

GD1 Price Control Financial Handbook

First publication: 1 February 2013

Effective date: 1 April 2013

Version 1.21 [15 September 2014](#)
[27 November 2014](#)

Contact: Ofgem Regulatory Finance Team

Tel: 020 7901 7000

Email: regulatoryfinance@ofgem.gov.uk

Overview:

This is the GD1 Price Control Financial Handbook which forms part of Special Condition 2A (Governance of GD1 Price Control Financial Instruments) of the Gas Transporter Licence held by gas distribution network operators.

This document consists of:

- a) a description of the GD1 Price Control Financial Model ('PCFM') and the Annual Iteration Process for it, used to update the licensee's Opening Base Revenue Allowances during the course of the RIIO-GD1 Price Control Period;
- b) an overview of the GD1 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 2A.

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-GD1 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-GD1 price control is longer than the previous gas distribution price control (known as GDPCR1), 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 gas distribution infrastructure management.

However, the RIIO price control mechanisms are also more dynamic. Under GDPCR 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-GD1, comprehensive adjustments to base revenue will be made each year in respect of the licensee's network business.

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

This Handbook (which forms part of Special Condition 2A) 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. RIIO-GD1 Price Control Financial Model ('PCFM')

www.ofgem.gov.uk - search term "PCFM"

- b. RIIO-GD1 Price Control Final Proposals

<http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=438&refer=Networks/GasDistr/RIIO-GD1/ConRes>

Contents

Introduction	9
Terms used in this handbook	10
1. The PCFM and the Annual Iteration Process	11
Overview	11
Price base.....	11
Temporal convention.....	12
The PCFM and the Annual Iteration Process	12
The GD1 Price Control Financial Model Working Group	17
Terms of reference	17
2. The GD1 Price Control Financial Methodologies	19
Methodologies in this handbook.....	19
Processing of different types of PCFM Variable Value under the Annual Iteration Process	22
3. Pension allowances - financial adjustment methodologies	25
Part 1 - Overview.....	25
Price control pension principles.....	26
Pension Scheme Established Deficit	26
Pension Scheme Administration and PPF levy	27
Temporal conventions	28
Part 2 - Updating allowances through the Annual Iteration Process	28
Reasonableness review	30
Part 3 – Established Deficit repair allowances	30
Determination and direction of revised EDE values by 30 November 2014	30
Determination and direction of revised EDE values by 30 November 2017	34
Direction of revised EDE values	38
Part 4 - Pension Scheme Administration and PPF levy allowances.....	39
Direction of revised APFE values	40
Part 5 - Processing of revised EDE and APFE values under the Annual Iteration Process.....	40
4. Tax liability allowances - financial adjustment methodologies	42
Part 1 - Overview.....	42
Temporal conventions	42
Annual Iteration Process.....	42
Price bases for tax calculations.....	44
Regulatory tax losses	44
Group tax arrangements.....	44
Part 2 - Adjustments driven by tax trigger events - methodology	45
Tax trigger events	45
Materiality threshold and 'deadband'	46
Accounting standards.....	46
Notification of tax trigger events.....	47
Logging of trigger events.....	49
Determination and direction of revised TTE values	50
Part 3 - Adjustments driven by gearing levels and corporate debt interest costs ('tax clawback') - methodology	52

Determination and direction of revised TGIE values	52
Direction of TGIE values	54
Part 4 - Processing of revised TTE and TGIE values under the Annual Iteration Process.....	55
5. Corporate debt - allowed percentage cost financial adjustment methodology	57
Overview	57
Temporal conventions	57
Methodology for determining revised PCFM Variable Values for the cost of corporate debt.....	58
Non-availability of iBoxx or Bank of England data	60
Use of revised PCFM Variable Values in the Annual Iteration Process	61
6. Totex Incentive Mechanism – financial adjustment methodology	62
Description of the Totex Incentive Mechanism (TIM)	63
Application of the TIM under the Annual Iteration Process.....	65
Determination of PCFM Variable Value revisions for actual Totex expenditure	67
Notification and direction of revised PCFM Variable Values.....	68
7. Uncertain costs allowed expenditure - financial adjustment methodology	69
Part 1 - Overview.....	69
Part 2 - Determination of PCFM Variable Value revisions for uncertain cost categories	72
Part 3 - Notification and direction of revised PCFM Variable Values	74
8. Mains and services replacement allowed expenditure - financial adjustment methodology.....	75
Mains and Services Replacement – allowed expenditure	75
Temporal convention.....	75
Determination and direction of revised RE values.....	76
Processing of RE values under the Annual Iteration Process	76
9. Innovation role-out mechanism allowed expenditure – financial adjustment methodology.....	78
Innovation roll-out mechanism	78
Overview	78
Temporal convention.....	79
Determination and direction of revised IRM values.....	79
Processing of IRM values under the Annual Iteration Process	79
10. Legacy price control adjustments – financial methodologies.....	81
Introduction	81
Overview	82
Conventions.....	83
Legacy adjustment calculation workbook	84
Part 1 - Determination of component value for legacy pension adjustment.....	85
Description of the adjustment	85
Determination of the value of the component term PAR.....	87
Restatement or adjustment of values used in the determination of PAR.....	88
Part 2 - Determination of component value for legacy gearing level and interest cost adjustment.....	89
Description of the adjustment	89

Restatement or adjustment of values used in the determination of TAR.....	91
Part 3 - Determination of component value for legacy non-gas fuel poor network extension scheme adjustment	91
Description of the FAR and FRAV adjustment	91
Determination of the value of the component term FAR and FRAV	92
Restatement or adjustment of values used in the determination of FAR and FRAV.....	93
Part 4 - Determination of component value for the legacy capex incentive scheme adjustment	93
Description of the adjustment	94
Restatement or adjustment of values used in the determination of CAR and CRAV	96
Part 5 – Determination of component value for legacy mains and services replacement expenditure adjustment	96
Description of the adjustment	97
Part 6 – Determination of component value for logged up and security costs adjustments relating to the legacy period	98
Restatement or adjustment of values used in the determination of SAR and SRAV	101
Part 7 – Determination of component value for the legacy licence error identified for the innovation funding incentive	101
Part 8 – Determination of component value for income adjusting events cost adjustments relating to the legacy period	102
Part 9 – Statement of component values and determination and direction of revised PCFM Variable Values	103
11. NTS Exit Capacity and Shrinkage cost allowance – financial adjustment methodology.....	105
Part 1 – Overview	105
Part 2 – Updating allowances through the Annual Iteration Process	106
Part 3 – Processing of revised AEx and ALSC values under the Annual Iteration Process.....	107
Appendix 1 - Glossary.....	108
Introduction	6
Terms used in this handbook.....	7
1. The PCFM and the Annual Iteration Process	8
Overview	8
Price base	8
Temporal convention.....	9
The PCFM and the Annual Iteration Process.....	9
The GD1 Price Control Financial Model Working Group	14
Terms of reference.....	14
2. The GD1 Price Control Financial Methodologies	16
Methodologies in this handbook	16
Processing of different types of PCFM Variable Value under the Annual Iteration Process.....	19
3. Pension allowances – financial adjustment methodologies	21
Part 1 – Overview	21

Price control pension principles	22
Pension Scheme Established Deficit	22
Pension Scheme Administration and PPF levy	23
Temporal conventions	24
Part 2—Updating allowances through the Annual Iteration Process	24
Reasonableness review	26
Part 3—Established Deficit repair allowances	26
Determination and direction of revised EDE values by 30 November 2014	26
Determination and direction of revised EDE values by 30 November 2017	30
Direction of revised EDE values	34
Part 4—Pension Scheme Administration and PPF levy allowances	35
Direction of revised APFE values	36
Part 5—Processing of revised EDE and APFE values under the Annual Iteration Process	36
4. Tax liability allowances—financial adjustment methodologies	38
Part 1—Overview	38
Temporal conventions	38
Annual Iteration Process	38
Price bases for tax calculations	40
Regulatory tax losses	40
Group tax arrangements	40
Part 2—Adjustments driven by tax trigger events—methodology	41
Tax trigger events	41
Materiality threshold and 'deadband'	42
Accounting standards	42
Notification of tax trigger events	43
Logging of trigger events	45
Determination and direction of revised TTE values	46
Part 3—Adjustments driven by gearing levels and corporate debt interest costs ('tax clawback')—methodology	48
Determination and direction of revised TGIE values	48
Direction of TGIE values	50
Part 4—Processing of revised TTE and TGIE values under the Annual Iteration Process	51
5. Corporate debt—allowed percentage cost financial adjustment methodology	53
Overview	53
Temporal conventions	53
Methodology for determining revised PCFM Variable Values for the cost of corporate debt	54
Non-availability of iBoxx or Bank of England data	56
Use of revised PCFM Variable Values in the Annual Iteration Process	57
6. Totex Incentive Mechanism—financial adjustment methodology	58
Description of the Totex Incentive Mechanism (TIM)	59

Application of the TIM under the Annual Iteration Process.....	61
Determination of PCFM Variable Value revisions for actual Totex expenditure	63
Notification and direction of revised PCFM Variable Values	64
7. Uncertain costs allowed expenditure—financial adjustment methodology	65
Part 1—Overview	65
Part 2—Determination of PCFM Variable Value revisions for uncertain cost categories	68
Part 3—Notification and direction of revised PCFM Variable Values.....	70
8. Mains and services replacement allowed expenditure—financial adjustment methodology	71
Mains and Services Replacement—allowed expenditure	71
Temporal convention.....	71
Determination and direction of revised RE values.....	72
Processing of RE values under the Annual Iteration Process	72
9. Innovation roll-out mechanism allowed expenditure—financial adjustment methodology	74
Innovation roll-out mechanism.....	74
Overview.....	74
Temporal convention.....	75
Determination and direction of revised IRM values.....	75
Processing of IRM values under the Annual Iteration Process.....	75
10. Legacy price control adjustments—financial methodologies.....	77
Introduction	77
Overview.....	78
Conventions.....	79
Legacy adjustment calculation workbook.....	80
Part 1—Determination of component value for legacy pension adjustment	81
Description of the adjustment	81
Determination of the value of the component term PAR.....	83
Restatement or adjustment of values used in the determination of PAR.....	84
Part 2—Determination of component value for legacy gearing level and interest cost adjustment.....	85
Description of the adjustment	85
Restatement or adjustment of values used in the determination of TAR.....	87
Part 3—Determination of component value for legacy non-gas fuel poor network extension scheme adjustment.....	87
Description of the FAR and FRAV adjustment.....	87
Determination of the value of the component term FAR and FRAV	88
Restatement or adjustment of values used in the determination of FAR and FRAV	89
Part 4—Determination of component value for the legacy capex incentive scheme adjustment.....	89
Description of the adjustment	90

Restatement or adjustment of values used in the determination of CAR and CRAV.....	92
Part 5—Determination of component value for legacy mains and services replacement expenditure adjustment.....	92
Description of the adjustment.....	93
Part 6—Determination of component value for logged up and security costs adjustments relating to the legacy period.....	94
Restatement or adjustment of values used in the determination of SAR and SRAV.....	97
Part 7—Determination of component value for the legacy licence error identified for the innovation funding incentive.....	97
Part 8—Determination of component value for income adjusting events cost adjustments relating to the legacy period.....	98
Part 9—Statement of component values and determination and direction of revised PCFM Variable Values.....	99
11. NTS Exit Capacity and Shrinkage cost allowance—financial adjustment methodology.....	101
Part 1—Overview.....	101
Part 2—Updating allowances through the Annual Iteration Process.....	102
Part 3—Processing of revised AEx and ALSC values under the Annual Iteration Process.....	103
Appendix 1—Glossary.....	104

Introduction

The GD1 Price Control Financial Handbook (this handbook) is one of the Price Control Financial Instruments referred to in Special Condition 2A (Governance of Price Control Financial Instruments) of the Gas Transporter Licence held by gas distribution network operators. It describes the Price Control Financial Model (PCFM) and the Annual Iteration Process for it, by which annual adjustments to the licensee's base revenues will be calculated. It also contains the Price Control Financial Methodologies ('the methodologies'), specified in relevant special conditions, which will be used to determine appropriate revisions to the variable values contained in the PCFM to facilitate calculations under the Annual Iteration Process. The methodologies also describe the intent and effects of revising the various PCFM Variable Values.

This handbook, the constituent methodologies and the PCFM (together the Price Control Financial Instruments) form part of Special Condition 2A. 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 special conditions;
- it provides for consistent treatment of the Totex¹ aspects of the price control;
- it maintains transparency on adjustments to base revenues, since the licence, methodologies, PCFM and variable values will be published; and
- it allows stakeholders to keep abreast of base revenue² levels and to carry out business sensitivity analysis.

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

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

¹ Total Expenditure – see Glossary

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

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 Office of the Gas and Electricity Markets Authority ("Ofgem") is the office that supports the Authority.

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

Other terminology

Throughout this handbook:

- (a) 'licence' means a Gas Transporter Licence issued under s7 of the Gas Act 1986 that includes "Standard Special Conditions applicable to all DN Licensees: Part D";
- (b) 'licensee' means every holder of a licence as defined at a) above, save that in the case of National Grid Gas plc any reference to the 'licensee' shall be a reference to each of the four individual Distribution Networks owned and operated by National Grid Gas plc (ie the East of England, London, North West and West Midlands Distribution Networks) together with the administrative and management resources deployed by National Grid Gas plc in operating each of those Distribution Networks, as though each of those Distribution Networks and the associated administrative and management resources were themselves the holder of a licence as defined at (a) above;
- (c) 'this handbook' means the GD1 Price Control Financial Handbook;
- (d) 'Special Condition' means any one of the "Special Conditions contained in Special Conditions Applicable to the Licensee (DN): Part E – RDN" of the licensee's licence;
- (e) 'Price Control Period' means the RIIO-GD1 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 PCFM and the Annual Iteration Process

Overview

1.1 Special Condition 1B (restriction of revenue in respect of the Distribution Network Transportation Activity) specifies the Opening Base Revenue Allowance³ for the licensee for each Formula Year of the Price Control Period, reflecting the Authority's Final Proposals for the RIIO-GD1 price control settlement.

1.2 The PCFM has been designed to calculate incremental changes to the licensee's Opening Base Revenue Allowances for each Formula 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 total expenditure (Totex⁴) 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 simplified⁵ formula below:

Base Revenue for year t = Opening Base Revenue Allowance for year t + MOD for year t.

Price base

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

1.5 Some tax calculations internal to the PCFM use nominal prices, based on embedded RPI forecast data. The use of nominal prices in the PCFM tax calculations

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

⁴ See Chapter 6 paragraphs 18 to 22

⁵ The full formula is shown in Special Condition 1B, para1B.5

ensures that revenue allowance calculations more accurately reflect the profile of tax expenses of the licensee.

1.6 Where a methodology in this handbook calls for values to be deflated from a nominal price base, used in price control review information reporting, to the 2009-10 price base used in the PCFM, the following formula will be used:

$$\text{value}_{2009-10} = \text{value}_{\text{nominal price year}} \times \frac{\text{RPI}_{2009-10}}{\text{RPI}_{\text{nominal price year}}}$$

Where:

$\text{value}_{2009-10}$	means the deflated value in the 2009-10 price base;
$\text{value}_{\text{nominal price year}}$	means the value in nominal prices, used in price control review information reporting;
$\text{RPI}_{2009-10}$	means the arithmetic average of the Retail Prices Index (all items) figures published by the Office for National Statistics for each calendar month in Formula Year 2009-10 rounded to three decimal places; and
$\text{RPI}_{\text{nominal price year}}$	means the arithmetic average of the Retail Prices Index (all items) figures published by the Office for National Statistics for each calendar month in the Formula Year referred to in the price control review information in question rounded to three decimal places.

Temporal convention

1.7 As indicated above, the MOD term is used to adjust the Opening Base Revenue Allowance figure for each Formula Year t during the Price Control Period⁶. References in this handbook to Formula 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 Formula Year $t-1$ would mean 2014-15 and so on.

The PCFM and the Annual Iteration Process

1.8 The PCFM exists as a constituent part of Special Condition 2A (Governance of GD1 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 Formula 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.

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

1.9 At the outset of the Price Control Period, the base revenue figures calculated by the PCFM, using the variable values subsisting at that time, constituted the Opening Base Revenue Allowance values for the licensee. Before the calculation of Opening Base Revenues Allowances were performed, Ofgem commissioned an external audit of the functionality of the PCFM and obtained an audit letter which has been published⁷.

1.10 Subject to paragraph 1.11, by 30 November in each Formula Year t-1, or as soon as is reasonably practicable thereafter, Ofgem will determine whether any PCFM variable values for the licensee should be revised in accordance with the special conditions and methodologies referred to in chapters 3 to 10 of this handbook.

1.11 The last Formula Year in which there will be an Annual Iteration Process for the PCFM is Formula Year 2019-20 for the purpose of determining the value of the term MOD for Formula Year 2020-21. Some financial adjustments provided for under the RIIO-GD1 Final Proposals will remain outstanding at the end of the Price Control Period, because relevant data will not be available in time for inclusion in the last Annual Iteration Process. For example, adjustments under the Totex Incentive Mechanism (see chapter 6) relating to actual and allowed expenditure levels in Formula Years 2019-20 and 2020-21 will remain outstanding. For the avoidance of doubt, adjustments of this type will be addressed under the RIIO-GD2 price control arrangements.

1.12 In order to facilitate the determination of revised PCFM Variable Values by 30 November, Ofgem will normally expect to apply the following annual cut-off dates:

- (a) 30 September in respect of functional changes to the PCFM; and
- (b) 31 October in respect of information submitted by the licensee and used under the Price Control Financial Methodologies.

1.13 In applying the cut-off referred to in paragraph 1.12(b), Ofgem will, through business correspondence, apprise the licensee of any provisionality it has attached to information submissions, which might entail a restatement of the information by the licensee for the purpose of making a further revision to the PCFM Variable Value(s) concerned for use in a subsequent Annual Iteration Process.

1.14 The Authority will give the licensee at least 14 days notice of any revised PCFM Variable Values in accordance with requirements in the licence to allow for any representations. The Authority will then (by 30 November in Formula Year t-1, or as soon as is reasonably practicable thereafter) specify any PCFM Variable Value revisions in a formal direction to the licensee. The direction will also include a screenshot of the PCFM Variable Values table for the licensee, showing the state of all variable values after the directed revisions, with revised values emboldened.

⁷ <http://www.ofgem.gov.uk/Networks/GasDistr/RIIO-GD1/ConRes/Documents1/GDpkf.pdf>

1.15 Having directed revisions to PCFM Variable Values for the licensee, Ofgem will carry out the Annual Iteration Process:

- revised PCFM Variable Values will be inputted in the appropriate Formula 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 updated, including:
 - the recalculated base revenue figure for the licensee for each Formula Year of the Price Control Period, and
 - the modelled RAV balance for the licensee;
- the PCFM will output the value of MOD for Formula Year t for the licensee.

