values are stated in 2009-10 prices.
- 12.3 The application of the methodologies set out in this Chapter of the Handbook will mean that as a consequence of the Annual Iteration Process, the value of the term MOD as calculated for Relevant Year t will result in an appropriate adjustment of the base revenue of the licensee so that it is economically the same as it would have been had the forecast values used in the model been the same as the actual out-turn values.
- 12.4 The Opening Base Revenue Allowances ('PU' values) for the licensee, set down in the table at Appendix 1 to Special Condition 3A (Restriction of Transmission Network Revenue) reflect allowed expenditure figures for forecast levels of innovation expenditure. These figures constitute the 'IRM' values contained in the Variable Values Table of the RIIO-T1 Price Control Financial Model ('PCFM') as at 1 April 2013, the first day of RIIO-T1.
- 12.5 It may be necessary to revise IRM values during the course of RIIO-T1 so that they represent allowed expenditure levels driven by additional innovation funding. This ensures that the value of the term MOD_t which is calculated through the Annual Iteration Process for the PCFM appropriately reflects updated allowed expenditure on innovation as a component of Totex in:
 - (i) fast and slow money allowed revenue calculations; and
 - (ii) allowed revenue adjustments under the Totex Incentive Mechanism (see Chapter 6).

Temporal convention

12.6 For the purposes of Special Condition 6E, and this Chapter, "Relevant Year t" means the Relevant Year in which a value for the term MOD, calculated through a particular Annual Iteration Process, is used in the formula for the licensee's Base Transmission Revenue.

Determination and direction of revised IRM values

- 12.7 Part A of Special Condition 6E specifies the features that need to be present in the roll-out of an innovation to qualify for additional allowed expenditure.
- 12.8 Part B of Special Condition 6E provides for the licensee to propose a relevant adjustment to IRM values.
- 12.9 Part C of Special Condition 6E (The Innovation Roll-out Mechanism) specifies two periods when these adjustments can be proposed:
 - (a) the first application window opens on 1 May 2015 and closes on 31 May 2015; and
 - (b) the second application window opens on 1 May 2018 and closes on 31May 2018.
- 12.10 For the first application window Ofgem will determine revised IRM values for all Relevant Years (if necessary) between 31 July 2015 and 30 November 2015 the deadline for directing revised IRM values to be used in the Annual Iteration Process which will take place by 30 November 2015 (see Chapter 2).
- 12.13 For the second application window Ofgem will determine revised IRM values for all Relevant Years (if necessary) between 31 July 2018 and 30 November 2018 the deadline for directing revised IRM values to be used in the Annual Iteration Process which will take place by 30 November 2018 (see Chapter 2).
- 12.14 The Authority's direction of revised IRM values will be made by no later than 30 November in each Relevant Year t-1 and in accordance with Part G of Special Condition 6E.

Processing of IRM values under the Annual Iteration Process

- 12.15 Under the Annual Iteration Process, IRM values, as revised, representing allowed innovation expenditure are allocated to:
 - fast and slow money⁴⁷ totals in accordance with the Totex Capitalisation Rate (per cent) specified in Final Proposals, Special Conditions 6C and 7B; and
 - the tax pools associated with innovation expenditure in accordance with the licensee specific tax allocation profile, within the PCFM.

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⁴⁷ See Glossary



- 12.16 IRM values, as revised, for all Relevant Years up to and including Relevant Year t are then used with other PCFM variable values under the Annual Iteration Process:
 - (i) in calculating the value of the term \mbox{MOD}_t for Relevant Year t including:
 - fast money components,
 - amounts of return and depreciation on the licensee's RAV balance,
 - tax allowance effects, and
 - (ii)to update Totex related balances held within the PCFM including the licensee's RAV balance.
- 12.17 Under the Annual Iteration Process described in Chapter 2 the effect of revised IRM values directed for Relevant Years earlier than Relevant Year t flow through to the determination of the value of MOD_t and will have no retrospective effect on previously directed values of MOD.
- 12.18 IRM values held in the PCFM for Relevant Years later than year t in relation to a particular Annual Iteration Process do not feed into the calculation of the term MOD_t and remain at the forecast levels referred to in paragraph 12.4 pending any subsequent revision. Accordingly, all calculated values in the PCFM for Relevant Years later than Relevant Year t have indicative status only.



- 13.1 Where new projects which will be remunerated by other mechanisms are impacted by planning decisions to underground cables, the additional costs of laying transmission wires directly in the ground instead of being strung overhead on pylons can be considerable.
- 13.2 Special Condition 6K provides a volume driver for allowances to fund the cost of meeting planning requirements through underground cabling and DNO mitigation measures above a funded baseline and where that funding has not been provided elsewhere. The baseline forecast expenditure is given in Special Condition 6K Part A Table 1.
- 13.3 Special Condition 6K sets out the basis of calculating adjustments to Totex allowances arising from planning requirements to include underground cabling in new transmission routes and DNO measures ie to adjust allowances where the level of mitigation requirements for planning consent are different to the baseline. In every year of iteration of the PCFM (denoted year t-1), it seeks to specify the total variance in allowance for each year up to the latest reported (year t-2). The entire vector of allowances is potentially rewritten (subject to Authority determination), changes being made ex ante to future allowances.

Temporal convention

- 13.4 For the purposes of Special Condition 6K, and this Chapter, "Relevant Year t" means the Relevant Year in which a value for the term MOD, calculated through a particular Annual Iteration Process, is used in the formula for the licensee's Base Transmission Revenue.
- 13.5 Required adjustments are applied through the Annual Iteration Process for the ET1 Price Control Financial Model (PCFM) using revised PCFM Variable Values determined under Special Condition 6K.

Meeting planning requirements for new infrastructure

- 13.6 The 'UCE value' relating to a particular Relevant year t, represents the total amount of allowed expenditure (in 2009-10 prices) for underground cabling works and mitigation measures on DNO networks to acquire the planning permissions for new transmission infrastructure for that Relevant Year as determined in accordance with the condition.
- 13.7 The PCFM contains the baseline expenditure amounts referred to in paragraph 13.2 which were used in the calculation of opening Base Transmission Revenue allowances. These figures can be supplanted for calculations under the Annual Iteration Process by revised PCFM Variable Value UCE.



- 13.8 The UCE term is determined in accordance with the provisions of Special Condition 6K. Values for this term are determined in 2009-10 prices, consistent with the price base used in the PCFM.
- 13.9 Under the Annual Iteration Process, the updated allowed expenditure values are used in the calculation of recalculated base revenue figures for affected Relevant Years. These in turn feed through to the calculation of the term MOD for Relevant Year t.
- 13.10 Under the provisions of Special Condition 6K, it is possible for the UCE value for any Relevant Year in the price control period to be revised in respect of each Annual Iteration Process. Revised UCE values will be determined in accordance with Part D of Special Condition 6K.
- 13.11 Special Condition 6K sets out the procedures governing the proposal and determination of the licensee's allowed expenditure levels in respect of demand related infrastructure and reference should be made to this condition for the full and definitive procedures and requirements.

Determination and direction of revised UCE values

- 13.12 In order to facilitate the Annual Iteration Process that is required by Special Condition 5B:
 - (i) The licensee must notify the Authority of the amount, if any, of Underground Cabling or DNO Mitigation works the licensee is required to deliver as part of a new transmission infrastructure project to meet the conditions or requirements of a Development Consent Order (DCO) granted by the Secretary of State.
 - (ii) The licensee must use best endeavours to promote a design and route of new electricity transmission infrastructure in DCO applications that ensure long term value for money for consumers.
 - (iii) The licensee must report annually to the Authority on the amount and type of Underground Cabling or DNO Mitigation works delivered along with information on actual expenditure incurred under the regulatory instructions and guidance issued in accordance with Standard Condition B15 (Regulatory Instructions and Guidance).
 - (iv) The Authority will ascertain the total amount of allowed expenditure for the licensee, (in 2009-10 prices) for each Relevant Year of the Price Control Period (see example below); and
 - (v) The Authority will, by 30 November or as soon as reasonably practical thereafter, in each Relevant Year t-1 issue a direction, in accordance with the provisions of Part E of Special Condition 6K, specifying the revised UCE values for Relevant Year t.



