Promoting choice and value
**for all gas and electricity customers**

# GT1 Price Control Financial Handbook

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


**Reference:**

**Publication date:** XX XXX 2013

**Contact:** Ofgem Regulatory Finance Team

**Tel:** 020 7901 7000

**Email:** regulatoryfinance@ofgem.gov.uk


**Overview:**

This is the GT1 Price Control Financial Handbook which forms part of Special Condition GTC 57 (Governance of Price Control Financial Instruments) of the Gas Transporter Licence held by National Grid Gas plc in respect of the national gas transmission system.

This document consists of:

a) a description of the GT1 Price Control Financial Model (PCFM) and the Annual Iteration Process for it, used to update the licensee's base revenue allowances during the course of the RIIO-T1 price control period;

b) an overview of the GT1 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 GTC 57.

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

# Context

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

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

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

This more sophisticated approach involves an annual iteration of the GT1 Price Control Financial Model (PCFM) using updated variable values. This gives rise to a requirement for licence conditions and methodologies to govern the determination of revised PCFM Variable Values and the Annual Iteration Process.

This Handbook (which forms part of Price Control Licence Condition GTC 57) sets out the required processes and methodologies. To promote transparency, up to date copies of both the Handbook and the PCFM will be maintained on the Ofgem website.

# Associated documents

a. GT1 Price Control Financial Model

   [Hyperlink]

b. RIIO-T1 Price Control Final Proposals

   [Hyperlink]

c. Statutory Consultation on RIIO-T1 licence conditions

   [Hyperlink]

# Contents

# Introduction

The GT1 Price Control Financial Handbook (this handbook) is one of the Price Control Financial Instruments referred to in Special Condition GTC 57 (Governance of Price Control Financial Instruments) of the Gas Transporter Licence held by National Grid Gas plc in respect of the national gas transmission system. It describes the GT1 Price Control Financial Model ('PCFM') and the Annual Iteration Process for it, by which annual adjustments to the licensee's base revenue will be calculated. It also contains the Price Control Financial Methodologies ('the methodologies'), specified in relevant price control licence conditions, which will be used to determine appropriate revisions to the variable values contained in the PCFM to facilitate calculations under the Annual Iteration Process. The methodologies also describe the intent and effects of revising the various revised PCFM Variable Values.

This handbook, the constituent methodologies and the PCFM (together the Price Control Financial Instruments) form part of Special Condition GTC 57. The Financial Instruments are subject to a formal change control process set out in that condition.

The PCFM Annual Iteration Process approach has been adopted because:

- it is consistent with the aims of the RIIO price control, embodying more 'real time' adjustments to financial allowances;
- it handles complex computational interactions between financial adjustments without the need for unwieldy algebra on the face of price control licence special conditions;
- it provides for consistent treatment of the Totex[1] aspects of the price control;
- it maintains transparency on adjustments to base revenues, since the licence, methodologies, PCFM and variable values will be published; and
- it allows stakeholders to keep abreast of allowed revenue levels and to carry out business sensitivity analysis.

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

(i) the licence,

(ii) the methodologies, and

(iii) the PCFM.

[1] Total Expenditure – see Glossary

## Terms used in this handbook

*References to the Authority and Ofgem*

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

In this handbook the text refers to:

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

*Other terminology*

Throughout this handbook:

a) 'the licence' means the Gas Transporter Licence held by National Grid Gas plc in respect of the national gas transmission system;

b) 'this handbook' means the GT1 Price Control Financial Handbook;

c) 'Special Condition' means one of the Special Conditions contained in the Gas Transporter Licence held by National Grid Gas plc in respect of the national gas transmission system; and

d) 'price control period' means the RIIO-T1 price control period which runs from 1 April 2013 to 31 March 2021.

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

# 1. The GT1 Price Control Financial Model and the Annual Iteration Process

## Overview

1.1. The Special Conditions specify the Transmission Owner (TO) and System Operator (SO) opening base revenue[2] levels for the licensee for each Formula Year of the price control period, reflecting the Authority's final proposals for the RIIO-T1 price control settlement.

1.2. The GT1 Price Control Financial Model (PCFM) has been designed to calculate incremental changes to the licensee's opening base revenues 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 Totex[3] expenditure and the Totex incentive mechanism.

1.3. The calculations take place under the Annual Iteration Process for the PCFM described below and are manifested as a PCFM output value for the term 'MOD' which is then applied as shown in the simplified formula below:

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

1.4. There is a similar term, 'SOMOD' which applies to the System Operator part of the price control. Information relating to the term MOD in this chapter, and in chapter 2 is also relevant to the term SOMOD in the context of the System Operator price control.

### Price base

1.5. The PCFM works predominantly in a constant 2009-10 price base. This is consistent with the opening base revenue values set down in the licence. The value

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

[3] see Glossary

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.

1.6. Some tax calculations internal to the PCFM use nominal prices, based on embedded RPI forecast data. Interest cost and tax allowance calculations relate to the licensee's accounting profit and loss position. Since, for regulatory purposes, this is considered in nominal prices, the use of nominal prices in the PCFM tax calculations ensures that revenue allowance calculations more accurately reflect the profile of tax expenses of the licensee.

1.7. Where values reported in nominal terms are required to be reflected in 2009-10 prices we will use the regulatory year average actual RPI indices to rebase.

**Temporal convention**

1.8. As indicated above, the MOD term is used to adjust the opening base revenue figure for each Formula Year t during the price control period[4]. 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 Price Control Financial Model and the Annual Iteration Process

1.9. The PCFM exists as a constituent part of Special Condition GTC 57 (Governance of GT1 Price Control Financial Instruments). It has an input area containing both fixed values and a PCFM Variable Values table. The base revenue figure 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.

1.10. At the outset of the price control period, the base revenue figures calculated by the PCFM, using the variable values subsisting at that time, constitute the opening base revenue values for the licensee. Before the calculation of opening base revenues are performed, Ofgem will commission an external audit of the functionality of the PCFM.

1.11. By 30 November in each Formula Year t-1[6], Ofgem will determine whether any PCFM variable values for the licensee should be revised in accordance with the Special Conditions and methodologies referred to in chapters 3 to 11 of this handbook.

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

1.12. The Authority will give the licensee at least 14 days notice of any revised PCFM Variable Values in accordance with requirements in the licence, to allow for any representations or objections. The Authority will then (by 30 November in Formula Year t-1) specify any PCFM Variable Value revisions in a formal direction to the licensee. The direction will also include a 'screenshot' of the PCFM Variable Values table for the licensee, showing the state of all variable values after the directed revisions, with revised values emboldened.

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

- directed revisions to PCFM Variable Values will be inputted in the appropriate 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 automatically updated, including:
    - the 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.

1.14. The output value of $MOD_t$ for the licensee will reflect the difference between the recalculated base revenue figures for the licensee held in the PCFM before the Annual Iteration Process and the recalculated base revenue figures for the licensee held in the PCFM after the Annual Iteration Process recalculations. The PCFM calculations will apply appropriate time value of money[5] adjustments to the calculation of $MOD_t$, so that the licensee will be in the same position as if adjustments to base revenue for years prior to Formula Year t had been notified to it in the Formula Year concerned.

