

ET1 Price Control Financial Handbook

This handbook and the constituent methodologies are development drafts and the content is subject to any decision at Final Proposals.

Reference:

Publication date: XX XXX 2013

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 ETC 57 (Governance of 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 update licensees' base revenue allowances during the course of the RIIO-T1 price control period;
- 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
- c) 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 ETC 57.

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 Transportation 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 Price Control Licence Condition ETC 57) 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](#)

[Hyperlink]

- b. [RIIO-T1 Price Control Final Proposals](#)

[Hyperlink]

- c. [Statutory Consultation on RIIO-T1 licence conditions](#)

[Hyperlink]

- d. [Decision letter: Clawback of tax benefit due to excess gearing](#)

Contents

Introduction	6
Terms used in this handbook	7
1. The ET1 Price Control Financial Model and the Annual Iteration Process	8
Overview	8
Price base	8
Temporal convention	9
The Price Control Financial Model and the Annual Iteration Process	9
State of the ET1 Price Control Financial Model	11
The ET1 Price Control Financial Model Working Group	12
Terms of reference	13
2. The ET1 Price Control Financial Methodologies	15
Methodologies in this handbook	15
Processing of different types of PCFM Variable Value under the Annual Iteration Process	18
3. Pension allowances - financial adjustment methodology	21
Pension Scheme Administration and PPF levy	23
Direction of revised EDE and SOEDE values	32
Direction of revised APFE and SOAPFE values	34
4. Tax liability allowances - financial adjustment methodologies	36
Part 1 - Overview	36
Temporal conventions	36
Annual Iteration process	36
Price bases for tax calculations	37
Regulatory tax losses	37
Group tax arrangements	38
Part 2 - Adjustments driven by tax trigger events - methodology	38
Tax trigger events	38
Materiality threshold and 'deadband'	39
Accounting standards	40
Notification of tax trigger events	40
Logging of trigger events	43
Determination and direction of revised TTE values	43
Part 3 - Adjustments driven by gearing levels and corporate debt interest costs ('tax clawback') - methodology	45
Determination and direction of revised TGIE values	45
Direction of revised TGIE values	47
Part 4 - Processing of revised TTE and TGIE values under the Annual Iteration Process	48
5. Corporate debt - allowed percentage cost financial adjustment methodology	49

Overview	49
National Grid Electricity Transmission plc (NGET) – System Operator price control	49
Temporal conventions	49
Methodology for determining revised PCFM Variable Values for the cost of corporate debt	50
Non-availability of iBoxx or Bank of England data	52
Variation of approach for Scottish Hydro Electric Transmission Ltd	53
Use of revised PCFM Variable Values in the Annual Iteration Process	54
6. Totex incentive mechanism – financial adjustment methodology	55
Description of the Totex Incentive Mechanism	56
Application of the TIM under the annual iteration process	58
Determination of PCFM Variable Value revisions for actual Totex expenditure	60
Notification and direction of revised PCFM Variable Values	61
7. Uncertain costs allowed expenditure – financial adjustment methodology	62
Part 1 - Overview	62
Part 2 - Determination of PCFM Variable Value revisions for uncertain cost categories	65
Part 3 - Notification and direction of revised PCFM Variable Values	67
8. Baseline and strategic wider works outputs allowed expenditure - financial adjustment methodology	69
Temporal convention	70
Allowed Expenditure – Baseline and Strategic Wider Works Outputs (WWE)	70
Allowed Expenditure – Incremental Wider Works	71
Processing of PCFM Variable Values for WWE under the Annual Iteration Process	71
Effects of using revised PCFM Variable Values	71
9. Network development policy and wider works allowed expenditure - financial adjustment methodology (NGET only)	73
Temporal convention	73
10. Generation connection volume driver allowed expenditure - financial adjustment methodology	76
Temporal convention	76
Generation connection – local enabling works	76
Determination and direction of revised GCE values	78
11. Enhancements to pre-existing infrastructure allowed expenditure - financial adjustment methodology	80
Temporal convention	80
Enhancements to pre-existing infrastructure – visual amenity	80
Determination and direction of revised EPIE values	82
12. Innovation roll out mechanism allowed expenditure – financial adjustment methodology	84
Temporal convention	84
Determination and direction of revised IRM values	85
Processing of IRM values under the Annual Iteration Process	85
13. Undergrounding volume driver (NGET only)	87
Temporal convention	87

Undergrounding of new infrastructure	87
14. Demand related infrastructure volume driver allowed expenditure – financial adjustment methodology	90
Temporal convention	90
15. Legacy price control adjustments - financial methodologies	93
Overview	93
Part 1 - Pension adjustments relating to the legacy period	96
Description of the pension true-up	96
Pension true-up calculation	97
Part 2 - Tax adjustments relating to the legacy period	98
Description of the tax clawback from TPCR4 Rollover	99
Determination and direction of revised TAR value	99
Part 3 – Capex incentive scheme adjustments relating to the legacy period	100
Process to update the TO Capex incentive scheme adjustment for TPCR4	100
Process to calculate the TO Capex incentive adjustment for TPCR4 Rollover	101
Part 4 – Transmission asset owner incentive scheme adjustments relating to the legacy period	103
Description of the TPCR4 Transmission Asset Owner Incentives	103
Calculation of TPCR4 Transmission Asset Owner Incentives adjustment	104
Part 5 – Logged up and security costs adjustments relating to the legacy period	107
Description of the TPCR4 Logged-up and Security costs	107
Calculation of TPCR4 Logged-up and Security costs adjustment	107
Part 6 – Direction of LAR, LRAV, SOLAR and SOLRAV values	108
Appendices	111
Appendix 1 - Glossary	112

Introduction

The ET1 Price Control Financial Handbook is one of the Price Control Financial Instruments referred to in Special Condition ETC57 (Governance of 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 licensees' base revenues will be calculated. It also contains the Price Control Financial Methodologies ('the methodologies'), specified in relevant price control licence 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 ETC57. The 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 price control licence 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 allowed revenue levels and to carry out business sensitivity analysis.

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

- (i) the licence,
- (ii) the methodologies, and
- (iii) the PCFM.

¹ Total Expenditure – see Glossary

Terms used in this handbook

References to the Authority and Ofgem

The Gas and Electricity Markets Authority (“the Authority”) is established by section 1 of and Schedule 1 to the Utilities Act 2000. The Authority’s staff are based at the Office of the Gas and Electricity Markets Authority (“Ofgem”)

In this handbook the text refers to:

- ‘the Authority’ when an action or decision must be taken by the Authority itself as a “reserved matter” (or by a committee or individual with delegated authority to so act on its behalf); and
- ‘Ofgem’ when an action or decision relating to a “non-reserved matter” is to be taken by one or more of the Authority’s staff under delegated authority or a regime or protocol approved by the Authority.

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

1.1. The special conditions specify the Transmission Owner (TO) and, for National Grid Electricity Transmission plc (NGET), System Operator (SO) opening base revenue² levels 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 incremental changes to the licensee's opening base revenues for each Relevant Year so that the updated base revenue allowances 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 Totex³ expenditure and the Totex incentive mechanism.

1.3. 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 simplified formula below:

Base Revenue for year t = opening base revenue for year t + MOD for year t .

1.4. 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

1.5. The PCFM works predominantly in a constant 2009-10 price base. This is consistent with the opening base revenue values set down in the licence. The value of the term MOD is calculated in 2009-10 prices. Indexation is provided for in the base revenue formula set out in the special conditions.

² Base Revenue is the largest component of the licensee's overall Allowed Revenue

³ See Glossary

1.6. Some tax calculations internal to the PCFM use nominal prices, based on embedded RPI forecast data. Interest cost and tax allowance calculations relate to the licensee's accounting profit and loss position. Since, for regulatory purposes, this is considered in nominal prices, 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 values reported in nominal terms are required to be reflected in 2009-10 prices we will use the regulatory year average actual RPI indices to rebase.

Temporal convention

1.8. As indicated above, the MOD term is used to adjust the opening base revenue figure for each Relevant Year t during the price control period⁴. 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 ETC57 (Governance of ET1 Price Control Financial Instruments). It has an input area for each licensee 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, constitute the opening base revenue values for each licensee. Before the calculation of opening base revenues are performed, Ofgem will commission an external audit of the functionality of the PCFM.

1.11. By 30 November in each Relevant Year $t-1$ ⁶, 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 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 or objections. The Authority will then (by 30 November in Relevant Year $t-1$) specify any PCFM Variable Value revisions in a formal direction to the licensee. The direction will also include a 'screenshot' of the PCFM Variable

⁴ In 2013-14, the first year of the price control period, the licence specifies that the value of MOD is zero.

Values table for the licensee, showing the state of all variable values after the directed revisions, with revised values emboldened.

1.13. Ofgem will then carry out the Annual Iteration Process:

- directed revisions to 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:
 - the base revenue figure for each licensee for each relevant year of the price control period, and
 - the modelled RAV balance for each licensee;
- the PCFM will output the value of MOD for relevant year t for each licensee.

1.14. The output value of MOD_t for the licensee will reflect the difference between the recalculated base revenue figures for the licensee held in the PCFM before the Annual Iteration Process and the recalculated base revenue figures for the licensee held in the PCFM after the Annual Iteration Process recalculations. The PCFM calculations will apply appropriate time value of money⁵ adjustments to the calculation of MOD_t , so that the licensee will be in the same position as if adjustments to base revenue for years prior to Relevant Year t had been notified to it in the relevant year concerned.

1.15. 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 value for the same year.

1.16. The steps of the Annual Iteration Process are specified in Special Condition ETC26 (Annual Iteration Process for the ET1 Price Control Financial Model).

1.17. The Authority will issue a direction to the licensee giving the value of MOD_t by 30 November in each Relevant Year t-1⁶. 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 1.10. The value of MOD in the direction will be stated in £m to one decimal place.

1.18. 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:

⁵ See Glossary

⁶ The first such direction will be given by 30 November 2013.

- 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 for Relevant Year t, in time to calculate and issue its indicative use of system charges by 31 December in Relevant Year t-1⁷.

1.19. In the unlikely event that the Authority does not direct a value for MOD_t by 30 November in Relevant Year t-1, paragraph 11 of Special Condition ETC 26 specifies that the value must be directed as soon as possible thereafter and that, in the meantime, the value of MOD_t shall be held to be equivalent to the value of MOD_{t-1} .

1.20. The table below shows the timings for updating the PCFM and running the Annual Iteration Process as described above.

Table [1.0] timing of Annual Iteration Process

Annual iteration Process							Revenue adjustment for year MOD_t
Timing of AIP		Input and changes to the model			AIP finalisation		Regulatory year (t)
Month	Regulatory year (t-1)	Latest RIGs data (t-2)	Functional cut-off	Data cut off	Provisional MOD circulated	AIP completed. MOD directed	
There is no AIP run in Nov 2012. Final proposals determine Revenues for Regulatory year 13/14.							
Nov-13	13/14	31 Jul 13	30 Sep 13	31 Oct 13	15 Nov 13	30 Nov 13	14/15
Nov-14	14/15	31 Jul 14	30 Sep 14	31 Oct 14	15 Nov 14	30 Nov 14	15/16
Nov-15	15/16	31 Jul 15	30 Sep 15	31 Oct 15	15 Nov 15	30 Nov 15	16/17
Nov-16	16/17	31 Jul 16	30 Sep 16	31 Oct 16	15 Nov 16	29 Nov 16	17/18
Nov-17	17/18	31 Jul 17	30 Sep 17	31 Oct 17	15 Nov 17	30 Nov 17	18/19
Nov-18	18/19	31 Jul 18	30 Sep 18	31 Oct 18	15 Nov 18	30 Nov 18	19/20
Nov-19	19/20	31 Jul 19	30 Sep 19	31 Oct 19	15 Nov 19	30 Nov 19	20/21
Nov-20	20/21	31 Jul 20	30 Sep 20	31 Oct 20	15 Nov 20	30 Nov 20	21/22

State of the ET1 Price Control Financial Model

1.21. As mentioned in paragraph 1.7, the PCFM exists as a constituent part of Special Condition ETC57 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 ETC57 (Governance of ET1 Price Control Financial Instruments).

⁷ Scottish Hydro Electric Transmission Ltd and SP Transmission Ltd notify their allowed revenues to National Grid Electricity Transmission plc for charging purposes.

1.22. Ofgem will keep a log of modifications to the PCFM.

1.23. A copy of the PCFM in its latest state will be maintained on the Ofgem website. This will allow licensees 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 model is designed to be as 'user friendly' as possible for this purpose.

1.24. An updated copy of the PCFM will be uploaded to the website by 30 November each year (after each Annual Iteration Process) and the file will be named "ET1 Price Control Financial Model 20XX-XX".

Error of functionality in the PCFM

1.25. In the event that an error of functionality is discovered in the PCFM, the following procedures 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;
- the procedure in Special Condition ETC57 for modifications to the PCFM would be followed.

The ET1 Price Control Financial Model Working Group

1.26. 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.

1.27. In accordance with the provisions of Part A of Special Condition ETC57 (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 licensees or other stakeholders.

Terms of reference

Purposes of the working group

- 1.28. 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 that appropriately adjusts the licensee's opening base revenue so that its allowed expenditures and performance under incentive schemes are properly reflected;
 - (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 ETC57; and
 - (iii). to provide such views or recommendations to the Authority with regard to the PCFM as it sees fit.

Composition

- 1.29. The composition of the group will be:

- Ofgem (chair);
- Ofgem (secretary);
- one representative per licensee;
- ENA representative (optional).

Timing and duration of the group's work

- 1.30. The working group's incumbency will run from 1 April 2013 to 31 March 2021.

- 1.31. 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 1.25(ii)).

- 1.32. Representatives may attend meetings in person, or at the discretion of the chair, through video or telephone conferencing facilities.

- 1.33. 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 at least two licensee representatives (each from a different licensee) are present.

Resources

1.34. 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.