1.16 The output value of MOD_t for the licensee will reflect the difference between the recalculated base revenue figure for the licensee for Formula Year t (in the PCFM) and the Opening Base Revenue Allowance (PU term) set down in the licence. It will also reflect the difference between the recalculated base revenue figures held in the PCFM for Formula Years t-1 and earlier before the Annual Iteration Process and the recalculated base revenue figures for the licensee held in the PCFM for the same years after the Annual Iteration Process. The PCFM calculations will apply appropriate Time Value of Money Adjustments to the calculation of MOD_t , so that the licensee will be in the same economic position as if adjustments to Base Distribution Network Transportation Activity Revenue for years prior to Formula Year t had been notified to it in the Formula Year concerned.

1.17 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 Formula Year, it is not retrospectively changed as a result of a subsequent Annual Iteration Process – the value becomes a matter of record alongside the Opening Base Revenue Allowance value for the same year.

1.18 The steps of the Annual Iteration Process are specified in Special Condition 2B (Annual Iteration Process for the GD1 PCFM).

1.19 The Authority will issue a direction to the licensee giving the value of MOD_t by 30 November in each Formula Year t-1⁸ or as soon as reasonably practicable thereafter. In practice, it is expected that the value of MOD_t will be included in the direction of revised PCFM Variable Values referred to in paragraph 1.14. The value of MOD_t in the direction will be stated in £m to one decimal place.

1.20 The deadline of 30 November in Formula Year t-1 for the direction of PCFM Variable Value revisions and for the value of MOD_t reflects

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

- the deadline of 31 July in Formula Year $t-1$ by which the licensee must submit its price control information returns (covering activity in Formula Year $t-2$) to Ofgem, and
- the need for the licensee to have confirmation of its allowed base revenue in time to calculate and issue its use of system charges.

1.21 In the unlikely event that the Authority does not direct a value for MOD_t by 30 November in Formula Year $t-1$, paragraphs 11 to 13 of Special Condition 2B specify that:

- the Annual Iteration Process will stand uncompleted;
- the Authority will complete the Annual Iteration Process as soon as reasonably practicable by directing a value for MOD_t ; and
- in the intervening period, the value of MOD_t shall be held to be equal to the value ascertained by:
 - taking a copy of the PCFM in its state following the last completed Annual Iteration Process (excluding the effect of any functional modifications under Special Condition 2A made after the completion of that Annual Iteration Process);
 - using the selection facilities on the user interface sheet contained in that copy to select:
 - the name of the licensee; and
 - the Formula Year equating to Formula Year t ; and
 - recording the value of the term MOD_t for the Licensee that is shown as an output value.

1.22 Table 1.1 below summarises the timings for the Annual Iteration Process during the Price Control Period.

Table 1.1 Summary of timings for the Annual Iteration Process

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

State of the PCFM

1.23 As mentioned in paragraph 1.8, the PCFM exists as a constituent part of Special Condition 2A 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 2A (Governance of GD1 Price Control Financial Instruments).

1.24 Ofgem will keep a log of modifications to the PCFM and publish this log on its website.

1.25 A copy of the PCFM in its latest state will be maintained on the Ofgem website. This will allow the licensee and other stakeholders to make copies of the PCFM so that they can:

- use their own forecasts of PCFM Variable Value revisions to forecast base revenue positions and to conduct sensitivity analysis; and
- reproduce the calculation of MOD_t by 30 November in each Formula Year t-1.

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

1.26 An updated copy of the PCFM will be uploaded to the website by 30 November each year (after each Annual Iteration Process) with the electronic file name "GD1 PCFM November 20XX" (where 20XX represents the calendar year containing the month of November in Formula Year t-1).

Error of functionality in the PCFM

1.27 In the event that an error of functionality is discovered in the PCFM, the following procedure would be followed:

- the issue would be considered at the earliest opportunity by the PCFM 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_t;
- the procedure in Special Condition 2A for modifications to the PCFM would be followed.

The GD1 Price Control Financial Model Working Group

1.28 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 PCFM Working Group ('the working group') are set out below.

1.29 In accordance with the provisions of Part A of Special Condition 2A (Governance of GD1 Price Control Financial Instruments), the Authority will have regard to any views expressed by the working group when assessing whether any proposed modification of the PCFM would be likely to have a significant impact on the licensee or other stakeholders.

Terms of reference

Purposes of the working group

1.30 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 Formula Year;
- (ii) to provide, when requested by the Authority, its views to the Authority on the impact of any proposed modifications to the PCFM in accordance with Part A of Special Condition 2A; and
- (iii) to provide such views or recommendations to the Authority with regard to the PCFM as it sees fit.

Composition

1.31 The composition of the group will be:

- Ofgem (chair);

- Ofgem (secretary);
- one representative per licensee;
- Energy Networks Association representative (optional).

Timing and duration of the group's work

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

1.33 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 1.30(ii)).

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

1.35 A meeting of the working group will be quorate, for the purpose of expressing a view or recommendation in respect of the PCFM, when at least one representative from Ofgem, and at least one representative from every different GDN ownership group are present.

Resources

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

2. The GD1 Price Control Financial Methodologies

2.1 The GD1 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 RIIIO-GD1 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 PCFM under which values of the term MOD_t are calculated (see chapter 1). Any revised PCFM Variable Values determined under the methodologies will replace (over-write) the existing values contained in the PCFM Variable Values Table for the licensee in the PCFM as part of the Annual Iteration Process. The PCFM Variable Values table is on the Input worksheet of the PCFM and has been shaded blue to give clarity on where revised PCFM Variable Values need to be input; this area is informally known as 'the blue box'. Alongside each row of the blue box is a description of the item and the PCFM Variable Value name detailed in table 2.1 below.

2.3 The methodologies are presented in chapters 3 to 10 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 2A (Governance of GD1 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.

Table 2.1

No	PCFM Variable Value	Special Condition	Description	Type of variable value
<u>Specified financial adjustments</u>				
1	EDE	3C	Pension Scheme Established Deficit	revenue allowance
2	APFE	3C	Pension Scheme Administration and PPF levy	revenue allowance

No	PCFM Variable Value	Special Condition	Description	Type of variable value
3	TTE	3C	Tax liability – tax trigger events	revenue allowance
4	TGIE	3C	Tax liability – gearing/interest costs	revenue allowance
5	CDE	3C	Allowed percentage cost of debt	Percentage

Totex Incentive Mechanism

6	ALC	3B	Actual load related capex expenditure	actual expenditure
7	AOC	3B	Actual other capex expenditure	actual expenditure
8	ACO	3B	Actual controllable opex expenditure	actual expenditure
9	ARE	3B	Actual replacement expenditure	actual expenditure

Allowed Totex expenditure adjustments

10	IAEEPS	3F	Uncertain costs – enhanced physical site security	allowed expenditure
11	IAESW	3F	Uncertain costs – specified street works	allowed expenditure
12	IAECCB	3F	Uncertain costs – connection charging boundary changes	allowed expenditure
13	IAESM	3F	Uncertain costs – smart metering roll out	allowed expenditure
14	IAELLC	3F	Uncertain costs – large load connections	allowed expenditure
15	IAEFP	3F	Uncertain costs – fuel poor network extensions	allowed expenditure
16	IAECA	3F	Uncertain costs –agency costs	allowed expenditure
17	RE	3E	Mains and services replacement expenditure	allowed expenditure

No	PCFM Variable Value	Special Condition	Description	Type of variable value
18	IRM	3D	Innovation roll out mechanism	allowed expenditure
19	AEx	1D	NTS Exit Capacity costs	cost adjustment
20	ALSC	1F	Shrinkage costs	revenue adjustment
<u>Legacy price control adjustments</u>				
1921	LAR	3A	Legacy price control adjustments to allowed revenue	true-up revenue allowance
2022	LRAV	3A	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-GD1 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 9 in Table 2.1) applies to any overspend or underspend by the licensee against its RIIO-GD1 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 10 to 18 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 9 of this handbook.

[2.9](#) Cost Allowance (numbers 19 to 20 in Table 2.1) relate to the adjustment mechanism set out in the 'Finance and uncertainty supporting document' chapter 8, para.s 8.36 to 8.41 in the RIIO GD1 Final Proposals. Overviews of the adjustment and the methodology for determining revisions to the associated PCFM Variable Values are contained in chapter 11 of this handbook.

[2.910](#) Legacy price control adjustments (numbers [2119](#) and [220](#) in Table 2.1) relate to activities which took place in the price control period prior to RIIO-GD1 but in respect of which a financial adjustment is required because:

- the outturn data for Formula Year 2012-13 was not available when Opening Base Revenue Allowances for the RIIO-GD1 price control were calculated;

- cost totals for items subject to true-up or logging-up were not available when Opening Base Revenue Allowances for the Price Control Period were set;
- it is possible for pre-RIIO-GD1 expenditure allowances to be adjusted under the terms of a RIIO-GD1 special condition; or
- there is an anomalous position, acknowledged by Ofgem and the licensee, that needs to be corrected.

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

2.4011 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 the Totex Capitalisation Rates, as:

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

Revenue allowance

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

Percentage

This type of variable value applies to the cost of corporate debt. As well as return, interest and tax calculations, corporate debt costs influence net present value calculations. Revised values for Formula Year t will flow into calculations of the return on RAV.

Actual expenditure

This type of variable value applies to the Totex Incentive Mechanism only and revised values affect fast and slow money calculations for the Formula Years concerned. These values will be obtained from the licensee's RIGs data tables relating to Formula Year t-2. These values may be adjusted as a result of efficiency reviews by Ofgem or as a result of the correction of errors. These adjustments could relate to Formula Year t-2 or any earlier year. Since the RIGs data tables contain values in nominal prices, these will be deflated to a

2009-10 price base using published RPI data (as set out in paragraph 1.6), so that they are consistent with the 2009-10 price base used in the PCFM.

True-up revenue allowance

These amounts relate to activity levels or outturn values for the price control period prior to RIIO-GD1. They are input as amounts in the Formula Year 2013-14 column of the PCFM and are spread over the eight years of RIIO-GD1 so as to reduce any volatility that may result.

True-up RAV additions

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

Consequential adjustments

2.1112 During the Annual Iteration Process, appropriate automatic adjustments are also made as a consequence of revisions to PCFM Variable Values. For example, in some circumstances, as a result of automatic updates to the licensee's net debt and RAV figures under the Annual Iteration Process, updated equity issuance allowances could also be included in recalculated base revenue figures for the Formula Years concerned.

A typical revision

2.1213 The GD1 Price Control Financial Methodologies describe the normal timing sequence for each PCFM Variable Value. For example, in relation to the driver for mains and services replacement expenditure (item 17 in Table 2.1) the normal sequence would be:

- activity level takes place in Formula Year t-2;
- activity level reported to Ofgem by 31 July in Formula Year t-1;
- revised PCFM Variable Value used in Annual Iteration Process to take place by 30 November in Formula Year t-1 (the variable value in the column equating to Formula 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 Formula Year t-2 flows through to value of MOD_t ie it affects base revenue in Formula Year t.

2.1314 A number of the special conditions provide for PCFM Variable Values to be directed for Formula Years outside the normal sequence. Where this is the case, the procedures are explained in the relevant methodologies in this handbook.



3. Pension allowances - financial adjustment methodologies

Part 1 - Overview

3.1 The Opening Base Revenue Allowances ('PU' values) for the licensee set down in the table at Appendix 1 to Special Condition 1B (Restriction of revenue in respect of the Distribution Network Transportation Activity) include allowances for:

- (a) Pension Scheme Established Deficit repair expenditure; and
- (b) Pension Scheme Administration and Pension Protection Fund (PPF) levy expenditure,

for each Formula Year of the Price Control Period.

3.2 These allowances are represented, respectively, by the opening EDE and APFE values⁹ held in the PCFM Variable Values Table for the licensee, contained in the PCFM and are expressed in 2009-10 prices. Opening EDE and APFE 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 3.5 below).

3.3 The allowance levels will be updated during the Price Control Period by revising EDE and APFE 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 and APFE values;
- the expected timing of revisions; and
- the effect on the licensee's allowed revenue of revising EDE and APFE values for the Annual Iteration Process.

3.4 In the context of Pension Scheme Established Deficit repair and Pension Scheme Administration/PPF levy expenditure, we refer to 'allowances' rather than 'allowed expenditure'. This is because, subject to the reasonableness tests referred to in this chapter, EDE and APFE values are added in full to recalculated base revenue figures in the PCFM under the Annual Iteration Process. It should be noted, however, that revisions to EDE and APFE values will have ancillary effects on other calculations under the Annual Iteration Process which also feed into recalculated base revenue figures.

⁹ as at 1 April 2013

Price control pension principles

3.5 Ofgem's price control pension principles were set out in the March 2011 decision on strategy for the RIIO-GD1 price control¹⁰, together with the updated guidance notes in the Final Proposals, to which reference should be made. In summary, they include the following key points:

- customers should expect to fund the efficient cost of providing a competitive employment package including pension costs in line with comparative benchmarks;
- customers should only fund the portion (of a wider group's pension costs) that is attributable to the gas transportation business;
- customers should not fund pension costs arising from a material failure of stewardship;
- pension costs should be assessed using actuarial methods, on the basis of reasonable assumptions in line with current best practice;
- under or over funding positions in preceding price control periods should be reflected in allowances, subject to being economic and efficient; and
- customers will not fund the cost of providing enhanced pension benefits granted under severance arrangements which have not been matched by increased contributions.

Pension Scheme Established Deficit

3.6 For the purposes of Special Condition 3C (Specified financial adjustments) and this chapter, the term 'Pension Scheme Established Deficit' means the difference between the assets and corresponding liabilities within a defined benefit pension scheme, sponsored by the licensee, which are:

- attributable to the licensee's transportation business; and
- attributable to pensionable service up to and including 31 March 2013.

3.7 The Authority may, following bilateral discussions, agree with the licensee that a different value (PSED_{ADJ}), be substituted for the PSED for the purposes of the methodology in this chapter provided that:

- (a) the licensee is one of the licensees named in paragraph 3.8;
- (b) its use will result in revised EDE values which give rise to allowances which both parties consider to be more appropriate; and
- (c) its use for determining any revision to EDE values is without prejudice to:
 - i) the meaning of the term Pension Scheme Established Deficit given in paragraph 3.6; and
 - ii) a reversion to the use of the licensee's PSED in any subsequent determination of revised EDE values for the licensee.

¹⁰ <http://www.ofgem.gov.uk/Networks/GasDistr/RIIO-GD1/ConRes/Documents1/GD1decisionfinance.pdf>

3.8 The licensees referred to in paragraph 3.7(a) are:

- National Grid Gas plc (with respect to its distribution network); and
- Northern Gas Networks Ltd.

3.9 If the Authority and the licensee decide that $PSED_{ADJ}$ should be used in place of PSED for the purpose of determining revised EDE values then:

- (a) the $PSED_{ADJ}$ will be used in place of the PSED for the licensee as indicated in subsequent paragraphs of this chapter; and
- (b) the Authority will include a statement specifying that a $PSED_{ADJ}$ value has been used in any direction of a revised EDE value for the purpose of an Annual Iteration Process.

~~3.7~~10 The proportion of a wider group pension scheme deficit which is attributable to the licensee's transportation business and to pensionable service up to and including 31 March 2013 will be determined in accordance with the deficit allocation methodology published by Ofgem. This amount may be adjusted by Ofgem acting reasonably, consistently with the price control pension principles and informed by the results of the reasonableness review.

~~3.118~~ Allowances for Pension Scheme Established Deficit repair are set at/revised to levels intended to allow the licensee to clear its Pension Scheme Established Deficit (by making payments to the pension scheme's trustees) over a 15 year period, beginning on 1 April 2013 (the Cut-Off date) and ending on 31 March 2028. The Price Control Period ends on 31 March 2021, but EDE values will be determined having regard to the projected Pension Scheme Established Deficit repair completion date of 31 March 2028.

Pension Scheme Administration and PPF levy

~~3.912~~ For the purposes of Special Condition 3C and this chapter, Pension scheme administration means the range of activities that pension scheme trustees are required by legislation to undertake or commission in running the pension scheme. It includes, without limitation, the keeping of scheme records, scheme management and administration, scheme policy and strategy, the provision of information to scheme members, the calculation and payment of benefits and liaison with tax and regulatory authorities, and the preparation of valuations. It does not include investment management fees which are remunerated by deduction from investment returns or costs which are the responsibility of the licensee, such as the costs of advisors to the licensee on managing or advising it on any and all aspects of its relationship with the trustees including recovery plans.

~~3.103~~ Pension scheme administration expenditure refers to payments made by the licensee to cover the proportion of Scheme administration costs attributable to its transportation business.

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

Costs and adjustments outside the scope of this chapter

Pension costs for service after 31 March 2013

3.125 Pension costs attributable to the licensee, but which relate to pensionable service on or after 1 April 2013 will be considered as a constituent part of labour costs for price control purposes. This includes annual funding costs relating to any incremental deficit which accrues in relation to such service, ascertained in accordance with the pension deficit allocation methodology. These costs therefore fall outside the scope of Special Condition 3C and this chapter.

True-up for pension payments by the licensee in the GDPCR1 price control period

3.163 For the price control period preceding RIIO-GD1 (the GDPCR1 price control), a true-up was 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.

Temporal conventions

3.147 For the purposes of Special Condition 3C and this chapter, "Formula Year t" means the Formula 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 Distribution Network Transportation Activity Revenue¹¹. References to Formula t-1 etc should be construed accordingly.

3.158 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 PCFM.

Part 2 - Updating allowances through the Annual Iteration Process

3.169 The licensee's allowances for Pension Scheme Established Deficit repair and Pension Scheme Administration/PPF levy costs will be updated during the Price Control Period to reflect:

¹¹ See Special Condition 1B (Restriction of revenue in respect of the Distribution Network Transportation Activity).

- information contained in pension scheme actuarial valuation reports provided by the licensee to Ofgem; and
- actual deficit funding payments and pension scheme administration and PPF costs information contained in the licensee's price control review information submitted to Ofgem.

3.1720 Special Condition 3C requires the Authority to determine annually whether any EDE or APFE values should be revised. However, the intention is that the values will actually be revised on two occasions during the Price Control Period, driven by the triennial scheme valuation cycle indicated in the timetable below.

Table 3.1 - Expected timetable for EDE and APFE value revisions

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

Note: The reasonableness review of the valuations as at 31 March 2019 will inform the reset and true up in RIIO-GD2.

3.1821 For licensees whose scheme triennial valuation dates differ to those shown in the first column of Table 3.1, licensees are required to provide either a full valuation (provided it is also used to determine the schemes deficit recovery plan) or an updated valuation at these dates. The approach which should be used by licensees to produce an updated valuation is defined in Ofgem's pension deficit allocation methodology.

3.1229 Ofgem will direct revised values for EDE and APFE values at other times, if that is necessary to reflect any revised timetable of information availability or

process completion. However, in those circumstances, EDE and APFE values would still be determined in accordance with the procedures set out in this chapter.

3.203 As set out in paragraph 3.4, revised EDE and APFE values feed directly into the recalculated base revenue figures in the PCFM for applicable Formula Years through the Annual Iteration Process. Incremental changes to recalculated base revenue figures for years earlier than Formula Year t 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.