1.15. Changes to base revenue figures calculated under the Annual Iteration Process may be upwards or downwards and, accordingly, the value of $MOD_t$ may be positive or negative. A key point to note is that once the value of MOD has been directed for a particular 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 value for the same year.

1.16. The steps of the Annual Iteration Process are specified in Special Condition GTC 26 (Annual Iteration Process for the GT1 Price Control Financial Model).

1.17. The Authority will issue a direction to the licensee giving the value of $MOD_t$ by 30 November in each Formula Year t-1[6]. 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

[5] See Glossary

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

paragraph 1.10. The value of MOD in the direction will be stated in £m to one decimal place.

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

- the deadline of 31 July in 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 base revenue for Formula Year t, in time to calculate and issue its indicative use of system charges by 31 December in Formula Year t-1.

1.19. In the unlikely event that the Authority does not direct a value for $MOD_t$ by 30 November in Formula Year t-1, paragraph 10 of Special Condition GTC 26 specifies that the value must be directed as soon as possible thereafter and that, in the meantime, the value of $MOD_t$ shall be held to be equivalent to the value of $MOD_{t-1}$.

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

Table [1.0] timing of Annual Iteration Process

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

**State of the GT1 Price Control Financial Model**

1.21. As mentioned in paragraph 1.7, the PCFM exists as a constituent part of Special Condition GTC 57 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 GTC 57 (Governance of GT1 Price Control Financial Instruments).

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

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

1.24. An updated copy of the PCFM will be uploaded to the website by 30 November each year (after each Annual Iteration Process) and the file will be named "GT1 Price Control Financial Model 20XX-XX".

*Error of functionality in the PCFM*

1.25. In the unlikely event that an error of functionality is discovered in the PCFM, the following procedures would be followed:

- the issue would be considered at the earliest opportunity by the GT1 Price Control Financial Model Working Group (see next section) and a corrective modification determined by Ofgem;
- if the functional error had distorted the calculation of a previously directed value of the term MOD, the determined modification would include any adjustments necessary to correct for that distortion on an NPV neutral basis in the next calculation of the term MOD;
- the procedure in Special Condition GTC 57 for modifications to the PCFM would be followed.

## The GT1 Price Control Financial Model Working Group

1.26. Ofgem will facilitate an industry expert working group to review issues arising with respect to the form or usage of the PCFM. The terms of reference for The GT1 Price Control Financial Model Working Group ('the working group') are set out below.

1.27. In accordance with the provisions of Part A of Special Condition GTC 57 (Governance of GT1 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*

1.28. The purposes of the working group are:

(i). to review the ongoing effectiveness of the PCFM in producing a value for the term MOD for each Formula Year that appropriately adjusts the licensee's opening base revenue so that its allowed expenditures and performance under incentive schemes are properly reflected;

(ii). to provide, when requested by the Authority, its views on the impact of any proposed modifications to the PCFM in accordance with Part A of Special Condition GTC 57; and

(iii). to provide such views or recommendations to the Authority with regard to the PCFM as it sees fit.

*Composition*

1.29. The composition of the group will be:

- Ofgem (chair);
- Ofgem (secretary);
- one or two representatives of the licensee;
- ENA representative (optional).

*Timing and duration of the group's work*

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

1.31. The group will meet at least once between 1 January and 31 July during each calendar year, but may meet more frequently if required, in particular in relation to the provision of views on the impact of proposed PCFM modifications (see paragraph 1.26(ii)).

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

1.33. A meeting of the working group will be quorate, for the purpose of expressing a view or recommendation in respect of the PCFM, if at least one representative from Ofgem (which may be the chair), and at least one representative of the licensee are present.

*Resources*

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

# 2. The GT1 Price Control Financial Methodologies

2.1. The GT1 Price Control Financial Methodologies set out in this handbook describe the basis for a range of annual adjustments to the licensee's opening base revenue allowances for the purposes of the RIIO-T1 price control arrangements.

2.2. The main purpose of each methodology is to set out the way in which one or more PCFM Variable Values are to be revised for the purposes of the Annual Iteration Process for the GT1 Price Control Financial Model under which values of the term $MOD_t$ are calculated (see chapter 1). Any revised PCFM Variable Values determined under the methodologies will replace (over-write) the existing values contained in the PCFM Variable Values Table as part of the Annual Iteration Process.

2.3. The methodologies are presented in chapters 3 to 11 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 GTC 57 (Governance of GT1 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 1 below. PCFM Variable Values whose names begin with "SO" relate to the System Operator aspects of the licensee's business

***Table 2.1***

| No | PCFM Variable Value | Special Condition | Description | Type of variable value |
|---|---|---|---|---|
| | <u>Specified financial adjustments</u> | | | |
| 1 | EDE<br>SOEDE | 27/65 | Pension Scheme Established Deficit | revenue allowance |
| 2 | APFE<br>SOAPFE | 27/65 | Pension Scheme Administration and PPF levy | revenue allowance |
| 3 | TTE<br>SOTTE | 27/65 | Tax liability – tax trigger events | revenue allowance |
| 4 | TGIE | 27/65 | Tax liability – gearing/interest | revenue allowance |

| No | PCFM Variable Value | Special Condition | Description | Type of variable value |
|---|---|---|---|---|
| | SOTGIE | | costs | |
| 5 | CDE<br>SOCDE | 27/65 | Allowed percentage cost of debt | Percentage |
| | Totex incentive mechanism | | | |
| 6 | ALC | 47 | Actual load related capex expenditure | actual expenditure |
| 7 | ARC | 47 | Actual asset replacement capex expenditure | actual expenditure |
| 8 | AOC | 47 | Actual other capex expenditure | actual expenditure |
| 9 | ACO<br>SOACO | 47/66 | Actual controllable opex | actual expenditure |
| 10 | ANC<br>SOANC | 47/66 | Actual non-operational capex | actual expenditure |
| 11 | ALU | 47 | Actual load related capex expenditure (uncertain) | actual expenditure |
| 12 | ARU | 47 | Actual asset replacement capex expenditure (uncertain) | actual expenditure |
| 13 | ACU | 47 | Actual other capex expenditure (uncertain) | actual expenditure |
| 14 | AOU | 47 | Actual controllable opex (uncertain) | actual expenditure |
| | Allowed Totex expenditure adjustments | | | |
| 15 | IAEEPS/<br>SOIAEPPS | 28/117 | Uncertain costs - enhanced security | allowed expenditure |
| 16 | IAEQL | 28 | Uncertain costs – quarry and lost development claims | allowed expenditure |
| 17 | IAEIE | 28 | Uncertain costs – industrial emissions | allowed expenditure |
| 18 | IAEPD | 28 | Uncertain costs – pipeline diversions | allowed expenditure |
| 19 | IAEAH | 28 | Uncertain costs – one off asset health | allowed expenditure |
| 20 | SOIAECA | 117 | Uncertain costs – Central Agent | allowed expenditure |
| 21 | IAENF | 28 | Network flexibility | allowed |

| No | PCFM Variable Value | Special Condition | Description | Type of variable value |
|---|---|---|---|---|
| | | | | expenditure |
| 22 | EntRD | C8 | Incremental obligated entry capacity | allowed expenditure |
| 23 | ExRD | C8 | Incremental obligated exit capacity | allowed expenditure |
| 24 | IRM | 9 | Innovation roll out mechanism | allowed expenditure |
| | Legacy price control adjustments | | | |
| 25 | LAR/ SOLAR | 64/67 | Legacy price control adjustments to allowed revenue | true-up revenue allowance |
| 26 | LRAV/ SOLRAV | 64/67 | Legacy price control adjustments to RAV | true-up RAV additions |

2.6. Overviews of the specified financial adjustments referred to in rows 1 to five of Table 2.1 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 (rows 6 to 14 in Table 2.1) applies to any overspend or under spend by the licensee against its RIIO-T1 Totex expenditure allowances. An overview of the mechanism and the methodology for determining revisions to the associated PCFM Variable Values is contained in chapter 6 of this handbook.