13.13 A direction issued by the Authority, is of no effect unless the Authority has first:

- given notice to the licensee of all of the values that it proposes to issue as a direction under paragraph 13.12.
 - 1. having specified the date on which it proposes that the direction should take effect;
 - 2. stating that any revised UCE values have been determined in accordance with Part C of the condition; and
 - 3. specifying the time (which must not be less than a period of 14 days) within which any representations concerning the determination of any revised UCE values may be made.
- considered any representations in response to the Notice that are duly made and not withdrawn.
- 13.14 The Authority may also revise the UCE value for a Relevant Year or Years earlier than Relevant Years ('earlier Relevant Years'), notwithstanding that the UCE values concerned might have been previously revised, subject to certain provisions (see condition for detail).

Indicative Example

During the Price Control Period, the licensee notifies the Authority of Underground Cabling works the licensee is required to deliver as part of a new transmission infrastructure project to meet the conditions or requirements of a DCO granted by the Secretary of State. The requirement is for 10km of type Y.

The Authority calculates the additional expenditure allowance for the incremental cost (length undergrounded x UCA for type Y x RPE 48 x weighting factor for each year directed). This calculation will be performed in 2009-10 prices.

The Authority gives notice to interested parties that it intends to make a direction and then considers any representations in response to the Notice that are duly made and not withdrawn.

The Authority determines that opening UCE values should be revised to reflect the value of the 10km undergrounding phased in accordance with Table 3 of Special Condition 6K, Part B. That is, allowances are amended in the proportions: first year 20 per cent; second year 50 per cent; third year 20 per cent and fourth year 10 per cent.

⁴⁸ UCAs and RPEs are set out in Tables 2 & 3 in Part B of Special Condition 6F (Baseline Generation Connections Outputs and Generation Connections volume driver)



- 14.1 The term 'Demand Related Infrastructure' means the new transmission infrastructure works which are needed to provide demand connections and to increase the load bearing capacity at grid exit points.
- 14.2 Special Condition 6L provides a volume driver for allowances to deliver additional Demand-Related Infrastructure outputs above a funded baseline and where that funding has not been provided elsewhere. The baseline forecast expenditure is given in Special Condition 6L Part A Table 1.
- 14.3 Special Condition 6L sets out the basis of calculating adjustments to Totex allowances arising from Demand Related Infrastructure works that vary to those in the baseline. In every year of iteration of the PCFM (denoted year t-1), it seeks to specify the total variance in allowance for each year up to the latest reported year (t-2). Changes to allowances are made retrospectively to the year of performance, not the year of reporting (note that while the condition will define inputs which affect MOD in year t, only variances up to and including year t-2 will be specified).

Temporal convention

- 14.4 For the purposes of Special Condition 6L, and this Chapter, "Relevant Year t" means the Relevant Year in which a value for the term MOD, calculated through a particular Annual Iteration Process, is used in the formula for the licensee's Base Transmission Revenue.
- 14.5 Required adjustments are applied through the Annual Iteration Process for the ET1 Price Control Financial Model (PCFM) using revised PCFM Variable Values determined under Special Condition 6L.

Demand Related Infrastructure volume driver allowed expenditure

- 14.6 The PCFM contains the forecast expenditure amounts referred to in paragraph 14.2 which were used in the calculation of Opening Base Revenue Allowances. These figures can be supplanted for calculations under the Annual Iteration Process by revised PCFM Variable Values DRI.
- 14.7 The DRI term is determined in accordance with the provisions of Special Condition 6L. Values for this term are determined in 2009-10 prices, consistent with the price base used in the PCFM.
- 14.8 Under the Annual Iteration Process, the updated allowed expenditure values are used in the calculation of newrecalculated base revenue figures for affected



Relevant Years. These in turn feed through to the calculation of the term MOD for Relevant Year t.

14.9 The primary PCFM Variable Value revisions for DRI in respect of each Annual Iteration Process in general relate to the PCFM Year which equates to Relevant Years t-2, t-3 and t-4. Revised DRI values will be calculated in accordance with Part C of Special Condition 6L. However for changes to outputs in the first year of the Price Control Period only allowances in that year (ie t-2) will be directed and for changes to outputs in year two of the Price Control Period only allowances in years t-2 and t-3 will be directed.

Determination and direction of revised DRI values

14.10 In order to facilitate the Annual Iteration Process that is required by Special Condition 5B:

- (i) The licensee must report annually on demand related infrastructure works completed and commissioned after 31 March 2013 and on its actual expenditure incurred in accordance with Standard Condition B15 (Regulatory Instructions and Guidance).
- (ii) The Authority will ascertain the total amount of allowed expenditure for the licensee, (in 2009-10 prices) for outputs delivered for each Relevant Year of the Price Control Period (see example below); and
- (iii) The Authority will, by 30 November or as soon as reasonably practicable thereafter, in each Relevant Year t-1 issue a direction, in accordance with the provisions of Part C of Special Condition 6L, specifying the revised DRI values for Relevant Year t-2 and Relevant Years t-3 and t-4.
- (iv) The Authority may also revise the DRI value for a Relevant Year or years earlier than Relevant Year t-1 ('earlier Relevant Years'), notwithstanding that the DRI values concerned might have been previously revised, provided that:
 - a. the revision is necessary to reflect a review by the Authority of the values of the term DRI pertaining to the earlier Relevant Years or to correct errors in relation to those values; and
 - the revised DRI value for the earlier Relevant Years is calculated in accordance with the formula set out in Part B of the condition; and
 - c. the revised DRI value for the earlier Relevant Years is specified in a direction issued in accordance with the provisions of Part D of the condition.
- 14.11 Special Condition 6L sets out the procedures governing the proposal and determination of the licensee's allowed expenditure levels in respect of demand related infrastructure and reference should be made to this condition for the full and definitive procedures and requirements.

Indicative Example

During the Price Control Period in 2017-18, the licensee reports that it has delivered (in 2016-17) an additional transformer at an existing grid exit point that has undergone second stage electrical commissioning on the licensee's transmission system. This followed a relevant commercial agreement with a demand customer for a direct grid connection as defined in the CUSC.

Where the Authority is satisfied that this is the case it calculates the additional expenditure allowance based on the km delivered and/ or the number of transformers commissioned in excess of the baseline. The value for each year is calculated based on (delivered volume of transformers – baseline volume of transformers x £3.9m x RPE 49) + (km of line delivered on the project x £1.1m x RPE). This calculation will be performed in 2009-10 prices

The Authority gives notice to interested parties that it intends to make a direction and then considers any representations in response to the notice that are duly made and not withdrawn.

The Authority determines that opening DRI values should be revised to reflect the value of the output delivery in year t-2 phased in accordance with Table 2 of Special Condition 6L, Part B. That is, allowances are amended for the years prior to that in which actual additional capacity is reported in the profile 2014-15 45 per cent; 2015-16 44 per cent and 2016-17 11 per cent.

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⁴⁹ These values are given in paragraph 6L.9 of Special Condition 6L (Baseline Demand Related Infrastructure Outputs and Allowed Expenditure volume driver).



15. Legacy price control adjustments - financial methodologies

Introduction

- 15.1 The purpose of this Chapter of the ET1 Price Control Financial Handbook is to set out the methodologies that are to be used to determine values for each component term ('component term values') in the formulae set out in:
 - Part A of Special Condition 6A (Legacy price control adjustments Transmission Owner); and
 - Part A of Special Condition 7A (Legacy price control adjustments System Operator) for NGET.
- 15.2 The methodologies are set out in Parts 1 to 4 below.