Reasonableness review

3.241 In accordance with special licence condition 3C, after receiving the whole (or substantially the whole) of each scheme valuation data set, Ofgem will commission a review of those valuations and of the reasonableness of the licensee's Pension Scheme Established Deficit funding levels. That review will assist Ofgem in determining whether a licensee's pension costs are efficient. The expected completion times for the reasonableness reviews due to take place during the Price Control Period are shown in Table 3.1. The data set comprises:

- the actuarial valuation of the licensee's pension scheme(s), being either a full valuation as at the dates specified in Table 3.1 (ie 31 March 2013, 2016 and 2019) or an update of the last preceding full triennial valuation (where the date of the full valuation is not concurrent) with the asset and liability values rolled forward to the above date(s) on the basis set out in the pensions deficit allocation methodology document;
- the scheme's statement of funding principles;
- the scheme's statement of investment principles; and
- the completed deficit allocation methodology tables and other pension data tables and supporting documents specified in the price control review cost information regulatory instructions and guidance (RIGs) document provided under Standard Special Condition A40 (Regulatory Instructions and Guidance).

Part 3 – Established Deficit repair allowances

Determination and direction of revised EDE values by 30 November 2014

3.225 Subject to paragraph 3.24, revised EDE values will be determined by 30 November 2014 for each Formula Year from 2015-16 to 2020-21 using the methodology set out in Table 3.2 below.

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

Row	Timing	Event	Value
1	By 7 July 2014	Ofgem obtains the actuarial scheme valuation (on the basis set out in paragraph 3.21) for the licensee's defined benefit pension scheme as at 31 March 2013 and scheme datasets and commences a reasonableness review of all network operators' valuations as at 31 March 2013.	
2	By 31 July 2014	Ofgem receives price control review information from the licensee covering Formula Year 2013-14.	
3	By 30 September 2014	Licensee submits deficit allocation information and indicative Pension Scheme Established Deficit figure as at 31 March 2013.	
4	By 31 October 2014	(a) Ofgem carries out reasonableness review of information submitted by licensee on the latest valuations, ie 31 March 2013 valuations; and (b) determines the PSED Cut-Off Date Established Deficit amount as at 31 March 2013.	"A"
4(a)		<u>Where relevant agree a PSED_{ADJ} value with the licensee (see paragraphs 3.7 to 3.9).</u>	<u>"A₁"</u>
5	By 31 October 2014	PSED / PSED_{ADJ} Cut-Off Date Established Deficit amount as at 31 March 2013 deflated to 2009-10 prices using actual RPI data determined in accordance with paragraph 1.6.	"B"
6		Remaining deficit repair period established as 13 years (2027-28 minus 2014-15).	
7		Annual Pension Scheme Established Deficit repair allowance in 2009-10 prices computed as: = "B" / ((1-(1+DR)^ -13) / LN(1+DR)) Where: DR is the discount rate determined by a benchmarking process against energy network operators pre-retirement discount rates as applied in their valuations at step 1 and moderated against similar rates reported 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 C1 are set to zero and paragraph 3.24 below applies.	"C1"
Adjustment relating to licensee payment history in RIIO-GD1 period			

8	By 31 October 2014	<p>Ofgem obtains actual deficit repair payment attributable to the licensee:</p> <ol style="list-style-type: none"> Ofgem obtains relevant portion (ie the portion attributable to the licensee's transportation business) of the actual deficit repair payments made by the licensee in 2013-14, excluding any actual amounts relating to contingent asset costs (ED). Adjust for any disallowed costs for the Formula Year arising from Ofgem's reasonableness review (DC). Deflate to 2009-10 prices using actual RPI data determined in accordance with paragraph 1.6 <p>Steps (a) to (c) are computed as:</p> $= (ED - DC) * (RPI_{2009-10} / RPI_{year})$ <p>Where:</p> <p>"ED" is the licensee portion of Established Deficit repair payments during 2013-14 in nominal prices excluding actual contingent asset costs.</p> <p>"DC" is the value of disallowed costs for 2013-14 arising from Ofgem's relevant reasonableness review.</p> <p>"RPI₂₀₀₉₋₁₀" means the arithmetic average of the Retail Prices Index (all items) figures published by the Office for National Statistics for each calendar month in Formula Year 2009-10 rounded to three decimal places.</p> <p>"RPI_{year}" means the arithmetic average of the Retail Prices Index (all items) figures published by the Office for National Statistics for each calendar month in the Formula Year referred to in the price control review information in question rounded to three decimal places.</p>	<p>"D₂₀₁₂₋₁₃"</p> <p>"D₂₀₁₃₋₁₄"</p>
9		Obtain the pre-existing EDE allowance for 2013-14 (excluding any true-up amounts and, where relevant, any allowances for contingent asset costs) in 2009-10 prices as set out in Final Proposals for comparison to licensee's actual deficit repair payment.	"E"
10		<p>Obtain the difference between the pre-existing allowances and actual payments, and adjust for tax and the time value of money.</p> <ol style="list-style-type: none"> To ensure the correct treatment of costs after considering the impact of corporation tax, where the licensee has taxable profits in the year, there is a need 	"F"

		<p>to deduct the value of corporation tax (attributable to relevant deficit repair payments and allowances) to give the post-tax value of deficit repair payments and allowances for the year in question. This is calculated at the actual rate of corporation tax applicable to the relevant Formula Year ($CT_{2013-14}$). If the licensee does not have taxable profits for the year, this step is omitted.</p> <p>b) Adjust for the Time Value of Money Adjustment through to the date where EDE allowance values will be revised, ie 1 April 2015.</p> <p>c) To obtain the correct value to include in the PCFM this value is then divided by $(1 - CT_{2015-16})$ to give the correct tax adjusted value.</p> <p>Steps (a) to (c) are computed as follows:</p> $F = [(D - E) * (1 - CT_{2013-14}) * (1 + WACC_{2013-14}) * (1 + WACC_{2014-15})] / (1 - CT_{2015-16})$ <p>Where:</p> <p>"$CT_{2013-14}$" is the actual rate of Corporation Tax applicable in Formula Year 2013-14, or is zero if the licensee does not have taxable profits for the year.</p> <p>"$CT_{2015-16}$" is the actual rate of Corporation Tax applicable in the Formula Year that the EDE value is revised, ie Formula Year 2015-16, or is zero if the licensee does not have taxable profits for the year.</p> <p>"$WACC_{year}$" is the Vanilla Weighted Average Cost of Capital attributable in the relevant Formula Year.</p>	
11		<p>Spread the difference between the pre-existing allowance and actual payment evenly over the remaining 13 years of the notional 15-year funding period:</p> <p>The adjusting amount relating to each Formula Year is computed as (in 2009-10 prices):</p> $"G1" = \text{value "F"} / ((1 - (1 + DR)^{-13}) / \ln(1 + DR))$ <p>Where:</p> <p>DR is the discount rate determined using the methodology described in row 7. The value "G1" may be either positive (if the actual payment "D" is greater than the pre-existing</p>	"G1"

		allowance), or negative (if the actual payment "D" is less than the pre-existing allowance).	
12		<p>Obtain revised EDE values for the remaining years of RIIO-GD1, ie for each Formula Year from 2015-16 to 2020-21.</p> <p>This is determined as: "C1" + "G1".</p> <p>Note 2015-16 will remain the first Formula Year for which the EDE value is revised in the event that the adjustment is delayed by one or more years.</p>	

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

Scheme surplus

3.274 If the difference between the assets and corresponding liabilities referred to in paragraph 3.6 represents a surplus position for the Established Deficit as at 31 March 2013, then the value for "C1" at step 7 in table 3.2 above will be revised to zero pending the next review process set out in Table 3.3. The policy position with regard to pension scheme surpluses is set out in the March 2011 Strategy document and, as applicable, the relevant Final Proposals.

Determination and direction of revised EDE values by 30 November 2017

3.258 Subject to paragraph 3.27, revised EDE values will be determined by 30 November 2017 for each Formula Year from 2018-19 to 2020-21 using the methodology set out in Table 3.3 below.

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 7 July 2017	Ofgem obtains the actuarial scheme valuation (on the basis set out in paragraph 3.21) for the licensee's defined benefit pension scheme(s) as at 31 March 2016 and scheme datasets and commences a reasonableness review of those and all other network operators valuations as at 31 March 2016.	
2	By 31 July 2017	Ofgem receives price control review information from the licensee covering Formula Years 2014-15, 2015-16 and 2016-17.	

3	By 30 September 2017	Licensee submits deficit allocation information and indicative Pension Scheme Established Deficit figure relating to service up to 31 March 2013 as at 31 March 2013 and the movements to 31 March 2016 in accordance with the deficit allocation methodology.	
4	By 31 October 2017	Ofgem carries out reasonableness review of information submitted by licensee and determines the <u>PSED</u> Established Deficit position as at 31 March 2016.	"A"
<u>4(a)</u>		<u>Where relevant agree a PSED_{ADJ} value with the licensee (see paragraphs 3.7 to 3.9).</u>	<u>"A₁"</u>
5		PSED / PSED_{ADJ} Established Deficit amount as at 31 March 2016 deflated to 2009-10 prices using actual RPI data determined in accordance with paragraph 1.6.	"B"
6		Remaining deficit repair period established as 10 years (2027-28 minus 2017-18).	
7		Annual Pension Scheme Established Deficit repair allowance in 2009-10 prices computed as: = "B" / ((1-(1+DR) ⁻¹⁰) / LN(1+DR)) Where: "DR" is the discount rate determined by a benchmarking process against energy network operators pre-retirement discount rates as applied in their valuations at step 1 and moderated against similar rates reported by occupational pension schemes in Great Britain; and "LN" returns the natural logarithm of the subject value. If there is a surplus shown by the valuation, B and C2 are set to zero and paragraph 3.27 below applies.	"C2"
Adjustment relating to licensee payment history in RIIO-GD1 period			
8	By 31 October 2017	Ofgem obtains actual deficit repair payment attributable to the licensee: a) Obtain relevant portion (ie the portion attributable to the licensee's transportation business) of the actual deficit repair payments made by licensee in 2014-15, 2015-16, and 2016-17, excluding any actual amounts relating to contingent asset costs (ED). b) Adjust for any disallowed costs for each Formula Year identified in Ofgem's reasonableness review (DC). c) Deflate to 2009-10 prices using actual RPI data determined in accordance with paragraph 1.6.	"D ₂₀₁₄₋₁₅ " "D ₂₀₁₅₋₁₆ " "D ₂₀₁₆₋₁₇ "

		<p>Steps (a) to (c) are computed for each Formula Year as:</p> $= (ED - DC) * (RPI_{2009-10} / RPI_{year})$ <p>The formula for $D_{2014-15}$ is as follows:</p> $(ED_{2014-15} - DC_{2014-15}) * (RPI_{2009-10} / RPI_{2014-15})$ <p>The formula for $D_{2015-16}$ is as follows:</p> $(ED_{2015-16} - DC_{2015-16}) * (RPI_{2009-10} / RPI_{2015-16})$ <p>and for $D_{2016-17}$:</p> $(ED_{2016-17} - DC_{2016-17}) * (RPI_{2009-10} / RPI_{2016-17})$ <p>Where:</p> <p>"ED_{year}" is the licensee portion of Established Deficit repair payments during the relevant Formula Year, in nominal prices excluding actual contingent asset costs.</p> <p>"DC_{year}" is the value of disallowed costs for the relevant Formula Year arising from Ofgem's reasonableness review, based on valuation data as at 31 March 2016.</p> <p>"$RPI_{2009-10}$" means the arithmetic average of the Retail Prices Index (all items) figures published by the Office for National Statistics for each calendar month in Formula Year 2009-10 rounded to three decimal places.</p> <p>"RPI_{year}" means the arithmetic average of the Retail Prices Index (all items) figures published by the Office for National Statistics for each calendar month in the Formula Year referred to in the price control review information in question rounded to three decimal places.</p>	
9		<p>a) Obtain the pre-existing EDE annual allowances for 2014-15 as set out in Final Proposals and for 2015-16 and 2016-17 as reset at 1 April 2015 (ie value C1 established at step 7 in table 3.2 above), in 2009-10 prices for each year (E_{year}), in each case excluding (i) any true-up allowances and (ii) the amount set out in Final Proposals for contingent asset allowance amounts.</p>	<p>"$E_{2014-15}$"</p> <p>"$E_{2015-16}$"</p> <p>"$E_{2016-17}$"</p>
10		Obtain the difference between the pre-existing allowances and actual payments and adjust for tax and the time value of	"F"

		<p>money.</p> <p>a) To ensure the correct treatment of costs after considering the impact of corporation tax, where the licensee has taxable profits in the year, there is a need to deduct the value of corporation tax (attributable to relevant deficit repair payments and allowances) to give the post-tax value of deficit repair payments and allowances for the year in question. This is calculated at the actual rate of corporation tax applicable to the relevant Formula Year (CT_{year}). If the licensee does not have taxable profits for the year, this step is omitted.</p> <p>b) Adjust for the Time Value of Money Adjustment through to the date where EDE allowance values will be revised, ie 1 April 2018.</p> <p>c) To obtain the correct value to include in the PCFM this value is then divided by $(1 - CT_{2018-19})$ to give the correct tax adjusted value.</p> <p>Steps (a) to (c) are computed for each Formula Year as set out below:</p> <p>The formula for $F_{2014-15}$ is as follows:</p> $\frac{[(D_{2014-15} - E_{2014-15}) * (1 - CT_{2014-15}) * (1 + WACC_{2014-15}) * (1 + WACC_{2015-16}) * (1 + WACC_{2016-17}) * (1 + WACC_{2017-18})]}{(1 - CT_{2018-19})}$ <p>The formula for $F_{2015-16}$ is as follows:</p> $\frac{[(D_{2015-16} - E_{2015-16}) * (1 - CT_{2015-16}) * (1 + WACC_{2015-16}) * (1 + WACC_{2016-17}) * (1 + WACC_{2017-18})]}{(1 - CT_{2018-19})}$ <p>The formula for $F_{2016-17}$ is as follows:</p> $\frac{[(D_{2016-17} - E_{2016-17}) * (1 - CT_{2016-17}) * (1 + WACC_{2016-17}) * (1 + WACC_{2017-18})]}{(1 - CT_{2018-19})}$ <p>The value of "F" is:</p> $"F" = F_{2014-15} + F_{2015-16} + F_{2016-17}$ <p>Where:</p> <p>"CT_{year}" is the actual rate of Corporation Tax applicable in the Formula Year, or is zero if the licensee does not have taxable profits for the year.</p> <p>"$CT_{2018-19}$" is the actual rate of Corporation Tax applicable in</p>	
--	--	---	--

		<p>the Formula Year that EDE values are revised, ie Formula Year 2018-19, or is zero if the licensee does not have taxable profits for the year.</p> <p>"WACC_{year}" is the Vanilla Weighted Average Cost of Capital attributable in the relevant Formula Year.</p>	
11		<p>Spread the difference between the pre-existing allowance and actual payment evenly over the remaining 10 years of the notional 15-year funding period.</p> <p>The adjusting amount relating to each Formula Year is computed as (in 2009-10 prices):</p> $= \text{value "F"} / ((1-(1+DR)^{-10}) / \text{LN}(1+DR))$ <p>Where:</p> <p>DR is the discount rate determined using the methodology set out in row 7.</p> <p>The value "G2" may be either positive (if actual payments at are greater than the pre-existing allowance), or negative (if actual payments at are less than the pre-existing allowances).</p>	"G2"
12		<p>Obtain revised EDE values for the remaining years of RIIO-GD1, ie for each Formula Year from 2018-19 to 2020-21.</p> <p>This is determined as: "C2" + "G2" (above) + "G1" (from Table 3.2 above).</p>	

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

Scheme surplus

3.2730 If the difference between the assets and corresponding liabilities referred to in paragraph 3.6 represents a surplus position for the Established Deficit as at 31 March 2016, then values for "C2" at step 7 in table 3.3 above for Formula Years from 2018-19 onwards will be revised to zero pending the next triennial determination. 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 values

3.2831 The Authority will direct revised EDE values by no later than 30 November 2014 and 30 November 2017 in accordance with the procedure set out in Part D of Special Condition 3C.

Part 4 - Pension Scheme Administration and PPF levy allowances

- 3.2329 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 Special Condition A40 (Regulatory Instructions and Guidance) of the licence.
- 3.303 Revised APFE values will be determined in accordance with the steps set out below by 30 November 2014 and 30 November 2017.

Values to be directed by 30 November 2014

- (i) The actual aggregated Pension Scheme Administration and PPF levy expenditure reported by the licensee in its price control review information submissions for Formula Year 2013-14 will be obtained.
- (ii) The expenditure amounts in (i) will be deflated to 2009-10 prices using actual RPI data.
- (iii) The aggregate price control allowance (in 2009-10 prices) for Pension Scheme Administration and PPF levy expenditure for that year set out in the relevant Final Proposals will be obtained, to which is added the annual adjustment threshold amount of £1m.
- (iv) If the amount referred to in step (iii) is exceeded by the amount in step (ii), the excess amount only will be added to the pre-existing amount allowance at the price control for that item.
- (v) If the amount at (ii) is less than the pre-existing price control allowed value at (iii), then no revision to the price control value will be made.
- (vi) The excess at (iv) will be added to the pre-existing APFE value to determine the revised APFE value for Formula Year 2013-14.
- (vii) Ofgem will review Pension scheme administration and PPF levy costs based on actual costs incurred in previous years and known changes to the PPF levies advised by the PPF and, subject to them being 2015-16, 2016-17 and 2017-18. Revised APFE values for the years 2018-19, 2019-20 and 2020-21 will also be reset at this stage but will be subject to further revision in November 2017.

Values to be directed by 30 November 2017

- (i) The actual aggregated Pension Scheme Administration and PPF levy expenditure reported by the licensee in its price control review

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

Direction of revised APFE values

3.2134 The Authority will direct revised APFE values no later than 30 November 2014 and 30 November 2017 respectively as computed above in accordance with the procedure set out in Part D of Special Condition 3C.

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

3.35422 EDE and APFE values, as revised, are included in full in recalculated base revenue figures in the PCFM under the Annual Iteration Process. Revisions to EDE and APFE values will have ancillary effects on other calculations under the Annual Iteration Process, which also feed into recalculated base revenue figures.

- | 3.[36423](#) Incremental changes to recalculated base revenue figures for years earlier than Formula Year t 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.
- | 3.[24375](#) EDE and APFE values are not added to RAV and are not subject to the Totex Incentive Mechanism.

4. Tax liability allowances - financial adjustment methodologies

Part 1 - Overview

4.1 The Opening Base Revenue Allowances ('PU' values) for the licensee set down in the table at Appendix 1 to Special Condition 1B (Restriction of revenue in respect of the Distribution Network Transportation Activity) 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 Condition 3C provides for adjustments to be made to the licensee's tax liability allowances¹² during the Price Control Period commencing 1 April 2013 through the Annual Iteration Process for the GD1 Price Control Financial Model (PCFM). 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 to the factors referred to at sub-paragraph 4.1(c) are referred to as 'tax clawbacks' and the methodology for adjustments is set out in Part 3 of this chapter.