DRAFT

2. The ET1 Price Control Financial Methodologies

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 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 for the licensee 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 ETC57 (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

No	PCFM Variable Value	Special Condition	Description	Type of variable value
<u>Specified financial adjustments</u>				
1	EDE SOEDE	27/65	Pension Scheme Established Deficit	revenue allowance
2	APFE SOAPFE	27/65	Pension Scheme Administration costs and PPF levy	revenue allowance
3	TTE SOTTE	27/65	Tax liability – tax trigger events	revenue allowance

No	PCFM Variable Value	Special Condition	Description	Type of variable value
4	TGIE SOTGIE	27/65	Tax liability – gearing/interest costs	revenue allowance
5	CDE SOCDE	27/65	Allowed percentage cost of debt	Percentage
<u>Totex incentive mechanism</u>				
6	ALC	47	Actual load related capex expenditure	actual expenditure
7	ARC	47	Actual asset replacement capex expenditure	actual expenditure
8	AOC	47	Actual other capex expenditure	actual expenditure
9	ACO SOACO	47/66	Actual controllable opex	actual expenditure
10	ANC SOANC	47/66	Actual non-operational capex	actual expenditure
11	ACC	47	Contributions received	actual revenues (negative value)
<u>Allowed Totex expenditure adjustments</u>				
12	IAEEPS/ SOIAEEPS	28/117	Uncertain costs - enhanced security	allowed expenditure
13	IAEBT	28	Uncertain costs – BT 21 st Century (SHETL only)	allowed expenditure
14	IAEWL	28	Uncertain costs – compensation for wayleaves (SHETL only)	allowed expenditure
15	IAEWR	28	Uncertain costs – workforce renewal (SPTL only)	allowed expenditure
16	WWE	39	Baseline and strategic wider works outputs	allowed expenditure
17	WWI	41	Network development and wider works volume driver (NGET only)	allowed expenditure
18	GCE	55	Generation connections volume driver	allowed expenditure

No	PCFM Variable Value	Special Condition	Description	Type of variable value
19	EPIE	18	Enhancements to pre-existing infrastructure	allowed expenditure
20	IRM	9	Innovation roll out mechanism	allowed expenditure
21	DUV	122	Undergrounding volume driver	allowed expenditure
22	DIV	123	Demand related infrastructure volume driver	allowed expenditure
<u>Legacy price control adjustments</u>				
23	LAR/ SOLAR	64/67	Legacy price control adjustments to allowed revenue	true-up revenue allowance
24	LRAV/ SOLRAV	64/67	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 Proposals. 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 11 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.

2.8. Allowed Totex expenditure adjustments (numbers 12 to 26 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 for the RIIO-T1 price control;
- cost totals for items subject to true-up or logging-up were not available when opening base revenues for the RIIO-T1 price control period were set; or

- it is possible for pre-RIIO-T1 expenditure allowances to be adjusted under the terms of a RIIO-T1 special condition.

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 column 5 of 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:

- fast money – flowing directly to the base revenue figure for the Relevant Year to which the allowed expenditure relates; and
- 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 cost of capital return, depreciation and Totex incentive mechanism.

Revenue allowance

These amounts flow directly to the 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 only and revised values for Relevant Year t will flow into calculations of the return on RAV component of slow money.

Actual expenditure

With the exception of the TIRGA term, 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 Regulatory Reporting Pack relating to Relevant Year t-2. Since the RRP contains values in nominal prices, these will be deflated to a 2009-10 price base using published RPI data 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 model.

True-up revenue allowance

These amounts will usually flow directly to the 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.

True-up RAV additions

These additions to the licensee's RAV will usually apply to Relevant Year 2013-14, because they relate to activity levels or outturn values for the price control period prior to RIIO-T1, and generate a slow money adjustment to allowed revenues through the cost of capital return, depreciation and Totex incentive mechanism.

2.11. During the Annual Iteration Process, appropriate automatic adjustments are also made as a consequence of revised PCFM Variable Values and the treatments summarised above. For example, the position on net debt and RAV will be automatically updated in the PCFM based on the revised VVT. This could impact on the amount of (or need for) and equity issuance (calculated in accordance with the rules included in the VVT). If the equity issuance calculation changes then the equity issuance cost allowance is automatically updated. Any change in the allowance would feed into the respective MOD calculation and be included in Revenue.

Atypical revisions

2.12. The ET1 Price Control Financial Methodologies describe the normal timing sequence for each PCFM Variable Value. For example, in relation to *the generation connection volume driver* (item 20 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 (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);
- 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.



DRAFT

3. Pension allowances - financial adjustment methodology

Part 1 - Overview

3.1. The opening base revenue⁸ allowances ('PU' values) for the licensee set down in the table at Appendix 1 to Special Condition ETC 20 (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 RIIO-T1 price control period.

3.2. For National Grid Electricity Transmission plc (NGET), the opening Base SO Internal Revenue allowances ('SOPU' values) set down in the table at Appendix 1 to Special Condition ETC 12 (Restriction on System Operator Internal Revenue) include similar allowances relating to the System Operator part of its business.

3.3. These allowance are represented, respectively, by the opening EDE, APFE, SOEDE and SOAPFE values⁹ 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) and published pension funding policy [\[insert reference\]](#).

3.4. The allowance levels will be updated during the RIIO-T1 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 base revenues of revising EDE, APFE, SOEDE and SOAPFE values for the Annual Iteration Process.

3.5. In the context of Established Deficit repair and Pension Scheme Administration/PPF expenditure, we refer to "allowances" rather than "allowed

⁸ 'Base Transmission Revenue'

⁹ as at 1 April 2013

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 recalculated base revenue figures in the PCFM under the Annual Iteration Process – ie the amounts are treated as 100 per cent fast money¹⁰. 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 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 pensions costs in line with comparative benchmarks;
- customers should only fund the portion (of a wider group's pension costs) that is attributable to the gas transportation 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 pension costs relating to severance arrangements.

Established Deficit

3.7. For the purposes of Special Condition ETC 27 (Specified financial adjustments), ETC 65 (Specified financial adjustments – System Operator) and this chapter, the term '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.

3.8. The proportion of a wider group pension scheme deficit which is attributable to the licensee's transmission business will be determined in accordance with the deficit allocation methodology published by Ofgem in [detail of publication]. This amount may be adjusted by Ofgem informed by the results of the reasonableness review.

¹⁰ See Glossary

¹¹ <http://www.ofgem.gov.uk/Networks/GasDistr/RIIO-GD1/ConRes/Documents1/GD1decisionfinance.pdf>

3.9. For NGET, the Established Deficit is further divided between the Transmission Owner (TO) and System Operator (SO) parts of its transmission business in accordance with Ofgem's pension deficit allocation methodology.

3.10. Allowances for Established Deficit repair are set at/revised to levels intended to allow the licensee to clear its Established Deficit (by making payments to the pension scheme's trustees) over a 15 year period, which began on 1 April 2012 (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 Established Deficit repair completion date of 31 March 2027.

Pension Scheme Administration and PPF levy

3.11. For the purposes of Special Conditions ETC 27, ETC 65 and this chapter, Pension Scheme Administration means the range of activities that pension scheme trustees are required by legislation including 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.

3.12. Pension Scheme Administration expenditure refers to payments made by the licensee to cover the proportion of scheme administration costs attributable to its transmission business. It does not refer to investment or asset management costs; which are netted into the pension fund's investment returns.

3.13. The Pension Protection Fund charges an annual levy on eligible pension schemes. PPF levy expenditure refers to payments made by the licensee to cover the proportion of this levy attributable to its transportation business.

3.14. 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

3.15. 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 ETC 27, ETC 65 and this chapter.

True-up for pension payments by the licensee in the TPCR4 price control period

3.16. For the price control period preceding RIIO-T1 (the TPCR4 price control which excludes the rollover year), a true-up applied to the difference between the level of pension costs included in the licensee's allowed revenues, and the actual payments made by the licensee to the pension scheme. Any true-up amount not included in RIIO-T1 opening base revenue allowances ('PU' and 'SOPU' values) will be dealt with in accordance with Special Conditions ETC 64 (Legacy price control adjustments – Transmission Owner), ETC 67 (Legacy price control adjustments – System Operator) and chapter 15 of this handbook. Such adjustments therefore fall outside the scope of Special Conditions ETC 27, ETC 65 and this chapter. It should be noted however, that the level of payments made by the licensee in the preceding price control period will have fed through to the licensee's Established Deficit position as at 1 April 2012.

Temporal conventions

3.17. For the purposes of Special Conditions ETC 27, ETC 65 and this chapter, "Relevant Year t" means the Relevant Year in which a value for the term MOD, calculated through a particular Annual Iteration Process¹², is used in the formula for the licensee's Base Transmission Revenue¹³. References to Relevant Year t-1 etc should be construed accordingly.

3.18. 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

3.19. The licensee's allowances for Pension Scheme Established Deficit repair, Pension Scheme Administration and PPF levy expenditure will be updated during the RIIO-ET1 price control period to reflect:

- Established Deficit level information contained in triennial pension scheme actuarial valuation reports provided by the licensee to Ofgem; and
- scheme administration and PPF expenditure information contained in the licensee's price control review information submitted to Ofgem.

3.20. It is anticipated that EDE, APFE, SOEDE and SOAPFE values will be revised on two occasions during the RIIO-ET1 price control period, driven by the triennial scheme valuation cycle indicated in the timetable below.

Table 3.1 - Expected timetable for EDE and APFE value revisions

¹² and/or SOMOD for NGET

¹³ See Special Condition ETC 20 (Restriction of Transmission Network Revenue) and ETC 12 (Restriction on System Operator Internal Revenue).

Actuarial defined benefit pension scheme valuation as at	Expected receipt by Ofgem	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 SO APFE values revised for Relevant Year
31 March 2012 and 2013	June 2014	30 September 2014	30 November 2014	2015-16 onwards	2013-14
31 March 2016	June 2017	30 September 2017	30 November 2017	2018-19 onwards	2014-15 to 2016-17
31 March 2019	June 2020	30 September 2020	n/a	n/a	n/a

3.21. For licensee's whose scheme valuation dates are different from those shown in the first column of Table 3.1, reference will be made to deficit information provided in their most recent preceding scheme full triennial valuation. Asset and liabilities amounts will be rolled forward on a basis consistent with the actuarial methodology used for the valuation, Ofgem's pension deficit allocation methodology and the particular scheme's statement of funding principles.

3.22. 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.

3.23. 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

3.24. After receiving each data set, or substantially all of each data set, of scheme valuations, Ofgem will commission an independent review of the reasonableness of pension liability costs. The expected completion times for the reasonableness reviews due to take place during the RIIO-T1 price control period are shown in Table 3.1. The data set comprises:

- the actuarial valuation of the licensee's pension scheme(s), either a full triennial valuation as at the date specified or an updated valuation of the last preceding full triennial valuation with the asset and liability values rolled forward as defined in the pensions deficit allocation methodology document;
- the schemes statement of funding principles;

- the schemes 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

Part 3 – Established Deficit repair allowances

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

3.25. Subject to paragraph 3.26, revised EDE and SOEDE values will be determined by 30 November 2014 for each Relevant Year from 2015-16 to 2020-21 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 Established Deficit as at 31 March 2012.

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

<u>Row</u>	<u>Timing</u>	<u>Event</u>	<u>Value</u>
1	By 30 June 2014	Ofgem obtains the actuarial scheme valuations for the licensee's defined benefit pension scheme(s) as at 31 March 2012 and 2013 and commences a reasonableness review.	"A"
2	By 31 July 2014	Ofgem receives price control review information from licensee covering Relevant Year 2013-14.	
3	By 30 September 2014	Licensee submits deficit allocation information and indicative Established Deficit figure.	
4		Ofgem carries out reasonableness review of information submitted by licensee and determines Cut-Off Date Established Deficit position as at 31 March 2012.	
5		Cut-Off Date Established Deficit amount deflated to 2009-10 prices using actual RPI data determined in accordance with paragraph 1.7	"B"
6	By 31	Remaining deficit repair period established as 12 years (2026-27 minus 2014-15)	

7	October 2014	<p>Annual Established Deficit repair allowance in 2009-10 prices computed as:</p> $= "B" / ((1-(1+DR)^{-12}) / \text{LN}(1+DR))$ <p>Where:</p> <p>DR is the discount rate determined by Ofgem through a benchmarking process moderated against median pre-retirement discount rates for occupational pension schemes in Great Britain; and</p> <p>LN returns the natural logarithm of the subject value</p> <p>If there is a surplus shown by the valuation, B and C are set to zero and paragraph 3.26 below applies.</p>	"C"
Adjustment relating to licensee payment history in RIIO-T1 period			
8	By 31 October 2014	Obtain relevant portion (ie the portion attributable to the established deficit for the licensee's transmission business ¹⁴) of actual deficit repair payment made by licensee in 2012-13 and 2013-14 from the price control review information referred to in step 2 above; and, subject to any adjustments arising from Ofgem's reasonableness review, deflate to 2009-10 prices using actual RPI data determined in accordance with paragraph 1.7.	"D"
9		Deduct the pre-existing EDE/SOEDE value for Relevant Years 2012-13 and 2013-14 from "D" to give the difference between pre-existing allowance and actual payment.	"E"
10		<p>Annual adjustment amount in 2009-10 price computed as:</p> $= \text{value "E"} / ((1-(1+DR)^{-12}) / \text{LN}(1+DR))$ <p>where</p> <p>DR is the discount rate determined by Ofgem through a benchmarking process moderated against median pre-retirement discount rates for occupational pension schemes in Great Britain; and</p> <p>LN returns the natural logarithm of the subject value.</p> <p>The value "F" may be either positive (if actual payments at "D" are greater than the pre-existing allowance), or negative (if actual payments at "D" are less than the pre-existing allowances).</p>	"F"
11		Revised EDE/SOEDE value for each Relevant Year from 2015-16 to 2020-21 determined as "C" + "F".	

¹⁴ Split into TO and SO for NGET

	Note 2015-16 will remain the first Relevant Year in the event that the adjustment is delayed by one or more years.	
--	--	--

3.26. The adjustment contained in Row 10 of Table 3.2 deals with a situation where the licensee has previously paid across more, or less, than the allowance (EDE/SOEDE value) it was given for a particular Relevant Year.

Scheme surplus

3.27. If the difference between the assets and corresponding liabilities referred to in paragraph [3.6] represents a surplus position as at as at 31 March 2012, then EDE and SOEDE values for Relevant Years from 2015-16 onwards 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 [published policy] and, as applicable, the relevant Final Proposals.