2.8. Allowed Totex expenditure adjustments (rows 15 to 24 in Table 2.1) cover a range of Totex adjustment schemes under which allowed expenditure can be adjusted by 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 10 of this handbook.

2.9. Legacy price control adjustments relate to activities which took place in price control periods prior to RIIO-T1 but in respect of which a financial adjustments may be required because:

- the outturn data for Formula Year 2012-13 were not available when opening base revenues for the RIIO-T1 price control period were set;
- cost totals for items subject to true-up or logging-up were not available when opening base revenues for the RIIO-T1 price control period were set; or

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

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

2.10. In general terms, the different types of variable value specified in column 5 of Table 2.1 are processed under the Annual Iteration Process for the PCFM in the following ways:

Allowed expenditure

These amounts are modelled, subject to the Totex Capitalisation Rate, as:

- fast money – flowing directly to the 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 cost of capital return, depreciation and Totex incentive mechanism.

Revenue allowance

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

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 Regulatory Reporting Pack relating to Formula Year t-2. Since the RRP contains values in nominal prices, these will be deflated to a 2009-10 price base using published RPI data so that they are consistent with the 2009-10 price base used in the PCFM.

True-up revenue allowance

These amounts will usually flow directly to the base revenue figure for Formula Year 2013-14, because they relate to activity levels or outturn values for price control periods prior to RIIO-T1.

True-up RAV additions

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

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

*Atypical revisions*

2.12. The GT1 Price Control Financial Methodologies describe the normal Formula Year timing references for each PCFM Variable Value. For example, in relation to the PCFM Variable Values for the allowed percentage cost of debt (row 5 in Table 2.1) the normal sequence would be:

- data obtained for a trading days period up to 31 October in Formula Year t-1;
- CDE and SOCDE values for Formula Year t and each subsequent Formula Year revised to reflect new cost of debt (see chapter 5 for methodology);
- effect of revisions flows through to calculation of value of $MOD_t$ and $SOMOD_t$.

2.13. 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 methodology

## Part 1 - Overview

3.1. The opening base revenue[7] allowances ('TOPU' and 'SOPU' values) for the licensee set down in the tables appended to Special Conditions GTC 20 (Restriction of NTS Transportation Owner Revenue) and GTC 7 (Restriction of NTS System Operation Activity Charges) 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 RIIO-T1 price control period.

3.2. These allowance are represented, respectively, by the opening EDE, APFE, SOEDE and SOAPFE values[8] held in the PCFM Variable Values Tables for the licensee, contained in the GT1 Price Control Financial Model (PCFM) and are expressed in 2009-10 prices. Opening EDE, APFE, SOEDE and SOAPFE values are based on modelling assumptions and parameters applicable at the outset of the price control period, consistent with Ofgem's pension principles (see paragraph 3.5) and published pension funding policy [insert reference].

3.3. The allowance levels will be updated during the RIIO-T1 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 base revenue[7] of revising EDE and APFE values for the Annual Iteration Process.

3.4. In the context of Established Deficit repair and Pension Scheme Administration/PPF expenditure, we refer to "allowances" rather than "allowed expenditure". This is because, subject to the reasonableness tests referred to in this chapter, EDE, APFE, SOEDE and SOAPFE values are added in full to recalculated base revenue figures in the PCFM under the Annual Iteration Process – i.e. the amounts are treated as 100per cent fast money[9]. It should be noted, however, that revisions

[7] 'Base NTS Transportation Owner Revenue' and 'Base NTS System Operation Revenue'

[8] as at 1 April 2013

[9] See Glossary

to EDE, APFE, SOEDE and SOAPFE values will have ancillary effects on other calculations under the Annual Iteration Process which also feed into recalculated base revenue figures.

**Price control pension principles**

3.5. Ofgem's price control pension principles were set out in the March 2011 decision on strategy for the RIIO-T1 price control[10]. They include the following key points:

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

**Established Deficit**

3.6. For the purposes of Special Condition GTC 27 (Specified financial adjustments), GTC 65 (Specified financial adjustments – System Operator) and this chapter, the term 'Established Deficit' means the difference between the assets and corresponding liabilities within a defined benefit pension scheme, sponsored by the licensee, which are:

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

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

3.8. The Established Deficit is further divided between the Transportation Owner (TO) and System Operator (SO) parts of its transportation business in accordance with Ofgem's pension deficit allocation methodology.

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

3.9. Allowances for Established Deficit repair are set at/revised to levels intended to allow the licensee to clear its Established Deficit (by making payments to the pension scheme's trustees) over a 15 year period, beginning on 1 April 2013 and ending on 31 March 2028. The RIIO-T1 price control period ends on 31 March 2021, but EDE and SOEDE values will be determined having regard to the projected Established Deficit repair completion date of 31 March 2028.

**Pension scheme Administration and PPF levy**

3.10. For the purposes of Special Conditions GTC 27, GTC 65 and this chapter, Pension Scheme Administration means the range of activities that pension scheme trustees are required by legislation including to undertake or commission in running the pension scheme. It includes, without limitation, the keeping of scheme records, scheme management and administration,scheme policy and strategy, the provision of information to scheme members, the calculation and payment of benefits and liaison with tax and regulatory authorities, and the preparation of valuations. It does not include investment management fees which are remunerated by deduction from investment returns; or any activities which are the responsibility of the licensee, such as advisors to to the licensee on managing or advising it on any and all aspects of its relationship with the trustees including recovery plans.

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

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

3.13. These two items of expenditure are apportioned between the TO and SO parts of the licensee's transportation business.

**Costs and adjustments outside the scope of this chapter**

*Pension costs for service after 31 March 2013*

3.14. 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 costs relating to any incremental deficit which accrues in relation to such service, ascertained in accordance with the pension deficit allocation methodology. These costs fall outside the scope of Special Conditions GTC 27, GTC 65 and this chapter.

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

3.15. For the price control period preceding RIIO-T1 (the TPCR4 price control and rollover year), a true-up applied to the difference between the level of pension costs included in the licensee's allowed revenues, and the actual payments made by the licensee to the pension scheme. Any true-up amount not included in RIIO-T1 opening base revenue allowances ('TOPU' and 'SOPU' values) will be dealt with in accordance with Special Conditions GTC 64 (Legacy price control adjustments – Transmission Owner), GTC 67 (Legacy price control adjustments – System Operator) and chapter 10 of this handbook. Such adjustments therefore fall outside the scope of Special Conditions GTC 27, GTC 65 and this chapter. It should be noted however, that the level of payments made by the licensee in the preceding price control period will have fed through to the licensee's Established Deficit position as at 1 April 2013.