Temporal conventions

4.3 For the purposes of Special Condition 3C and this chapter, "Formula Year t " means the Formula 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 Distribution Network Transportation Activity Revenue¹³.

Annual Iteration Process

4.4 The adjusting of the licensee's tax liability allowances and regulatory tax losses balance (see paragraph 4.11) is carried out through the Annual Iteration Process for the PCFM. The PCFM Variable Values Table for the licensee contains rows for PCFM Variable Values for tax liability allowance adjustments driven by:

¹² References in this chapter to tax liabilities are references to liabilities for corporation tax only and not to any other type of taxation.

¹³ See Special Condition 1B (Restriction of revenue in respect of the Distribution Network Transportation Activity).

- tax trigger events ('TTE' values); and
- tax clawbacks ('TGIE values').

4.5 TTE and TGIE values represent £m amounts. As at 1 April 2013, the TTE and TGIE values for the licensee, for each Formula Year will be zero. Part B of Special Condition 3C (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 Subject to paragraph 4.7, revisions to TTE and TGIE values feed into the recalculated base revenue figures and/or the regulatory tax losses balance for applicable Formula Years in the PCFM, through the Annual Iteration Process. Incremental changes to recalculated base revenue figures for years earlier than Formula Year *t* are, subject to a Time Value of Money Adjustment, brought forward and reflected in the calculation of the term MOD to be directed for Formula Year *t*. For the avoidance of doubt, such changes will not have any retrospective effect on a previously directed value of the term MOD.

4.7 Any recalculation of the licensee's tax liability allowances necessarily includes an iterative modelling aspect: an increased allowance gives rise to an increased liability which requires an increased allowance and so on. The effect can be either positive or negative. This 'tax allowance on tax allowance' issue is dealt with as follows:

- In respect of tax trigger adjustments, revised TTE values (determined using the tax trigger calculation tool referred to in the methodology in Part 2 of this chapter) incorporate the iterative calculations and no further processing is required as part of the Annual Iteration Process.
- In respect of tax clawback adjustments, revised TGIE values (determined under the methodology in Part 3 of this chapter) do not incorporate the iterative calculations and these are instead factored into recalculated base revenue figures by functionality within the PCFM as part of the Annual Iteration Process.

4.8 It should be noted that underlying tax liability allowances for the licensee within the PCFM might also be changed under the Annual Iteration Process as a consequence of other variable value changes, such as increases in allowed Totex expenditure. However, these changes are distinct from the specific adjustments to tax liability allowances under the methodologies in this chapter. Assumptions in respect of the allocation of the component elements of allowed Totex expenditure to capital allowance pools and revenue expenditure in the PCFM as set out in the Final Proposals will not be updated in the Price Control Period.

Price bases for tax calculations

4.9 The PCFM works in constant 2009-10 prices, with all inputs and outputs in this price base. Where applicable, financial amounts which are expressed in later, nominal prices, will be deflated to 2009-10 prices in accordance with paragraph 1.6 before being used to determine revised TTE and TGIE values.

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

Regulatory tax losses

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

Group tax arrangements

4.12 For the purposes of the methodology set out in Part 2 of this chapter, tax liabilities, allowances and trigger events are considered on a notional 'licensee business' basis, and consequently the following are disregarded in the assessment of tax liabilities and allowances for price control purposes:

- the claim or surrender of group tax relief (including consortium relief);
- interest payments (including any coupon on any debt instrument or preference share dividend) and receipts which are not tax deductible or chargeable under HMRC rules for the purposes of computing the licensee's taxable profits, including but not limited to adjustments for transfer pricing and the "worldwide" debt cap; and
- any other adjustments required in appendix 1 of the July 2009 decision letter¹⁴.

4.13 For the purposes of the methodology set out in Part 3 of this chapter, levels of debt, interest and gearing are considered at licensee level or, for National Grid Gas plc each of its distribution networks level, as opposed to any other level with respect to the corporate or ownership group of which the licensee is a member.

¹⁴ Open letter: Clawback of tax benefit due to excess gearing

Part 2 - Adjustments driven by tax trigger events - methodology

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

Tax trigger events

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

Type A

Type A events consist of:

- changes to corporation tax rates, applicable to one or more Formula Years; and
- changes to capital allowance rates applicable to one or more Formula 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 Formula Years including:

- changes to applicable legislation;
- the setting of legal precedents through case law;
- changes to HMRC interpretation of legislation; and
- changes in accounting standards.

4.16 Where a Type B event changes the allocation of allowable expenditure into different capital allowance pools or introduces new capital allowance pools, the PCFM will only be adjusted for the scale of the change driven by the policy. The applicable allocation and allowance rates will be adjusted to take into account the new expected allocation basis from the introduction of a new capital allowance pool or pools. There is no adjustment of allocations to licensee's actual allocations for Formula Years up to the date of the change. We will work with licensees to quantify changes to allocations where these are not straightforward.

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

Materiality threshold and 'deadband'

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

4.19 The materiality threshold is a fixed value for each Formula Year of the Price Control Period. The threshold was determined for each Formula Year as the greater of:

- 0.33 per cent of the Opening Base Revenue Allowance for the licensee for the Formula Year concerned; and
- the effect that a one per cent change in the rate of corporation tax would (all other things being equal) have had on the calculation of the Opening Base Revenue Allowance for the licensee for the Formula Year concerned.

4.20 A change to notional 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 liability allowances for that year whose absolute value is greater than the threshold amount. Furthermore, any change to the tax liability allowance (upward or downward) is limited to the amount which is in excess of the threshold amount for the year concerned.

4.21 Where the change to the licensee's tax liability allowance for a particular Formula Year is below the threshold, subsequent tax trigger events, relating back to that Formula Year could cause the threshold amount to be exceeded. In that case, a change to the licensee's tax liability allowance for the Formula year concerned (a revised TTE value) would be determined once the threshold has been exceeded. Note that there is no retrospective adjustment to MOD terms already directed. Adjustments become component parts of future MOD calculations only.

4.22 For the avoidance of doubt, a regulatory tax loss figure attributable to a particular Formula Year is not taken into account for the purposes of deciding whether the threshold amount has been exceeded for that year.

Accounting standards

4.23 The licensee's tax liability calculations are subject to:

- changes to applicable legislation;
- the setting of legal precedents through case law;
- changes to HMRC interpretation of legislation; and

- changes in accounting standards applicable to preparation of the licensee's statutory accounts¹⁵

4.24 The accounting frameworks to be applied by the licensee for the purpose of computing tax liabilities are:

- UK GAAP in respect of Formula Years 2013-14 and 2014-15; and
- for each subsequent Formula Year either:
 - EU-IFRS, if adopted for use by the licensee; or
 - UK GAAP under Financial Reporting Standard 102.

Notification of tax trigger events

Type A trigger events

4.25 Ofgem will, by 30 September in each Formula 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 place by 30 November in that same Formula Year t-1. It is, however, open to the licensee to contact Ofgem in advance of 30 September in each Formula Year t-1 to discuss the current view of Type A events. If Ofgem does not notify the licensee by 30 September in any year, the adjustments will be made in the subsequent year.

4.26 The notification from Ofgem will specify the corporation tax rate change(s) or changes to rates of capital allowances concerned and the Formula Years to which they relate.

4.27 If, after receiving the notification referred to in paragraph 4.25, the licensee considers that a Type A trigger event has occurred, which has not been included in the notification, it should contact Ofgem within 14 days and provide details of the event concerned. If Ofgem agrees that a further Type A trigger event has occurred, it will notify the licensee by 31 October in the same Formula Year t-1.

4.28 If any Type A trigger event is left out of account when it ought to have been included in the determination of a revised TTE 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.

¹⁵ Section 385 of the Companies Act 2006 refers.

Type B trigger events

4.29 The licensee must notify Ofgem not later than 30 September in each Formula Year t-1 of all the Type B trigger events that it becomes aware of, except those which have been previously notified. This requirement applies equally to events which could be expected to increase or to reduce the licensee's tax liability allowances.

4.30 If the licensee fails to notify Ofgem of any events it becomes aware, or should be aware of then subject to the licensee demonstrating that it uses reasonable endeavours to identify all Type B trigger events this may not be held a breach of the licence conditions. We will deal with each event on its merits on a case-by-case basis.

4.31 The notification referred to in paragraph 4.29 should include, in respect of each Type B trigger event:

- (a) a description of the event;
- (b) the changes in tax liability allowances which the event is considered to cause and the Formula Years to which they relate;
- (c) the calculations (including all relevant parameters and values) which the licensee used to arrive at the amounts referred to in sub-paragraph (b). In performing these calculations the licensee should include a 'tax allowance on tax allowance' factor as explained in paragraph 4.7 but should ignore the tax trigger deadband which is adjusted for in paragraph 4.40;
- (d) any relevant information provided by HMRC in relation to the event;
- (e) evidence of mitigating measures which the licensee has taken to minimise any additional liabilities arising from the event; and
- (f) whether the licensee agrees or disagrees with HMRC, whether they may contest it; and how they intend to report it in the tax submissions and their statutory and regulatory accounts.

4.32 The licensee's notification should also state whether the licensee considers that the materiality threshold (see paragraph 4.18) has been exceeded for the Formula Year(s) concerned, taking into account the total net amount of tax liability changes (upward and downward) included in the current notification and any previous notifications.

4.33 Ofgem will review any notifications given to it by the licensee under paragraph 4.29 and may ask the licensee:

- for additional information in respect of one or more of the notified events; and/or

- to submit the results of agreed upon audit procedures, specified by Ofgem and carried out by the licensee's appropriate auditors¹⁶, to assist in confirming the appropriateness and accuracy of the licensee's calculations.

4.34 Ofgem will inform the licensee by 31 October in the same Formula 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.

4.35 Where Ofgem determines a different change in tax liabilities figure from that calculated by the licensee or decides that consideration of any change in tax liabilities should be deferred, it will set out its reasons and/or calculations. The licensee has the right to reply setting out its objections, which Ofgem will consider.

4.36 Ofgem will also notify the licensee by 31 October in each Formula Year t-1, of any Type B trigger events that it proposes to take into account which have not been included in a notification sent to Ofgem by the licensee. The licensee has the right to reply setting out its objections, which Ofgem will consider.

4.37 The final quantification and adjustment for any type B trigger event will be deemed to have occurred when the licensee and HMRC conclude the agreement of the licensee's tax liabilities for the relevant Formula Year concerned. This means that the final quantification will typically either confirm a prior value of TTE or revise a value of TTE for a year t-2 or earlier. The adjustment to TTE values will be directed in accordance with paragraphs 4.43 to 4.45.

Logging of trigger events

4.38 Ofgem will keep a log of tax trigger events which have been subject to notifications by it or by licensees showing for each event:

- a description of the event and whether it was Type A or Type B;
- the name of the party who notified the event (Ofgem or licensee);
- the date of notification;
- the amount of any change in the licensee's tax liabilities which has been determined under the procedures set out below; and

¹⁶ As defined in Standard Special Condition A3 of the Gas Transporter Licence

- 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

4.39 The design of the PCFM includes additional functionality meaning that a copy of the PCFM (held on Ofgem's website) can be used as a tax trigger calculation tool, as an adjunct to the Annual Iteration Process.

4.40 Once a tax trigger event has taken place at any point in the RIIO-GD1 Price Control Period, then after 31 October in each Formula Year t-1, Ofgem will generate a duplicate copy of the PCFM, in its state following the last completed Annual Iteration Process (but including any subsequent functional modifications under Special Condition 2A) for use as the tax trigger calculation tool. It will then take the following steps to determine TTE values for each licensee:

- (i) All of the other PCFM Variable Value revisions which have been determined for use in the prospective Annual Iteration Process (and which Ofgem expects to include in the notices of proposed Variable Value revisions to licensees) will be applied to the Variable Values Table. The correct Relevant Year will be selected using the PCFM year t selector on the User interface worksheet of the PCFM.
- (ii) All of the existing TTE values will be re-set to zero.
- (iii) Any existing values in the yellow input cells on the tax trigger worksheet will be cleared.
- (iv) The 'Tax allowance (pre-losses) before tax trigger' amount for the licensee for each Formula Year shown on the tax trigger worksheet will be noted.
- (v) The PCFM copy will be put into 'tax trigger tool mode' using the selector on the User Interface worksheet of the PCFM.
- (vi) Changes to corporation tax rates or writing down allowance rates (reflecting Type A trigger events) will be input into the yellow input cells in the appropriate rows and Formula Year columns on the tax trigger worksheet.
- (vii) The tax trigger macro calculation programmed into the workbook will be run.
- (viii) The aggregate changes to the licensee's tax liability allowances determined in respect of all Type B trigger events (whether notified during Formula Year t-1 or on an earlier occasion) will be input into the yellow input cells on the 'Tax Trigger' row of the 'B event value' section in the appropriate Formula Year columns on the tax trigger worksheet. This value should include the iterative tax allowance on tax allowance factor referred to in paragraph 4.7.
- (ix) The tax trigger macro calculation will be re-run.

- (x) The 'tax allowance (pre-losses) before tax trigger' referred to at step (iv) will be deducted from the 'Tax allowance' that has been calculated based on the new inputs (including both Type A and Type B trigger events).
- (xii) The absolute value of the amount obtained under step (x) will be ascertained.
- (xiii) If the absolute value ascertained at step (xi) is less than the deadband amount (which is a fixed amount for each Formula Year), the tax trigger adjustment is shown as zero; otherwise step (xiii) applies.
- (xiv) If the value calculated at step (xi) is greater than the deadband amount then:
 - (i) if the amount obtained under step (x) is negative, the tax trigger adjustment is shown as that amount plus the deadband ; or
 - (ii) if the amount obtained under step (x) is positive, the tax trigger adjustment is shown as that amount minus the deadband.

4.41 Subject to paragraph 4.42, the relevant amounts obtained under step (xii) or (xiii) will then be determined to be the TTE values for the licensee for each Formula Year where the deadband has been exceeded. Where these values differ from the TTE values shown on the Variable Values Table for the licensee in the 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 Condition 3C and referred to below.

4.42 The process set out in paragraph 4.40 will be re-performed, if any of the PCFM Variable Values, referred to at step (i) are changed, to ensure that accurate TTE values are available for the Annual Iteration Process.

Notes on the tax trigger calculation

- 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 (ii) together with the inclusion of all determined changes to the licensee's tax liabilities referred to in step (viii) ensures that the determination of TTE values under step (xiii) is on a consistent basis and accurately applies the materiality threshold/deadband applicable to each Formula Year.
- The inclusion of all available revisions to other PCFM Variable Values under step (i) ensures that the tax allowance calculation is as up to date as possible for each Formula Year.
- Once a tax trigger event has occurred in any prior year, the tax trigger calculation will need to be run in all subsequent years, even if no tax trigger event occurs in the year of running the calculation.

Direction of revised TTE values

4.43 The Authority will direct any revisions to TTE 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.

4.44 Revised TTE values can be directed in respect of a particular Annual Iteration Process for any Formula Year during the Price Control Period, including for years later than year t.

4.45 The procedure for the Authority's direction of revised TTE values is set out in Part D of Special Condition 3C.

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

4.46 At the outset of the Price Control Period, modelling assumptions are made about financing requirements, gearing levels and corporate debt costs for the licensee's business. These result in modelled levels of tax deductible interest costs and tax relief for the licensee.

4.47 If the licensee operates at a higher level of gearing than the modelled level, it stands to benefit from the tax value of higher levels of deductibility. We apply a mechanism which 'claws back' this benefit for consumers by updating the licensee's tax liability allowances using the methodology set out in this Part. It should be noted that there is no provision to give additional tax allowances to the licensee if it chooses to operate at a level of gearing lower than the modelled one.

Determination and direction of revised TGIE values

4.48 As a function of each Annual Iteration Process of the PCFM, for each year in the period 2013-14 to 2020-21 inclusive, updated figures for the expected amount of tax deductible interest payable by the licensee is calculated. These are shown as core and non-core elements in the Finance and Tax worksheet.

4.49 After 30 September in each Formula 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 PCFM, in its state following the last completed Annual Iteration Process (but including any functional modifications under Special Condition 2A)¹⁷.

¹⁷ The determination in respect of Formula Year t-2 will use the data subsisting immediately after the preceding Annual Iteration Process, which will have taken place by 30 November in Formula Year t-2. It will not therefore have been updated in respect of information reported by the licensee during Formula

4.50 The licensee is required to submit its price control cost reporting pack by 31 July in each Formula Year t-1¹⁸, in accordance with standard special condition A40 (Regulatory Instructions and Guidance) of the gas transporter's licence and the Price Control Cost Reporting Rules: Instructions & Guidance ('RIGs') issued under that condition.

4.51 Ofgem will obtain from the 'tax clawback data table' in that submission:

- (i) the licensee's view of 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.

4.52 The criteria, which the licensee must observe in reporting each of these adjusted items, are set out in the Cost and Revenue Reporting RIGs; and Ofgem reviews the licensee's reporting in this regard.

4.53 Ofgem will obtain from the PCFM :

- The licensee's indicative RAV (including any Shadow RAV) balance¹⁹ in 2009-10 prices as at 31 March in Formula Year t-2 and inflate to year-end prices for Formula Year t-2 using the arithmetic average of the RPI data for March of Formula Year t-2 and April of Formula Year t-1; and
- The modelled figure for tax deductible interest payable by the licensee in Formula Year t-2.

Applicability tests

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

Gearing level test

4.55 Ofgem will divide the licensee's net debt figure as at 31 March in Formula Year t-2 (see paragraph 4.51(i)) by the licensee's indicative PCFM RAV (including any Shadow RAV) balance as at 31 March in Formula Year t-2 (see paragraph 4.53) to obtain an actual calculated gearing ratio.

Year t-1. However, the annual re-performance of the determination for preceding years will ensure that finalised figures are subsequently taken into account.

¹⁸ Subject to any changes to Standard Special Condition A40 (Regulatory Instructions and Guidance)

¹⁹ As set out at the foot of the "Finance & Tax" worksheet in the PCFM for "RAV (including Fuel Poor)"

4.56 If the actual calculated gearing ratio established under paragraph 4.55, expressed as a percentage, is greater than the notional level of gearing as set out in the Final Proposals, ie 65 per cent, then the positive benefit test will be performed. If the positive benefit test is not to be performed then TGIE is zero.

Positive benefit test

4.57 Ofgem will subtract "interest" as set out in the PCFM in the Finance and Tax worksheet by the licensee in Formula Year t-2 (see paragraph 4.49) from the adjusted tax deductible interest payable reported by the licensee and treated as a positive value (see paragraph 4.51(ii)) for Formula Year t-2. If the resultant amount is positive then the clawback has been triggered.

4.58 If the amount is zero or negative meaning there is no positive tax benefit the clawback is not triggered and the value of TGIE is zero. If the clawback has been triggered, Ofgem will multiply the result in 4.57 by the corporation tax rate for the licensee (as hard coded in the PCFM) to derive the licensee's benefit figure which becomes TGIE.

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

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 net positive benefit amount calculated in paragraph 4.57 is added to the regulatory tax losses balance for the licensee. This will be utilised against future core taxable profit as set out in Part 4 below.