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

3.28. Subject to paragraph 3.29, 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 values to be directed by 30 November 2017

<u>Row</u>	<u>Timing</u>	<u>Event</u>	<u>Value</u>
1	By 30 June 2017	Ofgem obtains the actuarial scheme valuation for the licensee's defined benefit pension scheme(s) as at 31 March 2016 and commences a reasonableness review.	"A"
2	By 31 July 2017	Ofgem in receipt of 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 Established Deficit figure.	
4		Ofgem carries out reasonableness review of information submitted by licensee and determines the Established Deficit position as at 31 March 2016.	
5		Established Deficit amount deflated to 2009-10 prices using actual RPI data determined in accordance with paragraph 1.7.	"B"

6	By 31 October 2017	Remaining deficit repair period established as 9 years (2026-27 minus 2017-18)	
7		<p>Annual Established Deficit repair allowance in 2009-10 prices computed as:</p> $= "B" / ((1-(1+DR)^{-9}) / \text{LN}(1+DR))$ <p>Where:</p> <p>DR is the discount rate determined by Ofgem through a benchmarking process against moderated median pre-retirement discount rates for occupational pension schemes in Great Britain; and</p> <p>LN returns the natural logarithm of the subject value</p> <p>If there is a surplus shown by the valuation B and C are set to zero and paragraph 3.29 below applies.</p>	"C"
Adjustment relating to licensee payment history in RIIO-ET1 period			
8	By 31 October 2017	Obtain relevant portion (ie the portion attributable to the licensee's transmission business ¹⁵) of actual deficit repair payments made by licensee during 2014-15; 2015-16 and 2016-17 and, subject to any adjustments arising from Ofgem's reasonableness review, deflate to 2009 prices using actual RPI data determined in accordance with paragraph 1.7.	"D"
9		Deduct the total of pre-existing EDE/SOEDE values for Relevant Years 2014-15; 2015-16 and 2016-17 from "D" to give the difference between pre-existing allowances and actual payments.	"E"
10		<p>Annual adjustment amount in 2009-10 price computed as:</p> $= \text{value "E"} / ((1-(1+DR)^{-9}) / \text{LN}(1+DR))$ <p>where</p> <p>DR is the discount rate determined by Ofgem through a benchmarking process against moderated median pre-retirement discount rates for occupational pension schemes in Great Britain; and</p> <p>LN returns the natural logarithm of the subject value.</p> <p>The value "F" may be either positive (if actual payments at "D" are greater than the pre-existing allowance), or negative (if actual payments at "D" are less than the pre-existing allowances).</p>	"F"

¹⁵ Split into TO and SO for NGET

11		Revised EDE/SOEDE value for each Relevant Year from 2018-19 to 2020-21 determined as "C" + "F"	
----	--	--	--

3.29. The adjustment contained in Row 10 of Table 3.3 deals with a situation where the licensee has previously paid across more, or less, than the allowance (EDE/SOEDE value) it was given for a particular Relevant Year.

Scheme surplus

3.30. If the difference between the assets and corresponding liabilities referred to in paragraph 3.5 represents a surplus position as at as at 31 March 2016, then EDE and SOEDE values for Relevant Years from 2018-19 onwards will be revised to zero pending the next triennial scheme valuation. 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 2020

3.31. Subject to paragraph 3.36, revised EDE and SOEDE values will be determined by 30 November 2020 for each Relevant Year from 2021-22 to 2023-24 using the methodology set out in Table 3.4 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 3.4 - Process for determining revised EDE values to be directed by 30 November 2020

Row	Timing	Event	Value
1	By 30 June 2020	Ofgem obtains the actuarial scheme valuation for the licensee's defined benefit pension scheme(s) as at 31 March 2019 and commences a reasonableness review.	"A"
2	By 31 July 2020	Ofgem in receipt of price control review information from licensee covering Relevant Years 2017-18; 2018-19 and 2019-20.	
3	By 30 September 2020	Licensee submits deficit allocation information and indicative Established Deficit figure.	
4		Ofgem carries out reasonableness review of information submitted by licensee and determines the Established Deficit position as at 31 March 2019.	
5		Established Deficit amount deflated to 2009-10 prices using actual RPI data determined in accordance with paragraph 1.7.	"B"

6	By 31 October 2020	Remaining deficit repair period established as 6 years (2026-27 minus 2020-21)	
7		Annual Established Deficit repair allowance in 2009-10 prices computed as: = "B" / ((1-(1+DR) ⁻⁶) / LN(1+DR)) Where: DR is the discount rate determined by Ofgem through a benchmarking process against moderated median pre- retirement discount rates for 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 C are set to zero and paragraph 3.33 below applies.	"C"
Adjustment relating to licensee payment history in RIIO-ET1 period			
8	By 31 October 2020	Obtain relevant portion (ie the portion attributable to the licensee's transmission business ¹⁶) of actual deficit repair payments made by licensee during 2017-18; 2018-19 and 2019-20 and, subject to any adjustments arising from Ofgem's reasonableness review, deflate to 2009 prices using actual RPI data determined in accordance with paragraph 1.7.	"D"
9		Deduct the total of pre-existing EDE/SOEDE values for Relevant Years 2017-18; 2018-19 and 2019-20 from "D" to give the difference between pre-existing allowances and actual payments.	"E"
10		Annual adjustment amount in 2009-10 price computed as: =value "E" / ((1-(1+DR) ⁻⁶) / LN(1+DR)) where DR is the discount rate determined by Ofgem through a benchmarking process against moderated median pre- retirement discount rates for occupational pension schemes in Great Britain; and LN returns the natural logarithm of the subject value. The value "F" may be either positive (if actual payments at "D" are greater than the pre-existing allowance), or negative (if actual payments at "D" are less than the pre-existing allowances).	"F"

¹⁶ Split into TO and SO for NGET

11	Revised EDE/SOEDE value for each Relevant Year from 2021-22 to 2022-27 determined as "C" + "F"	
----	--	--

3.32. The adjustment contained in Row 10 of Table 3.4 deals with a situation where the licensee has previously paid across more, or less, than the allowance (EDE/SOEDE value) it was given for a particular Relevant Year.

Scheme surplus

3.33. If the difference between the assets and corresponding liabilities referred to in paragraph 3.5 represents a surplus position as at as at 31 March 2019, then EDE and SOEDE values for Relevant Years from 2021-22 onwards will be revised to zero pending the next triennial scheme valuation. 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.

Direction of revised EDE and SOEDE values

3.34. The Authority will direct revised EDE and SOEDE values by no later than 30 November 2014, 30 November 2017 and 30 November 2020 in accordance with the procedure set out in Part D of Special Condition ETC 27 and Part D of Special Condition ETC 65.

Part 4 - Pension Scheme Administration and PPF levy allowances

3.35. 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 (Price Control Review Information) of the licence.

3.36. Revised APFE and SOAFPE values will be determined in accordance with the steps set out below by 30 November 2014 for years 2012-13 and 2013-14.

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 Formula Years 2012-13 and 2013-14 will be obtained.
- (ii). The expenditure amounts in (i) will be deflated to 2009-10 prices using actual RPI data.
- (iii). The actual deflated expenditure figure for any Formula Year in (ii) is added to the annual adjustment threshold amount of £1m.
- (iv). The aggregate price control allowance for Pension Scheme Administration and PPF levy expenditure for that year set out in the relevant Final Proposals is obtained.

- (v). If the amount referred to in step (iii) is exceeded in any specified Formula Year, the excess amount only will be added to the pre-existing amount allowance at the price control for that item.
- (vi). If the amount at (iii) is less than the pre-existing price control allowed value at (iv), then no revision to the price control value will be made.
- (vii). The excess at (v) will be added to the pre-existing APFE and SOAPFE values to determine the revised APFE and SOAPFE values for Formula Years 2012-13 and 2013-14.
- (viii). 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 constituent costs; and the combined existing APFE values for Formula Years 2014-15, 2015-16 and 2016-17.

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 Formula 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 actual deflated expenditure figure for any Formula Year in (ii) is added to the annual adjustment threshold amount of £1m.
- (iv). The aggregate price control allowance for Pension Scheme Administration and PPF levy expenditure for that year set out in the relevant Final Proposals is obtained.
- (v). If the amount referred to in step (iii) is exceeded in any specified Formula Year, the excess amount only will be added to the pre-existing amount allowance at the price control for that item.
- (vi). If the amount at (iii) is less than the pre-existing price control allowed value at (iv), then no revision to the price control value will be made.
- (vii). The excess at (v) will be added to the pre-existing APFE and SOAPFE values to determine the revised APFE and SOAPFE values for Formula Years 2014-15, 2015-16 and 2016-17.
- (viii). 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 constituent costs; and the combined existing APFE values for Formula Years 2017-18, 2018-19 and 2019-20.
- (i). *Values to be directed by 30 November 2020* The actual aggregated Pension Scheme Administration and PPF levy expenditure reported by the licensee in its price control review information submissions for Formula Years 2017-18, 2018-19 and 2019-20 will be obtained.

- (ii). The expenditure amounts in (i) will be deflated to 2009-10 prices using actual RPI data.
- (iii). The actual deflated expenditure figure for any Formula Year in (ii) is added to the annual adjustment threshold amount of £1m.
- (iv). The aggregate price control allowance for Pension Scheme Administration and PPF levy expenditure for that year set out in the relevant Final Proposals is obtained.
- (v). If the amount referred to in step (iii) is exceeded in any specified Formula Year, the excess amount only will be added to the pre-existing amount allowance at the price control for that item.
- (vi). If a the amount at (iii) is less than the pre-existing price control allowed value at (iv), then no revision to the price control value will be made.
- (vii). The excess at (v) will be added to the pre-existing APFE and APFE values to determine the revised APFE and SOAPFE values for Formula Years 2017-18, 2018-19 and 2019-20.
- (viii). 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 constituent costs; and the combined existing APFE values for Formula Years 2020-21, 2021-22 and 2022-23.

Direction of revised APFE and SOAPFE values

3.37. The Authority will direct revised APFE and, as applicable, SOAPFE values no later than 30 November 2014, 2017 and 2020 respectively as computed above in accordance with the procedure set out in Part D of Special Condition ETC27 and Part D of Special Condition ETC65.

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

3.38. EDE, SOEDE, APFE and SOAPFE values, as revised are added in full to recalculated base revenue figures in the PCFM under the Annual Iteration Process and are treated as 100 per cent fast money. Revisions to the values will have ancillary effects on other calculations under the Annual Iteration Process which also feed into recalculated base revenue figures.

3.39. 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.

3.40. EDE, SOEDE, APFE and SOAPFE values are not added to RAV and are not subject to the Totex Incentive Mechanism.



DRAFT

4. Tax liability allowances - financial adjustment methodologies

Part 1 - Overview

4.1. The opening base revenue allowances for the licensee set down in the table in Special Condition ETC [•] 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 ETC27 and ETC 65 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 for MOD and SOMOD. Changes to the factors referred to at sub-paragraphs 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 in respect of 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 ETC27 and ETC65 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.

Annual Iteration process

4.4. The adjusting of the licensee's tax liability allowances and regulatory tax losses balance is carried out through the Annual Iteration Process for the ET1 Price Control Financial Model. The Variable Values Table for the licensee contained in the ET1 PCFM contains rows for PCFM Variable Values for tax liability allowance adjustments driven by:

- tax trigger events ('TTE' values); and
- tax clawbacks ('TGIE 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 and TGIE values represent £m amounts. As at 1 April 2013, the TTE and TGIE values for the licensee will be zero. Part B of Special Condition ETC 27 and ETC65 (Specified financial adjustments) provides for any revisions to TTE and TGIE values to be directed after determination under the methodologies in this chapter.

4.6. Revisions to TTE and TGIE values feed into the recalculated base revenue figures and/or the regulatory tax loss balances (see paragraph 4.10) for applicable relevant years in the ET1 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 vanilla WACC, brought forward and reflected in the calculation of the term TOMOD 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 TOMOD and SOMOD.

4.7. It should be noted that underlying tax liability allowances for the licensee within the ET1 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. The allocation assumptions of the component elements of allowed Totex expenditure to capital allowance pools and revenue in the PCFM as set out in the Final Proposals will not be updated in the price control period.

Price bases for tax calculations

4.8. The ET1 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 on the basis of actual RPI data (regulatory year average) before being used to determine revised TTE and TGIE values.

4.9. The ET1 PCFM uses nominal prices for some internal tax calculation functions. For this purpose, the model refers to RPI forecast values set at the outset of the price control period and hard coded into the model.

Regulatory tax losses

4.10. 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 in the period 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 to later years. The regulatory tax loss balance attributable to each Year (together with a running total) is held within the ET1 PCFM and regulatory tax losses are referred to where applicable in the methodologies in this chapter.

Group tax arrangements

4.11. 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.

4.12. 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

4.13. 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.

Tax trigger events

4.14. 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, including any deferral of the Accounting Standard Board's (ASB) implementation date for Financial Reporting Exposure Draft 48 (FRED48)¹⁸.

4.15. Where, a Type B event changes the allocation of allowable expenditure into different, or introduces new capital allowance pools, the model 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 in 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.

4.16. Type B events will only be taken into account where the licensee has demonstrably used all reasonable endeavours to minimise any increase in its tax liabilities.

Materiality threshold and 'deadband'

4.17. 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.

4.18. The materiality threshold for each relevant year is fixed for the price control period. The threshold is determined as the greater of:

- 0.33 per cent of opening base revenue allowances ('PU' values) for the licensee set down in Special Condition [•]; and
- the effect of a one per cent change in the rate of corporation tax,

on the opening values of the PU term for each relevant year.

4.19. A change to tax liability allowances for a particular Formula Year is only applied where one or more trigger events result in a change to the licensee's tax liabilities for that year (upward or downward) by an amount which 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.

¹⁸ FRED48 The Financial Reporting Standard applicable to UK and Republic of Ireland published by ASB January 2012, which is expected to become FRS102

4.20. Where the change to the licensee's tax liabilities 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 value) would be determined once the threshold has been exceeded. This has no retrospective effect on a previously directed value of MOD.

4.21. 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

4.22. 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, including any deferral of the Accounting Standard Board's (ASB) implementation date for Financial Reporting Exposure Draft 48 (FRED48)¹⁹ requirements of the accounting framework applicable to preparation of the licensee's statutory accounts²⁰

4.23. 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:
 - EU-IFRS, if adopted for use by the licensee; or
 - UK GAAP (under Financial Reporting Standard 102, as it should be known as on the implementation of FRED48).