Overview

- 15.3 The methodologies referred to in paragraph 15.1 are used to determine revised values for PCFM Variable Values, that relate to:
 - a) legacy price control revenue allowance adjustments (LAR and SOLAR values) for Relevant Year 2013-14; and
 - b) legacy price control adjustments to RAV⁵⁰ balance additions for Relevant Year 2013-14 (LRAV and SOLRAV values).
- 15.4 Legacy price control adjustments are necessary, to take account of outturn levels of:
 - activities carried out by the licensee;
 - incentivised performance by the licensee; and/or
 - expenditure incurred by the licensee,

in specified legacy price control adjustment categories during Relevant Years prior to 1 April 2013 (the 'legacy period'). These 'legacy outturn levels' will either not have been available, or not have been confirmed, when the licensee's opening Base Transmission Revenues (or System Operator Internal Revenues) were set. Adjustments might also be necessary to correct other anomalous positions, acknowledged by Ofgem and the licensee.

15.5 The PCFM Variable Values LAR, SOLAR, LRAV and SOLRAV represent the net incremental changes (which may be positive or negative) to revenue allowance and RAV adjustment amounts to reflect legacy outturn levels. It should be noted, however, that revisions to LAR, SOLAR, LRAV and SOLRAV values will also have ancillary effects on other calculations under the Annual Iteration Process which feed into recalculated base revenue figures.



- 15.6 Each component term value (see Table 15.1) in the formulae for LAR, SOLAR, LRAV and SOLRAV represents the incremental change for a particular legacy price control adjustment category. At the outset of the Price Control Period on 1 April 2013, all LAR, SOLAR, LRAV and SOLRAV values will be zero, because provisional or forecast legacy outturn levels will have been used in modelling the licensee's Opening Base Revenue Allowances.
- 15.7 The use of revised LAR, SOLAR, LRAV and SOLRAV values for Relevant Year 2013-14 in the Annual Iteration Process for the ET1 Price Control Financial Model (PCFM) will mean that values of the terms MOD_t and SOMOD_t will appropriately reflect legacy outturn levels.
- 15.8 There are no provisions to revise LAR, SOLAR, LRAV or SOLRAV values for Relevant Years other than Relevant Year 2013-14. For NGET only, the aggregate revenue allowance adjustments embodied in the LAR and SOLAR terms will be spread evenly across recalculated base revenue figures for the eight years of the Price Control Period by revenue profiling functionality contained in the PCFM. All necessary calculations and effects are achieved under the Annual Iteration Process, with appropriate Time Value of Money Adjustments.
- 15.9 For the avoidance of doubt, legacy price control adjustments are not subject to the Totex Incentive Mechanism.
- 15.10 Where required a determination of component term values will be carried out during each Relevant Year of the Price Control Period, in time to determine any necessary revisions to LAR, SOLAR, LRAV or SOLRAV values for each Annual Iteration Process.
- 15.11 Legacy outturn values for each legacy price control adjustment category will be applied to a determination of component term values as soon as they become available in accordance with the methodologies set out in parts 1 to 4 of this Chapter.
- 15.12 It might exceptionally be necessary for a legacy outturn value to be restated by the licensee or adjusted by Ofgem after it has been applied to the determination of a component term value because of:
 - errors or omissions in the preparation of information or inconsistencies with relevant regulatory instructions and guidance (RIGs); or
 - an efficiency review by Ofgem, referred to in one of the methodologies in parts 1 to 4 of this Chapter.
- 15.13 In either of those circumstances, the restated/adjusted legacy outturn value would be applied in place of the original value in a subsequent determination of component term values, and reflected in a revision to the relevant PCFM Variable Value for the next Annual Iteration Process.

Legacy price control adjustment categories

15.14 The revised LAR value for any Relevant Year from 2013-14 onwards is determined in accordance with the following formula:

$$LAR = TAR + CAR + IAR + SAR$$

15.15 The LRAV value for any Relevant Year from 2013-14 onwards is determined in accordance with the following formula:

$$LRAV = CRAV + IRAV + SRAV$$

15.16 The revised SOLAR value for any Relevant Year from 2013-14 onwards is determined in accordance with the following formula:

15.17 The SOLRAV value for any Relevant Year from 2013-14 onwards is determined in accordance with the following formula:

$$SOLRAV = SOCRAV$$

15.18 Each component term in the formulae set out in Part A of Special Condition 6A and Part A of Special Condition 7A relates to one of the categories shown in Table 15.1 below.

Table 15.1 – Legacy price control adjustment categories

Category	Special Condition	Applicable licensees	Component Term	Component in PCFM Variable Value	See Part of this Chapter
Gearing and interest cost adjustments	6A	All	TAR	LAR	1
Capex incentive scheme adjustments	6A	All	CAR CRAV	LAR LRAV	2
Transmission asset owner incentive scheme	6A	All	IAR IRAV	LAR LRAV	3

adjustments					
Logged up and security costs adjustments	6A	All	SAR SRAV	LAR LRAV	4
Internal cost incentive (SO)	7A	NGET	SOOIR	SOLAR	2
Capex incentive scheme adjustments (SO)	7A	NGET	SOCAR	SOLAR	2
Capex incentive scheme adjustments (SO)	7A	NGET	SOCRAV	SOLRAV	2

Conventions

15.19 All component term values will be stated and PCFM Variable Values directed in 2009-10 prices, consistent with the price base used in the PCFM and with directed values for the terms MOD and SOMOD.

15.20 In the remainder of this Chapter

- references to the term MOD should be taken to include SOMOD and references to Special Condition 6A should be taken to include Special Condition 7A; and
- "Relevant Year t" means the Relevant Year in which a value for the term MOD, calculated through a particular Annual Iteration Process, is used in the formula for the licensee's Base Transmission Revenue/ SO Internal Revenue and references to Relevant Year t-1 etc should be construed accordingly.



Reference documents

15.21 The reference documents (previously published by Ofgem) referred to in Parts 1 to 5 of this Chapter are:

1. Transmission TPCR4 Final Proposals (Ref: 206/06) TPCR4 Final Proposals

http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=191&refer=Networks/Trans/Archive/TPCR4/ConsultationDecisionsResponses

2. Transmission TPCR4 Final Proposals – main supplementary appendices (Ref:206/06b)

TPCR4 appendices

http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=190&refer=Networks/Trans/Archive/TPCR4/ConsultationDecisionsResponses

 Transmission Rollover Final Proposals (Ref 162/11) TPCR4Roll-over

http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=75&refer=Networks/Trans/PriceControls/TPCR4Roll-over

4. Open letter dated 31 July 2009 regarding Clawback of tax benefit due to excess gearing

Tax clawback open letter

http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=49&refer=Net works

5. Decision on licence modifications to reflect extension of the TII framework into 2012-13 (dated 1 June 2012)

Licence modifications re TII framework June 2012

http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=63&refer=Networks/Trans/ElecTransPolicy/CriticalInvestments/InvestmentIncentives

Legacy adjustment calculation workbook

15.22 As noted in paragraph 15.6, the modelling of the licensee's Opening Base Revenue Allowances will have included revenue allowances and RAV adjustment values for legacy price control adjustments derived from provisional or forecast legacy outturn levels. Those revenue allowance and RAV adjustment values, represented by fixed input values in the PCFM, will have been established in accordance with applicable licence scheme provisions and, by dint of the PCFM's incorporation into Special Condition 5A (Governance of ET1 Price Control Financial Instruments), the basis for setting those fixed values will have been consulted upon and accepted by the licensee.



- 15.23 As part of its Final Proposals for the RIIO-T1 price control (see link on page 3 for associated document 'b'), the Authority will provide to the licensee, a legacy adjustment calculation workbook ('calculation workbook') in Excel® format. The calculation workbook will contain a worksheet relating to each legacy price control adjustment category and have functionality to calculate and display component term values.
- 15.24 The calculation workbook will be designed to perform the calculation of component term values using legacy outturn values, in a way which is consistent with:
 - the regimes and licence scheme provisions applicable to each legacy price control adjustment category;
 - the calculation and determination of the revenue allowance and RAV addition values for legacy price control adjustments included in the licensee's Opening Base Revenue Allowances;
 - references to the use of the calculation workbook in the methodologies set out in Parts 1 to 4 of this Chapter.
- 15.25 For the avoidance of doubt, in the event of any conflict between the licence (including this Handbook) and the content or functionality of a calculation workbook, the stipulation or meaning given in the licence will prevail.