Direction of TGIE values

4.61 TGIE values will be directed in respect of Formula year t-2 and each prior Formula Year in the Price Control Period. This is because the figures used in determining them are obtained from the licensee's annual cost reporting return which, at the time of first submission, contains data relating to Formula Year t-2 and prior years²¹.

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

- Ofgem will re-perform the gearing level test and, if applicable, the positive tax benefit test to determine whether any revised TGIE 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 state following the last completed Annual Iteration Process to obtain an

updated RAV value and modelled figure for tax deductible interest payable by the licensee.

- If a revised TGIE 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 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 3C.

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

4.65 Subject to paragraph 4.69, a positive TTE value will increase the recalculated base revenue figure for the Formula Year concerned by the same amount.

4.66 Subject to paragraph 4.69, a negative TTE value will decrease the recalculated base revenue figure for the Formula Year concerned by the equivalent amount.

4.67 Subject to paragraph 4.69, a positive TGIE value will decrease the recalculated base revenue figure for the Formula Year concerned by:

- the amount of the value²⁰; and
- a 'tax allowance on tax allowance' factor calculated by functionality within the PCFM (see paragraph 4.7).

4.68 As noted at paragraph 4.59, TGIE values can only be zero or positive.

4.69 If there is any unutilised regulatory tax losses balance for the licensee, any change to recalculated base revenue under paragraph 4.65, 4.66 or 4.67 will be partially or fully abated to take account of that balance, and the regulatory tax losses balance held within the GD1 PCFM will be updated accordingly.

²⁰ Subject to a price base adjustment factor applied under the PCFM functionality (see paragraph 1.6 in chapter 1).

4.70 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.

5. Corporate debt - allowed percentage cost financial adjustment methodology

Overview

5.1 The allowed revenue totals for the licensee include amounts to cover the efficient cost of raising finance for the transportation 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)²¹ for the transportation business. The Vanilla WACC is determined using a pre-tax cost of corporate debt percentage, a post-tax real cost of equity percentage and a weighting (notional gearing) percentage.

5.2 Under the RII0-GD1 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 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 the licensee and its 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 percentage cost of corporate debt ('CDE' values) is established in Special Condition 3C (Specified financial adjustments). Special Condition 3C requires revised CDE values to be determined in accordance with the methodology in this chapter.

Temporal conventions

5.5 For the purposes of Special Condition 3C and this chapter, "Formula Year t" means the Formula 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 revenue.²²

²¹ see Glossary

²² See Special Condition 1B (Restriction of revenue in respect of the Distribution Network Transportation Activity).

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

5.6 At the outset of the Price Control Period (1 April 2013), the CDE value for every Formula Year will be the pre-tax cost of debt percentage for the licensee set down in RIIO-GD1 Final Proposals.

5.7 Revised CDE values are to be derived using the pounds sterling indices of bonds issued by non-financial institutions which have a remaining maturity of 10 or more years contained in the Markit iBoxx® database of bond market data.

5.8 A revised CDE value will be determined in accordance with the methodology set out below and directed in respect of each Annual Iteration Process for Formula Year t and subsequent Formula Years.

5.9 The following steps are to be followed:

Step 1

Establish the trading days period²³ to be used in relation to the particular Annual Iteration Process:

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

²³ Trading days as published in the Markit iBoxx® database

Step 2

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

- (i) A 10+ index Markit iBoxx series reference: DE000A0JY837; and
- (ii) BBB 10+ index Markit iBoxx series reference: DE000A0JZAH1

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

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

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.²⁴ In the event that the above data series does not include an entry that

²⁴ <http://www.bankofengland.co.uk>

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 arithmetic average value of *CoD* across the trading days 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

5.10 If, for any reason, iBoxx data or Bank of England data is unavailable for an entire trading days period in time to determine revised PCFM Variable Values for the cost of corporate debt for any Annual Iteration Process, then for that Annual Iteration Process only, the trading days period concerned shall be deemed to have ended on the last trading day for which data has been published. If the data concerned is subsequently published, revised PCFM Variable Values for the affected Formula Years will be directed.

5.11 If, for any reason, the iBoxx or Bank of England series identified above cease to be published, or if there is a material change in the basis of those indices, Ofgem

will consult on alternatives, as well as on any reconciliation that may need to be undertaken between the above series and any replacements.

Use of revised PCFM Variable Values in the Annual Iteration Process

5.12 The Authority will direct revised CDE values by no later than 30 November in each Formula Year $t-1$ in accordance with Part D of Special Condition 3C. Notice of proposed revised values will be given to the licensee at least 14 days before the date of the direction.

5.13 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.

5.14 The data and spreadsheet used to calculate revised CDE values will be published on the Ofgem website, and will be provided to the licensees with the notification of the proposed values.

6. Totex Incentive Mechanism – financial adjustment methodology

6.1 For RIIO-GD1 Final Proposals Opening Base Revenues Allowances will have been modelled on the basis that actual Totex²⁵ expenditure levels are expected to equal allowed Totex expenditure levels (allowances). If actual (outturn) expenditure differs from allowances, for any Formula 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 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 term MOD_t .

6.4 Special condition 3B (Determination of PCFM Variable Values for Totex Incentive Mechanism Adjustments) provides for the Authority to determine revised PCFM Variable Values for the licensee relating to actual Totex expenditure levels. It also sets out the procedures for the direction of those values so that they can be used for the Annual Iteration Process.

²⁵ See Glossary

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
3D	IRM	Innovation Roll-out expenditure	9
3E	RE	Mains and services replacement expenditure	8
3F	IAEEPS	Enhanced Physical Site Security Costs	7
	IAESW	Specified street work costs	
	IAECCB	Connection charging boundary change costs	
	IAEFP	Fuel poor network extension scheme	
	IAECA	Agency costs	
	IAESM	Smart metering roll out costs	
	IAELLC	Large load connection costs	

Description of the Totex Incentive Mechanism (TIM)

6.6 The TIM applies adjustments to the Totex figure used in the fast/slow money modelling of recalculated base revenue figures under the Annual Iteration Process. The adjustments reflect the amount of under or over expenditure by the licensee against Totex allowances and the relevant Totex Incentive Strength Rate (incentive strength) for each licensee. The incentive strength is a percentage figure specified in special condition 3B for each licensee. It represents the percentage that a licensee bears in respect of an overspend against allowances or retains in respect of an underspend against allowances. The adjustment that is made to the Totex figures is the Funding Adjustment Rate (often called the 'sharing factor') which is calculated as $(1 - \text{incentive strength})$. Applying the Funding Adjustment Rate to the over (or under spend) gives the amount that is added to (or subtracted from) the totex allowances included in recalculated base revenues. Wherever the term "Totex Incentive Mechanism Adjustment" is used in the Special Conditions, it means an adjustment under the mechanism described in this paragraph.

6.7 The TIM uses the actual Totex expenditure values reported to Ofgem by 31 July each year (subject to any revisions that may be required for corrections to date 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.

6.8 Totex, once ascertained under the TIM, is apportioned using the Totex Capitalisation Rate(s), as:

- fast money – flowing directly to the recalculated base revenue figure for the Formula Year to which the allowed expenditure relates; and
- slow money - additions to the licensee's RAV in the Formula Year to which the allowed expenditure relates; the return on RAV and depreciation flowing to the recalculated base revenue figure for the Formula year.

6.9 Totex Capitalisation Rates are specified at Appendix 1 to Special Condition 3B and are hard coded into the PCFM as fixed input values for the licensee. GDNs have two rates of capitalisation. One for replacement expenditure (repeX) which varies by year and one that applies to other Totex (also referred to as non-repeX) and is fixed for each individual GDN over the period of the price control.

6.10 Under the Annual Iteration Process, the effects of this modelling treatment, (including any ancillary effects such as the impact on tax allowances) are reflected in the value of the term MOD_t .

Totex Incentive Mechanism - illustrative examples

6.11 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

6.12 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

6.13 For the purposes of Special Condition 3B and this chapter, “Formula Year t ” means the Formula 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 Distribution Network Transportation Activity Revenue.

6.14 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:

Formula Year $t-2$:	Totex expenditure incurred
Formula Year $t-1$:	Outturn expenditure levels reported to Ofgem by 31 July
Formula Year $t-1$:	31 October – cut off date for making revisions (that may be required for corrections of data or for expenditure that is not regarded as efficient) to outturn expenditure levels to be taken account of in that year’s Annual Iteration Process
Formula Year $t-1$:	Revised PCFM Variable Values for actual Totex expenditure determined and directed by the Authority by 30 November or as soon as reasonably practicable practicable thereafter [and, as applicable, revised PCFM Variable Values for categories of allowed Totex expenditure determined/directed – see relevant handbook chapters]
Formula Year $t-1$:	Value for MOD_t directed by the Authority by 30 November

Formula Year t: Value for MOD_t effective in formula for licensee's Base Distribution Network Transportation Activity Revenue.

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

6.15 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 Formula Year t-1 or later, 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.

6.16 It should be noted that:

- each Annual Iteration Process re-runs the TIM calculations for each Formula Year up to Formula 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 2009-10 price base, but applies adjustments to ensure that the effect of PCFM Variable Value revisions are NPV neutral with respect to Formula Year t.

Total expenditure (Totex)

6.17 In summary Totex consists of all the items of expenditure required for the licensee to carry on the gas transportation business with the exception of:

- costs relating to de minimis activities;
- 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;
- The non cash element of current service pension costs charged to the income statement in accordance with accounting standards;
- statutory or regulatory depreciation and amortisation;
- profit margins from related parties (except where permitted);
- costs relating to rebranding a company's assets or vehicles following a change of trading name or logo;
- fines and penalties incurred by the licensee (including all tax penalties, fines and interest) except if, exceptionally, Traffic Management Act penalty costs can be shown to be efficient;
- compensation payments made in relation to standards of performance;
- bad debt costs and recoveries (which are subject to separate review);

- costs relating to the network innovation allowance;
- costs reported other than on a normal accruals basis;
- costs in relation to pass-through items, including business rates (except for business rates on non-operational buildings), NTS exit charges, shrinkage and Ofgem licence fees;
- interest, other financing and corporation tax costs; and
- other items of expenditure as detailed in the RIGs.

6.18 Further details on the reporting of expenditure items which are eligible for Totex treatment is given in the Cost and Revenue Reporting Regulatory Instructions and Guidance (RIGs) document referred to in Standard Special Condition A40 (Regulatory Instructions and Guidance)) of the licence. The RIGs also detail other requirements for expenditure to be able to qualify as RAV additions.

6.19 It should also be noted that:

- Any change in the Totex amount for the licensee under the TIM is included as an adjustment to fast / slow money.
- Pension deficit repair payments relating to any incremental deficit (ie not part of the Established Deficit) are considered to be part of the licensee's Totex.
- Customer contributions (which mainly relate to connection works) and other proceeds received (including from legal and insurance claims but excluding asset disposal proceeds) that relate to the transportation business are treated as an offset to Totex expenditure, unless specifically subject to different treatment under the Cost and Revenue Reporting RIGs.
- Asset disposal proceeds are deducted directly from the licensee's RAV balance, but only after a five year deferment under the associated incentive mechanism. Asset disposal levels have been forecast for the RIIO-GD1 Price Control Period; a true up to outturn levels will be taken into account in the calculation of base revenue allowances for the RIIO-GD2 price control.

Determination of PCFM Variable Value revisions for actual Totex expenditure

6.20 Following a review by Ofgem, the Authority will, by 30 November in each Formula Year t-1, determine that the PCFM Variable Values for Formula Year t-2, shown in the first column of Table 6.2 below, should be revised to match the equivalent actual expenditure values in the licensee's annual cost reporting submission after any necessary adjustments.

6.21 The Authority can also determine and direct revised PCFM Variable Values for actual Totex expenditure for years earlier than Formula Year t-2 where that is necessary to address a restatement of, or correction to, price control cost information submitted by the licensee including costs amended following any efficiency review by Ofgem.

Table 6.2 – PCFM Variable Values for actual Totex

PCFM Variable Value	Totex sub-division
ALC	Actual load related capex expenditure
AOC	Actual other capex expenditure
ACO	Actual controllable opex expenditure
ARE	Actual replacement expenditure

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

Notification and direction of revised PCFM Variable Values

6.23 The PCFM exists as a constituent part of Special Condition 2A (Governance of GD1 Price Control Financial Instruments). It has an input area for each licensee containing both fixed values and variable values. The variable values relating to actual Totex expenditure are shown in the PCFM Variable Values table 6.2 above.

6.24 During each Formula 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 3B, 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.

6.25 The Authority is required to direct any PCFM Variable Value revisions by 30 November in Formula Year t-1, so the notice of proposed values must be given no later than 15 November in the same year. In practice, the Authority will give notice of the proposed values as soon as practicably possible in Formula Year t-1.

6.26 The Authority will then carry out the Annual Iteration Process in accordance with Special Condition 2B (see Chapter 1).

7. Uncertain costs allowed expenditure - financial adjustment methodology

Part 1 - Overview

7.1 Appropriate levels of allowed Totex²⁶ expenditure for some transportation business activities/requirements, were uncertain at the time of the RIIO-GD1 Final Proposals. For RIIO-GD1 Final Proposals, Opening Base Revenue Allowances will have been modelled using forecast values relating to these uncertain cost categories.

7.2 The PCFM contains values relating to allowed Totex expenditure on uncertain cost categories as ex-ante amounts that can be added to through the Annual Iteration Process. This means that the term MOD_t included in the formula for the licensee's Base Distribution Network Transportation Activity Revenue can take account of up to date allowed expenditure levels for uncertain cost categories for the purposes of the Totex Incentive Mechanism described in chapter 6 of this handbook.

7.3 PCFM Variable Values relating to uncertain cost categories are stated in 2009-10 prices, consistent with the price base used in the PCFM and the values for the term MOD. The allocation of allowed expenditure for uncertain cost categories into the Totex sub-divisions referred to in table 6.2 above is handled automatically under the Annual Iteration Process using fixed attribution rates contained in the PCFM.

7.4 Special Condition 3F (Arrangements for the recovery of uncertain costs) provides 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 Condition 3F also provides for the Authority to determine revised PCFM Variable Values for uncertain cost categories in accordance with the methodology set out in this chapter to give effect to adjustments which have been determined. It also sets 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, and associated variable value names contained in the PCFM, are set out in Table 7.1 below.

²⁶ See Glossary

Table 7.1 – Uncertain cost categories

Uncertain cost	PCFM Variable Value name
Connection charging boundary change	IAECCB
Enhanced physical site security	IAEEPS
Large load connections	IAELLC
Specified street works	IAESW
Smart metering roll-out	IAESM
Agency costs	IAECA
Fuel poor network extension scheme	IAEFP

Overview of uncertain cost categories

7.7 Special condition 3F specifies that any proposal for a relevant adjustment to an uncertain cost category must:

- be based on information about actual or expected costs that was not available when the licensee's Opening Base Revenue Allowances were calculated;
- take account of any prior relevant adjustments;
- relate to a material amount as defined in paragraph 3F.7 of Special Condition 3F;
- 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.

Connection charging boundary change

7.9 This category relates to costs incurred by the licensee in relation to any material change in the charging methodology in relation to Distributed Entry Connections.

Enhanced physical site security

7.10 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 Distribution Network.

Large load connections

7.11 This category relates to costs incurred by the licensee, that cannot be recoverable through any other means, in relation to connecting new loads in order to meet its obligations under the Act.

Specified street works

7.12 This category relates to costs incurred by the licensee in complying with obligations or requirements arising under any orders or regulations made pursuant to Part 3 of the Traffic Management Act 2004 or, in Scotland, the Transport (Scotland) Act 2005.

Smart metering roll-out

7.13 This category relates to costs incurred by the licensee, that cannot be recovered through any other means, in facilitating the supplier led roll-out of smart meters.

Agency costs

7.14 This category relates to the potential for a change in funding arrangements related to the central agent (ie Xoserve), and the impact that this will have on the expenditure provided to the licensee.

Fuel poor extension scheme

7.15 This category relates to a potential change to the funding provided to the licensee for complying with the fuel poor extension scheme. A change will be driven by a review of the scheme by the Authority.

Temporal conventions

7.16 For the purposes of Special Condition 3F and this chapter, "Formula Year t " means the Formula 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

Distribution Network Transportation Activity Revenue.²⁷ References to Formula Year t-1 etc should be construed accordingly.

7.17 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 PCFM.

7.18 Where revisions to PCFM Variable Values are directed for Formula Years earlier than Formula Year t, the effect of using those revised values in the Annual Iteration Process for the PCFM will, subject to a time value of money adjustment, be reflected in the calculation of the term MOD for Formula Year t and, for the avoidance of doubt shall not have any retrospective effect on a previously directed value of the term MOD.

7.19 Revisions to PCFM Variable Values directed for Formula Years later than Formula 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 3F.

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

Determinations in relation to proposed adjustments

7.20 Proposals for relevant adjustments in respect of the majority of uncertain cost categories, with the exception of smart metering roll-out costs, agency costs and fuel poor network extension scheme costs, can only be made by the licensee or the Authority during application windows specified in Special Condition 3F. Proposals, in relation to all uncertain cost categories, must be made in the form of notices given by the licensee to the Authority or vice versa.

7.21 There are no application windows for proposals for relevant adjustments in respect of smart metering roll-out costs, agency costs and fuel poor network extension scheme costs. These can be made at any time. Where reference is made to application windows in the remainder of this chapter these should be ignored in respect of smart metering roll-out costs, agency costs and fuel poor network extension scheme costs.

7.22 Following the end of each application window (or in relation to smart metering roll-out costs after the receipt of a proposal for an adjustment) the Authority has four months to confirm, reject or vary the proposed adjustment in a determination decision. In reaching that decision the Authority will:

- consult with the licensee concerned and other interested parties;

²⁷ See Special Condition 1B (Restriction of revenue in respect of the Distribution Network Transportation Activity).

- 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.

7.23 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 7.22, then the adjustment is deemed to have been made.

7.24 In relation to agency costs and fuel poor network extension scheme costs, the Authority can commence a review at any time in accordance with Parts B and C of Special Condition 3F.

Determination of PCFM Variable Values

7.25 It follows from the timetable outlined in paragraphs 7.20 to 7.24 above that the Authority will only determine revised PCFM Variable Values relating to uncertain cost categories (as set out in Table 7.1) for use in next Annual Iteration Process following the conclusion of the an assessment process or conclusion of any reviews.

7.26 It should be noted that the determination can amend PCFM Variable Values for any years in the RIIO-GD1 period.

7.27 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 Process:

- following receipt of a notice proposing an adjustment, 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;
- prior to the start of the annual iteration process, 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 1.6 of this handbook.

7.28 Each aggregate net adjustment ascertained under paragraph 7.27 will be added to the equivalent pre-existing PCFM Variable Value contained in the PCFM for the licensee and the resulting figure will be determined by the Authority to be the revised PCFM Variable Value for that uncertain costs category.

7.29 For the avoidance of doubt, under the procedures outlined in paragraphs 7.27 and 7.28, the Authority can determine a revision to the PCFM Variable Value relating to an uncertain cost category for any Formula Year during the Price Control

Period, where that is necessary to reflect the determination (or deeming) of a relevant adjustment in respect of that uncertain cost category.