**Temporal conventions**

3.16. For the purposes of Special Condition GTC 27, GTC 65 and this chapter, "Formula Year t" means the Formula Year in which a value for the term MOD or SOMOD, calculated through a particular Annual Iteration Process, is used in the formula for the licensee's Base NTS Transportation Owner Revenue or Base NTS System Operation Revenue respectively [11]. References to Formula t-1 etc should be construed accordingly.

3.17. 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 GT1 Price Control Financial Model.

## Part 2 - Updating allowances through the Annual Iteration Process

3.18. The licensee's allowances for Pension Scheme Established Deficit repair, Pension Scheme Administration and PPF levy expenditure will be updated during the RIIO-GT1 price control period to reflect:

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

3.19. It is anticipated that EDE, SOEDE, APFE and SOAPFE values will be revised on two occasions during the RIIO-GT1 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 | Expected | Reasonableness | Revised PCFM | EDE and | APFE and |
|---|---|---|---|---|---|

[11] See Special Conditions GTC 20 (Restriction of NTS Transportation Owner Revenue) and GTC 7 (Restriction of NTS System Operation Activity Charges).

| defined benefit pension scheme valuation as at | receipt by Ofgem | review completed | Variable Values directed for Annual Iteration Process no later than: | SOEDE values revised for Formula Year | SOAPFE values revised for Formula Year |
|---|---|---|---|---|---|
| 31 March 2012 and 2013 | June 2014 | 30 September 2014 | 30 November 2014 | 2015-16 onwards | 2013-14 |
| 31 March 2016 | June 2017 | 30 September 2017 | 30 November 2017 | 2018-19 onwards | 2014-15 to 2016-17 |
| 31 March 2019 | June 2020 | 30 September 2020 | n/a | n/a | n/a |

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

3.21. Ofgem will direct revised EDE, APFE, SOEDE and SOAPFE values at other times, if that is necessary to reflect any revised timetable of information availability or process completion. However, in those circumstances, the PCFM Variable Values would still be determined in accordance with the procedures set out in this chapter.

3.22. As mentioned in paragraph 3.4, revised EDE, APFE, SOEDE and SOAPFE 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 terms MOD and SOMOD 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 or SOMOD.

**Reasonableness review**

3.23. After receiving each data set, or substantially all of each, of scheme valuations Ofgem will commission an independent review of the reasonableness of the Established Deficit position.

3.24. The expected completion times for the reasonableness reviews due to take place during the RIIO-T1 price control period are shown in Table 3.1. The data set comprises:

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

- the schemes statement of funding principles;
- the schemes statement of investment principles; and
- the completed deficit allocation methodology tables and other pension data tables and supporting documents specified in the price control review cost information regulatory instructions and guidance (RIGs) document

## 3.25. Part 3 – Established Deficit repair allowances

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

3.26. Subject to paragraph 3.25, revised EDE and SOEDE values will be determined by **30 November 2014 for each Formula Year from 201**5-16 to 2020-21 using the methodology set out in Table 3.2 below. Each step is carried out in respect of EDE values to be determined and separately in respect of SOEDE values to be determined.

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

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

| | | | |
|---|---|---|---|
| 6 | By 30 November 2014 | Remaining deficit repair period established as 12 years<br>(2026-27 minus 2014-15) | |
| 7 | | Annual Established Deficit repair allowance in 2009-10 prices computed as:<br><br>= "B" / ((1-(1+DR)^ -12) / LN(1+DR))<br><br>Where:<br><br>DR is the discount rate determined by Ofgem through a benchmarking process moderated against median pre-retirement discount rates for occupational pension schemes in Great Britain; and<br><br>LN returns the natural logarithm of the subject value<br><br>If there is a surplus shown by the valuation, B and C are set to zero and paragraph 3.26 below applies. | "C" |
| Adjustment relating to licensee payment history in RIIO-T1 period | | | |
| 8 | By 31 October 2014 | Obtain relevant portion (ie the portion attributable to the established deficit for the licensee's transmission business[12]) of actual deficit repair payment made by licensee in 2012-13 and 2013-14 from the price control review information referred to in step 2 above; and, subject to any adjustments arising from Ofgem's reasonableness review, deflate to 2009-10 prices using actual RPI data determined in accordance with paragraph 1.7. | "D" |
| 9 | | Deduct the pre-existing EDE/SOEDE value for Formula Years 2012-13 and 2013-14 from "D" to give the difference between pre-existing allowance and actual payment | "E" |
| 10 | | Annual adjustment amount in 2009-10 price computed as:<br><br>=value "E" / ((1-(1+DR)^ -12 / LN(1+DR))<br><br>where<br><br>DR is the discount rate determined by Ofgem through a benchmarking process moderated against median pre-retirement discount rates for | "F" |

[12] Split into TO and SO for NGGT

| | | | |
|---|---|---|---|
| | | occupational pension schemes in Great Britain; and<br>LN returns the natural logarithm of the subject value.<br>The value "F" may be either positive (if actual payments at "D" are greater than the pre-existing allowance), or negative (if actual payments at "D" are less than the pre-existing allowances). | |
| 11 | | Revised EDE/SOEDE value for each Formula Year from<br>2015-16 to 2020-21 determined as "C" + "F".<br>Note 2015-16 will remain the first Formula Year in the event that the adjustment is delayed by one or more years. | |

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

*Scheme surplus*

3.28. If the difference between the assets and corresponding liabilities referred to in paragraph 3.6 represents a surplus position as at as at 31 March 2013, then EDE and SOEDE values for Formula Years from 2015-16 onwards will be revised to zero pending the next review process set out in Table 3.3. The policy position with regard to pension scheme surpluses is set out in the March 2011 Strategy document and, as applicable, the relevant Final Proposals.

3.29. [published policy].

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

3.30. Subject to paragraph 3.28, revised EDE and SOEDE 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. Each step is carried out in respect of EDE values to be determined and separately in respect of SOEDE values to be determined.

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

| Row | Timing | Event | Value |
|---|---|---|---|
| 1 | By 30 June 2017 | Ofgem obtains the actuarial scheme valuation for the licensee's defined benefit pension scheme(s) as at 31 March 2016 and commences a reasonableness review. | "A" |

| | | | |
|---|---|---|---|
| 2 | By 31 July 2017 | Ofgem in receipt of price control review information from licensee covering Formula Years 2014-15; 2015-16 and 2016-17. | |
| 3 | By 30 September 2017 | Licensee submits deficit allocation information and indicative Established Deficit figure. | |
| 4 | By 31 October 2017 | Ofgem carries out reasonableness review of information submitted by licensee and determines the Established Deficit position as at 31 March 2016. | |
| 5 | By 30 November 2017 | Established Deficit amount deflated to 2009-10 prices using actual RPI data determined in accordance with paragraph 1.7. | "B" |
| 6 | | Remaining deficit repair period established as 9 years (2026-27 minus 2017-18) | |
| 7 | | Annual Established Deficit repair allowance in 2009-10 prices computed as:<br>= "B" / ((1-(1+DR)^ - 9) / LN(1+DR))<br>Where:<br>DR is the discount rate determined by Ofgem through a benchmarking process against moderated median pre-retirement discount rates for occupational pension schemes in Great Britain; and<br>LN returns the natural logarithm of the subject value<br>If there is a surplus shown by the valuation B and C are set to zero and paragraph 3.29 below applies. | "C" |
| Adjustment relating to licensee payment history in RIIO-GT1 period | | | |
| 8 | | Obtain relevant portion (ie the portion attributable to the licensee's transmission business[14]) of actual deficit repair payments made by licensee during 2014-15; 2015-16 and 2016-17 and, subject to any adjustments arising | "D" |