Part 1 - Determination of component value for legacy gearing level and interest cost adjustments

15.26 This part sets out the methodology for determining the value of the component term TAR, the revenue allowance adjustment relating to the licensee's gearing levels and corporate debt interest costs in the legacy period. Legacy gearing and interest cost adjustments do not affect RAV balance additions.

Description of the adjustment

- 15.27 In its open letter dated 31 July 2009 (see Chapter 4 paragraph 4.11), the Authority confirmed the approach that would be used to 'clawback' any tax value benefits to the licensee of operating at a level of gearing higher than modelled levels. The methodological approach set out in the letter has been applied in:
 - (a) determining the gearing level and interest cost adjustments to be included in the licensee's Opening Base Revenue Allowances; and
 - (b) setting out the methodology for the legacy gearing level and interest cost adjustment in this part.
- 15.28 Save for some procedural details, it is also consistent with the methodology for (RIIO-T1 period) adjustments driven by gearing levels and corporate debt interest costs set out in part 3 of Chapter 4 of this Handbook.



- 15.29 The legacy gearing level and interest cost adjustments for the transmission owner (TO) and system operator (SO) parts of NGET's business are dealt with as a combined adjustment through the TAR component term.
- 15.30 The outturn values needed to calculate legacy gearing level and interest cost adjustments in respect of a particular Relevant Year are the licensee's:
 - net debt as at 31 March in the Relevant Year;
 - RAV balance as at 31 March in the Relevant Year; and
 - actual corporate debt interest payments,

in each case, derived in accordance with the criteria set out in reference document 4 from information submissions made by the licensee in accordance with applicable RIGs.

15.31 The RAV balance referred to in this Chapter includes both core and non-core⁵⁰ (or shadow) RAV.

Relevant Years in the legacy period subject to adjustment

- 15.32 Finalised net debt, RAV balance and corporate debt interest levels relating to Relevant Years up to and including 2011-12 will have been available in time to factor revenue allowance adjustments into the licensee's opening base revenues, with the revenue allowance amounts being spread across the eight years of the Price Control Period.
- 15.33 Finalised net debt, RAV balance and corporate debt interest levels relating to Relevant Year 2012-13 will not have been available when the licensee's Opening Base Revenue Allowances were set and forecast legacy outturn levels for those items for that year will have been used in setting the licensee's Opening Base Revenue Allowances. A legacy price control gearing level and interest cost adjustment therefore needs to be made to reflect legacy outturn levels for net debt, RAV balance and corporate debt interest costs for Relevant Year 2012-13.
- 15.34 Finalised net debt, RAV balance and corporate debt interest levels relating to Relevant Year 2012-13 are expected to be included in the price control review information submission that the licensee will make by 31 July 2013.

Determination of the value of the component term TAR

15.35 The steps set out in paragraphs 15.36 to 15.40 below will be followed to determine the value of the component term TAR.

50	See	Glossary
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Step 1

- 15.36 After 31 July 2013, Ofgem will obtain from price control review information submissions relating to Relevant Year 2012-13 the licensee's:
 - net debt balance as at 31 March in Relevant Year 2012-13;
 - RAV balance as at 31 March in Relevant Year 2012-13; and
 - Actual appropriate corporate debt interest payments in Relevant Year 2012-13.

Step 2 Use of the legacy adjustment calculation workbook

- 15.37 The legacy outturn values, in nominal terms, obtained under step 1 will be used to overwrite the forecast legacy outturn values for Relevant Year 2012-13 on the TAR worksheet of the calculation workbook.
- 15.38 Using the legacy outturn values, the calculation workbook is designed to:
 - (a) perform a gearing level test if actual gearing (net debt/RAV balance) is lower than the 60.0% gearing levels in the TPCR4 Price Control model, then the gearing level and interest cost adjustment for 2012-13 will be zero; and
 - (b) perform a positive tax benefit test ie deduct from the actual corporate debt interest payments in 2012-13 the level used in the modelling of the licensee's base revenue for Relevant Year 2012-13 (treating both values as positive values). If this results in a positive value this will be the benefit. If the result is zero or negative then the gearing level and interest cost adjustment for 2012-13 will be zero.
- 15.39 If neither of the circumstances in sub-paragraphs 15.38 (a) or (b) result in a zero value the clawback has been triggered.
- 15.40 If the clawback has been triggered, Ofgem will multiply the result in paragraph 15.31(b) by the corporation tax rate for the licensee (as hard-coded into the legacy workbook) to derive the licensee's benefit figure. This will be deflated into 2009-10 price base. The functionality in the calculation workbook compares this revised calculated amount with the forecast used in setting the licensee's Opening Base Revenue Allowances. It then calculates the incremental adjustment amount which will be shown as the value for the component term TAR.

Restatement or adjustment of values used in the determination of TAR

15.41 As set out in paragraph 15.10 of this Chapter, a determination of each component term value will be carried out (if required) during each Relevant Year of the Price Control Period. If, exceptionally, it is necessary for one or more of the values referred to in step 1 and 2 above to be restated or adjusted after its use in a



determination of the component term TAR, the value of TAR would be re-determined using the restated/adjusted values for the purpose of determining a revision to the PCFM Variable Value LAR, for use in the next available Annual Iteration Process.

Part 2 – Determination of component values for legacy capex incentive scheme adjustments

15.42 The purpose of this part is to set out the methodology to determine the revised PCFM Variable components (CAR & CRAV) for the TPCR4 Capital Expenditure Incentive scheme and the TPCR4RO Capital Incentive Scheme. Additionally the final section deals with updates to the SO RAV for expenditure that differs from that forecast for 2012-13 and any changes resulting from the capex efficiency review (SOCRAV).

Process to update the TO Capex incentive scheme adjustment for TPCR4

15.43 For the TPCR4 TO allowed revenue, the term CxIncRA_t means the capital expenditure adjustment term calculated in Special Condition D9 for NGET and J7 for SPTL & SHETPLC (Capital Expenditure Incentive and Safety Net).

15.44 A provisional calculation of this term was made as part of the TPCR4 rollover settlement based on the forecast expenditure and output delivery for the final years of TPCR4. This provisional adjustment was funded in the TPCR4 rollover settlement⁵¹ subject to a review of capex for efficiency, adjustment for actual expenditure in 2011-12, and confirmation of which outputs had been delivered. The capex efficiency review is scheduled to be made following reporting of the rollover year (2012-13) data so that all 6 years can be reviewed together. At that point this calculation will be revised.

15.45 We will initially review all relevant projects and calculate the Work-in-Progress (WIP) element of capex spend which will be deducted in the calculation of actual spend to be compared to allowances. Within this review we will identify any overlap of works which have been funded and delivered under alternative schemes (TIRG and TII). Where an overlap has been identified, an adjustment will be made to the generation connection and/or zonal surplus/deficit calculation to reflect such overlap.

15.46 Special Conditions D9 and J7 sets out the calculation of the capital expenditure adjustment term as the sum of two calculations:

 For SPTL and SHETPLC the first is calculated as the indexed value of the sharing factor (CIR) multiplied by the present value factor (PVF) multiplied by the sum of the zonal generation capex adjustment (LV in D9, LVN in J7). For NGET the first is calculated as the indexed value of the sharing factor (CIR) multiplied by the present value factor (PVF) multiplied by the sum of both the zonal generation and demand capex

⁵¹ For NGET, the rollover settlement included 20% of the provisional value with the remainder to be funded during the RIIO-T1 Price Control period.