Part 3 - Notification and direction of revised PCFM Variable Values

7.30 Special Condition 3F 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 E of Special Condition 3F.

7.31 The Authority will give notice of the PCFM Variable Value revisions that it proposes to direct by 15 November, being at least 14 days before the deadline date for the direction of revised PCFM Variable Values which is 30 November. The notice will confirm that:

- any revised PCFM Variable Value determinations have been made in accordance with Special Condition 3F, which cross refers to this chapter of the GD1 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.

7.32 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.

7.33 As set out in paragraph 7.25, the Authority will not determine PCFM Variable Value revisions for uncertain cost categories by 30 November in years in which no proposal has been duly made by the licensee or the Authority. However, the overall direction issued in those years will include a copy of the PCFM Variable Values Table(s) for the licensee showing the 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

7.34 If the procedures set out in Special Condition 3F and in Parts 2 and 3 of this chapter call for the Authority to direct revised PCFM Variable Values for uncertain cost categories by 30 November and the Authority does not make such a direction, then Special Condition 3F requires that the values should be directed by the Authority as soon as is reasonably practicable to facilitate the notification and direction of the value of the term MOD_t under Special Condition 2B (Annual Iteration Process for the PCFM).

8. Mains and services replacement allowed expenditure - financial adjustment methodology

Mains and Services Replacement – allowed expenditure

8.1 During the Price Control Period ('RIIO-GD1') each licensee is required to carry out mains replacement, services replacement and services transfer activity relating to mains and services which are categorised as being Above Threshold Tier 2 ('ATT2'). We refer to this activity as 'Repex T2'.

8.2 The Opening Base Revenue Allowances ('PU' values) for each licensee, set down in the table at Appendix 1 to Special Condition 1B (Restriction of revenue in respect of the Distribution Network Transportation Activity) reflect allowed expenditure figures for forecast levels of ATT2 mains replacement.

8.3 The allowed expenditure figures referred to in paragraph 8.2 constitute the 'RE' values contained in the Variable Values Table of the PCFM as at 1 April 2013, the first day of RIIO-GD1.

8.4 It is necessary to revise RE values during the course of RIIO-GD1 so that they represent allowed expenditure levels driven by actual (outturn) levels of Repex T2 reported by each licensee. 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 Repex T2 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).

8.5 The provisions for determining revised RE values are contained in Special Condition 3E (Mains and Services Replacement Expenditure). All RE values are stated in 2009/10 prices.

Temporal convention

8.6 For the purposes of Special Condition 3E and this chapter, "Formula Year t " means the Formula Year in which a value for the term MOD_t , calculated through a particular Annual Iteration Process, is used in the formula for the licensee's Base Distribution Revenue.²⁸ References to Formula Year $t-1$ etc should be construed accordingly.

²⁸ See Special Condition 1B (Restriction of revenue in respect of the Distribution Network Transportation Activity).

Determination and direction of revised RE values

8.7 Part B of Special Condition 3E (Mains and Services Replacement Expenditure) contains a formula which specifies what the RE value is to be for each Formula Year t-2.

8.8 The first Formula Year of RIIO-GD1 is 2013-14 which ends on 31 March 2014. Each licensee will report the Repex T2 activity values specified in Part B of Special Condition 3E for that year by no later than 31 July 2014.

8.9 Ofgem will determine revised RE values for Formula Year 2013/14 between 31 July 2014 and 30 November 2014 - the deadline for directing revised RE values to be used in the Annual Iteration Process which will take place by 30 November 2014 (see Chapter 2).

8.10 This process will be repeated annually:-

- (i) Formula Year t-2 – activity and expenditure occurs
- (ii) by 31 July in Formula Year t-1 – licensee reports activity and actual expenditure levels to Ofgem
- (iii) by 30 November in Formula Year t-1 – Authority directs a revised RE value for Formula Year t-2 (and any earlier years in accordance with paragraph 9 of Special Condition 3E)
- (iv) by 30 November in Formula Year t-1 – Authority carries out Annual Iteration Process and directs value of MODt for Formula Year t.

8.11 The Authority's direction of revised RE value by no later than 30 November in each Formula Year t-1 will be made in accordance with Part C of Special Condition 3E.

Processing of RE values under the Annual Iteration Process

8.12 Under the Annual Iteration Process, RE values, as revised, representing allowed Repex T2 expenditure are allocated to:-

- fast and slow money²⁹ totals in accordance with the Repex Capitalisation Rate (per cent) specified in the RIIO-GD1 Final Proposals and
- the 'repex' category of totex for the purposes of subsequent allocation to tax pools within the PCFM.

²⁹ See Glossary

8.13 RE 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.

8.14 Under the Annual Iteration Process described in chapter 2 the effect of revised RE values directed for Formula Years earlier than Formula Year $t-2$ (see paragraph 8.10(iii)) flows through to the determination of the value of MOD_t and will have no retrospective effect on previously directed values of MOD.

8.15 RE 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 paragraphs 8.2 and 8.3 pending any subsequent revision. Accordingly, all calculated values in the PCFM for Formula Years later than Formula Year t have indicative status only.

9. Innovation role-out mechanism allowed expenditure – financial adjustment methodology

Innovation roll-out mechanism

Overview

9.1 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 formula years to which those revisions relate.

9.2 The provisions for determining revised IRM values are contained in Special Condition 3D (The Innovation Roll-out Mechanism). All IRM values are stated in 2009-10 prices.

9.3 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 economically the same as it would have been had the forecast values used in the model been the same as the actual outturn values.

9.4 The Opening Base Revenue Allowances ('PU' values) for the licensee, set down in the table at Appendix 1 to Special Condition 1B (Restriction of revenue in respect of the Distribution Network Transportation Activity) reflect allowed expenditure figures for forecast levels of innovation expenditure (and will be zero at the outset).

9.5 The allowed expenditure figures constitute the 'IRM' values contained in the Variable Values Table of the PCFM as at 1 April 2013, the first day of RIIO-GD1.

9.6 It may be necessary to revise IRM values during the course of RIIO-GD1 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

9.7 For the purposes of Special Condition 3D and this chapter, “Formula Year t ” means the Formula 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 Distribution Revenue.³⁰ References to Formula Year $t-1$ etc should be construed accordingly.

Determination and direction of revised IRM values

9.8 Part A of Special Condition 3D specifies the features that need to be present in the roll-out of an innovation to qualify for additional allowed expenditure.

9.9 Part B of Special Condition 3D provides for the licensee to propose a relevant adjustment to the values.

9.10 Part C of Special Condition 3D 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

9.11 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).

9.12 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).

9.13 The Authority’s direction of revised IRM values by no later than 30 November in each Formula Year $t-1$ will be made in accordance with Part G of Special Condition 3D.

Processing of IRM values under the Annual Iteration Process

9.14 Under the Annual Iteration Process, IRM values, as revised, representing allowed innovation expenditure are allocated to -

³⁰ See Special Condition 1B (Restriction of revenue in respect of the Distribution Network Transportation Activity).

- fast and slow money totals in accordance with the Totex Capitalisation Rate (per cent) specified in the RIIO-GD1 Final Proposals and
- the tax pools associated with innovation expenditure in accordance with the licensee specific tax allocation profile, within the PCFM.

9.15 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:
 - a. fast money components
 - b. amounts of return and depreciation on the licensee's RAV balance
 - c. tax allowance effects and
- (ii) to update Totex related balances held within the PCFM including the licensee's RAV balance.

9.16 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 23 of Special Condition 3D.

9.17 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 9.4 pending any subsequent revision. Accordingly, all calculated values in the PCFM for Formula Years later than Formula Year t have indicative status only.

10. Legacy price control adjustments – financial methodologies

Introduction

10.1 The purpose of this chapter of the GD1 Price Control Financial Handbook is to set out the methodologies (in Parts 1 to 8 below) that are to be used to determine values for each component term ('component term values') in the formulae set out in Part A of Special Condition 3A (Legacy price control adjustments). The formulae and components are set out below and detailed in Table 10.1.

$LAR = PAR + TAR + FAR + CAR + SAR + IFIAR + IAEAR$

$LRAV = FRAV + CRAV + MRAV + SRAV$

Table 10.1 – Legacy price control adjustment categories

Category	Special Condition	Applicable licensees	Component Term	PCFM Variable Value	See Part of this chapter
Pension adjustments	3A	All	PAR	LAR	1
Gearing and interest cost adjustments	3A	All	TAR	LAR	2
Non Gas Fuel Poor Network Extension Scheme adjustments	3A	All	FAR FRAV	LAR LRAV	3
Capex incentive scheme adjustments	3A	All	CAR CRAV	LAR LRAV	4
Mains and services replacement expenditure adjustments	3A	All	MRAV	LRAV	5
Security Logged up costs	3A	All	SAR SRAV	LAR LRAV	6

Legacy licence error – IFI	3A	All	IFIAR	LAR	7
GDPCR1 Income Adjusting Events	3A	All	IAEAR	LAR	8

Overview

10.2 The formulae referred to in paragraph 10.1 are used to determine revised values for PCFM Variable Values, that relate to:

- (a) legacy price control revenue allowance adjustments (LAR values) for Formula Year 2013-14; and
- (b) legacy price control adjustments to RAV additions for Formula Year 2013-14 (LRAR values).

In overview, LAR and LRAR are incremental adjustments between amounts calculated at final proposals (on which opening base revenues were set) which may have used forecast or estimated amounts and updated calculations to factor in additional information.

10.3 Legacy price control adjustments are necessary, to take account of outturn levels of:

- (a) activities carried out by the licensee
- (b) incentivised performance by the licensee and/or
- (c) expenditure incurred by the licensee

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

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

10.5 Each component term value (see Table 10.1) in the formulae for LAR and LRAR represents the incremental change for a particular legacy price control adjustment category. At the outset of the Price Control Period on 1 April 2013, all LAR and LRAR values will be zero, because provisional or forecast legacy outturn levels will have been used in modelling the licensee's Opening Base Revenue Allowances.

10.6 The use of revised LAR and LRAV values for Formula Year 2013-14 in the Annual Iteration Process for the PCFM will mean that values of the term MOD_t will appropriately reflect legacy outturn levels.

10.7 The aggregate revenue allowance adjustment embodied in the LAR term will be spread evenly across recalculated base revenue figures for the eight years of the Price Control Period by revenue profiling functionality contained in the PCFM. However, there are no provisions to revise LAR or LRAV values for Formula Years other than Formula Year 2013-14 - all necessary calculations and effects are achieved under the Annual Iteration Process, with appropriate time value of money adjustments.

10.8 For the avoidance of doubt, legacy price control adjustments are not subject to the Totex Incentive Mechanism.

10.9 A determination of component term values will be carried out during each Formula Year of the Price Control Period, in time to determine any necessary revisions to LAR or LRAV values for each Annual Iteration Process.

10.10 Legacy outturn values for each legacy price control adjustment category will be applied to a determination of component term values as soon as they become available in accordance with the methodologies set out in Parts 1 to 8 of this chapter.

10.11 It might be necessary for a legacy outturn value to be restated by the licensee or adjusted by Ofgem after it has been applied to the determination of a component term value because of:

- errors or omissions in the preparation of information or inconsistencies with relevant regulatory instructions and guidance (RIGs) or
- an efficiency review by Ofgem, referred to in one of the methodologies in Parts 1 to 8 of this chapter.

In either of those circumstances, the restated/adjusted legacy outturn value would be applied in place of the original value in a subsequent determination of component term values, and reflected in a revision to the relevant PCFM Variable Value for the next Annual Iteration Process.

Conventions

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

10.13 In the remainder of this chapter "Formula Year t " means the Formula 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 Distribution Network Transportation Activity Revenue and references to Formula Year $t-1$ etc should be construed accordingly.

Reference documents

10.14 The reference documents (previously published by Ofgem) referred to in this chapter are:

1. GDPCR1 Final Proposals (Ref 285/07)
<http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=362&refer=Networks/GasDistr/GDPCR7-13>
2. Decision on strategy for the next transmission and gas distribution price controls - RIIO-T1 and GD1 Financial issues
<http://www.ofgem.gov.uk/Networks/GasDistr/RIIO-GD1/ConRes/Documents1/GD1decisionfinance.pdf>
3. Open letter: Clawback of tax benefit due to excess gearing dated 31 July 2009
<http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=49&refer=Networks>
4. Open letter: Final position on the non gas fuel poor network extension scheme dated 29 June 2011
<http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=255&refer=Networks/GasDistr/GasDistrPol>
5. Electricity Distribution Price Control Review Final Proposals – Financial Methodologies (Ref 148/09)
<http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=372&refer=Networks/ElecDist/PriceCtrls/DPCR5>

Legacy adjustment calculation workbook

10.15 As noted in paragraph 10.5, the modelling of the licensee's Opening Base Revenue Allowances will have included revenue allowances and RAV addition values for legacy price control adjustments derived from provisional or forecast legacy outturn levels. Those revenue allowance and RAV addition values, represented by fixed input values in the PCFM, will have been established in accordance with applicable licence scheme provisions and, by dint of the PCFM's incorporation into Special Condition 2A (Governance of GD1 Price Control Financial Instruments), the basis for setting those fixed values will have been consulted upon and accepted by the licensee.

10.16 As part of its Final Proposals for the RIIO-GD1 price control, (see link on page 2 for associated document 'b') the Authority will provide to the licensee a legacy adjustment calculation workbook ('calculation workbook') in Excel® format. The calculation workbook will contain a worksheet relating to each legacy price control adjustment category and have functionality to calculate and display component term values.

10.17 Calculation worksheets will be designed to perform the calculation of component term values using legacy outturn values, in a way which is consistent with:

- the regimes and licence scheme provisions applicable to each legacy price control adjustment category;
- the calculation and determination of the revenue allowance and RAV addition values for legacy price control adjustments included in the licensee's Opening Base Revenue Allowances (see paragraph 10.5);
- references to the use of the calculation workbook in the methodologies set out in Parts 1 to 8 of this chapter.

10.18 For the avoidance of doubt, in the event of any conflict between the licence (including this handbook) and the content or functionality of a calculation workbook, the stipulation or meaning given in the licence shall prevail.

Part 1 - Determination of component value for legacy pension adjustment

10.19 This part sets out the methodology for determining the value of the component term PAR, the revenue allowance adjustment relating to pension scheme allowance and payment levels in the legacy period. Legacy pension adjustments do not affect RAV balance additions.

Description of the adjustment

10.20 In its decision on strategy for the RIIO-GD1 price control (see reference document 2), the Authority confirmed the approach that would be used to make a financial adjustment (whether upwards or downwards) for:

- (a) the difference between the licensee's allowance for pension deficit repair payments (including any one-off pension deficit repair contributions) and the actual pension deficit repair payments made by the licensee and
- (b) the difference between the licensee's allowance for ongoing pension scheme funding costs³¹ and the actual ongoing funding payments made by the licensee

for each Formula Year in the preceding price control periods, being the one year price control for 2007-08 and the GDPCR price control which ran from 1 April 2008 to 31 March 2013.

10.21 The aggregated difference amount, subject to an amendment for tax effects, is applied as an adjustment, colloquially referred to as a pension 'true-up'.

³¹ Including scheme costs in respect of scheme administration and PPF levy costs where applicable under RIGs.

10.22 The licensee's allowances for defined benefit pension deficit repair payments were set at the outset of the GDPCR price controls. However, allowances for ongoing pension scheme funding costs are determined by the formula:

Actual defined benefit pensionable salary payments \times allowed contribution rate

meaning that the allowance level is not finalised until defined benefit pensionable salary payments have been reported by the licensee, after the end of the Formula Year concerned.

Amendment for tax effects

10.23 If the level of actual payments made by the licensee is higher than the allowances provided, the licensee will have enjoyed higher tax deductions than was anticipated, meaning that its price control tax allowance for the Formula Year concerned will have been higher than, in retrospect, was warranted. In that scenario, the aggregated difference amounts are subject to a deduction equating to:

the aggregated difference amount \times the main rate of corporation tax³²
for the Formula Year concerned

10.24 Calculations of the pension revenue adjustment using forecasts for 2012-13 were made and included in RIIO-GD1 Final Proposals with any relevant adjustments to the regulatory tax loss position³³ being made at that time. The PAR term calculated below is not anticipated to be material. PAR is also a component of LAR which contains other items which do not impact regulatory tax losses. The PCFM does not therefore adjust the opening regulatory tax losses for the PAR amount which is calculated.

10.25 No amendments or changes to regulatory tax loss balances are made if the level of actual payments made by the licensee are lower than the allowances provided.

Formula years in the legacy period subject to adjustment

10.26 Finalised allowance and actual payment levels relating to Formula Years up to and including 2011-12 will have been available in time to factor revenue allowance adjustments into the licensee's Opening Base Revenue Allowances, with the revenue allowance amounts being spread across the eight years of the Price Control Period.

³² The official main rate of Corporation Tax and not the modelled tax rate – see also paragraph 10.37.

³³ A positive regulatory tax loss balance represents one or more price control tax benefits which have been obtained by the licensee and which may be subject to off-set against future regulatory taxable profits. Regulatory tax losses should therefore not be confused with trading or group tax losses.

10.27 The following items relating to Formula Year 2012-13 will not have been available when the licensee's opening base revenues were set and forecast legacy outturn levels will have been used in setting the licensee's opening base revenues:

- the licensee's allowance for ongoing defined benefit pension scheme funding costs;
- the licensee's actual ongoing defined benefit pension scheme funding payments; and
- the licensee's actual defined benefit pension deficit repair payments (including any one-off pension deficit repair contributions).

10.28 A legacy price control pension adjustment therefore needs to be made to reflect the legacy outturn levels for the items referred to in paragraph 10.27.

10.29 The level of actual defined benefit pension payments made by the licensee in Formula Year 2012-13 is expected to be included in the price control review information submission which it will make by 31 July 2013. In confirming the level of actual payments made, the Authority will satisfy itself that payments reported by the licensee were made in accordance with the pension principles referenced at paragraph 3.87 of reference document 1 and summarised at paragraph 3.5 of this handbook.

Relationship with pension adjustments for the RIIO-GD1 Price Control Period

10.30 As explained in paragraph 13 in Chapter 3 of this handbook, defined benefit pension adjustments relating to the legacy period are separate from pension allowance financial adjustments made under the provisions of Special Condition 3C (Specified financial adjustments).

Determination of the value of the component term PAR

10.31 The steps set out in paragraphs 10.32 to 10.37 below will be followed to determine the value of the component term PAR.

Step 1

10.32 After 31 July 2013, Ofgem will obtain from price control review information submissions relating to Formula Year 2012-13 the licensee's

- actual defined benefit pension deficit repair payments (including any one-off pension deficit repair contributions)
- actual total of defined benefit pensionable salary payments
- actual ongoing defined benefit pension scheme funding
- actual Corporation Tax paid figure

in each case for Formula Year 2012-13.

Step 2

10.33 Ofgem will deflate the amounts referred to in Step 1 from the 2012-13 price base used in the relevant price control review information submissions to the 2009-10 price base used in the PCFM using actual RPI data (see section on price base in 1.6).