[14] Split into TO and SO for NGGT

| | | | |
|---|---|---|---|
| | By 31 October 2017 | from Ofgem's reasonableness review, deflate to 2009 prices using actual RPI data determined in accordance with paragraph 1.7. | |
| 9 | | Deduct the total of pre-existing EDE/SOEDE values for Formula Years 2014-15; 2015-16 and 2016-17 from "D" to give the difference between pre-existing allowances and actual payments. | "E" |
| 10 | | Annual adjustment amount in 2009-10 price computed as:<br><br>=value "E" / ((1-(1+DR)^ -9 / LN(1+DR))<br><br>where<br><br>DR is the discount rate determined by Ofgem through a benchmarking process against moderated median pre-retirement discount rates for occupational pension schemes in Great Britain; and<br><br>LN returns the natural logarithm of the subject value.<br><br>The value "F" may be either positive (if actual payments at "D" are greater than the pre-existing allowance), or negative (if actual payments at "D" are less than the pre-existing allowances). | "F" |
| 11 | | Revised EDE/SOEDE value for each Formula Year from 2018-19 to 2020-21 determined as "C" + "F" | |

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

*Scheme surplus*

3.32. If the difference between the assets and corresponding liabilities referred to in paragraph 3.5 represents a surplus position as at as at 31 March 2019, then EDE and SOEDE values for Formula Years from 2021-22 onwards will be revised to zero pending the next triennial scheme valuation. The policy position with regard to pension scheme surpluses is set out in the March 2011 Strategy document and, as applicable, the relevant Final Proposals.

**Direction of revised EDE and SOEDE values**

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

## Part 4 - Pension Scheme Administration and PPF levy allowances

3.34. The licensee's actual costs in respect of scheme administration costs and PPF levies will be reported under the annual Regulatory Reporting cycle in accordance with Standard Condition B15 ( Price Control Review Information) of the licence.

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

*Values to be directed by 30 November 2014*

(i). The actual aggregated Pension Scheme Administration and PPF levy expenditure reported by the licensee in its price control review information submissions for Formula Years 2012-13 and 2013-14 will be obtained.

(ii). The expenditure amounts in (i) will be deflated to 2009-10 prices using actual RPI data.

(iii). The actual deflated expenditure figure for any Formula Year in (ii) is added to the annual adjustment threshold amount of £1m.

(iv). The aggregate price control allowance for for Pension Scheme Administration and PPF levy expenditure for that year year set out in the relevant Final Proposals is obtained.

(v). If the amount referred to in step (iii) is exceeded in any specified Formula Year, the excess amount only will be added to the pre-existing amount allowance at the price control for that item.

(vi). If a the amount at (iii) is less than the pre-existing price control allowed value at (iv), then no revision to the price control value will be made.

(vii). The excess at (v) will be added to the pre-existing APFE and APFE values to determine the revised APFE and SOAPFE values for Formula Years 2012-13 and 2013-14.

(viii). Ofgem will review Pension Scheme Administration and PPF levy costs based on actual costs incurred in previous years and known changes to the PPF levies advised by the PPF and, subject to them being considered efficient, reset the existing constituent costs; and the combined existing APFE values for Formula Years 2014-15, 2015-16 and 2016-17.

*Values to be directed by 30 November 2017*

(i). The actual aggregated Pension Scheme Administration and PPF levy expenditure reported by the licensee in its price control review information submissions for Formula Years 2014-15, 2015-16 and 2016-17 will be obtained.

(ii). The expenditure amounts in (i) will be deflated to 2009-10 prices using actual RPI data.

(iii). The actual deflated expenditure figure for any Formula Year in (ii) is added to the annual adjustment threshold amount of £1m.

(iv). The aggregate price control allowance for for Pension Scheme Administration and PPF levy expenditure for that year year set out in the relevant Final Proposals is obtained.

(v). If the amount referred to in step (iii) is exceeded in any specified Formula Year, the excess amount only will be added to the pre-existing amount allowance at the price control for that item.

(vi). If a the amount at (iii) is less than the pre-existing price control allowed value at (iv), then no revision to the price control value will be made.

(vii). The excess at (v) will be added to the pre-existing APFE and APFE values to determine the revised APFE and SOAPFE values for Formula Years 2014-15, 2015-16 and 2016-17.

(viii). Ofgem will review Pension Scheme Administration and PPF levy costs based on actual costs incurred in previous years and known changes to the PPF levies advised by the PPF and, subject to them being considered efficient, reset the existing constituent costs; and the combined existing APFE values for Formula Years 2017-18, 2018-19 and 2019-20.

(i). *Values to be directed by 30 November 2020*The actual aggregated Pension Scheme Administration and PPF levy expenditure reported by the licensee in its price control review information submissions for Formula Years 2017-18, 2018-19 and 2019-20will be obtained.

(ii). The expenditure amounts in (i) will be deflated to 2009-10 prices using actual RPI data.

(iii). The actual deflated expenditure figure for any Formula Year in (ii) is added to the annual adjustment threshold amount of £1m.

(iv). The aggregate price control allowance for for Pension Scheme Administration and PPF levy expenditure for that year year set out in the relevant Final Proposals is obtained.

(v). If the amount referred to in step (iii) is exceeded in any specified Formula Year, the excess amount only will be added to the pre-existing amount allowance at the price control for that item.

(vi). If a the amount at (iii) is less than the pre-existing price control allowed value at (iv), then no revision to the price control value will be made.

(vii). The excess at (v) will be added to the pre-existing APFE and APFE values to determine the revised APFE and SOAPFE values for Formula Years 2017-18, 2018-19 and 2019-20.

(viii). Ofgem will review Pension Scheme Administration and PPF levy costs based on actual costs incurred in previous years and known changes to the PPF levies advised by the PPF and, subject to them being considered efficient, reset the existing constituent costs; and the combined existing APFE values for Formula Years 2020-21, 2021-22 and 2022-23.

**Direction of revised APFE and SOAPFE values**

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

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

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

3.38. 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/SOMOD 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 or SOMOD.

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

# 4. Tax liability allowances - financial adjustment methodologies

## Part 1 - Overview

4.1. The opening base revenue allowances ('PU' values) for the licensee set down in the table in Special Condition [•] include tax liability allowances which are modelled at the outset of the price control period to take account of:

(c) existing and announced corporation tax rates and writing down allowance rates;

(d) existing legislation, case law, accounting standards and HM Revenue & Customs (HMRC) policy; and

(e) modelled levels of gearing and corporate debt interest payments.

4.2. Part B of Special Condition GTC 27 provides for adjustments to be made to the licensee's tax liability allowances[16] during the price control period through the Annual Iteration Process for the GT1 Price Control Financial Model. Changes to the factors referred to at sub-paragraphs 4.1(a) and (b) are referred to as 'tax trigger events' and the methodology for adjustments is set out in Part 2 of this chapter. Changes in respect of the factors referred to at sub-paragraph 4.1(c) are referred to as 'tax clawbacks' and the methodology for adjustments is set out in Part 3 of this chapter.