Notification of tax trigger events

Type A trigger events

4.24.

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 values for use in the Annual Iteration Process that is required to take

¹⁹ FRED48 The Financial Reporting Standard applicable to UK and Republic of Ireland published by ASB January 2012, which is expected to become FRS102

²⁰ Section 385 of the Companies Act 2006 refers.

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 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. The notification from Ofgem will specify the corporation tax rate change(s) or capital allowance rate changes concerned and the relevant years to which they relate.

4.26. If, after receiving the notification referred to in paragraph 4.24, 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.

4.27. 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 value (either because it was not included in a notice or otherwise) the position will be rectified in a subsequent revision of the TTE 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

4.28. 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 reported. This requirement applies equally to events which could be expected to increase or to reduce the licensee's tax liability allowances.

4.29. If the licensee fails to notify Ofgem of any events it becomes aware, or should be aware of, which potentially or actually increases the licensee's tax liability it will not be made retrospective nor made PV neutral. If the failure relates to a reduction or increase in the licensee's tax liability, then subject to the licensee demonstrating that it used its best 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.

4.30. The notification referred to in paragraph 4.28 should include, in respect of each Type B trigger event:

- (a) a description of the event;
- (b) the change in tax liabilities 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);
- (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 licensee agrees or disagrees with HMRC, whether they may contend it; and how they intend to report it in the tax submissions.

4.31. The licensee's notification should also state whether the licensee considers that the materiality threshold (see paragraph 4.17) 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.

4.32. Ofgem will review any notifications given to it by the licensee under paragraph 4.28 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.

4.33. 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 tax liabilities figure calculated by the licensee;
- it has determined a different change in tax liabilities figure from that calculated by the licensee; or
- it has decided that consideration of any change in tax liabilities should be deferred until further/better information is available.

4.34. 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 must consider.

4.35. 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 must consider.

4.36. 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. The adjustment to TTE values will be directed in accordance with paragraphs 4.41 and 4.42.

²² As defined in Standard Condition [•] of the Electricity Transmission Licence

Logging of trigger events

4.37. 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 values

Determination of revised TTE values using the tax trigger calculation tool

4.38. 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.

4.39. 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 ETC 57 for use as the tax trigger calculation tool. It will then take the following steps to determine TTE values for each licensee:

- a) the 'Tax allowance before tax trigger' amount for the licensee for each relevant year shown on the tax trigger worksheet will be noted;
- b) the PCFM copy will be put into 'tax trigger tool mode' using the selector on the User Interface worksheet of the licence model;
- c) 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;
- d) all of the existing TTE values will be re-set to zero;
- e) any existing values in the yellow input cells on the tax trigger worksheet will be cleared with the exception of the tax deadband values;
- f) 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 Formula Year columns on the tax trigger worksheet;
- g) the tax trigger macro calculation programmed into the workbook will be run;

- h) the aggregate changes to the licensee's tax liabilities 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 'Type B event values' row in the appropriate relevant year columns on the tax trigger worksheet;
- i) the tax trigger macro calculation will be re-run;
- j) the new 'Tax allowance' amount for the licensee shown on the tax trigger worksheet will be noted – this is displayed net of the deadband amount which is also calculated under the macro calculation;
- k) the difference between the 'Tax allowance before tax trigger' referred to at point (i) and the new 'Tax allowance' referred to at point (x) will be calculated as a £m amount, for the licensee for each relevant year.

4.40. Subject to paragraph 4.41, the amounts calculated under step (xi) will then be determined to be the TTE values for the licensee for each relevant year. Where these values differ from the TTE 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 values concerned are to be changed in accordance with the process set out in Part B of Special Conditions ETC 27 and ETC65, as appropriate, and referred to below.

4.41. The process set out in paragraph 4.39 will be re-performed, if any of the prospective PCFM Variable Values, referred to at step 'c)' are changed, to ensure that accurate TTE values are available for the annual iteration process.

Notes on the tax trigger calculation

- 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 values referred to in step (iv) 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 values under step (xi) 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 (iii) ensures that the tax allowance calculation is as up to date as possible for each relevant year.

Direction of revised TTE values

4.42. The Authority will direct any revisions to TTE 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.

4.43. Revised TTE 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.

4.44. The procedure for the Authority's direction of revised TTE values is set out in Part D of Special Conditions ETC 27 and ETC 65.

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

4.45. 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) businesses. These result in modelled levels of tax deductible interest costs and tax relief for each of the TO and SO. The TGIE adjustment is to be calculated separately for each of the TO and the SO, where applicable, both are referred to as the licensee below.

4.46. 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 values

4.47. As a function of each Annual Iteration Process of the PCFM, for each year in the period 2013-14 to 2010-21 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.

4.48. After 31 October in each Relevant Year, Ofgem will obtain the most recently modelled figure for tax deductible interest payable by the licensee in Formula 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 ETC 27 and ETC65).

4.49. The licensee is required to submit its price control cost reporting pack by 31 July in each Formula Year t-1²³, in accordance with standard special condition B15 (Price Control Review Information) of the electricity transmission licence and the Price Control Cost Reporting Rules: Instructions & Guidance ('RIGs') issued under that condition.

4.50. Ofgem will obtain from the 'tax clawback data table' that submission:

²³ subject to any changes to Standard Special Condition A40 (Price Control Review Information)

- (i). the licensee's view of adjusted net debt figure as at 31 March in Formula Year t-2 for the purposes of this calculation; and
- (ii). the adjusted amount of tax deductible net interest payable by the licensee during Formula Year t-2, measured on an accruals basis.

4.51. The criteria, which the licensee must observe in reporting each of these adjusted items, are set out in the decision letter dated 31 July 2009 and Ofgem reviews the licensees reporting in this regard.

4.52. Ofgem will obtain from the PCFM the licensee's indicative RAV (including any Shadow RAV) balance as at 31 March in Formula Year t-2;

Applicability tests

4.53. Ofgem will use two tests – gearing level test and a positive tax benefit test - to see whether there is a revised TGIE value for the licensee in respect of Formula Year t-2.

Gearing level test

4.54. Ofgem will divide the licensee's net debt figure as at 31 March in Formula Year t-2 (see paragraph 4.48(i)) into the licensee's indicative PCFM RAV (including any Shadow RAV) balance as at 31 March in Formula Year t-2 (see paragraph 4.50) to obtain an actual calculated gearing ratio.

4.55. If the actual calculated gearing ratio established under paragraph 4.52, expressed as a percentage, is lower than the notional level of gearing then:

- if the existing TGIE value is zero, no revised TGIE value is determined; or
- if the existing TGIE value is not zero, it is revised to zero.

4.56. If the actual calculated gearing ratio established under paragraph 4.52, expressed as a percentage, is greater than the notional level of gearing then the positive benefit test will be performed.

Positive benefit test

4.57. Ofgem will subtract the aggregate of Core and non-Core modelled figures for tax deductible interest payable by the licensee in Formula Year t-2 (see paragraph 4.46) from the adjusted tax deductible interest payable reported by the licensee (see paragraph 4.48(ii)) for Formula Year t-2. If the resultant amount is positive then the clawback has been triggered.

4.58. If the clawback has been triggered, Ofgem will multiply the result in 4.55 by the actual corporation tax rate applicable for the relevant year to derive the licensee's benefit figure. The revised TGIE value for the licensee for Formula Year t-2 is determined as:

Revised TGIE value = benefit figure x -1

4.59. If the benefit figure is a negative value then:

- if the existing TGIE value is zero, no revised TGIE value is determined; or
- if the existing TGIE value is not zero, it is revised to zero.

Interaction with unutilised regulatory tax losses

4.60. If for any Formula Year the licensee has a clawback but no modelled profits subject to tax then the pre-tax value of TGIE (ie the amount in 4.55) is added to the cumulative unutilised regulatory tax losses. This will be relieved against future Core taxable profits.

Direction of revised TGIE values

4.61. Revised TGIE values will be directed in respect of Formula year t-2 and each prior Relevant Year in the RIIO-T1 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 Formula Year t-2 and prior years.

4.62. If, for any reason, RAV, net debt or tax deductible interest figures submitted by the licensee are subject to amendment after they have been used in determining revised TGIE values, the following procedure will be followed for the next Annual Iteration Process:

- Ofgem will re-perform the calculation of a benefit figure and the applicability tests set out above to determine whether any revised TGIE value should be determined and directed in respect of the Formula Year to which the amended figures relate. For this purpose, Ofgem will use a copy of the PCFM in its latest state to obtain a modelled figure for tax deductible interest payable by the licensee.
- If a revised TGIE value is directed for a year earlier than Formula Year t-2, any resultant changes to recalculated base revenue figures for years earlier than Formula 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 to be directed for Formula 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.

4.63. The Authority will direct any revisions to TGIE values for the licensee by 30 November in each Formula 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 values is set out in Part D of Special Condition ETC xx.

Part 4 - Processing of revised TTE and TGIE values under the Annual Iteration Process

4.65. A positive incremental change in a TTE value will increase the 'recalculated base revenue figure' for the Formula Year concerned by the same amount. However, if there is any unutilised amount of regulatory tax loss for the licensee, attributable to that Formula Year or to an earlier Formula Year, the increase to the recalculated base revenue figure will be partially or fully abated by that amount, and the record of regulatory tax losses held within the ET1 PCFM will be updated accordingly.

4.66. For the avoidance of doubt, regulatory tax losses are not carried back and offset against tax liability allowances for Formula Years earlier than the Formula Year to which the regulatory tax loss concerned is attributable.

4.67. Only negative incremental changes in TGIE value are possible (resulting from a positive tax saving multiplied by minus one - see paragraph 4.56).

4.68. A negative incremental change in a TTE value or TGIE value will decrease the 'recalculated base revenue figure' for the Formula Year concerned by the equivalent amount. However, if the modelled tax liability (in the ET1 PCFM under the Annual Iteration Process) for the Formula Year concerned is smaller (in absolute terms) than the aggregate change in the TTE and TGIE value for that year, then:

- a portion of the aggregate incremental change in the TTE and TGIE values equal to the modelled tax liability will be deducted from the recalculated base revenue figure for the Formula Year concerned; and
the remaining amount will be added to the regulatory tax loss balance for the Formula Year concerned and carried forward.

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)²⁴ for the transmission business. The 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 RII0-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 ('TO CDE' values) is established in Special Condition ETC 27 (Specified financial adjustments – Transmission Owner). ETC 27 requires revised TO 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. Paragraph [•] of Special Condition ETC 65 (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 ('SO CDE' values) to be determined in accordance with the methodology in this chapter. The SO CDE value for any relevant year is the same as the TO CDE Value for the same year.

Temporal conventions

5.6. For the purposes of Special Condition ETC 27, ETC 65 and this chapter:

²⁴ see Glossary

- “relevant year t” means the relevant year in which a value for the term TOMOD, or as applicable SOMOD, calculated through a particular Annual Iteration Process, is used in the formula for the licensee’s base transmission revenue²⁵/ internal costs revenue.

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

5.7. At the outset of the RIIO-T1 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.

5.8. 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.

5.9. 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. However, only the revised CDE²⁶ value for relevant year t will impact on the value of TOMOD for the same relevant year t²⁷.

5.10. The following steps are to be followed:

Step 1

Establish the ‘trading days period’²⁸ 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

²⁵ See Special Condition [•] (Restriction on Transmission Network Revenue).

²⁶ SO CDE value with respect to the value of SOMOD

²⁷ Subject to revision of an earlier value – see paragraph 5.8

²⁸ Trading days as published in the Markit iBoxx® database

30 November 2014	1 November 2004 to 31 October 2014
30 November 2015	1 November 2005 to 31 October 2015
Et seq.....	Et seq.....

Step 2

For each day in the trading day 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:

$$\frac{\text{"A 10+ index" annual yield figure for day} + \text{"BBB 10+ index" annual yield figure for day}}{2}$$

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.
- i 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.²⁹ 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.

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 average value of CoD across the trading day period ascertained under Step 1.

This average, 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

5.11. 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

²⁹ <http://www.bankofengland.co.uk>

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.

5.12. 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.

Variation of approach for Scottish Hydro Electric Transmission Ltd

5.13. Scottish Hydro Electric Transmission Ltd (SHETL) 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 SHETL’s effective cost of debt may be proportionately closer to current market rates than will be the case for other licensees.

5.14. To address this issue, the average annual yield figures used in calculating revised PCFM Variable Values for the cost of corporate debt for SHETL are subjected to a weighting process based on changes to SHETL’s RAV during the RIIO-T1 period.

5.15. Revised PCFM Variable Values for the cost of corporate debt for SHETL are calculated in accordance with the following formula:

$$SHETL\ IV_t = \left[IV_t \times \left(\frac{\text{Opening RAV 2013-14}}{\text{Closing RAV t-1}} \right) \right] + \left[\text{Average of CoD From 1 Apr to 31 Oct in t-1} \times \left(\frac{\text{Change in RAV for t-1}}{\text{Closing RAV t-1}} \right) \right] + \sum_{2013-14}^{t-2} \left[\text{Average of CoD From 1 Apr to 31 Mar} \times \left(\frac{\text{Change in RAV}}{\text{Closing RAV t-1}} \right) \right]$$

where:

SHETL IV_t means the revised TO CDE value for SHETL for relevant year t.

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 SHETL (inclusive of ‘shadow’ RAV³⁰) 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 ETC 57;

³⁰ See Glossary

- 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 $t-1$ ³¹.
- Ofgem will run trial calculations using those values and extract the nominal RAV values which are generated within the copy model as a result.

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.

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

Use of revised PCFM Variable Values in the Annual Iteration Process

5.17. The Authority will direct revised TO CDE³² values by no later than 30 November in each relevant Year $t-1$ in accordance with Part D of Special Condition ETC 27. Notice of proposed revised values will be given to licensees at least 14 days before the date of the direction.

5.18. 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.

5.19. The data and spreadsheet used to calculate revised TO CDE and SO CDE values will be published on the Ofgem website together with the weighted index used for the SHETL calculations referred to above, and will be provided to the licensees with initial notification of the revised values.