- adjustment plus WIP (LV in D9, LVN in J7) and the capital shortfall (ie the difference between termination receipts and the associated capital expenditure (NTP in D9)).
- The second is calculated as the indexed value of the sharing factor (CIR) minus 0.25 multiplied by the present value factor multiplied by the difference between base capex allowance (BC) and efficient outturn capex (AC) (excluding for SPTL and SHETPLC revenue driver capex) minus the sum of the capex adjustment as above (LV/LVN).
- 15.47 The calculations will be shared with the individual licensees in the workbook "RIIO-T1 legacy calculations".
- 15.48 In summary to revise the calculation we will :-
 - Update for actual capex (subject to a review of efficiency)
 - Update Work-in-Progress (WIP) adjustments to reflect actual expenditure and outputs delivered
 - Recalculate the profile of adjustments to be made
 - Compare to original values and calculate differences
 - Apply the appropriate sharing factors to over or underspend
 - Uplift differences for Time Value of Money at appropriate pre-tax WACC (ie TPCR4 pre-tax WACC and TPCR4RO pre-tax WACC as necessary).
- 15.49 Revised actual capex spend will give rise to amendments to RAV. The RAV adjustment required is calculated by comparing the actual efficient capex to that assumed in the modelling of Final Proposals. This value (net of any depreciation) will form the RAV adjustment for the TPCR4 capex incentive part of the CRAV term.

Process to calculate the TO Capex incentive adjustment for TPCR4 Rollover

- 15.50 Special Conditions D9 for NGET and J7 for SPTL and SHETPLC also set out the calculation of the provisional allowance of the capital expenditure adjustment term and associated calculations for the Rollover year (2012-13). The approach is similar to that used for the full TPCR4 period.
- 15.51 Both J7 and D9 specify the CxIncRO term for the rollover year. For NGET, D9 provides for the capital expenditure adjustment term, as set out in the previous section, to be used to calculate the revenue adjustment needed to reflect the capex incentive for the rollover year (ROAdj). ROAdj makes a revenue adjustment equal to the difference between the capex incentive for the TPCR4 Price Control Period and the revenue allowances made to NGET for the rollover year and for the RIIO-T1 period. ROAdj also makes a revenue adjustment in line with the capex incentive for the rollover year (CxIncRO), where the revenue adjustment is made to clawback/grant additional return and depreciation for the rollover year where actual



capex incurred does not match the capex allowance which was used for determining the allowed revenue.

- 15.52 Again the calculation is as set out in the workbook "RIIO-T1 legacy calculations" and the detail for each company is shown there.
- 15.53 To summarise the adjustment for actual performance in 2012-13 (the rollover year) we will:
 - Use allowances and actual spend for 2012-13 (subject to a review of efficiency) in a consistent price base
 - Allow for load-related outputs actually delivered and any consequent change to work in progress where appropriate
 - Compare to original values and calculate differences
 - Apply the appropriate sharing factors to over or underspend
 - Uplift differences for any Time Value of Money Adjustment at the appropriate pre-tax WACC (ie TPCR4RO WACC).
- 15.54 Adjusted efficient capex spend will give rise to amendments to RAV. The RAV adjustment required is calculated by comparing the actual efficient capex to that assumed in the modelling of Final Proposals. This value (net of any depreciation) will form the RAV adjustment for the TPCR4 rollover capex incentive part of the CRAV term. Additionally any other differences from the Final Proposal assumed additions will be adjusted for in this calculation. This will include the impact of any disposals in earlier years.

Adjustments required for differences in System Operator (SO) expenditure

- 15.55 The purpose of this part is to set out the methodology to determine the revised PCFM Variable SOCRAV which represents changes in actual efficient expenditure from that forecast for the System Operator.
- 15.56 The TPCR4 and rollover sharing mechanism for the SO shares any over or underspend of capex allowances with consumers by adding or deducting the shared portion to RAV. The calculation (carried out in 2009-10 prices) is set out in the Legacy adjustment calculation workbook which will be made available to the licensee.
- 15.57 This calculation takes the following steps:
 - Taking the original calculation of additions to RAV and noting the RAV additions profile (ie efficient capex plus incentive)

- Updating the actual efficient expenditure as required
- Comparing actual efficient expenditure to allowances and deducting 25% of overspend from the costs incurred/ adding back 25% of underspend to give a revised RAV additions profile
- Calculating the difference in profiles between the original profile and revised profile
- Summing the differences (less depreciation) to arrive at the SOCRAV term.

15.58 A value will only be ascribed to the SOCAR component term where that is necessary to reimburse amounts of allowed revenue, due to the licensee under legacy period System Operator expenditure incentive scheme adjustments, which would not be included in the effects of a revision to the SOCRAV component term.

Determination of SOOIR values

15.59 The SOOIR component term represents the allowed revenue adjustment relating to legacy period System Operator internal costs incentive adjustments that will be determined under the formula for the term IncPayInt (with respect to Relevant Year 2012-13) set out at paragraph 15B of Special Condition AA5A (Balancing Services Activity Revenue Restriction) of the licence in the form in which it was in at 31 March 2013, subject to clarifications to the calculation that were set out in correspondence (dated 25 February 2013) between the Authority and the licensee during Relevant Year 2012-13.

15.60 This adjustment is calculated by comparing the allowed internal operating costs with the actual allowed costs. There is a sharing factor of 25 per cent. The calculation is set out in the legacy workbook which also includes the amendment referred to in the letter of 25 February 2013.

Part 3 – Determination of component value for Transmission Asset Owner Incentive Scheme adjustments relating to the legacy period

15.61 The purpose of this section is to set out the methodology to determine the revised PCFM Variable Components (IAR & IRAV) for the TPCR4 Transmission Asset Owner Incentives Scheme activity in the legacy period, specifically in relation to the Transmission Investment Incentives (TII) framework. Supplementary provisions in relation to this scheme are set out in Special Condition 6B: Supplementary provisions in relation to transmission asset owner incentives scheme activity in the incentive period (which should be read in conjunction with this Part).



15.62 The TPCR4 Transmission Asset Owner Incentives are specified in:

- Special Conditions D2 (Restriction on Transmission Network Revenue) and D11 (Adjustment to the Transmission Network Revenue Restriction due to Transmission Asset Owner Incentives) of NGET's licence; and
- Special Conditions J2 (Restriction of transmission charges: revenue from transmission owner services) and J12 (Adjustment to the Transmission Network Revenue Restriction due to Transmission Asset Owner Incentives) of the licences of SPTL and SHETPLC,

in the form that each of those licences were in on 31 March 2013.

15.63 Special Conditions D11 and J12 (Adjustment to the Transmission Network Revenue Restriction due to Transmission Asset Owner Incentives) introduced the Transmission Investment Incentives (TII) framework in April 2010 to provide project-specific interim funding for critical large-scale investment projects required to support Government 2020 renewable energy targets such as the Western HVDC link. The relevant projects are identified in annex A of D11/J12 with associated capital expenditure allowances and deliverables.

15.64 On 5 April 2012, Ofgem published a statutory consultation on proposed licence modifications to extend the Transmission Investment Incentives (TII) framework to 2012-13.

15.65 The purpose of the licence modifications was to reflect the extension of the TII policy framework into 2012-13; and the capital expenditure allowances for 2012-13.

15.66 On 1 June 2012, Ofgem published a decision letter on licence modifications to extend the TII framework for application in the TPCR4 Rollover and to reflect capital expenditure allowances determined up to and including 2012-13.

15.67 The wording of the above licence modifications recognised that in line with the TPCR4 Rollover Final Proposals and the November 2011 policy decision letter on the extension of the TII framework to 2012-13:

- the baseline allowance for each TO in 2012-13 had already been set taking into account aggregate provisional TII allowance, as a proxy for the sum of the capital expenditure allowances which were still to be determined under TII for 2012-13:
- the revenue for 2012-13 had also already been set taking into account a
 provisional revenue adjustment in respect of capital efficiency incentive taking
 into account expenditure under TII to the end of 2010-11; and

 further revenue adjustments would be required in subsequent years (under the RIIO price control) in relation to: the true-up between TII allowances assumed in setting revenues for a given year and final TII allowances determined for that year; and the application of the capital efficiency incentive to expenditure under TII to the end of 2012-13.