**Temporal conventions**

4.3. For the purposes of Special Condition GTC 27 and this chapter, "formula year t" means the formula year in which a value for the term TOMOD, calculated through a particular Annual Iteration Process, is used in the formula for the licensee's base revenue.

**Annual Iteration process**

4.4. The updating of the licensee's tax liability allowances and regulatory tax losses balance is carried out through the Annual Iteration Process for the GT1 Price Control Financial Model. The Variable Values Table for the licensee contained in the GT1 PCFM contains rows for PCFM Variable Values for tax liability allowance adjustments driven by:

- tax trigger events ('TTE' values); and

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

- the licensee's gearing levels and corporate debt interest costs ('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 GTC 27 (Specified financial adjustments) provides for any revisions to TTE and TGIE values to be directed after determination under the methodologies in this chapter.

4.6. Revisions to TTE and TGIE values feed into the recalculated base revenue figures and/or the regulatory tax loss balances for applicable formula years in the GT1 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 TOMOD 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 TOMOD.

4.7. It should be noted that underlying tax liability allowances for the licensee within the GT1 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.

**Price bases for tax calculations**

4.8. The GT1 PCFM works in constant 2009-10 prices, with all inputs and outputs in this price base. Where applicable, financial amounts which are expressed in later, nominal prices, will be deflated to 2009-10 prices on the basis of actual RPI data before being used to determine revised TTE and TGIE values.

4.9. The GT1 PCFM uses nominal prices for some internal tax calculation functions. For this purpose, the model refers to RPI forecast values set at the outset of the price control period and hard coded into the model.

**Regulatory tax losses**

4.10. In some instances, the approach to calculating tax liability allowances could imply that the licensee should receive a negative allowance. In such cases, the price control treatment is to model a zero allowance and to record what would have been the negative allowance as a 'regulatory tax loss' figure, to be deducted from any tax liability allowances which would otherwise be allocated to the year concerned or to later years. The regulatory tax loss balance attributable to each formula year (together with a running total) is held within the GT1 PCFM and regulatory tax losses are referred to where applicable in the methodologies in this chapter.

**Group tax arrangements**

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

- the claim or surrender of group tax relief (including consortium relief); and
- interest payments and receipts which are not tax deductible or chargeable under HMRC rules for the purposes of computing the licensee's taxable profits, including adjustments for transfer pricing and debt cap adjustments.

4.12. For the purposes of the methodology set out in Part 3 of this chapter, levels of debt, interest and gearing are considered at licensee level, as opposed to any other level with respect to the corporate or ownership group of which the licensee is a member.

## Part 2 - Adjustments driven by tax trigger events - methodology

4.13. The methodology set out in this Part provides for the licensee's tax liability allowances to be updated (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 and its shareholders will be appropriately reimbursed when they rise.

**Tax trigger events**

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

Type A

Type A events consist of:

- changes to corporation tax rates, applicable to one or more 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, including any deferral of the Accounting Standard Board's (ASB) implementation date for Financial Reporting Exposure Draft 48 (FRED48)[17].

4.15. Where a Type B event changes the allocation of allowable expenditure into different or introduces new capital allowance pools, the model will only be updated for the scale of the change driven by the policy and the applicable allowance rates will be adjusted to the new expected allocation basis. There is no adjustment of allocations to licensee's actual allocations for formula years up to the date of the change.

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

**Materiality threshold and 'deadband'**

4.17. A materiality threshold is applied to tax trigger events during the price control period and a £m threshold amount for each formula year is included amongst the fixed values on the Tax Trigger sheet for the licensee in the GT1 PCFM.

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

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

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

4.19. A change to tax liability allowances for a particular formula year is only applied where one or more trigger events result in a change to the licensee's tax liabilities for that year (upward or downward) by an amount which is greater than the threshold amount. Furthermore, any change to the tax liability allowance (upward or downward) is limited to the amount which is in excess of the threshold amount for the year concerned.

4.20. Where the change to the licensee's tax liabilities 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

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

the licensee's tax liability allowance for the formula year concerned (a revised TTE value) would be determined once the threshold has been exceeded.

4.21. 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**

4.22. The licensee's tax liability calculations are subject to:

- specific legislative requirements;
- case law;
- HMRC interpretation of legislation; and
- requirements of the accounting framework applicable to preparation of the licensee's statutory accounts[18]

4.23. 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, as it should be known as on the implementation of FRED48).

**Notification of tax trigger events**

*Type A trigger events*

4.24. 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 this date to discuss the current view of Type A events.

4.25. 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.

[18] Section 385 of the Companies Act 2006 refers.

4.26. If, after receiving the notification referred to in paragraph [4.20], 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.

4.27. If any Type A trigger event is left out of account when it ought to have been included in the determination of a revised TTE value (either because it was not included in a notice or otherwise) the position will be rectified in a subsequent revision of the TTE value(s) concerned. In such a case, the functionality of the PCFM means that a time value of money adjustment would be applied.

*Type B trigger events*

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

4.29. If the licensee fails to notify Ofgem of any increase in the licensee's tax liability it will not be made retrospective nor made PV neutral. If the failure relates to a reduction in the licensee's tax liability, then subject to the licensee demonstrating that is has taken all reasonable steps to identify all Type B trigger events this may not be held a breach of the licence conditions.

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

(a) a description of the event;

(b) the change in tax liabilities which the event is considered to cause and the 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);

(d) any relevant information provided by HMRC in relation to the event; and

(e) evidence of mitigating measures which the licensee has taken to minimise any additional liabilities arising from the event.

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

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

- for additional information in respect of one or more of the notified events; and/or
- to submit the results of limited scope audit procedures, specified by Ofgem and carried out by the licensee's appropriate auditors[19], to assist in confirming the appropriateness and accuracy of the licensee's calculations.

4.33. Ofgem will inform the licensee by 31 October in the same 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.

4.34. Where Ofgem determines a different change in tax liabilities figure from that calculated by the licensee or decides that consideration of any change in tax liabilities should be deferred, it will set out its reasons and/or calculations.

4.35. 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 but which have not been included in a notification sent to Ofgem by the licensee.

4.36. The final quantification and adjustment for any type B trigger event will be deemed to have occurred when the licensee and HMRC conclude the agreement of the licensee's tax liabilities for the relevant formula year.

**Logging of trigger events**

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

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

[19] As defined in Standard Special Condition A3 of the Gas Transporter Licence

**Determination and direction of revised TTE values**

*Determination of revised TTE values using the tax trigger calculation tool*

4.38. The design of the GT1 PCFM includes additional functionality meaning that a copy of the GT1 PCFM (held on Ofgem's website) can be used as a tax trigger calculation tool, as an adjunct to the Annual Iteration Process.

4.39. During each formula year t-1, Ofgem will generate a *duplicate copy* of the GT1 PCFM, in its state following the last completed Annual Iteration Process (but including any subsequent functional modifications under Special Condition GTC 57) for use as the tax trigger calculation tool. It will then take the following steps to determine TTE values for each licensee:

(i) the 'Tax allowance before tax trigger' amount for the licensee for each formula year shown on the tax trigger worksheet will be noted;

(ii) the PCFM copy will be put into 'tax trigger tool mode' using the selector on the User Interface worksheet;

(iii) 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;

(iv) all of the existing TTE values will be re-set to zero;

(v) any existing values in the yellow input cells on the tax trigger worksheet will be cleared;

(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 liabilities 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 'Type B event values' row in the appropriate formula year columns on the tax trigger worksheet;

(ix) the tax trigger macro calculation will be re-run;

(x) the new 'Tax allowance' amount for the licensee shown on the tax trigger worksheet will be noted – this is displayed net of the deadband amount which is also calculated under the macro calculation;

(xi) the difference between the 'Tax allowance before tax trigger' referred to at point (i) and the new 'Tax allowance' referred to at point (x) will be calculated as a £m amount, for the licensee for each formula year.