³¹ 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

³² and SO CE values for NGET

6. Totex incentive mechanism – financial adjustment methodology

6.1. For RIIO-T1 Final Proposals opening base revenues will have been modelled on the basis that actual Totex³³ 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 $SOMOD_t$ ³⁴.

6.4. Special conditions ETC 47 (Determination of PCFM Variable Values for Totex Incentive Mechanism Adjustments) and ETC 66 (Determination of PCFM Variable Values for Totex Incentive Mechanism Adjustments – System Operator)³¹ 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:

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
-------------------	---------------------	-------------	------------------

³³ See Glossary

³⁴ For National Grid Electricity Transmission plc (NGET) only

ETC 9	IRM	Innovation Roll-out allowed expenditure	12
ETC 18	EPEI	Enhancement to Pre-existing Infrastructure	11
ETC 28	IAEEPS IAEBT IAEWL IAEWR	Enhanced Physical Site Security Costs BT 21st Century Costs (SHETL ³⁵ only) Wayleave compensation costs (SHETL only) Workforce renewal (SPTL only) ³⁶	7
ETC 39	WWE	Wider Works allowed expenditure	8
ETC 41	WWI	Network development policy and the Wider Works volume driver (NGET ³⁷ only)	9
ETC 122	DUV	Undergrounding uncertainty volume driver (NGET only)	13
ETC 123	DIV	Demand related infrastructure volume driver (NGET only)	14

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 ETC 47 should be taken to include special condition ETC 66.

6.7. The Totex Incentive Mechanism (TIM) applies adjustments to the Totex figure used in the fast/slow money modelling of base revenue figures under the annual iteration process. The adjustments reflect under or over expenditure by the licensee against Totex allowances, applying the relevant incentive strength for each licensee. The incentive strength is a percentage figure specified in special condition ETC 47 for each licensee.

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 reporting inaccuracies or for expenditure that is not regarded as efficient) and adjusts revenues in the following formula year via the MOD term. The incentive mechanism therefore operates with a two year lag.

6.9. Totex, once ascertained under the TIM, is modelled using the Totex Capitalisation Rate(s) applicable to the licensee, as:

³⁵ Scottish Hydro Electric Transmission Ltd

³⁶ SP Transmission Ltd

³⁷ National Grid Electricity Transmission plc

- fast money – flowing directly to the 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 Totex expenditure relates, generating an adjustment to allowed revenues through the cost of capital return on RAV and depreciation amount.

6.10. Totex Capitalisation Rates are specified at Appendix 1 to special conditions ETC 47 and ETC 66 and are hard coded into the PCFM as fixed input values for the licensee.

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 $(1 - 0.4) \times 20$	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 $(1 - 0.4) \times 10$	6
Totex amount for fast/slow money treatment $110 + 6$	116

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.

Application of the TIM under the annual iteration process

6.14. For the purposes of Special Condition ETC 47 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/ internal costs revenue³⁸.

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:	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 revenue.

The incentive mechanism therefore operates with a two year 'lag'.

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.

³⁸ See Special Conditions [ETC 20] (Restriction of Transmission Network Revenue) and (for NGET only) [ETC 12] (Restriction on System Operator Internal Revenue).

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 6.13), 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 6.15);
- 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. A full definition of the 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 XX (Regulatory Instructions and Guidance XXX) of the licence. 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 excluded services activities;
- 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;
- costs associated with specific incentive schemes (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 receipts (subject to an ex post adjustment to allowed revenues);

- costs related to the SF6 incentive;
- costs relating to the network innovation allowance
- the reversal, where appropriate, of cost reporting which is not on a normal accruals basis;
- costs in relation to pass-through items including:
 - business rates (except for business rates on non-operational buildings),
 - NTS exit charges, and
 - Ofgem licence fees;
- interest, other financing and tax costs (except for business rates on non-operational buildings and stamp duty land tax); and
- any change in the Totex amount for the licensee under the TIM.

6.20. It should also be noted that:

- 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 benchmarked 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

6.21. Following a review by Ofgem, the Authority will, by 30 November in each Relevant Year t-1, determine that the PCFM Variable Values for Relevant Year t-2, shown in the first column of Table 6.1 below, should be revised to match the equivalent actual expenditure values in the licensee’s annual cost reporting submission for the Totex sub-division shown in column 2 of Table 6.1.

6.22. As noted in paragraph 6.14, 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.

Table 6.1 – 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 ³⁹	Actual controllable opex expenditure (system operator)
SOANC ³⁴	Actual non-operational capex expenditure (system operator)

6.23. The items of expenditure included in each of the Totex sub-divisions set out in Table 6.1 are specified in the Cost and Revenue Reporting RIGs.⁴⁰

Notification and direction of revised PCFM Variable Values

6.24. The PCFM exists as a constituent part of Special Condition ETC57 (Governance of ET1 Price Control Financial Instruments). It has an input area for each licensee containing both fixed values and variable values - contained in a PCFM Variable Values table.

6.25. As set out in paragraphs 6.13 and 6.19, 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 ETC 47, 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 or objections received from the licensee and to give reasons for its decisions in relation to them.

6.26. 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 must be given no later than 16 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.

6.27. Ofgem will carry out the Annual Iteration Process in accordance with Special Conditions ETC 47 and 66 (see Chapter 1).

³⁹ NGET only

⁴⁰ [Insert link](#)

7. Uncertain costs allowed expenditure – financial adjustment methodology

Part 1 - Overview

7.1. Appropriate levels of allowed Totex⁴¹ expenditure for some transmission business activities/requirements, will be uncertain at the time of the RIIO-T1 Final Proposals. For RIIO-T1 Final Proposals, opening base revenues will 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 revenue (and the term $SOMOD_t$ included in the formula for internal costs revenue³⁷) 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 paragraphs 6.3, and 6.19 to 6.21 of chapter 6 is handled automatically under the annual iteration process using fixed attribution rates contained in the PCFM.

7.4. Special conditions ETC 28 (Arrangements for the recovery of uncertain costs) and ETC 117 (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 ETC 28 and ETC 117 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 variable value contained in the PCFM.

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	ETC 28	All	IAEEPS
Enhanced security System Operator	ETC 117	NGET	SOIAEEPS
BT® 21 st Century	ETC 28	SPTL ⁴³	IAEBT
Compensation for wayleaves	ETC 28	SHETL ⁴⁴	IAEWL
Workforce renewal	ETC 28	SPTL	IAEWR

Overview of uncertain cost categories

7.7. Special conditions ETC 28 and ETC 117 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 revenues were calculated;
- take account 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 relates to costs incurred by the licensee in complying with any requirements or formal recommendations issued by the Secretary of State for Energy and Climate Change in relation to the physical security of sites associated with the licensee's Transmission System.

⁴³ SP Transmission Ltd

⁴⁴ Scottish Hydro Electric Transmission Ltd

Enhanced security System Operator

7.10. This category is applicable to National Grid Electricity Transmission plc (NGET) only and relates to costs incurred by the licensee in complying with any requirements or formal recommendations issued by the Secretary of State for Energy and Climate Change in relation to the security of information technology systems associated with the operation of the national transmission system.

BT® 21st Century related costs

7.11. This category is applicable to Scottish Hydro Electric Transmission Ltd (SHETL) only. It relates to costs incurred in upgrading operational telecommunication systems as a consequence of the introduction of BT's 21st Century Networks programme.

Compensation for wayleaves

7.12. This category is applicable to SHETL only. It relates to the cost of maintaining wayleave agreements/deeds of servitude associated with the siting of assets forming parts of the licensee's transmission system.

Workforce renewal

7.13. This category is applicable to SP Transmission Ltd (SPTL) only. It relates to the cost of recruiting and training a stable workforce.

Temporal conventions

7.14. For the purposes of Special Conditions ETC 28, ETC 117 and this chapter, "Relevant Year t" means the Relevant Year in which a value for the term MOD, calculated through a particular Annual Iteration Process⁴⁵, is used in the formula for the licensee's Base Transmission Revenue⁴⁶. References to Relevant Year t-1 etc should be construed accordingly.

7.15. 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.

7.16. 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

⁴⁵ and/or SOMOD for NGET

⁴⁶ See Special Condition ETC 20 (Restriction of Transmission Network Revenue) and ETC 12 (Restriction on System Operator Internal Revenue).

applicable, SOMOD for Relevant Year t and, for the avoidance of doubt shall not have any retrospective effect on a previously directed value of the term MOD or SOMOD.

7.17. 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 but (subject to further determinations) have status as values determined under the provisions of Special Condition ETC 28 or, as applicable, ETC 117

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

7.18. In the remainder of this chapter, references to the term MOD should be taken to include the term SOMOD and references to Special Condition ETC 28 should be taken to include Special Condition ETC 117, with respect to NGET.

Determinations in relation to proposed adjustments

7.19. Proposals for relevant adjustments in respect of uncertain cost categories can only be made by the licensee or the Authority during two application windows specified in Special Condition ETC 28. These are:

- 1 May 2015 to 31 May 2015; and
- 1 May 2018 to 31 May 2018.

Proposals must be made in the form of notices given by the licensee to the Authority or vice versa.

7.20. Following the end of each application window the Authority has four months (ie until 30 September 2015 or 2018) to confirm, reject or vary the proposed adjustment in a determination decision. In reaching that decision the Authority must:

- consult with the licensee concerned;
- 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

7.21. 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 7.20, then the adjustment is deemed to have been made.

Determination of PCFM Variable Values

7.22. It follows from the timetable outlined in paragraphs 7.19 to 7.21 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 following Annual Iteration Processes:

- (a) the Annual Iteration Process that must take place by 30 November 2015 in order to calculate the value of the terms MOD_t and $SOMOD_t$ for Relevant Year 2016-17; and
- (b) the Annual Iteration Process that must take place by 30 November 2018 in order to calculate the value of the terms MOD_t and $SOMOD_t$ for Relevant Year 2019-20.

7.23. Therefore, the Authority will **not** determine any revisions to PCFM Variable Values relating to uncertain cost categories for the Annual Iteration Processes that must take place by:

- 30 November 2013 in order to calculate the value of the terms MOD_t for Relevant Year 2014-15;
- 30 November 2014 in order to calculate the value of the terms MOD_t for Relevant Year 2015-16;
- 30 November 2016 in order to calculate the value of the terms MOD_t for Relevant Year 2017-18;
- 30 November 2017 in order to calculate the value of the terms MOD_t for Relevant Year 2018-19; and
- 30 November 2019 in order to calculate the value of the terms MOD_t for Relevant Year 2020-21.

7.24. The following procedures will be carried out by the responsible Ofgem team to facilitate the determination of any revised PCFM Variable Values relating to uncertain cost categories for the Annual Iteration Processes referred to in paragraph 7.22:

- on or shortly after 1 June, a check will be made on whether any relevant adjustments were proposed during the application window which have just closed and the position noted;
- liaison will be maintained with the Ofgem team responsible for the review of proposed adjustments and any determination made by the Authority will be noted;
- on or shortly after 1 October the aggregate net adjustment (whether upward or downward) for the licensee in respect of each uncertain costs 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;

and

each aggregate net adjustment will be rebased to the 2009-10 price base used in the PCFM in accordance with paragraph 1.7 of chapter 1 of this handbook.

7.25. Each aggregate net adjustment ascertained under paragraph 7.24 will be applied 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.

7.26. For the avoidance of doubt, under the procedures outlined in paragraphs 7.24 and 7.25, the Authority can determine a revision to the PCFM Variable Value relating to an uncertain cost category for any Relevant Year during the RIIIO-T1 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

7.27. Special Condition ETC 28 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 Condition ETC 28:

7.28. The Authority will give notice of the PCFM Variable Value revisions that it proposes to direct by 16 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 ETC 28, 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.

7.29. 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.

7.30. As set out in paragraphs 7.22 and 7.23, the Authority will not determine PCFM Variable Value revisions for uncertain cost categories by November 2013, 2014, 2016, 2017 or 2019. 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

7.31. If the procedures set out in Special Condition ETC 28 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 2015 and/or 30 November 2018 and, in either case,



the Authority does not make such a direction, then Special Condition ETC 28 requires that the values should be directed by the Authority as soon as is practicable to facilitate the notification and direction of the value of the term MOD_t under Special Condition ETC 26 (Annual Iteration Process for the ET1 Price Control Financial Model).

DRAFT

8. Baseline and strategic wider works outputs allowed expenditure - financial adjustment methodology

8.1. The term 'Wider Works Outputs' refers to reinforcement of the onshore electricity transmission system to meet existing and future customer requirements. The reinforcement will provide additional transmission capacity and/or boundary transfer capability on the Main Interconnected Transmission System (MITS). The development of schemes must be in accordance with the planning criteria set out in the National Electricity Transmission System Security and Quality of Supply Standards.

8.2. The modelling of opening base revenue allowances for each licensee (set down in the table at Appendix [•] to Special Condition [•]) includes forecast amounts to cover expenditure on an agreed set of Baseline Wider Works Outputs. However, it may be necessary to adjust the licensee's allowed expenditure levels and Base Transmission Network Activity 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 ETC 39 (Specification of Baseline and Strategic Wider Works Outputs and Assessment of Allowed Expenditure).

8.4. In addition, the licensee's allowed expenditure/ Base Transmission Network Activity Revenue will be adjusted to reflect the achievement of boundary transfer capabilities which vary from expected levels. The provisions in this respect are contained in Special Condition ETC 41 (Calculating Allowed Totex 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 ET1 Price Control Financial Model (PCFM) using revised PCFM Variable Values determined under Special Conditions ETC 39 and ETC 41. These conditions include some licensee-specific determination provisions.

Temporal convention

8.7. For the purposes of Special Condition ETC 39 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; and

Allowed Expenditure – Baseline and Strategic Wider Works Outputs (WWE)

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 base revenue figures for affected relevant years. These in turn feed through to the calculation of the term MOD for formula Year t.

8.11. The primary PCFM Variable Value revisions for WWE in respect of each Annual Iteration Process relate to the PCFM Year which equates to regulatory year t. However, there may be occasions when the Authority needs to direct that PCFM Variable Values entered for preceding PCFM Years are to be revised to reflect a directed change to allowed expenditure for the year(s) concerned under Part D of ETC 39. Part G of Special Condition ETC 39 provides for revised values to be directed when appropriate. In Part H of Special Condition ETC 39, table 3 summarises the revised allowances and total WWE term for each year of the Price Control.