Step 3: Use of the legacy adjustment calculation workbook

10.34 The deflated legacy outturn values obtained under steps 1 and 2 will be used to overwrite the forecast legacy outturn values for Formula Year 2012-13 on the PAR worksheet of the calculation workbook.

10.35 Using the deflated legacy outturn values, the calculation workbook is designed to:

- (a) calculate the actual ongoing defined benefit pension scheme funding allowance for Formula Year 2012-13 and the true-up amount which should have applied
- (b) calculate the defined benefit pension deficit repair true-up amount which should have applied for Formula Year 2012-13
- (c) apply the tax adjustment referred to in paragraph 10.24 if the licensee paid corporation tax in Formula Year 2012-13
- (d) calculate the total true-up amount which should have applied in the Price Control Period
- (e) deduct the true-up amount already included in the modelling of the licensee's opening base revenues to give the incremental adjustment
- (f) show the result as the value for the component term PAR.

10.36 The value referred to in paragraph 10.35(f) will be determined to be the value of the component term PAR.

10.37 It should be noted that, if the licensee did not pay corporation tax in Formula Year 2012-13, the licensee's regulatory tax loss balance will not be updated in this respect. The licensee's regulatory tax loss balance is held in the PCFM.

Restatement or adjustment of values used in the determination of PAR

10.38 As set out in paragraph 9 of this chapter, a determination of each component term value will be carried out during each Formula Year of the Price Control Period. If, exceptionally, it is necessary for one or more of the values used in steps 1 to 3 above to be restated or adjusted after its use in a determination of the component term PAR, the value of PAR would be re-determined using the restated/adjusted values for the purpose of determining a revision to the PCFM Variable Value LAR, for use in the next available Annual Iteration Process.

Part 2 - Determination of component value for legacy gearing level and interest cost adjustment

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

Description of the adjustment

10.40 In its open letter dated 31 July 2009 (see reference document 3), the Authority confirmed the approach that would be used to 'clawback' any tax value benefits to the licensee of operating at a level of gearing higher than modelled levels. The methodological approach set out in the letter has been applied in:

- (a) determining the gearing level and interest cost adjustments to be included in the licensee's opening base revenues and
- (b) setting out the methodology for the legacy gearing level and interest cost adjustment in this part.

Save for some procedural details, it is also consistent with the methodology for (RIIO-GD1 period) adjustments driven by gearing levels and corporate debt interest costs set out in part 3 of chapter 4 of this handbook.

10.41 The outturn values needed to calculate legacy gearing level and interest cost adjustments in respect of a particular Formula Year are the licensee's

- net debt as at 31 March in the Formula Year
- RAV balance as at 31 March in the Formula Year and
- actual corporate debt interest payments

in each case, derived in accordance with the criteria set out in reference document 3 from information submissions made by the licensee in accordance with applicable RIGs.

10.42 The RAV balance referred to in this chapter includes both core and non-core (or shadow) RAV.

Formula Years in the legacy period subject to adjustment

10.43 Finalised net debt, RAV balance and corporate debt interest levels relating to Formula Years up to and including 2011-12 will have been available in time to factor revenue allowance adjustments into the licensee's Opening Base Revenue Allowances, with the revenue allowance amounts being spread across the eight years of the Price Control Period.

10.44 Finalised net debt, RAV balance and corporate debt interest levels relating to Formula Year 2012-13 will not have been available when the licensee's Opening Base

Revenue Allowances were set and forecast legacy outturn levels for those items for that year will have been used in setting the licensee's Opening Base Revenue Allowances. A legacy price control gearing level and interest cost adjustment therefore needs to be made to reflect legacy outturn levels for net debt, RAV balance and corporate debt interest costs for Formula Year 2012-13.

10.45 Finalised net debt, RAV balance and corporate debt interest levels relating to Formula Year 2012-13 are expected to be included in the price control review information submission that the licensee will make by 31 July 2013.

Determination of the value of the component term TAR

10.46 The steps set out in paragraphs 10.47 to 10.51 below will be followed to determine the value of the component term TAR.

Step 1

10.47 After 31 July 2013, Ofgem will obtain from price control review information submissions relating to Formula Year 2012-13 of the licensee's

- net debt balance as at 31 March in Formula Year 2012-13
- RAV balance as at 31 March in Formula Year 2012-13 and
- actual appropriate corporate debt interest payments in Formula Year 2012-13.

Step 2 Use of the legacy adjustment calculation workbook

10.48 The legacy outturn values, in nominal terms, obtained under step 1 will be used to overwrite the forecast legacy outturn values for Formula Year 2012-13 on the TAR worksheet of the calculation workbook.

10.49 Using the legacy outturn values, the calculation workbook is designed to:

- (a) perform a gearing level test - if actual gearing (net debt/RAV balance) is lower than the notional gearing level of 62.5% specified in the GDPCR Price Control Final Proposals (see reference document 1 in paragraph 10.14), then the gearing level and interest cost adjustment for 2012-13 will be zero; if gearing is greater than the notional gearing level of 62.5% then the positive benefit test in (b) below is made;
- (b) if actual corporate debt interest payments in 2012-13 are lower than the level used in the modelling of the licensee's base revenue for Formula Year 2012-13 (treating both figures as positive values), then the gearing level and interest cost adjustment for 2012-13 will be set to zero;

- (c) if actual corporate debt interest payments in 2012-13 are greater than the level used in the modelling of the licensee's base revenue for Formula Year 2012-13 (treating both figures as positive values) the clawback has been triggered.

10.50 If the clawback has been triggered, Ofgem will multiply the amount by which actual corporate debt interest payments exceed the modelled amount in paragraph 10.49(c) by the corporation tax rate (as hard-coded into the legacy workbook) to derive the licensee's benefit figure. This will be deflated into 2009-10 price base and deducted from the forecast amount in the legacy workbook. This is performed by the functionality in the calculation workbook which compares this revised calculated amount with the forecast adjustment used in setting the licensee's Opening Base Revenue Allowances. It then calculates the incremental adjustment amount which will be shown as the value for the component term TAR (after grossing up by multiplying by the corporation tax rate for 2013-14).

Restatement or adjustment of values used in the determination of TAR

10.51 As set out in paragraph 9 of this chapter, a determination of each component term value will be carried out during each Formula Year of the Price Control Period. If, exceptionally, it is necessary for one or more of the values referred to in step 1 and 2 above to be restated or adjusted after its use in a determination of the component term TAR, the value of TAR would be re-determined using the restated/adjusted values for the purpose of determining a revision to the PCFM Variable Value LAR, for use in the next available Annual Iteration Process.

Part 3 - Determination of component value for legacy non-gas fuel poor network extension scheme adjustment

10.52 This part set outs the methodology for determining the value of the following component terms

- FAR - the revenue allowance adjustment and
- FRAV – the RAV additions adjustment

relating to non-gas fuel poor network extension activity in the legacy period.

Description of the FAR and FRAV adjustment

10.53 During the GDPCR1 price control period the licensee was incentivised to provide discounted gas connections to households meeting eligibility criteria under the non-gas fuel poor network extension scheme. The incentive and discount arrangements are described in the Authority's open letter dated 29 June 2011 (see reference document 4 – paragraph 10.14).

10.54 The non-gas fuel poor network extension scheme was instigated after the commencement of the GDPCR1 price control period therefore projected capex amounts were not included in projected RAV balance or revenue allowance calculations. Therefore, capital expenditure by the licensee was recorded ('logged

up') for addition to the licensee's RAV balance at the start of the next Price Control Period.

10.55 The PCFM already includes the fuel poor RAV workings which include the logged up capex together with the incentive adjustment for each of the scheme years during GDPCR1 so as to calculate the amount to be added to the licensee's RAV balances for the commencement of RIIO-GD1. These workings include an estimate of values for 2012-13.

10.56 Under the incentive arrangement, a net present value amount (consisting of a cost element and an incentive adjustment), for community based schemes, was deemed to be added to the licensee's RAV (as at the scheme inception date) for each eligible household connecting during each year of the five year scheme period. These amounts were deemed to remain in the licensee's RAV balance for five years. The incentive adjustment has been written off equally over the five years it is included in RAV.

10.57 The legacy calculation workbook includes a duplicate copy of the fuel poor workings that are contained within the PCFM so as to calculate the adjustment to be included in base revenue for Final Proposals based on unearned return and depreciation whilst these costs were being logged up.

10.58 The fuel poor RAV calculations assume that depreciation is on a sum of digits basis for the purposes of the logged up calculations.

10.59 The FAR and FRAV terms are the calculation of incremental amounts compared to those already included in price control base revenues. They arise where the estimates of values used in deriving the amounts included in the base revenues are updated with actual values during subsequent annual iteration processes.

10.60 The FRAV adjustment is a component part of the LRAV term and is therefore not separate from the LRAV. In the PCFM it is therefore treated as an adjustment to the main RAV balance rather than the specific fuel poor RAV workings.

The non-gas fuel poor network extension scheme in the RIIO-GD1 period

10.61 The non-gas fuel poor network extension scheme has an ex-ante allowance set for the RIIO-GD1 period. There is an uncertainty mechanism related to the scheme which is detailed in Chapter 7.

Determination of the value of the component term FAR and FRAV

10.62 The legacy calculation workbook performs calculations to derive the FAR and FRAV amounts in line with the steps set out below.

Step 1

10.63 After 31 July 2013, Ofgem will obtain from price control review information submissions the actual amount of capex expenditure and the relevant incentive adjustments by the licensee on non-gas fuel poor network extension schemes in Formula Year 2012-13.

Step 2

10.64 Ofgem will deflate the amount referred to in Step 1 from the 2012-13 price base used in the relevant price control review information submissions to the 2009-10 price base used in the PCFM using RPI data contained in the legacy workbook.

Step 3 Use of the legacy adjustment calculation workbook

10.65 The actual capex value and incentive adjustments, in 2009-10 prices, will be used to overwrite the forecast value for Formula Year 2012-13 on the FRAV worksheet of the calculation workbook.

10.66 The functionality of the legacy calculation workbook will deduct any capex value for 2012-13 already included in the opening RAV balance for Formula Year 2013-14 in the PCFM to give the incremental adjustment amount which will be shown as the value for the component term FRAV.

10.67 The functionality of the legacy calculation workbook will also calculate the FAR term from the values already input to calculate the FRAV adjustment (after grossing up by multiplying by the corporation tax rate for 2013-14).

Restatement or adjustment of values used in the determination of FAR and FRAV

10.68 As set out in paragraph 9 of this chapter, a determination of each component term value will be carried out during each Formula Year of the Price Control Period. If it is necessary for one or more of the values above to be restated or adjusted after use in a determination of the component term FAR or FRAV, the value of FAR or FRAV concerned would be re-determined using the restated/adjusted values for the purpose of determining a revision to the PCFM Variable Value LAR or LRAV, for use in the next available Annual Iteration Process.

Part 4 - Determination of component value for the legacy capex incentive scheme adjustment

10.69 This part sets out the methodology for determining the value of the component terms CAR and CRAV, the revenue allowance and RAV balance addition adjustments relating to the licensee's actual expenditure levels on capital expenditure (capex) and non-incentivised replacement expenditure (repx) activities

during the GDPCR1 price control period. For the avoidance of doubt, it should be noted that any adjustments notified by Ofgem subsequent to the setting of capex and repex allowances, at the outset of the GDPCR1 price control, will be incorporated in the CAR and CRAV calculations.

Description of the adjustment

10.70 The relevant capex and repex allowances that were set at the outset of the GDPCR1 price control period gave rise to RAV balance additions and revenue allowance amounts based upon assumed levels of expenditure.

10.71 The GDPCR1 capex incentive scheme provided for the licensee to retain/bear an appropriate share of any under/over spend against the projected allowances, with the effects being logged up for adjustment in the price control modelling for the RIIO-GD1 price control. The approach used to calculate the revenue allowance and RAV addition adjustments is the same as that described for the DPCR5³⁴ price control in paragraphs 2.33 to 2.36 of reference document 5 (paragraph 10.14), and involves:

- (a) calculating the fast and slow money amounts that were included in or left out of GDPCR1 base revenues because levels of expenditure turned out to be over or under-estimated
- (b) aggregating the amounts ascertained under sub-paragraph (a) on an NPV neutral basis – ie amounts relating to earlier years in the GDPCR1 period are given a time value of money adjustment, and multiplying by the relevant capex incentive strength
- (c) calculating the fast and slow money amounts that would have been included in or left out of GDPCR1 base revenues if contemporaneous adjustments had been made to the licensee's RAV balance to reflect underspend or overspend amounts
- (d) aggregating the amounts ascertained under sub-paragraph (c) on an NPV neutral basis and
- (e) subtracting the total obtained under sub-paragraph (d) from the total obtained under sub-paragraph (b).

10.72 The outturn values needed to calculate capex incentive scheme adjustments are the licensee's actual capex and non-incentivised repex expenditure totals for each Formula Year in the GDPCR1 price control period, from information submissions made by the licensee in accordance with applicable RIGs.

10.73 At the outset of the Price Control Period, the licensee's RAV balance is adjusted to reflect the difference between capex and repex expenditure levels projected for the GDPCR1 price control and the actual capex and repex expenditure

³⁴ (Electricity) Distribution Price Control Review 5

totals referred to in paragraph 10.80, taking into account the 50 per cent capitalisation rate applicable to repex for the GDPCR1 price control.

Formula years in the legacy period subject to adjustment

10.74 Finalised capex and non-incentivised repex expenditure totals relating to Formula Years up to and including 2011-12 will have been available for the modelling of the licensee's opening base revenues and opening RAV balance for the RIIO-GD1 price control. However, capex and repex expenditure totals relating to Formula Year 2012-13 will not have been available when the licensee's opening base revenues and opening RAV balance were set and forecast legacy outturn levels for that year will have been used.

10.75 A legacy price control capex incentive scheme adjustment therefore needs to be made to reflect legacy outturn levels for capex and repex expenditure totals in Formula Year 2012-13.

Determination of the value of the component term CAR

10.76 The steps set out in paragraphs 10.77 to 10.80 below will be followed to determine the value of the component term CAR.

Step 1

10.77 After 31 July 2013, Ofgem will obtain from price control review information submissions relating to Formula Year 2012-13 the licensee's:

- outturn capex expenditure (excluding fuel poor, SIU and logged up and security costs) total; and
- outturn non-incentivised repex expenditure (excluding MRSA) total

for Formula Year 2012-13.

Step 2

10.78 Ofgem will deflate the figures obtained under step 1 to 2005/06 prices.

Step 3 Use of the legacy adjustment calculation workbook

10.79 The deflated figures for outturn capex and repex obtained under step 2 will be used to overwrite the forecast Total Capex (gross of NTS expenditure) and Total Repex (net of expenditure under MRSA incentive) for Formula Year 2012-13 on the CAR worksheet of the calculation workbook.

10.80 The functionality of the calculation workbook will:

- (a) perform the calculations described in paragraph 10.71; and

- (b) deduct any adjustment amount already included in the modelling of the licensee's opening base revenues to give the incremental adjustment amount which will be shown as the value for the component term CAR (after grossing up by multiplying by the corporation tax rate for 2013-14).

Determination of the value of the component term CRAV

10.81 The step set out in paragraphs 10.82 to 10.83 below will be followed to determine the value of the component term CRAV.

Step 1 Use of the legacy adjustment calculation workbook

10.82 The outturn capex expenditure and outturn repex expenditure totals referred to in paragraph 10.77 will be input to the CRAV worksheet of the calculation workbook. SIU costs have been excluded for the purposes of CAR as there was no corresponding allowance. However, SIU costs will be included for CRAV calculations.

10.83 The functionality of the calculation workbook will deduct the forecast levels that were used in calculating the licensee's opening RAV balance for the RIIO-GD1 Final Proposals, to give the incremental RAV additions adjustment value which will be shown as the value for the component term CRAV.

Restatement or adjustment of values used in the determination of CAR and CRAV

As set out in 10.9 a determination of each component term value will be carried out during each Formula Year of the Price Control Period. It may be necessary for one or more of the values referred to in the paragraphs above to be restated or adjusted after having been used to determine the component terms CAR and CRAV. It may also be necessary for the respective allowances currently included within the legacy workbook to be restated or adjusted after use in a determination of the component terms CAR and CRAV. If it was necessary for either of the values or the allowances to be restated or adjusted then the values of CAR and CRAV would be determined again using the restated/adjusted values for the purpose of determining a revision to the PCFM Variable Value LAR or LRAV, for use in the next available Annual Iteration Process.10.85. For adjustments relating to income adjusting events see Part 8.

Part 5 – Determination of component value for legacy mains and services replacement expenditure adjustment

10.84 This part set outs the methodology for determining the value of the component term MRAV, the RAV balance adjustment relating to the licensee's actual expenditure levels on mains and services replacement expenditure during GDP CR1.

Description of the adjustment

10.85 The mains and services replacement expenditure adjustment in the GDPCR1 price control had two purposes:

- to flex the allowances included in the licensee's base revenue in response to outturn levels of required activity; and
- to incentivise the licensee to deliver activity at lower than projected cost levels,

whilst controlling overall cost levels for the GDPCR1 period (see chapter 6 of reference document 1 – para 10.14).

10.86 The mechanism provided for:

- (a) The licensee's base revenue figures for the GDPCR1 price control period to include sums reflecting projected levels of mains and services replacement expenditure with:
 - (i) 50 per cent of the amount modelled as capex (RAV additions) and
 - (ii) 50 per cent of the amount modelled as opex.
- (b) An adjustment to the licensee's allowed revenue in each year of the GDPCR1 period under a formula contained in Special Condition E5 of the licence in force during the GDPCR1 using:
 - (i) the licensee's actual expenditure for the year
 - (ii) an amount determined by a driver formula applying a matrix of standard costs and
 - (iii) the licensee's incentive strength percentage.
- (c) The consolidation of projected capex additions (see sub-paragraph (a)) into RAV at the end of the GDPCR1 period with:
 - (i) no further adjustment if the licensee's total capex across the DPCR1 period was lower than the total of projected capex expenditure
 - (ii) a further addition to the licensee's RAV reflecting the excess of actual capex over projected capex, but subject to an incentive strength adjustment for the overspend (with the total overspend reduced by any annual overspend amounts which would have been addressed under sub-paragraph (b)).

10.87 The outturn values needed to calculate net RAV additions at the end of the GDPCR1 period are the licensee's actual expenditure levels on mains and services replacement for each Formula Year during the GDPCR1 price control period.

Formula years in the legacy period subject to adjustment

10.88 Finalised mains and services replacement expenditure totals relating to Formula Years up to and including 2011-12 will have been available for the modelling of the licensee's opening RAV balance for the RIIO-GD1 price control. However, the licensee's mains and services replacement expenditure total relating to Formula Year 2012-13 will not have been available when the licensee's opening RAV balance was set and a forecast legacy outturn level for that year will have been used.

10.89 A legacy price control mains and services replacement expenditure adjustment therefore needs to be made to reflect the legacy outturn level for actual expenditure in Formula Year 2012-13.