4.40. The amounts calculated under step (xi) will then be determined to be the TTE values for the licensee for each formula year. Where these values differ from the TTE values shown on the Variable Values Table for the licensee in the GT1 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 GTC 27 and referred to below.

*Notes on the tax trigger calculation*

- The two stage calculation process referred to in steps (vii) and (ix) allows the tax trigger calculation tool to take full account of the interrelationship between Type A and Type B events.
- The nullification of existing TTE values referred to in step (iv) together with the inclusion of all determined changes to the licensee's tax liabilities referred to in step (viii) ensures that the determination of TTE values under step (xi) is on a consistent basis and accurately applies the materiality threshold/ deadband applicable to each formula year.
- the inclusion of all available revisions to other PCFM Variable values under step (iii) ensures that the tax allowance calculation is as up to date as possible for each formula year.

*Direction of revised TTE values*

4.41. 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.

4.42. 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.

4.43. The procedure for the Authority's direction of revised TTE values is set out in Part D of Special Condition GTC 27.

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

4.44. At the outset of the price control period, modelling assumptions are made about financing requirements, gearing levels and corporate debt costs for each of the licensee's transmission owner (TO) and system operator (SO) businesses. These result in modelled levels of tax deductible interest costs and tax relief for each of the TO and SO. The TGIE adjustment is to be calculated separately for each of the TO and the SO, where applicable, both are referred to as the licensee below.

4.45. 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**

4.46. As a function of each Annual Iteration Process of the PCFM, an updated figure for the expected amount of tax deductible interest payable by the licensee is calculated. Ofgem will obtain the most recently modelled figure for tax deductible interest payable by the licensee in Formula Year t-2 from a copy of the GT1 PCFM, in its state following the last completed Annual Iteration Process (but including any functional modifications under Special Condition GTC 27).

4.47. The licensee is required to submit its price control cost reporting pack by 31 July in each Formula Year t-1[20], in accordance with standard special condition A40 (Price Control Review Information) of the gas transporter's licence and the Price Control Cost Reporting Rules: Instructions & Guidance ('RIGs') issued under that condition.

4.48. Ofgem will obtain from 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.

4.49. The criteria, which the licensee must observe in reporting each of these items, are set out in the Cost and Revenue Reporting RIGs and Ofgem reviews the licensees reporting in this regard.

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

Applicability tests

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

*Gearing level test*

[20] subject to any changes to Standard Special Condition A40 (Price Control Review Information)

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

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

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

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

*Positive benefit test*

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

4.56. If the clawback has been triggered, Ofgem will multiply the result in 4.55 by the corporation tax rate for the licensee (as hard-coded into the PCFM) to derive the licensee's benefit figure. The revised TGIE value for the licensee for Formula Year t-2 is determined as:

Revised TGIE value = benefit figure x -1

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

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

<u>Interaction with unutilised regulatory tax losses</u>

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

**Direction of revised TGIE values**

4.59. Revised TGIE values will usually be directed in respect of Formula year t-2 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.

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

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

- If a revised TGIE value is directed for a year earlier than Formula Year t-2, any resultant changes to recalculated base revenue figures for years earlier than Formula Year t-2 calculated under an Annual Iteration Process will, subject to a time value of money adjustment, be brought forward and reflected in the calculation of the term MOD to be directed for Formula Year t. For the avoidance of doubt, such a revision will not have any retrospective effect on a previously directed value of the term MOD.

4.61. The Authority will direct any revisions to TGIE values for the licensee by 30 November in each Formula Year t-1, having given the licensee at least 14 days notice of the values which it proposes to direct.

4.62. The procedure for the Authority's direction of revised TGIE values is set out in Part D of Special Condition GTC 27.

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

4.63. A positive incremental change in a TTE value will increase the 'recalculated base revenue figure' for the Formula Year concerned by the same amount. However, if there is any outstanding (unused) amount of regulatory tax loss for the licensee, attributable to that Formula Year or to an earlier Formula Year, the increase to the recalculated base revenue figure will be partially or fully abated by that amount, and the record of regulatory tax losses held within the GT1 PCFM will be updated accordingly.

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

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

4.66. A negative incremental change in a TTE value or TGIE value will decrease the 'recalculated base revenue figure' for the Formula Year concerned by the equivalent amount. However, if the modelled tax liability (in the GT1 PCFM under the Annual Iteration Process) for the Formula Year concerned is smaller (in absolute terms) than the aggregate change in the TTE and TGIE value for that year, then:

- a portion of the aggregate incremental change in the TTE and TGIE values equal to the modelled tax liability will be deducted from the recalculated base revenue figure for the Formula Year concerned; and

  the remaining amount will be added to the regulatory tax loss balance for the Formula Year concerned and carried forward.

# 5. Corporate debt - allowed percentage cost financial adjustment methodology

## Overview

5.1. The allowed revenue totals for 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 WACC is determined using a pre-tax cost of corporate debt percentage, a post-tax real cost of equity percentage and a weighting (notional gearing) percentage.

5.2. Under the RIIO-T1 price control the cost of equity and notional gearing percentages are fixed for the whole of the price control period. However, the corporate debt cost percentage is updated on an annual basis with reference to a trailing average index of debt costs. The update is effected through the annual iteration of the GT1 Price Control Financial Model (PCFM).

5.3. The use of an indexed corporate debt percentage means that allowed revenues are appropriately updated to reflect debt market conditions. As a result, consumers will derive a benefit when debt costs fall whilst 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 TO percentage cost of corporate debt ('TO CDE' values) is established in Special Condition GTC 27 (Specified financial adjustments – Transmission Owner). GTC 27 requires revised TO CDE values to be determined in accordance with the methodology in this chapter.

**System Operator price control**

5.5. Paragraph [•] of Special Condition GTC 65 (Specified financial adjustments – System Operator) of the licence provides for PCFM Variable Values for the licensee's allowed SO percentage cost of corporate debt ('SO CDE' values) to be determined in accordance with the methodology in this chapter. The SO CDE value for any formula year is the same as the TO CDE Value for the same year.

[21] see Glossary

**Temporal conventions**

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

- "formula year t" means the formula year in which a value for the term TOMOD, or as applicable SOMOD, calculated through a particular Annual Iteration Process, is used in the formula for the licensee's Base NTS TO Revenue[22]/ internal operating cost revenue.

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

5.7. At the outset of the RIIO-T1 price control period (1 April 2013), the TO CDE value for every formula year will be the pre-tax cost of debt percentage for the licensee set down in RIIO-T1 Final Proposals.

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

5.9. A revised TO 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. However, only the revised TO CDE[23] value for formula year t will impact on the value of TOMOD for the same formula year t[24].