15.68 In line with the above policy, as a consequence of the licence modifications to reflect the TPCR4 Rollover Final Proposals and subsequent licence modifications to extend the TII framework to 2012-13:

- the aggregate provisional TII allowance taken into account in setting baseline allowance for each TO has resulted in an implicit revenue adjustment via the PRt term for 2012-13 defined in Special Condition D2/J2;
- the provisional revenue adjustment in respect of the capital efficiency incentive was reflected in an explicit TII-specific revenue adjustment, via the TOInct term for 2012-13 defined in Special Condition D2/J2; and
- the provisions for future revenue adjustments and associated RAV adjustments are set out in paragraphs 2A-2D of Special Condition D11/J12, where paragraph 2C allows that the revenue adjustment determined by the Authority under 2A or 2B will endeavour to ensure that the financial position of the licensee is the same as if the allowance adjustment had been known at the time of setting the allowed revenue and the same as if the revenue adjustment had been taken into account in setting the allowed revenue.
- 5.69 Special Condition 6B (Supplementary provisions in relation to transmission asset owner incentives scheme activity in the legacy period) supersedes Special Condition D11/J12. Special Condition 6B includes provisions for specification of inputs to the calculation of revenue adjustments, and associated RAV adjustments, in line with the approach previously reflected in paragraph 2A-2D of Special Condition D11/J12. Such adjustments are reflected in the determination of IAR values and IRAV values under Special Condition 6A in line with the methodology set out below.

Calculation of TPCR4 Transmission Asset Owner Incentives adjustment

15.70 The calculation of IAR and IRAV values is based on the following inputs specified or determined in Special Condition 6B:

- Fixed input value: TII Assumed Allowance for each TII year, TII Initial Allowance for each TII year, and the TII Provisional Revenue Adjustment, and
- Variable input value: TII actual allowance for each TII year.

15.71 Special Condition 6B paragraph 6B.7 states that IAR values and IRAV values may be determined by the Authority to reflect:

- a) A true-up of the difference between the TII Assumed Allowance for a given TII year and the TII Actual Allowance for the same TII year, and/or
- b) The application of the capital expenditure incentive regime on the difference between expenditure incurred by the licensee and TII Actual Allowance for each TII year.
- 15.72 Special Condition 6B paragraph 6B.7 sets out the principles by which revenue adjustments will be calculated, in line with those set out in paragraph 2C of superseded Special Condition D11/J12, to achieve this Ofgem will base any revenue adjustment in line with paragraph 6B 7(a) of Special Condition 6B on an off-line calculation following the process below:
 - Noting the Base Transmission Revenue allowance made in modelling the TPCR4 Rollover Final Proposals from the pre-RIIO-T1 financial model (ie the one used to model the rollover allowances) for 2012-13. This Base Transmission Revenue was based on the allowances assumed for setting revenues for this year as reflected in the TII Assumed Allowance for 2012-13.
 - Comparing the TII Assumed Allowance with the TII Actual Allowance for each TII year and, where these are different calculate the change in revenue (in 2009-10 prices) for each TII year as follows:
 - i. Where the difference relates to a given TII year prior to 2012-13, calculate the change in revenue for that TII year, and all subsequent TII years excluding 2012-13, directly based on the revenue formulation in the TII legacy condition for the same TII year, and
 - ii. In all cases, calculate the change in revenue for 2012-13 by updating the pre-RIIO-T1 financial model for 2012-13 (ie the one used to model the rollover base revenue allowance) to take account of the TII Actual Allowance for the TII year 2012-13 to produce a revised revenue for 2012-13. That is, replacing the TII Assumed Allowance with the TII Actual Allowance so that the resulting revenue calculated using the pre-RIIO-T1 financial model for 2012-13 reflects the total TII capex allowance finally determined for 2012-13 as set out in Special Condition 6B.
 - Applying a Time Value of Money Adjustment to the change in revenue to determine the revenue adjustment to be made in the RIIO-T1 period.
- 15.73 We will base any revenue adjustment in line with Part A of Special Condition 6B on an off-line calculation following the process below:
 - Using the efficient expenditure for 2009-10 and 2010-11 and the
 efficient expenditure for 2011-12 and 2012-13 we will compare the
 expenditure to the TII Actual Allowance for each year and applying the
 relevant sharing factor (as specified in Table 5 of Appendix 1 of Special
 Condition 6B) to the difference to calculate the revenue adjustment;

- Netting off the TII Provisional Revenue Adjustment which was previously taken into account in setting the revenue for 2012-13, and
- Applying a Time Value of Money Adjustment to the change in revenue to determine the revenue adjustment to be made in the RIIO-T1 period. Where the outcome of the efficiency review of expenditure is not known we will use the provisional capex numbers in the above calculation and repeat the process using updated information at the next Annual Iteration Process.
- 15.74 For the purposes of applying the Time Value of Money Adjustment in paragraphs 15.72-15.73, the revenue adjustment to be made in the RIIO-T1 period will be calculated on the basis that it will be made on 1 April 2013. However, in practice revenue adjustments determined by 30 November in one financial year will be an input to the Annual Iteration Process through which it will be made on 1 April in the following financial year.
- 15.75 Where actual TII efficient expenditure differs from TII expenditure (and forecast expenditure) in the TPCR4 period and the TPCR4 Rollover year we will calculate the adjustment to the RIIO-T1 opening RAV. This calculation will compare actual efficient expenditure (in 2009-10 prices) to that in the same price base assumed in calculating the RIIO-T1 opening RAV. Where a difference exists we will adjust for any over/ under allowance of depreciation to determine the required change to RAV.
- 15.76 The above policy will be reflected by determining revised PCFM Variable Components (IAR & IRAV) for the TPCR4 Transmission Asset Owner Incentives as follows:
 - The TPCR4 Transmission Asset Owner Incentives scheme revenue adjustment will be derived from the sum of all revenue adjustments calculated in line with paragraphs 15.74-15.75 and will form the IAR component in the LAR PCFM variable value for 2013-14.
 - The TPCR4 Transmission Asset Owner Incentives RAV adjustment (for years prior to 2012-13) determined in line with paragraph 15.75 forms the IRAV component in the LRAV PCFM variable value for 2013-14
 - The RAV adjustment relating to 2012-13 expenditure is included in the CRAV term.

Part 4 – Determination of component value for logged up and security costs adjustments relating to the legacy period

15.77 This part sets out the methodology for determining the value of the component terms SAR and SRAV, the revenue allowance and RAV balance addition adjustments relating to the licensee's actual efficient expenditure levels on logged up and security costs during the legacy period.



15.78 The TPCR4 price control arrangements, and the TPCR4 Rollover arrangements provided for the licensee to log up certain types of cost which were not included in opex or capex allowances for those periods. The cost categories concerned were, however, recognised under the term ${}^{\backprime}LC_t{}'$ in the formula for the licensee's Transmission Owner Revenue and specified in:

- paragraph 3 of Special Condition D2 (for NGET); and
- paragraph 4 of Special Condition J2 (for SPTL and SHEPLC),

of the respective electricity transmission licences in the form they were in on 31 March 2013.

15.79 The licensee was required to record and report the levels of expenditure being logged up on specified activities so that, for the RIIO-T1 price control arrangements:

- (a) an appropriate aggregate addition (in 2009-10 prices) to the licensee's RAV balance could be made, reflecting capex; and
- (b) appropriate, additions (including Time Value of Money Adjustments) could be made to the licensee's base revenue allowances (spread across the Price Control Period) reflecting:
 - (i) the amounts which would have been included in base revenues; and
 - (ii) the higher RAV balances which would have earned a return and depreciation allowance,

if the costs had been included in TPCR4/Rollover opex and capex allowances.

15.80 In addition, the licensee was allowed to report incremental costs incurred on physical security measures ('security costs') for certain operational sites during the TPCR4/Rollover period.

15.81 The outturn values needed to calculate the RAV balance additions and revenue adjustments are the licensee's efficient logged up and security costs during the legacy period.