8.12. Because PCFM Variable Value revisions for WWE are entered against the PCFM Year which equates to 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 pre-price control modelling of opening base 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 ETC 47 ([•]).

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 regulatory 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 in each Regulatory Year t-1 in accordance with paragraph [•] of Special Condition ETC 39. Notice of the proposed value(s) will be given at least 14 days before the date of the direction. Revised PCFM Variable Values for WWE will generally be directed together with all of the other PCFM Variable Value revisions required for a particular Annual Iteration Process. Further information on the direction of revised PCFM Variable Values is given in chapters 1 and 2.

Allowed Expenditure – Incremental Wider Works

8.15. The process to direct allowances for Incremental Wider Works (NGET only) is set out in chapter 8.

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 Baseline/Strategic Wider Works is allocated to the fast and slow money⁴⁷ totals held in the PCFM, in accordance with the Totex Capitalisation Rate (per cent) specified in the RIIO-T1 Final Proposals and at paragraph [•] of Special Condition ETC [•]).

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; and
- Totex Incentive Mechanism Adjustments.

Effects of using revised PCFM Variable Values

8.18. As referred to in paragraph 8.10, 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 Formula Year t.

⁴⁷ See Glossary

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 Formula 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.

DRAFT

9. Network development policy and wider works allowed expenditure - financial adjustment methodology (NGET only)

9.1. The term 'Wider Works Outputs' refers to reinforcement of the onshore electricity transmission system to meet existing and future customer requirements. The reinforcement will provide additional transmission capacity and/or boundary transfer capability on the Main Interconnected Transmission System (MITS). The development of schemes must be in accordance with the planning criteria set out in the National Electricity Transmission System Security and Quality of Supply Standards.

9.2. For NGET Special Condition ETC 41 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 ETC39). The baseline forecast expenditure for incremental wider works is given in Special Condition ETC 41 part B, table 1.

9.3. Special Condition ETC 41 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 level of incremental wider works are different to the baseline. In every year of iteration of the financial model (denoted year t-1), it seeks to specify the total variance in allowance for each regulatory year k 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 ETC 41, 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 ETC 41.

Allowed expenditure for Incremental Wider Works

9.6. The PCFM contains the forecast expenditure amounts 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 ETC 41 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 new base revenue figures for affected relevant years. These in turn feed through to the calculation of the term MOD for formula 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 regulatory year t-2. Revised IWW values will be calculated in accordance with Part D of Special Condition ETC 41

9.10. Special Condition ETC 41 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 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 otherwise directs within two months of the date of submission of the statement by the licensee, the licensee must take all reasonable steps 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 under, the licensee must take all reasonable endeavours to apply the methodology in accordance with the proposed revisions.

9.11. Reference should be made to Special Condition ETC 41 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 [ETC26] for NGET:

- (i). The licensee will report on relevant boundary transfer capability after 31 March 2013 and on its actual expenditure incurred in accordance with standard condition [ETC74] 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 RIIO-T1 price control period (see example below);
and

- (iii). The Authority shall, 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 F of the condition, specifying the revised IWW values for relevant year k and relevant years k-1, k-2 and k-3.
- (iv). The Authority may also revise the IWW value for a relevant year or years earlier than relevant years in paragraph 18 ('earlier relevant 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; and
 - 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 F of this condition.

Indicative Example

During the Price Control period, the licensee reports that it has achieved boundary capability of 10MWh in excess of the target value of 100MWh. 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 this is the case it calculates the additional expenditure allowance for the incremental output delivered of 10MWh (excess capability x UCA 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 BIWW values should be revised to reflect the value of the 10MWh incremental output delivery in year t-2 phased in accordance with table 3 of Special Condition 41, part D. That is, allowances are amended for the years prior to that in which actual additional capacity is reported in the profile 2013-14 16 per cent; 2014-15 26 per cent; 2015-16 37 per cent and 2016-17 21 per cent.

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

10.1. Special condition ETC 55 (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 SHETL are forecast to be delivered) in excess of the target level.

10.2. The allowed expenditure is on sole-use and shared-use enabling works (together 'Generation Connections').

10.3. Special condition ETC 55 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 ETC55, 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 ETC 55. These conditions include some licensee-specific determination provisions.

Generation connection – local enabling works

10.6. The PCFM contains the forecast expenditure amounts referred to in paragraph 10.3 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 GCE.

10.7. The GCE term is determined in accordance with the provisions of Special Condition ETC 55. 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 base revenue figures for affected relevant years. These in turn feed through to the calculation of the term MOD for formula Year t .

10.9. The primary PCFM Variable Value revisions for GCE in respect of each Annual Iteration Process for NGET and SPTL relate to the PCFM Year which equates to regulatory year $t-2$. For SHETL the revisions primarily relate to years t to $t+4$.

10.10. Special Condition ETC 55 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 and commissioned after 31 March 2013 and on its actual expenditure incurred in accordance with standard condition [ETC74] Regulatory Instructions and Guidance
- Revised GCE values will be calculated in accordance with Part B of Special Condition ETC 55.
- For SHETL the GCE values will be based on forecast delivery. For details see their licence condition.
- For NGET there is a separate UCA relating to the overhead line component.
- The Authority shall, by 30 November in each Relevant Year $t-1$ issue a direction, in accordance with the provisions of Part C of this condition, specifying the revised GCE values for Relevant Year $k = t-2$.
- A direction issued by the Authority under paragraph 12 is of no effect unless the Authority has first:
 - (a) given Notice to interested parties that it proposes to issue a direction under paragraph 12:
 - (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 this condition; and
 - (iii) specifying the time (which must not be less than a period of 28 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 Years k earlier than Relevant Year $t-2$ ('earlier Relevant Years'), notwithstanding that the GCE 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 licence terms VSUE k , or VSHE k pertaining to the earlier Regulatory 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; and

(c) the revised GCE value for the earlier Relevant Years is specified in a direction issued in accordance with the provisions of Part C of this 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 [ETC26] Special Condition [x] to be undertaken by the Authority by 30 November in that same Relevant Year t-1. In those circumstances, the Authority shall 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 ETC 55 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 [ETC26] for NGET and SPTL:

- (i). The licensee will report on relevant generation connections and relevant installed asset rating completed and commissioned after 31 March 2013 and on its actual expenditure incurred in accordance with standard condition [ETC74] 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 RIIO-T1 price control period (see example below); and
- (iii). The Authority shall, by 30 November in each Relevant Year t-1 issue a direction, in accordance with the provisions of Part C of ETC 55, specifying the revised GCE values for Relevant Year k = t-2.

10.14. For SHETL the procedure is different:

- (i). The licensee will report on relevant generation connections and relevant installed asset rating completed and commissioned after 31 March 2013 and on its actual expenditure incurred in accordance with standard condition [ETC74] Regulatory Instructions and Guidance. The licensee will also provide a forecast of output delivery for the remainder of RIIO-T1 as directed in the RIGs.
- (ii). The Authority will ascertain the total amount of additional forecast expenditure for the licensee, (in 2009-10 prices) for additional outputs delivered for each of the remaining years of the RIIO-T1 price control period; and

- (iii). The Authority shall, by 30 November in each Relevant Year t-1 issue a direction, in accordance with the provisions of Part C of ETC 55, specifying the revised GCE values for Relevant Years t, t+1, t+2 and t+3. Where adjustments are required for under delivery of outputs the Authority will issue a direction to amend earlier years.

Indicative Example

During the Price Control period, the licensee reports that it has achieved outputs of 10MWh in excess of the target value of 100MWh. Where the authority is satisfied that this is the case it calculates the additional expenditure allowance for the incremental output delivered of 10MWh (excess output x UCA 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 GCE value of zero should be revised to reflect the value of the 10MWh incremental output delivery in year t-2. That is, allowances are amended for the year in which actual additional capacity is reported.

10.15. For SHETL 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 [ETC74] 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 RIIO-T1 price control period; and

- (iii). The Authority shall, by 30 November in each Relevant Year t-5 (following commencement of the RIIO-T1 price control period) issue a direction, in accordance with the provisions of Part C of ETC 55, specifying the revised GCE values for Relevant Years = t-4 to t. These values are based on an assumed even expenditure over four years (ie 25 per cent per annum); and

- (iv). Once actual delivered outputs are known the Authority will recalculate allowances and correct allowances to 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 ETC 18 (Enhancement to Pre-existing Infrastructure in National Parks and Areas of Outstanding Natural Beauty) 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. 'Enhancement to Pre-existing Infrastructure' means a reduction in the visual impact of existing transmission assets, in National Parks and Areas of Outstanding Natural Beauty ("designated areas") such that meet the licensee's criteria set out in its Enhancements to Pre-existing Infrastructure Policy.

11.3. Special condition ETC 18 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 ETC 18, 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 ETC 18.

Enhancements to pre-existing infrastructure – visual amenity

11.6. The PCFM contains the forecast expenditure amounts (initially all zero) referred to in paragraph 11.3 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 EPEI.

11.7. The EPEI term is determined in accordance with the provisions of Special Condition ETC 18. 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 base revenue figures for affected relevant years. These in turn feed through to the calculation of the term MOD for formula Year t.

11.9. The primary PCFM Variable Value revisions for EPEI in respect of each Annual Iteration Process relate to years t onwards.

11.10. Special Condition ETC 18 sets out the stipulations and procedures governing the proposal and determination of the licensee's allowed expenditure levels in respect of Enhancements to pre-existing infrastructure. In summary these are:

- Before requesting the Authority to specify EPI Outputs in Table 1 the licensee shall submit to the Authority an Enhancing 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 Enhancement to Pre-existing Infrastructure Policy which, pursuant to the provisions of Part C of the condition, has been approved by the Authority.
- The Authority may specify EPI Outputs in Table 1 of Special Condition ETC 18 pursuant to the provisions of Part D of the condition.
- The licensee's delivery of the EPI Outputs specified in Table 1 shall be monitored by the Authority against the licensee's Enhancements to Pre-existing Infrastructure Policy and the information referred to in paragraph 9 of the condition.
- Where the licensee has not delivered or has only partially delivered an EPI Output set out in Table 1, the Authority shall, 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 this Part D in order to include or modify details, including the amount of allowed expenditure, of EPI Outputs through the provisions of this Part D.
- 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 Part B and Part D of this condition;
 - (iii) provide an update on the remaining allowance available during RIIO-T1 to fund EPI outputs; and

- (iv) specifying the time (which must not be less than a period of 28 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

11.11. 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 [ETC26] Special Condition [x] to be undertaken by the Authority by 30 November in that same Relevant Year t-1. In those circumstances, the Authority shall take full account of the position when determining and directing any revised EPIE values in respect of the next Annual Iteration Process.

11.12. Reference should be made to Special Conditions ETC 18 for the full and definitive procedures and requirements.

Determination and direction of revised EPIE values

11.13. In order to facilitate the annual iteration process that is required by [ETC26]:

- (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 [ETC74] Regulatory Instructions and Guidance.
- (ii). The authority will ascertain the total amount of additional allowed expenditure for the licensee, (in 2009-10 prices) the Relevant Year of the RIIO-T1 price control period (see example below); and
- (iii). The Authority shall, by 30 November in each Relevant Year t-1 issue a direction, in accordance with the provisions of Part C 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 carrying time value of money adjustment, be reflected in the calculation of the term MOD for Relevant Year t and, for the avoidance of doubt, it shall not have any retrospective effect on a previously directed value of the term MOD.

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 Enhancement to Pre-existing Infrastructure Policy.

The Authority satisfies itself that:

the proposed output is compliant with the agreed policy and;

that the proposed costs of delivery are considered efficient and;

that 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 revised additional expenditure allowance stated in 2009-10 prices.

DRAFT

12. Innovation roll out mechanism allowed expenditure – financial adjustment methodology

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 regulatory years to which those revisions relate.

12.2. The provisions for determining revised IRM values are contained in Special Condition [ETC 9] (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 formula year t will result in an appropriate adjustment of the base revenue of the licensee so that it is 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 each licensee, set down in the table at Appendix 1 to Special Condition [ETC xx](Restriction of revenue in respect of the **Transportation Activity**) reflect allowed expenditure figures for forecast levels of innovation expenditure (and will be zero at the outset).

12.5. The allowed expenditure 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.

12.6. 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

12.7. Each special condition that provides for the determination and direction of revised PCFM Variable Values uses the following convention:

- 'Formula Year t' means the Formula Year in which the value for the term MOD_t calculated through a particular Annual Iteration Process, is used in the

formula set out in Part [•] of Special Condition [ETC 9] and references to Formula Years t-1 and t-2 are construed accordingly;

Determination and direction of revised IRM values

12.8. Part A of Special Condition [ETC 9] (The Innovation Roll-out Mechanism) specifies the Features that qualify a roll-out for additional funding.

12.9. Part B of Special Condition [ETC 9] (The Innovation Roll-out Mechanism) specifies the licensees' ability to propose a relevant adjustment to the IRM value.

12.10. Part C of Special Condition [ETC 9] (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 31 May 2018.

12.11. For the first application window Ofgem will determine revised IRM values for Formula Year 2016-17 (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).

12.12. For the second application window Ofgem will determine revised IRM values for Formula Year 2019-20 (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).

12.13. The Authority's direction of revised IRM value by no later than 30 November in each Formula Year t-1 will be made in accordance with Part D of Special Condition ETC 9.

Processing of IRM values under the Annual Iteration Process

12.14. Under the Annual Iteration process, IRM values, as revised, representing allowed innovation expenditure are allocated to:

- fast and slow money⁴⁸ totals in accordance with the Totex Capitalisation Rate (per cent) specified in the RIIO-T1 Final Proposals; and
- the tax pools associated with innovation expenditure in accordance with the licensee specific tax allocation profile,

⁴⁸ See Glossary

within the PCFM.

12.15. IRM values, as revised, for all Formula Years up to and including Formula Year t are then used with other PCFM variable values under the Annual Iteration Process:

- (i). in calculating the value of the term MOD_t for Formula Year t including:
 - fast money components,
 - amounts of return and depreciation on the licensee's RAV balance,
 - tax allowance effects,
 - Totex Incentive Mechanism adjustments, and
- (ii). to update Totex related balances held within the PCFM including the licensee's RAV balance.