Determination of the value of the component term MRV

10.90 The steps set out in the paragraphs below will be followed to determine the value of the component term MRV.

Step 1

10.91 After 31 July 2013, Ofgem will obtain from price control review information submissions relating to Formula Year 2012-13 the licensee's outturn mains and services replacement expenditure level for Formula Year 2012-13.

Step 2 Use of the legacy adjustment calculation workbook

10.92 The total obtained under step 1 will be used to overwrite the forecast Incentivised Repex allowance and Actual Incentivised Repex Workload values for Formula Year 2012-13 on the MRV worksheet of the calculation workbook.

10.93 The functionality of the calculation workbook will

- (a) re-perform the process set out in paragraph 10.87(c) and
- (b) deduct any RAV addition amount already included in the modelling of the licensee's opening RAV balance for RIIO-GD1, to give the incremental adjustment amount which will be shown as the value for the component term MRV.

10.94 For adjustments relating to income adjusting events see Part 8.

Part 6 – Determination of component value for logged up and security costs adjustments relating to the legacy period

10.95 This part sets out the methodology for determining the value of the component terms SAR and SRV, the revenue allowance and RAV balance addition

adjustments relating to the licensee's actual efficient expenditure levels on logged up and security costs during the legacy period.

Description of the adjustment

10.96 The GDPCR1 price control arrangements provided for the licensee to log up certain types of cost which were not included in opex or capex allowances for that price control period.

10.97 The licensee was required to record and report the levels of expenditure being logged up on specified activities so that, for the RIIO-GD1 price control arrangements:

- (a) an appropriate aggregate addition (in 2009-10 prices) to the licensee's RAV balance could be made, reflecting capex and
- (b) appropriate additions (including time value of money adjustments) could be made to the licensee's base revenue allowances (spread across the Price Control Period) reflecting
 - a. the amounts which would have been included in base revenues and
 - b. the higher RAV balances which would have earned a return and depreciation allowanceif the costs had been included in GDPCR1 opex and capex allowances.

10.98 The outturn values needed to calculate the RAV balance additions and revenue adjustments referred to in paragraph 10.102 are the licensee's efficient logged up and security costs during the legacy period.

Formula years in the legacy period subject to adjustment

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

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

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

Determination of the value of the component term SAR and SRAV

10.101 The steps set out below will be followed to determine the value of the component term SAR and SRAV.

Step 1

10.102 After 31 July 2013, Ofgem will obtain from price control review information submissions relating to Formula Year 2012-13 the licensee's reported totals for logged up security costs (capex and opex) and for each Formula Year in the GDPCR1 price control period.

Step 2

10.103 Ofgem will re-base each of the figures obtained under Step 1 into 2009-10 prices (see section on price base 1.6).

Step 3 Use of the legacy adjustment calculation workbook

10.104 The rebased totals for logged up security costs obtained under step 2 will be used to overwrite the pre-existing logged up and security cost values on the SAR and SRAV worksheet of the calculation workbook.

10.105 The calculation workbook is designed to:

- (a) calculate the difference between the logged up security costs referred to in Step 2 and the logged up security values (in the same price base) used in the modelling of the licensee's opening base revenues;
- (b) calculate the return and depreciation that should be allowed on the figures obtained under sub-paragraph (a) for each Formula Year in GDPCR1; and
- (c) apply a time value of money adjustment to each of the totals obtained

10.106 The value of the time value adjusted incremental revenue calculated from the above steps will be determined to be the value of the component term SAR.

10.107 The value of the incremental RAV additions value calculated in the above steps will be determined to be the component term SRAV.

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

10.108 A determination of each component term value will be carried out during each Formula Year of the Price Control Period.

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

Part 7 – Determination of component value for the legacy licence error identified for the innovation funding incentive

10.110 This part sets out the methodology for determining the value of the component term IFIAR, the revenue allowance addition adjustments relating to the licensee's actual expenditure levels allowed in respect of the innovation funding incentive (IFI) costs, incurred during the legacy period.

Description of the adjustment

Innovation funding incentive GDPCR1 adjustment ($IFISD_t$)

10.111 An error has been identified in the formulae used to calculate $IFISD_t$, where no adjustment was recognised for applying RPI to base revenue (Z_t). In addition to this, Z_t was defined incorrectly within Special Condition E11 and this should have been consistent with the definition for Z_t in Special Condition E2 (Restriction of revenue in respect of Distribution Network Transportation Activity).

10.112 To correct this error, an adjustment will be made to the $IFISD_t$ formula by multiplying Z_t by RPI for each of the formula years of GDPCR1. The $IFISD_t$ formula will now read as $Z_t * RPI$ instead of just Z_t . The IFI adjustment calculated in the steps below will be added to the Legacy price control allowed revenue adjustment (LAR) term which is subsequently added to base revenue.

Determination of the value of the component term IFIAR

10.113 The steps set out below will be followed to determine the value of the component term IFIAR.

Step 1

10.114 After 31 July 2013, Ofgem will obtain from price control review information submissions relating to Formula Year 2012-13, the licensee's calculated IFISDt value for each Formula Year in the GDPCR1 Price Control Period.

Step 2

10.115 The difference in the value of IFISDt as a result of the application of RPI to Zt will be the IFI adjustment. Step 3 Use of the legacy calculation workbook

10.116 The legacy work book will have a new worksheet for IFIAR, in which step 2 above will be calculated. The IFI adjustment for each of the formula years of the GDPCR1 will be re-based into 2009-10 prices (see section on price base 1.6)

10.117 A time value of money adjustment is applied to the values derived in 10.114 above for each year and then summed up to arrive at the total IFISDt adjustment. The IFISDt adjustment is not grossed up for tax because it is an incentive.

Part 8 – Determination of component value for income adjusting events cost adjustments relating to the legacy period

10.118 This part sets out the methodology for determining the value of the component term IAEAR, the revenue allowance and RAV balance addition adjustments relating to the licensee's actual efficient expenditure levels for income adjusting events (IAEs) costs during the legacy period.

Description of the adjustment

10.119 The GDPCR1 price control arrangements provided for the licensee to claim efficient costs for defined IAEs which were not included in opex, repex or capex allowances for that Price Control Period.

Determination of the value of the component term IAEAR

10.120 The steps set out below will be followed to determine the value of the component term IAEAR.

Step 1

10.121 After receipt of any claim for an IAE, Ofgem will make a decision on the allowed efficient expenditure relating to any claimed IAE relating to Formula Year 2012-13 and for each Formula Year in the GDPCR1 Price Control Period. These costs will be disaggregated into opex, capex and repex.

Step 2 Use of the legacy calculation workbook

10.122 The legacy work book will have a worksheet for IAEAR.

10.123 The costs decided in step 1 above, will be allocated as below in the legacy calculation workbook, relating to Formula Year 2012-13 and for each Formula Year in the GDPCR1 Price Control Period, in the following way:

- (a) All costs derived in step 1 relating to opex and allowed as IAE, will be collated on the IAEAR worksheet of the legacy calculation workbook.
- (b) All costs derived in step 1 relating to capex and allowed as an IAE, will be added to the capex allowance on the CAR worksheet of the legacy calculation workbook.
- (c) All costs derived in step 1 relating to repex (incentivised) and allowed as an IAE, will be added to the incentivised repex allowance on the MRV worksheet of the legacy calculation workbook. 50% of this repex value will be added to the repex allowance on the CRAV worksheet. The other 50% will be used to calculate the IAEAR adjustment on the IAEAR worksheet. The IAEAR adjustment for each of the formula years of the GDPCR1 will be re- based into 2009-10 prices (see section on price base 1.6)
- (d) A time value of money adjustment is applied to the values derived in "c" above for each year
- (e) The values are then grossed up for tax using the tax rate for 2013/14 and then summed up to arrive at the total IAEAR adjustment.

Part 9 – Statement of component values and determination and direction of revised PCFM Variable Values

10.124 Parts A and B of Special Condition 3A provide for the determination of revised PCFM Variable Values for Formula Year 2013-14, that relate to legacy price control adjustments, for use in the Annual Iteration Process. Determinations will be made by 30 November in each Formula Year using the formulae set out in Part A of

Special Condition 3A and component term values determined in accordance with Part B of that condition and the methodologies set out in Parts 1 to 8 of this chapter.

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

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

10.127 Part C of Special Condition 3A sets out the procedure to be used for the direction of revised PCFM Variable Values relating to legacy price control adjustments. It specifies that:

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

10.128 If, for any reason, in any Formula Year $t-1$, the Authority does not make a required direction of revised PCFM Variable Values relating to legacy price control adjustments, Part C of Special Condition 3A specifies that the Authority must direct the values concerned as soon as is reasonably practicable thereafter.

11. NTS Exit Capacity and Shrinkage cost allowance – financial adjustment methodology

Part 1 – Overview

11.1 The Opening Base Revenue Allowance ('PU' values) for each licensee set down in the table at Appendix 1 to Special Condition 1B (Restriction of revenue in respect of the Distribution Network Transportation Activity) includes an allowance for:

- (a) NTS Exit Capacity costs set down in the table at Appendix 1 to Special Condition 1D (NTS Exit Capacity Cost Adjustment); and
- (b) Shrinkage costs set down in the table at Appendix 1 to Special Condition 1F (Revenue adjustments for performance in respect of gas Shrinkage and environmental emissions),

for each Formula Year of the Price Control Period.

11.2 The PCFM contains AEx and ALSC values which represent the allowance for NTS Exit Capacity costs and Shrinkage costs, respectively.

11.3 Opening values are based on the latest information that was available at the outset of the Price Control Period. As outlined in Final Proposals³⁵ the licence condition allows for the licensee to propose revisions to these allowances. These revisions will take effect through the Annual Iteration Process of the PCFM.

11.4 In order to maintain a period of notice before any such revision takes effect, the licensee is required to notify the Authority of such a revision by 31 July in Formula Year t-2. For the avoidance of doubt, and by way of an example, this would mean that by 31 July 2014 the licensee must notify the Authority that it wishes to revise the AEx and/or ALSC values that will apply from 1 April 2016 (or a subsequent Formula Year).

³⁵ See RIIIO-GD1: Final Proposals – Finance and uncertainty supporting document, para.s 8.36 to 8.41: http://www.ofgem.gov.uk/Networks/GasDistr/RIIO-GD1/ConRes/Documents1/3_RIIIOGD1_FP_Finance_and_uncertainty.pdf

Part 2 – Updating allowances through the Annual Iteration Process

11.5 Part D and E of Special Condition 1D and Part H and I of Special Condition 1F provide for adjustments to be made during the Price Control Period to the licensee's AEx and ALSC values, respectively.

11.6 The licensee's allowance for NTS Exit Capacity costs (AEx) will be updated during the Price Control Period to reflect a more up to date forecast of such costs, as published by National Grid Gas (as owner of the National Transmission System).

11.7 The calculation and process to update the AEx values will be as follows, and may be repeated annually:

- (a) The licensee may notify the Authority of revised AEx values by 31 July in Formula Year $t-2$, where the revision may not take effect sooner than Formula Year t .
- (b) The notified variation will be calculated based on fixed offtake volumes at each offtake (as set down in Appendix 2 of Special Condition 1D) and the revised forecast of the NTS (TO) Exit Capacity Charge for each offtake.
- (c) The Authority will direct revised AEx values by no later than 30 November following the receipt of a notice from the licensee (further information on the process of directing revised PCFM Variable Values can be found in chapters 1 and 2).
- (d) The direction will only have affect in the Annual Iteration Process the following year, ie the change will not have any affect on revenues in the year following the direction.

11.8 The licensee's allowance for Shrinkage costs (ALSC) will be updated during the Price Control Period to reflect a more up to date forecast of the price of gas, with reference to a gas price reference cost based on the forward offer price for delivery at the national balancing point published in an Approved Market Price Report³⁶.

11.9 The calculation and process to update the ALSC values will be as follows, and may be repeated annually:

- (a) The licensee may notify the Authority of revised ALSC values by 31 July in Formula Year $t-2$, where the revision may not take effect sooner than Formula Year t .
- (b) The notified variation will be calculated based on fixed Shrinkage volumes (as set out in Appendix 2 of Special Condition 1F and the revised forecast of the price of gas.

³⁶ See Glossary

- (c) The Authority will direct revised ALSC values by no later than 30 November following the receipt of a notice from the licensee (further information on the process of directing revised PCFM Variable Values can be found in chapters 1 and 2).
- (d) The direction will only have affect in the Annual Iteration Process the following year, ie the change will not have any affect on revenues in the year following the direction.

Part 3 – Processing of revised AEx and ALSC values under the Annual Iteration Process

11.10 AEx and ALSC values, as revised, are added in full to recalculated base revenue figures in the PCFM through the Annual Iteration Process. AEx and ALSC values are not added to RAV and are not subject to the Totex Incentive Mechanism.

Appendix 1 - Glossary

A

Annual iteration Process

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

Approved Market Price Report

The European Spot Gas Markets (ESGM) report published by Heren Energy Limited or another published market price report (published by a comparable price reporting service) which, in the opinion of the Authority, notified in writing to the licensee, is equivalent to ESGM in the United Kingdom

C

Cut-Off Date

In respect of the licensee's Pension Scheme Established Deficit means 31 March 2013 for GDNs

D

Defined Benefit Scheme

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

Defined Contribution Scheme

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

E

Early Retirement Deficiency Contributions (ERDCs)

The cost of providing enhanced pension benefits granted under severance arrangements prior to 1 April 2004 which were not fully matched by increased contributions

F

[Fast money](#)

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

[Financial Reporting Council \(FRC\)](#)

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

[Formula Year](#)

A year beginning on 1 April and ending on 31 March to which the provisions of this handbook apply.

[Funding Adjustment Rate](#)

This is the percentage calculated as $1 - \text{Totex Incentive Strength Rate}$.

G

[GD1](#)

Prefix/Suffix designating an item relevant to the RIIO-GD1 (gas distribution) price control review which will be applicable for the eight years running from 1 April 2013.

[GD1 Price Control Financial Model \(PCFM\)](#)

The model of that name including the suffix 'November 20XX' (where 20XX represents the calendar year containing the month of November in the Formula Year t-1):

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

as modified from time to time, whether under Special Condition 2A or otherwise.

The GD1 PCFM calculates appropriate changes to be applied to the licensee's Opening Base Revenue Allowances through an Annual Iteration Process - see chapters 1 and 2.

I

[Incremental deficit – see Pension scheme incremental deficit](#)

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

International Financial Reporting Standards (IFRS)

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

M

MOD Term

The term of that name included in the formula for Base Distribution Network Transportation Activity Revenue set out in Special Condition 1B of the Gas Transporters licence. It represents the incremental change to be applied to the licensee's Opening Base Revenue Allowance 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 Process for the PCFM (see Chapter 2) and is specified in a direction given by the Authority by 30 November in each Formula Year.

N

Non-core RAV

See Shadow RAV

NPV

Net present value

NTS Exit Capacity

Capacity which causes or permits gas to flow from the NTS in accordance with paragraph 1.2.3 (b) of section B of the Network Code having effect on 1 January 2013

O

Ofgem

The Office of the Gas and Electricity Markets Authority.

P

PCFM

The RIIO-GD1 Price Control Financial Model (see GD1 PCFM)

Pension Principle

Ofgem's price control Pension Principles and guidance notes as set out in appendix 5 to the RIIO-GD1 Final Proposals - Finance and Uncertainty supporting document. It includes any revision to the guidance notes from time to time

Pension Protection Fund

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

Pension Protection Fund (PPF) Levy

The levy on pension schemes by which the PPF is financed. This levy has a number of constituent elements including a fixed element (based on scheme liabilities), and a risk based element (based on the perceived insolvency risk of each scheme). Additionally there is an administration levy charged to cover the PPF running costs

Pension Scheme Administration

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

Pension Scheme Established Deficit (Established Deficit)

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

Pension scheme incremental deficit adj ($PSED_{AD1}$)

A different value ($PSED_{AD1}$) substituted for the $PSED$ for the purposes of the methodology in this handbook. The Authority may, following bilateral discussions, agree with the licensee that a different value be substituted for the $PSED$.

Pension scheme incremental deficit

The difference between assets and liabilities, determined at any point in time, attributable to post cut-off date pensionable service and relating to Regulated

Business Activities under Pension Principle 2. The term also applies equally where there is a surplus for the post-cut off date regulated notional incremental deficit sub-fund.

Pre-tax WACC

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

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

RIIO

Revenue = Incentives + Innovation + Outputs.
Ofgem's framework for the economic regulation of energy networks

RIIO-GD1 (Gas Distribution)

The price control arrangements which will apply to gas distribution licensees from 1 April 2013 until 31 March 2021

S

Scheme datasets

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

Slow money

The proportion of Totex which is added to the licensee's RAV balance on which the licensee receives a revenue allowance to cover finance (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. This is also referred to as "non-core RAV"

Shrinkage

Gas which is lost or otherwise not accounted for as off taken from an LDZ, including gas lost or unaccounted for by reason of unidentified theft from the Distribution Network and gas used by the licensee for its own purposes

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, for any one year, the multiplier is $(1+X)$ where:

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

Totex

See Chapter 6 paragraphs 6.18 – 6.22

Totex Capitalisation Rate

The percentage of Totex which is added to RAV (slow money). For RIIO-GD1 is a capitalisation rate applied to repex (repex capitalisation rate) and non-repex i.e. opex and capex (non-repex capitalisation rate).

Totex Incentive Mechanism (TIM)

TIM is the mechanism that calculates the financial reward (or penalty) that companies are given in allowances for under or over spend on Totex. For RIIO-GD1, Opening Base Revenue Allowances have been modelled on the basis that actual Totex expenditure levels are expected to equal allowed Totex expenditure levels (allowances). If actual (outturn) expenditure differs from allowances, for any Formula Year during the Price Control Period, the TIM provides for an appropriate sharing of the incremental amount (whether an overspend or underspend) between consumers and licensees

Totex Incentive Strength Rate (incentive strength)

The incentive strength is a percentage figure specified in Special Condition 3B (Determination of PCFM Variable Values for Totex Incentive Mechanism Adjustments) for the licensee. It represents the percentage that a licensee bears in respect of an overspend against allowances or retains in respect of an underspend against allowances.

Triennial Valuation

An actuarial valuation of a pension scheme which has been carried out to meet the requirements of Section 224(2)(a) of the Pensions Act 2004 and which details in a written report, prepared and signed by the Scheme Actuary, the value of the scheme's assets and Technical Provisions. Actuarial valuations are usually produced

triennially but the term may also refer equally to any full actuarial valuation that is not an Updated Valuation

U

Updated Valuation

A report, prepared and signed by the Scheme Actuary, which updates a Triennial Valuation to a later date.

V

Vanilla WACC

See WACC

W

WACC

The Vanilla Weighted Average Cost of Capital is Ofgem's preferred way of expressing the rate of return allowed on the Regulatory Asset Values (RAV) of price controlled network companies. The use of Vanilla WACC means that the company's tax cost is separately calculated as a discrete allowance so that only the following have to be factored in:

- the pre-tax cost of debt - ie the percentage charge levied by lenders, and
- the post tax cost of equity – ie the percentage return equity investors expect to actually receive, weighted according to the price control gearing assumption.

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