Relevant years in the legacy period subject to adjustment

15.82 The licensee's reported totals for logged up and security costs relating to Relevant Years up to and including 2011-12 will have been available for the modelling of the licensee's opening base revenues and opening RAV balance for the Price Control Period. However, reported totals for Relevant Year 2012-13 will not have been available when the licensee's opening base revenues and opening RAV balance were set and forecast levels for that year will have been used. In addition, logged up and security costs reported by the licensee are subject to an efficiency review by Ofgem.



15.83 Legacy price control logged up and security cost adjustments therefore need to be made to reflect:

- reported levels of logged up and security cost expenditure for Relevant Year 2012-13; and
- the outcome of the Ofgem efficiency review of logged up and security costs during the legacy period.

Determination of the value of the component term SAR

15.84 The steps set out in paragraphs 15.85 to 15.89 below will be followed to determine the value of the component term SAR.

Step 1

15.85 After 31 July 2013, Ofgem will obtain from price control review information submissions relating to Relevant Year 2012-13 the licensee's reported totals for:

- logged up costs categorised (capex);
- logged up costs categorised (opex); and
- security costs (capex and opex).

for each Relevant Year in the TPCR4 and Rollover Year Price Control Period.

Step 2

15.86 Ofgem will re-base each of the figures obtained under Step 1 into 2009-10 prices (see section on price base in Chapter 1).

Step 3 Use of the legacy adjustment calculation workbook

15.87 The rebased totals for capex and opex items obtained under step 2 will be used to overwrite the pre-existing logged up and security cost values on the SAR and SRAV worksheets of the calculation workbook.

15.88 The calculation workbook is designed to:

- (a) calculate the difference between the logged up (capex) costs referred to in Step 2 and the logged up (capex) values (in the same price base) used in the modelling of the licensee's opening base revenues;
- (b) calculate the difference between the logged up (opex) costs referred to in Step 2 and the logged up (opex) values (in the same price base) used in the modelling of the licensee's opening base revenues;

- (c) calculate the difference between the security costs (capex and opex) referred to in Step 2 and the security cost (capex and opex) values (in the same price base) used in the modelling of the licensee's opening base revenues;
- (d) calculate the return and depreciation that should be allowed on the figures obtained under sub-paragraph (a) for each Relevant Year in the TPCR4 and Rollover Year Price Control Period;
- (e) add the figures obtained under sub-paragraphs (b) and (c) to the figures obtained under sub-paragraph (d) for each Relevant Year in the TPCR4 and Rollover Year Price Control Period;
- (f) apply a Time Value of Money Adjustment to each of the totals obtained under sub-paragraph (e); and
- (g) sum the figures obtained under sub-paragraph (f) to calculate the overall revenue allowance adjustment to be applied in 2009-10 prices.
- 15.89 The value referred to in paragraph 15.88(g) will be determined to be the value of the component term SAR.

Determination of the value of the component term SRAV

Use of the legacy adjustment calculation workbook

- 15.90 The calculation workbook is designed to:
 - (a) calculate the difference relating to logged up (capex) costs, for each Relevant Year in the TPCR4 and Rollover Year Price Control Period, referred to in subparagraph 15.88(a);
 - (b) deduct from the figures referred to in sub-paragraph (a), the respective depreciation amounts referred to in sub-paragraph 15.88(d); and
 - (c) sum the figures obtained under sub-paragraph (b) to calculate the overall RAV balance addition to be applied in 2009-10 prices
- 15.91 The value referred to in sub-paragraph 15.90(c) will be determined to be the value of the component term SRAV.

Restatement or adjustment of values used in the determination of SAR and SRAV

15.92 As set out in paragraph 10 of this Chapter, a determination of each component term value will be carried out during each Relevant Year of the Price Control Period.



15.93 If it is necessary for one or more of the values referred to above to be restated or adjusted after use in a determination of the component terms SAR and SRAV, in particular following a cost efficiency review by Ofgem, the values of SAR and SRAV would be re-determined using the restated/adjusted values for the purpose of determining a revision to the PCFM Variable Value LAR or LRAV, for use in the next available Annual Iteration Process.

Part 5 – Statement of component values and determination and direction of revised PCFM Variable Values

15.94 Parts A and B of Special Condition 6A and 7A provide for the determination of revised PCFM Variable Values for Relevant Year 2013-14, that relate to legacy price control adjustments, for use in the Annual Iteration Process. Determinations will be made by 30 November in each Relevant Year using the formulae set out in Part A of Special Condition 6A, 7A and component term values determined in accordance with Part B of that condition and the methodologies set out in parts 1 to 4 of this Chapter.

15.95 All of the outturn values needed to finalise legacy price control adjustments should be available by 31 July 2013. This means that they can be used in the determination of revised PCFM Variable Values for the Annual Iteration Process that will take place by 30 November 2013. It should only be necessary to make subsequent revisions to those PCFM Variable Values where price control review information relating to the legacy period is restated in accordance with relevant licence conditions and/or RIGs documents. The effect of any such subsequent revisions will, subject to a Time Value of Money Adjustment, be included in the calculation of the term MOD_t in relation to the Annual Iteration Process concerned.

15.96 A determination of PCFM Variable Values relating to legacy price control adjustments will be made by 30 November in each Relevant Year and the overall direction of PCFM Variable Values revisions for each Annual Iteration Process will include a copy of the PCFM Variable Values Table(s) for the licensee. This will confirm the post direction state of PCFM Variable Values relating to legacy price control adjustments.

15.97 Part C of Special Condition 6A sets out the procedure to be used for the direction of revised PCFM Variable Values relating to legacy price control adjustments. It specifies that:

- a) the direction of revised PCFM Variable Values will be made by 30 November in each Relevant Year t-1;
- b) the direction will include a statement of the component term values used in the determination of any revised PCFM Variable Values;
- c) the licensee will be given at least 14 days notice of any revisions to PCFM Variable Values that the Authority proposes to direct; and
- d) the Authority will have due regard to any representations or objections made by the licensee during the period referred to in sub-paragraph c) and give its reasons for any decisions made in relation to them.



15.98 If, for any reason, in any Relevant Year t-1, the Authority does not make a required direction of revised PCFM Variable Values relating to legacy price control adjustments, Part C of Special Condition 6A specifies that the Authority will direct the values concerned as soon as is reasonably practicable thereafter.



Appendix - Glossary

Α

Annual iteration Process

The annual iteration process is the process of annually updating the variable (blue box) values in the PCFM and running its calculation functions in order to provide updated MOD and SOMOD values.

C

Cut-Off Date

In respect of licensee's Pension Scheme Established Deficit, means 31 March 2010 for DNOs, 31 March 2013 for GDNs and 31 March 2012 for TOs and SOs.

D

Defined Benefit Scheme

A pension scheme where the benefits that accrue to members are normally based on a set formula taking into account the final salary and accrual of service in the scheme. It is also known as a final salary pension scheme.

Defined Contribution Scheme

A pension scheme where the benefits that accrue to members are based on the level of cash contributions made to an individual account; the returns on those funds are used to provide a cash amount to purchase an annuity on retirement.

Ε

ET1

Prefix/Suffix designating an item relevant to the RIIO-T1 (electricity transmission) price control review which will be applicable for the eight years running from 1 April 2013.

ET1 Price Control Financial Model (PCFM)

The model of that name (with a Relevant Year suffix: "20XX November" (where 20XX represents the calendar year containing the month of November in Relevant Year t-1)):

- (a) that is represented by a workbook in Microsoft Excel ® format maintained under that name (with a Relevant Year suffix) on the Authority's website; and
- (a) that the Authority will use to determine the values of the terms MOD and SOMOD through the application of the Annual Iteration Process,



as modified from time to time, whether under Special Condition 5A or otherwise.

The PCFM calculates amounts to beadded to the licensee's Opening Base Revenue Allowances through an Annual Iteration Process to derive a recalculated base revenue value - see Chapters 1 and 2.