12.16. Under the Annual Iteration Process described in chapter 2 the effect of revised IRM values directed for Formula Years earlier than Formula Year $t-2$ flow through to the determination of the value of MOD_t and will have no retrospective effect on previously directed values of MOD . This point is confirmed in paragraph 14 of Special Condition ETC 9.

12.17. IRM values held in the PCFM for Formula 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 Formula Years later than Formula Year t have indicative status only.

13. Undergrounding volume driver (NGET 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 or in a tunnel instead of being strung overhead on pylons can be considerable.

13.2. Special Condition ETC 122 provides a volume driver of 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 ETC 122 part B table 1.

13.3. Special Condition ETC 122 sets out the basis of calculating adjustments to Totex allowances arising from planning requirements to include underground cabling in new transmission routes ie to adjust allowances where the level of underground cabling are different to the baseline. In every year of iteration of the financial model (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 ETC 122, 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 ETC 122.

Undergrounding of 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 in new transmission infrastructure for that relevant year as determined in accordance with this condition.

13.7. The PCFM contains the forecast expenditure amounts referred to in paragraph 13.2 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 UCE.

13.8. The UCE term is determined in accordance with the provisions of Special Condition ETC 122. 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 new base revenue figures for affected relevant years. These in turn feed through to the calculation of the term MOD for formula Year t.

13.10. The primary PCFM Variable Value revisions for UCE in respect of each Annual Iteration Process relate to the PCFM Year which equates to regulatory years t-2, t-3 and t-4. Revised UCE values will be calculated in accordance with Part C of Special Condition ETC 122.

13.11. Special Condition ETC 122 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 [ETC26]:

- (i). The licensee shall notify the Authority of the amount, if any, 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.
- (ii). The licensee shall 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 will report annually to the Authority on the amount and type of underground cabling delivered along with information on actual expenditure incurred under the regulatory instructions and guidance issued in accordance with standard condition [ETC71] 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 RIIO-T1 price control period (see example below); and
- (v). The Authority shall, 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 C of Special Condition ETC 122, 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 a direction under paragraph 16.

specified the date on which it proposes that the direction should take effect;

a. stating that any revised UCE values have been determined in accordance with Part C of this condition; and

b. specifying the time (which must not be less than a period of XX 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 must satisfy itself that the design and route of the new electricity transmission infrastructure ensures long term value for money for consumers. If so the Authority calculates the additional expenditure allowance for the incremental cost (length undergrounded x UCA for type Y x RPE⁴⁹ x weighting factor for 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 undergrounded phased in accordance with table 3 of Special Condition ETC 122, part C. That is, allowances are amended in the proportions: first year 10 per cent; second year 50 per cent; third and fourth years 20 per cent.

⁴⁹ UCAs and RPEs are set out in ETC 122 Part C tables 2 & 4

14. Demand related infrastructure volume driver allowed expenditure – financial adjustment methodology

14.1. The term 'demand related infrastructure' means the new transmission infrastructure works which are needed for to provide demand connections and to increase the offtake capacity at grid exit points.

14.2. Special Condition ETC 123 provides a volume driver of 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 ETC 123 part B table 1.

14.3. Special Condition ETC 123 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 financial model (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 ETC 123, 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 ETC 123.

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 Value DRI.

14.7. The DRI term is determined in accordance with the provisions of Special Condition ETC 123. 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 new base revenue figures for affected relevant years. These in turn feed through to the calculation of the term MOD for formula 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 regulatory years t-2, t-3 and t-4. Revised DRI values will be calculated in accordance with Part C of Special Condition ETC 123. However for changes to outputs in the first year of RIIO only allowances in that year (ie t-2) will be directed and for changes to outputs in year two of RIIO 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 [ETC26]:

- (vi). The licensee will 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 [ETC71] Regulatory Instructions and Guidance.
- (vii). 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 RIIO-T1 price control period (see example below); and
- (viii). The Authority shall, 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 C of Special Condition ETC 123, specifying the revised DRI values for relevant year t-2 and relevant years t-3 and t-4.
- (ix). The Authority may also revise the DRI value for a relevant year or years earlier than relevant year in paragraph 10 ('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_t pertaining to the earlier relevant years or to correct errors in relation to those values; and
 - b. 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 E of the condition.

14.11. Special Condition ETC 123 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) additional offtake capacity 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 (excess transformers x UCA x RPE⁵⁰) + (km of line delivered on the project x UCA 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 3 of Special Condition ETC 123, part C. That is, allowances are amended for the years prior to that in which actual additional capacity is reported in the profile 2014-15 44 per cent; 2015-16 44 per cent and 2016-17 12 per cent.

⁵⁰ The RPE factors and UCAs are given in tables 2 and 4 of Part C of ETC 123.

15. Legacy price control adjustments - financial methodologies

Overview

15.1. The purpose of this chapter of the Price Control Financial Handbook is to set out the methodologies that are to be used to determine values for each component term in the formulae for legacy price control financial adjustments contained in Special Condition ETC 64 (Legacy price control adjustments – Transmission Owner) and in Special Condition ETC 67 (Legacy price control adjustments – System Operator) for National Grid Electricity Transmission plc (NGET).

15.2. The formulae for legacy price control financial adjustments, set out in Special Conditions ETC 64 and ETC 67, are used to determine revisions to PCFM Variable Values for:

- a) legacy price control revenue allowance adjustments (LAR and SOLAR values); and
- b) legacy price control adjustments to RAV balance additions (LRAV and SOLRAV values)

15.3. The component terms for Legacy price control financial adjustments relate to outturn values for the items shown in Table 15.1 below, in respect of Relevant Years prior to 1 April 2013 (the legacy period).

Table 15.1 – Legacy price control financial adjustment categories

Category	Licence Condition	Applicable licensees	PCFM Variable Value name	Component in PCFM Variable Value	See Part of this chapter
Pension adjustments	ETC 64	All	PAR	LAR	1
Tax adjustments	ETC 64	All	TAR	LAR	2
Capex incentive scheme adjustments	ETC 64	All	CAR CRAV	LAR LRAV	3

Transmission asset owner incentive scheme adjustments	ETC 64 ⁵¹	All	IAR IRAV	LAR LRAV	4
Logged up and security costs adjustments	ETC 64	All	SAR SRAV	LAR LRAV	5
Pension adjustments (SO)	ETC 67	NGET	SOPAR	SOLAR	1
Tax adjustments (SO)	ETC 67	NGET	SOTAR	SOLAR	2
Capex incentive scheme adjustments (SO)	ETC 67	NGET	SOCAR SOCRAV	SOLAR SOLRAV	3

15.4. Special Conditions ETC 64 and ETC 67 specify that the component term values used to derive revised LAR, SOLAR, LRAV and SOLRAV values are to be determined in accordance with the methodologies contained in this chapter. They also provide for revisions to those PCFM Variable Values to be directed for use in the annual iteration process for the Price Control Financial Model (PCFM).

15.5. For every annual iteration process in the RIIO-T1 price control period, the Authority will:

- a) determine each component term in the formulae for legacy price control financial adjustments for every Relevant Year in the RIIO-T1 price control period; and
- b) derive and direct LAR, SOLAR, LRAV and SOLRAV values which have been revised, where appropriate, to reflect the component term values calculated under sub-paragraph a).

15.6. 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 values of the terms MOD and SOMOD, calculated for Relevant Year t, will result in

⁵¹ See [ETC 52] Special Condition [x] (Supplementary provisions in relation to transmission asset owner incentives scheme activity in the legacy period) for the specification of, or determination of revisions to, the values for the inputs to the calculations of revisions to the IAR and IRAV values under the methodology set out in Part D of this chapter.

adjustments to the licensee's Base Transmission Revenue and Base SO Internal Revenue so that they appropriately reflect outturn levels of

- activities carried out by the licensee;
- incentivised performance by the licensee; and/or
- expenditure incurred by the licensee,

in the legacy period.

15.7. Under the annual iteration process, revisions to PCFM Variable Values for Legacy price control financial adjustments also result in appropriate changes to RAV balance additions. For the avoidance of doubt, legacy price control adjustments are not subject to the Totex Incentive Mechanism.

15.8. At the commencement of the RIIO-T1 price control period, all PCFM Variable Values relating to legacy price control adjustments will have the value zero, since forecast outturn values for the component terms will have been incorporated into the licensee's opening base revenue allowances.

15.9. All PCFM Variable Values relating to legacy items and revisions thereto are given in 2009-10 prices, consistent with the price base used in the ET1 Price Control Financial Model and with values for the terms MOD and SOMOD.

15.10. In the remainder of this chapter, references to the term MOD should be taken to include SOMOD and references to special condition ETC 64 should be taken to include special condition ETC 67.

15.11.

Temporal conventions

15.12. For the purposes of Special Conditions ETC 64, ETC 67 and this chapter, "Relevant Year t" means the Relevant Year in which a value for the term MOD, calculated through a particular Annual Iteration Process⁵², is used in the formula for the licensee's Base Transmission Revenue⁵³. References to Relevant Year t-1 etc should be construed accordingly.

Associated documents

15.13. The associated documents (previously published by Ofgem) referred to in this chapter are:

1. Transmission TPCR4 final proposals (Ref: 206/06)
[TPCR4 Final Proposals](#)

⁵² and/or SOMOD for NGET

⁵³ See Special Condition ETC 20 (Restriction of Transmission Network Revenue) and ETC 12 (Restriction on System Operator Internal Revenue).

<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>

3. 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=Networks>

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>

Part 1 - Pension adjustments relating to the legacy period

15.14. The purpose of this part is to set out the methodology to determine the revised PCFM Variable Components (PAR) for the true-up of Pensions from the TPCR4 price control.

Description of the pension true-up

15.15. The previous price controls up to and including TPCR4 provided an allowance for funding past deficits as a true up subject to being economic and efficient, and in accordance with the Pension Principles.

15.16. TPCR4 final proposals supplementary appendices, appendix 6 paragraph 1.3 states:

“The basis on which allowances have been proposed at this review means that the extent to which pension contributions differ from the pension allowances will be offset against actual future pension costs in determining future pension allowances. Any such adjustments would be net of tax, to the extent that the over or under payment has reduced or increased tax payable”.

15.17. The provisional pension true up amounts in respect of TPCR4 will be spread over nine years as set out in March 2011 Strategy document at Table 6.2 of Chapter 6 of the Financial Issue supplement commencing 1 April 2012. These were provisional subject to:

- the finalisation of the March 2010 valuations for NGET,
- receipt of the actual, compared to forecast deficit funding and ongoing costs payments for 2011-12; and
- the conclusion of the 2010 Reasonableness Review.

Pension true-up calculation

15.18. The pension true-up calculation will involve several stages because the figures are recorded in various price base years.

15.19. For the deficit allowance, the steps are as follows:

Step one is to list the deficit funding allowances for each of the five years of TPCR4. The deficit funding allowances for the five years of the TPCR4 price control are in 2004-05 prices as set out in TPCR4 final proposals main supplementary appendices Appendix 6 table A6.1.

Step two is to rebase deficit allowances to the price base year used to report deficit actual.

Step three is to collate the actual deficit funding payments that relates to the regulated entity from the RRP's for each year of TPCR4. This will be subject to the payments having been determined economic and efficient (informed by the 2010 Reasonableness Review), and a review of the appropriateness of and any changes in the amount of the payments related to the regulated transmission business activity (the regulatory fraction) arising from structural changes and the application of Pension Principle 2.

Step four is to deduct the allowance from the actual costs for each of the five years of TPCR4.

Step five is to rebase these differences to RIIO-T1 price base year of 2009-10.

Step six is to calculate the historical tax impact of the deficit true-up by multiplying the gross deficit adjustment for each year by the actual Corporation Tax rate applicable for each year.

Step seven is to deduct the tax impact from the gross adjustment figure to arrive at the net deficit adjustment true-up after tax.

For the Ongoing Costs Allowance, the steps are as follows:

Step one is to list the ongoing cost allowances for each of the five years of TPCR4. The allowances for the first year of the TPCR4 price control are in 2004-05 prices as reported in RRP's and the TPCR4 Final Proposals.

Step two is to collate the actual ongoing costs (relating to the regulated business only) from the RRP's for each year and make any adjustment to the annual where the costs have not been determined as economic and efficient (informed by the 2010 Reasonableness Review).

Step three is to deduct the ongoing allowance from actual ongoing regulated costs for each of the five years.

Step four is to rebase these differences to RIIO-T1 price base year of 2009-10.

Step five is to calculate the historical tax impact of the deficit true-up by multiplying the gross deficit for each year by the actual Corporation Tax rate applicable for each year.

Step six is to deduct the tax impact from the gross figure to arrive at the net ongoing costs true-up after tax.

Step 7 is to deduct the aggregate amount in Table 6 of the March 2011 Strategy document and in the TPCR4 Rollover: Final Proposals document) from the amount in step 6.

15.20. The sum of differences in deficit and ongoing costs relative to allowances net after tax true-up is the total pension true-up to be adjusted for the time value of money using the WACC. We do this on a year by year basis with expenditure from year 1 of TPCR4 uplifted by 6.5 years compounded return at the prevailing cost of capital for each year, year 2 uplifted by 5.5 years etc.

15.21. To avoid a spike in the use of systems charges, the RIIO model funds the pension forecast equally over the eight years of the price control. However, the pension true-up is adjusted in the first year of the RIIO-T1 price control, 2013-14.

15.22. The pension true-up adjusted for the time value of money will form the PAR component in the LAR PCFM variable value for year 2013-14 of the price control.

Part 2 - Tax adjustments relating to the legacy period

15.23. The purpose of this part is to set out the methodology to determine the revised PCFM Variable Components (TAR) for the tax clawback from TPCR4 rollover due to excess gearing in accordance with Special Licence Conditions ETC 64 and ETC 67.

Description of the tax clawback from TPCR4 Rollover

15.24. A [decision letter dated 31 July 2009](#) sets out Ofgem's implementation of the ex post adjustment considered in TPCR4 final proposals.

15.25. The adjustment claws back from licensees the revenue benefit they obtain from lower tax costs as a result of a higher level of gearing than assumed in the Price Control Final Proposals.

15.26. The tax clawback adjustment is triggered when in any year actual gearing exceeds notional gearing and interest costs exceed those modelled at the price control. When both of these conditions are satisfied, Ofgem will clawback the tax benefit which results from the difference between actual and modelled interest costs in that year. The rollover year clawback adjustment is to be calculated on the combined TO and the SO values. 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 TAR value

15.27. For 2012-13, a figure for the expected amount of tax deductible interest payable by the licensee is calculated. The calculation is as set out in the workbook "RIIO-T1 legacy calculations" and the detail for each company is shown there.

15.28. In summary the calculation:

- Compares actual gearing to assumed gearing level
- If assumed gearing is exceeded, the actual interest paid is compared to modelled level of interest
- Any excess over modelled interest is assumed to be a tax benefit and the value of this is calculated by multiplying the excess by the actual tax rate
- This value (as a negative) forms the TAR constituent of LAR.

Interaction with unutilised regulatory tax losses

15.29. If for 2012-13 the licensee has a clawback triggered after any adjustment but no modelled profits subject to tax then the pre-tax value of TAR (ie the amount in 15.30) is added to the cumulative unutilised regulatory tax losses. This will be relieved against future Core taxable profits.

Part 3 – Capex incentive scheme adjustments relating to the legacy period

15.30. 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

15.31. 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 & SHETL (Capital Expenditure Incentive and Safety Net).

15.32. 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 settlement 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.

15.33. We will initially review all outputs delivered 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 outputs which have been funded and delivered under alternative schemes (TIRG and TII). These outputs will be deducted from outputs measured against allowed capex to give a value for outputs delivered to be compared to the output targets set.

15.34. Special conditions D9 and J7 sets out the calculation of the capital expenditure adjustment term as the sum of two calculations:

15.35. 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)

15.36. 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) minus the sum of the capex adjustment as above (LV/LVN).

15.37. The calculations will be shared with the individual licensees in the workbook "RIIO-T1 legacy calculations".

15.38. In summary to revise the calculation we will :-

- Update for actual allowed capex (subject to a review of efficiency)
- Update Work-in-Progress (WIP) adjustments to reflect actual outputs delivered
- Recalculate the profile of adjustments to be made
- Compare to original values and calculate differences
- Uplift differences for time value of money at appropriate vanilla WACC (ie TPCR4 WACC and TPCR4RO WACC as necessary)
- The difference between actual spend and that forecast will also be used to amend opening RAV (less any consequent depreciation differences).

15.39. Revised allowed 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

15.40. Special conditions D9 for NGET and J7 for SPTL and SHETL also set out the calculation provisional allowance of the capital expenditure adjustment term and associated calculations for the Rollover year. The approach is similar to that used for the full TPCR4 period.

15.41. Both J7 and D9 specify the CxIncRA 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 the first year of RIIO-T1. ROAdj also makes a revenue adjustment in line with the capex incentive for the rollover year (CxIcnRO), 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.

15.42. Again the calculation is as set out in the workbook "RIIO-T1 legacy calculations" and the detail for each company is shown there.

15.43. 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 outputs actually delivered and any consequent change to work in progress.
- Compare to original values and calculate differences
- Uplift differences for time value of money at appropriate vanilla WACC (ie TPCR4RO WACC)
- The difference between actual spend and that forecast will also be used to amend opening RAV (less any consequent depreciation differences).

15.44. Revised allowed 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.

Adjustments required for differences in System Operator (SO) expenditure

15.45. 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.

15.46. The TPCR4 and rollover sharing mechanism for the SO share any over or underspend of capex allowances with consumers by adding or deducting the shared portion to RAV. The calculation is set out in the Legacy Price Control workbook which will be made available to the licensee.

15.47. 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 50% of overspend/ adding back 50% of overspend to give a revised RAV additions profile
- Calculating the difference in profiles between the original profile and revised profile

- Summing the differences to arrive at the SOCRAV term

Part 4 – Transmission asset owner incentive scheme adjustments relating to the legacy period

15.48. 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 under the Transmission Investment Incentives (TII) framework.

Description of the TPCR4 Transmission Asset Owner Incentives

15.49. The TPCR4 Transmission Asset Owner Incentives are specified in Special Conditions D2 and D11 of NGET's licence and J2 and J12 of the licences of SPTL and SHETL.

15.50. SC D11 and J12 (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.

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

15.52. 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.

15.53. On 1 June 2012, Ofgem published a decision letter on licence modifications to extend the Transmission Investment Incentives (TII) framework for application in TPCR4RO and to reflect capital expenditure allowances determined up to and including 2012-13.

15.54. 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.

15.55. In line with the above policy, as a consequence of the licence modifications to reflect the TPCR4RO 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 shall 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.

15.56. Special condition ETC 52 (Adjustment to the Transmission Network Revenue Restriction due to Transmission Investment Incentives) supersedes Special Condition D11/J12. [ETC 52] 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 [ETC 64] Special Condition [x] (Legacy price control adjustments – Transmission Owner) in line with the methodology set out below.

Calculation of TPCR4 Transmission Asset Owner Incentives adjustment

15.57. The calculation of IAR and IRAV values is based on the following inputs specified or determined in [ETC 52]:

- 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.

- 15.58. [ETC 52] paragraph 52.8 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.
- 15.59. [ETC 52] paragraph 52.11 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 we will base any revenue adjustment in line with paragraph 52.8(a) of [ETC 52] on an off-line calculation following the process below:
- Noting the base 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 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:
 - 15.59..1. 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
 - 15.59..2. 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 relevant TII year(s) 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 each year as set out in [ETC 52].
 - Applying an allowance for the time value of money to the change in revenue to determine the revenue adjustment to be made in the RIIO-T1 period.
- 15.60. We will base any revenue adjustment in line with paragraph 52.8(b) of [ETC 52] on an off-line calculation following the process below:

- Using any adjusted 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 ETC52) 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 an allowance for the time value of money 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.

15.61. For the purposes of applying the allowance for the time value of money in paragraphs 15.54-15.55, 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.

15.62. 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.

15.63. 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 1.53-1.55 and will form the IAR component in the LAR PCFM variable value for 2013-14.
- The TPCR4 Transmission Asset Owner Incentives RAV adjustment determined in line with paragraph 15.56 forms the IRAV component in the LRAV PCFM variable value for 2013-14.

Part 5 – Logged up and security costs adjustments relating to the legacy period

15.64. The purpose of this part is to set out the methodology to determine the revised PCFM Variable Components (SAR & SRAV and SOSAR and SOSRAV) for the logged-up and security costs.

15.65. Whilst there are no known costs for the SO in the period this has been included for completeness. References to SAR & SRAV should therefore be taken to mean SOSAR and SOSRAV in terms of the System Operator.

Description of the TPCR4 Logged-up and Security costs

15.66. TPCR4 Special Condition D2 (Restriction on Transmission Network Revenue) paragraph 2 'Formula for Transmission Network Revenue Restriction' states that LCt means the revenue adjustment term, whether of a positive or of a zero value, made in the relevant year commencing 1 April 2012 in respect of the full recovery of efficiently incurred logged up costs (adjusted for financing costs) as specified in paragraph 3 of this condition.

15.67. SC D2 paragraph 3 states that "for the purposes of paragraph 2, LCt shall comprise the capital expenditure and operating expenditure costs incurred in the period 1 April 2007 to 31 March 2012, and reported to the Authority in accordance with standard condition B15 (Price Control Review Information), by the licensee" against the specified cost categories "subject to the licensee satisfying the Authority that such costs have been efficiently incurred".

15.68. For RIIO-T1 we have calculated provisional values for logged up items up to 2011-12 and funded these in RIIO-T1 allowances (subject to the review of these costs for efficiency). Logged up costs incurred in the rollover year will need to be allowed for following submission of the rollover year RRP and the TPCR4 efficiency review.

Calculation of TPCR4 Logged-up and Security costs adjustment

15.69. Following an efficiency review of the logged up and security costs incurred in the period to 31 March 2013 and reported to the Authority in accordance with standard condition B15, the actual efficiently incurred logged up costs will be price index adjusted to RIIO-T1 base year prices and a return allowed for the time value of money.

15.70. These costs will potentially be made up of opex and capex adjustments. Where these costs are of opex in nature they will be funded as revenue in RIIO-T1.

15.71. These calculations are shown in the company workbook "RIIO-T1 legacy calculations".

15.72. The TPCR4 Logged-up and Security costs revenue adjustment will form the SAR component in the LAR PCFM variable value for 2013-14 (the SOSAR component of SOLAR).

15.73. The TPCR4 Logged-up and Security costs RAV adjustment will form the SRRAV component in the LRAV PCFM variable value for 2013-14 (the SOSRAV component of SOLRAV).

Part 6 – Direction of LAR, LRAV, SOLAR and SOLRAV values

15.74. Part A of Special condition ETC 64 (Legacy price control adjustments – Transmission Owner) and Special Condition ETC 67 (Legacy price control adjustments – System Operator) for National Grid Electricity Transmission plc (NGET), sets out how LAR and LRAV (SOLAR and SOLRAV for System Operator) are directed each year.

15.75. Except where stated references to LAR and LRAV should also be taken to mean SOLAR and SOLRAV for the System Operator.

15.76. The LAR and LRAV values for all Relevant Years are zero as at 1 April 2013.

15.77. The Authority shall, by 30 November in each Relevant Year t-1:

- (a) determine whether any LAR or LRAV values should be revised in relation to one or more of the schemes and mechanisms referred to in Parts A and B of the condition; and
- (b) issue a direction in accordance with the provisions of Part C of the condition specifying any revised values that have been determined and the Relevant Years to which they relate.

15.78. The first Relevant Year in which the Authority will make a determination is Relevant Year 2013-14.

15.79. Revised LAR and LRAV values will normally relate to Relevant Year 2013-14.

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

$$\text{LAR} = \text{PAR} + \text{TAR} + \text{CAR} + \text{IAR} + \text{SAR}$$

and the revised SOLAR value is determined in accordance with the following formula:

$$\text{SOLAR} = \text{SOPAR} + \text{SOTAR} + \text{SOCAR} + \text{SOSAR}$$

15.81. Where, in each case, for the same Relevant Year t:

PAR/ SOPAR means the revenue allowance adjustment in respect of true-ups for legacy period pension scheme expenditure, determined in accordance with Part B of the condition.

TAR/ SOTAR means the revenue allowance adjustment driven by the licensee's gearing levels and corporate debt interest costs in the legacy period, determined in accordance with Part B of the condition.

CAR/ SOCAR means the revenue allowance adjustment in respect of the close-out of the legacy period Capex rolling incentive, determined in accordance with Part B of the condition.

IAR means the revenue allowance adjustment in respect of transmission asset owner scheme activity in the legacy period, determined in accordance with Part B of the condition.

SAR/ SOSAR means the revenue allowance adjustment in respect of true ups for legacy period logged up and security costs, determined in accordance with Part B of the condition.

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

$$\text{LRAV} = \text{CRAV} + \text{IRAV} + \text{SRAV}$$

and the revised SOLRAV value is determined in accordance with the following formula:

$$\text{SOLRAV} = \text{SOCRAV} + \text{SOSRAV}$$

15.83. Where, in each case, for the same Relevant Year t:

CRAV/ SOCARV means the adjustment to the licensee's RAV balance additions in respect of the close-out of the legacy period Capex rolling incentive, determined in accordance with Part B of the condition.

IRAV means the adjustment to the licensee's RAV balance additions in respect of transmission asset owner scheme activity in the legacy period, determined in accordance with Part B of the condition.

SRAV/ SOSRAV means the adjustment to the licensee's RAV balance additions in respect of true ups for legacy period logged up and security costs, determined in accordance with Part B of the condition

15.84. Where the Authority directs any revised LAR values or LRAV values 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 for Relevant Year t and, for the avoidance of doubt shall not have any retrospective effect on a previously directed value of the term MOD (or SOMOD).



Appendices

Index

Appendix	Name of Appendix	Page Number
1	Glossary	[•]

DRAFT

Appendix 1 - Glossary

F

Fast money

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

G

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

The model referred to in Special Condition PCC 3 of the Electricity Transmission Licence. Derived from the Combined Model it has been developed to calculate appropriate changes to each licensee's base revenue through an annual iteration process - see chapters 1 and 2.

TPCR (Electricity Transmission)

The RPI-X type price control arrangements which applied to electricity transmission licensees from 1 April 2008 to 31 March 2013

M

MOD Term [TO and SO]

The term of that name included in the formula for Base Revenue set out in Special Condition X of the Electricity Transmission licence. It represents the incremental change to [base revenue] for the formula year concerned, ascertained in accordance with the methodologies set out in this Handbook. The value of the MOD term is calculated through the annual iteration of the ET1 Price Control Financial Model (see Chapter 1) and is specified in a direction given by the Authority by 30 November in each formula year.

N

NPV

Net present value

O

Ofgem

The Office of the Gas and Electricity Markets Authority.

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

[•]

RIIO

Revenue = Incentives + Innovation + Outputs.
Ofgem's new 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

Slow money

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

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.

SO

[•]

T**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, the multiplier is $(1+X)^Y$ where:

- X is the Vanilla WACC for the licensee applicable to the period of deferral; and
- Y is the number of years of deferral

TO

[•]

Totex

Total expenditure – a TO's capital (capex), and operational (opex) expenditure on its transportation business except for:

- costs relating to de minimis (non transportation business) activities;
- costs relating to excluded services;
- pension deficit repair payments relating to the established deficit and unfunded ERDC costs incurred after 1 April 2004;
- fines and penalties;
- compensation payments made in relation to standards of performance;
- bad debt costs;
- costs related to the SF6 incentive scheme;
- costs relating to pass-through items;
- finance and tax costs (except for some business rates and stamp duty land tax)
- other expenditure and accounting adjustments specifically excluded from Totex by the RIIO-T1 Cost Reporting Regulatory Instructions and Guidance.

A set percentage of Totex is added to the RAV, and the price control approach is to remunerate this amount as 'slow money' with the remaining percentage remunerated as 'fast money' in the year it is expected to be incurred.

Totex Capitalisation Rate

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

U**Unified Financial Model**

The model used by Ofgem to ascertain opening base revenue values for all the network price controls and to allow financeability analysis of overall price control packages (compare to ET1 price Control Financial Model)

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 since revenue allowances (which include the Vanilla WACC return) are separately RPI indexed.