F

Fast money

The proportion of Totex which is not added to the licensee's RAV balance and is effectively included in the licensee's revenue allowance for the year of expenditure

Financial Reporting Council (FRC)

The FRC is the body which issues Accounting Standards in the UK. It is recognised for that purpose under the Companies Act 2006.

Funding Adjustment Rate

This is the percentage calculated as 1 - Totex Incentive Strength Rate.

Ι

International Financial Reporting Standards/IFRS

IFRS are accounting standards set by the International Accounting Standards board. These standards ensure comparability and accuracy of accounts.

М

MOD Term [TO and SOMOD for SO]

The term of that name included in the formula for Base Transmission Revenue (System Operator Internal Revenue) set out in Special Condition 3A (or Special Condition 4A for SO) of the Electricity Transmission licence. It represents an amount added to the licensee's Opening Base Revenue Allowance for the Relevant Year concerned, to derive a recalculated base revenue value, ascertained in accordance with the methodologies set out in this Handbook. The value of the MOD term is calculated through the Annual Iteration Process for the ET1 Price Control Financial Model (see Chapter 1) and is specified in a direction given by the Authority by 30 November in each Relevant Year.

Ν

Non-core RAV

See Shadow RAV



NPV

Net present value

0

Ofgem

The Office of the Gas and Electricity Markets Authority.

P

Pension Protection Fund

The fund, established under the provisions of the Pensions Act 2004, to provide compensation to members of eligible defined benefit pension schemes, when there is a qualifying insolvency event in relation to the employer, and where there are insufficient assets in the pension scheme to cover the Pension Protection Fund level of compensation.

Pension Scheme Administration

The range of activities that pension scheme trustees are required by legislation to undertake or commission in running the pension scheme. It includes, without limitation, the keeping of scheme records, scheme management and administration, scheme policy and strategy, the provision of information to scheme members, the calculation and payment of benefits and liaison with tax and regulatory authorities, and the preparation of valuations. It does not include investment management fees which are remunerated by deduction from investment returns; or any activities which are the responsibility of the licensee, such as advisors to the licensee on managing or advising it on any and all aspects of its relationship with the trustees including recovery plans.

Pension Scheme Established Deficit (PSED)

The difference between assets and liabilities, determined at any point in time, attributable to pensionable service up to the end of the respective Cut-Off Dates and relating to Regulated Business Activities under Pension Principle 2. The term applies equally if there is a subsequent surplus.

Pension Scheme Established Deficit Adj (PSED_{ADJ})

A different value (PSED $_{ADJ}$) substituted for the PSED for the purposes of the methodology in this handbook. The Authority may, following bilateral discussions, agree with the licensee that a different value be substituted for the PSED.

Pension scheme incremental deficit

The difference between the assets and liabilities, determined at any point in time, attributable to post Cut-Off Date pensionable service and relating to Regulated Business Activities. The term also applies equally where there is a surplus for the post Cut-Off Date regulated Notional incremental deficit sub-fund



Pre-tax WACC

Whilst we generally use a Vanilla WACC to set the allowed return, in certain circumstances the return allowed is set with reference to a Pre-tax WACC, eg on TII projects. This Pre-tax WACC will be set out in the relevant schemes and comprises a pre-tax cost of debt and a pre tax cost of equity weighted together by the gearing level.

R

RAV - Regulatory Asset Value

A financial balance representing expenditure by the licensee which has been capitalised under regulatory rules. The licensee receives a return and depreciation on its RAV in its price control allowed revenues.

Relevant Year

A year beginning on 1 April to which the provisions of this Handbook apply.

RIIO

Revenue = Incentives + Innovation + Outputs.

Ofgem's framework for the economic regulation of energy networks.

RIIO-T1 (Electricity Transmission)

The price control arrangements which will apply to Electricity Transmission licensees from 1 April 2013 until 31 March 2021.

S

Scheme datasets

Pension scheme valuation datasets specified to be provided to Ofgem in the Energy Network Operators' Price Control Pension Costs – Regulatory Instructions and Guidance: Triennial Pension Reporting Pack including pension deficit allocation methodology.

Shadow RAV

Refers to expenditure, already incurred, which has not yet been admitted to the licensee's formal RAV balance, but which is expected to be admitted at a future point. This is also referred to as "non-core RAV". This arises as a feature of specific funding mechanisms such as TIRG.

Slow money

The proportion of Totex which is added to the licensee's RAV balance on which the licensee receives a revenue allowance to cover finance (WACC) and depreciation costs.



SO

NGG as the gas system operator has responsibility to construct, maintain and operate the NTS and associated equipment in an economic, efficient and coordinated manner. NGET as the electricity system operator has responsibility to construct, maintain and operate the NETS and associated equipment in an economic, efficient and co-ordinated manner. In their roles as SOs, NGG and NGET are responsible for ensuring the day-to-day operation of the transmission systems.

SOMOD

See MOD

Т

Time Value of Money Adjustment

A multiplier used when the award or application of a financial value, attributable to a particular year, is deferred until a later year, even where the deferral is routine and in accordance with a price control mechanism.

In basic terms, for any one year, the multiplier is (1+X) where:

o X is the WACC for the licensee applicable to the period of deferral

TII

Formerly known as TO incentives which provide an appropriate funding framework for anticipatory investment.

TIRG

This is a mechanism for funding transmission projects specific to connecting renewable generation. The mechanism was implemented during TPCR4, outside of the price control allowance, to minimise delays. TIRG is comprised of four projects: Beauly Denny, Sloy, South West Scotland, and the Anglo Scottish Interconnector.

TO

For the purposes of this handbook means a company which holds an onshore electricity transmission licence.

There are three onshore electricity TOs: NGET, SPTL and SHETPLC.

Totex

See Chapter 6 paragraphs 6.20 to 6.22



Totex Capitalisation Rate

The percentage of Totex which is added to RAV (slow money)

Totex Incentive Mechanism (TIM)

TIM is the financial reward (or penalty) that companies are given in allowances for under or over spend on Totex. For RIIO-T1 Final Proposals Opening Base Revenue Allowances have been modelled on the basis that actual Totex expenditure levels are expected to equal allowed Totex expenditure levels (allowances). If actual (outturn) expenditure differs from allowances, for any Relevant Year during the Price Control Period, the TIM provides for an appropriate sharing of the incremental amount (whether an overspend or underspend) between consumers and licensees.

Totex Incentive Strength Rate (incentive strength)

The incentive strength is a percentage figure specified in Special Condition 6C for each licensee. It represents the percentage that a licensee bears in respect of an overspend against allowances or retains in respect of an underspend against allowances.

TPCR (Electricity Transmission)

The RPI-X type price control arrangements which applied to electricity transmission licensees from 1 April 2007 to 31 March 2012 (with a one year extension to 31 March 2013 – referred to as TPCR4 rollover).

Triennial Valuation

An actuarial valuation of a pension scheme which has been carried out to meet the requirements of Section 224(2)(a) of the Pensions Act 2004 and which details in a written report, prepared and signed by the Scheme Actuary, the value of the scheme's assets and Technical Provisions. Actuarial valuations are usually produced triennially but the term may also refer equally to any full actuarial valuation that is not an Updated Valuation.

V

Vanilla WACC

See WACC.

W

WACC

The Vanilla Weighted Average Cost of Capital is Ofgem's preferred way of expressing the rate of return allowed on the Regulatory Asset Values (RAV) of price controlled network companies. The use of Vanilla WACC means that the company's tax cost is



separately calculated as a discrete allowance so that only the following have to be factored in:

- the pre-tax cost of debt ie the percentage charge levied by lenders, and
- the post tax cost of equity ie the percentage return equity investors expect to actually receive,

weighted according to the price control gearing assumption.

"Real Vanilla WACC" is used which gives a lower percentage than "Nominal Vanilla WACC" would (when inflation is positive). This is because inflation isn't taken into account in the determination of the Real Vanilla WACC percentage.

In limited circumstances we also use a pre-tax WACC (see Pre-tax WACC).