5.10. The following steps are to be followed:



Step 1

Establish the 'trading days period[25]' to be used in relation to the particular Annual Iteration Process:

[22] See Special Condition [•] (transportation owner activity revenue restriction).

[23] SO CDE value with respect to the value of SOMOD

[24] Subject to revision of an earlier value – see paragraph 6.11

[25] Trading days as published in the Markit iBoxx® database

| **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……. |

Step 2

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

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

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

The 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 3For each day in the trading day period ascertained under Step 1, obtain the Bank of England's 'breakeven inflation' figure for 10-year government-issued bonds by applying the following formula:

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

where:

$\pi$ is the Bank of England's breakeven inflation figure.

$i$ is the Yield From British Government Securities, 10 Year Nominal Zero Coupon – series reference IUDMIZC; and

$r$ is the Yield From British Government Securities, 10 Year Real Zero Coupon – series reference IUDMIZC.

In the event that the above data series does not include an entry that exactly matches the date from the Markit iBoxx series, the nearest older entry is to be used.

Step 4

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

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

where:

$CoD$ is the required deflated average of the annual yield figures;

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

$\pi$ is the Bank of England's breakeven inflation figure obtained under Step 3.

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

Step 5

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

This average, expressed as a percentage, constitutes the revised PCFM Variable Value for the cost of corporate debt which will be inputted into the PCFM in the following format: X.XX per cent.

**Non-availability of iBoxx or Bank of England data**

5.11. If, for any reason, iBoxx data or Bank of England data is unavailable for an entire trading days period in time to determine revised PCFM Variable Values for the cost of corporate debt for any Annual Iteration Process, then for that Annual Iteration Process only, the trading days period concerned shall be deemed to have 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.

5.12. If, for any reason, the iBoxx or Bank of England series identified above cease to be published, 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

5.13. The Authority will direct revised TO CDE and SO CDE values by no later than 30 November in each formula year t-1 in accordance with Part D of Special Condition GTC 27. Notice of proposed revised values will be given to the licensee at least 14 days before the date of the direction.

5.14. 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 chapter 2.

5.15. The data and spreadsheet used to calculate revised TO CDE and SO CDE values will be published on the Ofgem website.

# 6. Totex incentive mechanism – financial adjustment methodology

6.1. For RIIO-T1 Final Proposals opening base revenues will have been modelled on the basis that actual Totex[26] 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 GT1 Price Control Financial Model (PCFM) contains values for both actual 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.

6.3. Totex is divided into several sub-divisions to facilitate varying tax pool treatments under the annual iteration process calculations. This chapter sets out the process by which the *actual* Totex expenditure values in the PCFM can be revised. It also describes the way in which revised figures for Totex flow into the calculation of the terms $MOD_t$ and $SOMOD_t$[27].

6.4. Special conditions GTC 47 (Determination of PCFM Variable Values for Totex Incentive Mechanism Adjustments) and GTC 66 (Determination of PCFM Variable Values for Totex Incentive Mechanism Adjustments – System Operator)[31] provide for the Authority to determine revised PCFM Variable Values for the licensee relating to actual Totex expenditure levels. They also set out the procedures for the direction of those values so that they can be used for the annual iteration process. The procedures for determining and directing revised PCFM Variable Values relating to allowed Totex expenditure levels are covered in other chapters of this handbook.

6.5. In the remainder of this chapter, references to the term MOD should be taken to include SOMOD and references to special condition GTC 47 should be taken to include special condition GTC 66.

**Description of the Totex Efficiency Incentive**

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

[26] See Glossary

[27] For National Grid Electricity Transmission plc (NGET) only

licensee . The incentive strength is a percentage figure specified in special condition ETC 47 for each licensee.

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

6.8. Totex, once ascertained under the TIM, is modelled using the Totex Capitalisation rate, as:

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

6.9. Under the annual iteration process, the effects of this modelling treatment, (including any ancillary effects in respect of eg tax allowances) are reflected in the value of the term $MOD_t$.

*Totex Incentive Mechanism - illustrative examples*

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

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

Revised position – scenario 2:

| | |
|---|---|
| allowed Totex expenditure: | 110 |
| actual Totex expenditure | 120 |
| overspend: | 10 |
| incentive strength say 40% (or 0.4) | |
| Totex adjustment (1 – 0.4) X 10 | 6 |
| Totex amount for fast/slow money treatment 110 + 6 | 116 |

6.11. 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.

6.12. The totex relating to allowances set during the period are subject to a different capitalisation rate than the totex allowances used to derive base revenue. These categories are identified as the ALU, ARU, ACU and AOU terms. They are subject to TIM in the same way as base allowances and the resultant fast/ slow money split is added to that calculated for base totex to give total fast and slow money.

**Application of the TIM under the annual iteration process**

6.13. For the purposes of Special Condition ETC 47 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 transmission revenue/ internal costs revenue[28].

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; |

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

| | |
|---|---|
| Formula Year t-1: | Revised PCFM Variable Values for actual Totex expenditure determined and directed by the Authority by 30 November<br><br>[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 revenue. |

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

6.15. 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.

6.16. 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 (in relation to the timeline set out in paragraph 6.13), the PCFM will automatically update expected actual Totex expenditure levels to equivalent amounts for those years. This is consistent with the modelling rationale described in the opening paragraph of this chapter.

6.17. 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 constant 2009-10 prices, 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")**

6.18. A full definition of the expenditure items which are eligible for Totex treatment is given in the Cost and Revenue Reporting Regulatory Instructions and Guidance (RIGs) document referred to in Standard Condition XX (Regulatory Instructions and Guidance XXX) of the licence. In summary Totex consists of all the items of expenditure required for the licensee to carry on the transmission business with the exception of:

- costs relating to excluded services activities;
- pension deficit repair payments relating to the 'established deficit' and for the avoidance of doubt, all unfunded early retirement deficiency costs (ERDC) post 1 April 2004;
- Pension Scheme Administration and PPF levy costs;
- costs associated with specific incentive schemes (eg TPCR4 revenue driver schemes);
- statutory or regulatory depreciation and amortisation;
- profit margins in payments to related parties (except where permitted);
- costs relating to rebranding a company's assets or vehicles following a change of trading name or logo;
- fines and penalties incurred by the licensee (including all tax penalties, fines and interest) except if, exceptionally, Traffic Management Act penalty costs can be shown to be efficient;
- compensation payments made in relation to standards of performance;
- bad debt costs and receipts (subject to an ex post adjustment to allowed revenues);
- costs related to the SF6 incentive;
- costs relating to the network innovation allowance
- the reversal, where appropriate, of cost reporting which is not on a normal accruals basis;
- costs in relation to pass-through items including:
    - business rates (except for business rates on non-operational buildings),
    - NTS exit charges, and
    - Ofgem licence fees;
- interest, other financing and tax costs (except for business rates on non-operational buildings and stamp duty land tax); and

6.19. any change in the Totex amount for the licensee under the TIM.It should also be noted that:

- pension deficit repair payments relating to any incremental deficit (ie not part of the established deficit) are considered to be part of the licensee's benchmarked labour costs and as such are part of Totex; and
- customer contributions (which mainly relate to connection works) and other proceeds received (including from legal and insurance claims) that relate to the transmission business are treated as an offset to Totex expenditure, unless specifically subject to different treatment under the Cost and Revenue reporting RIGs.

## Determination of PCFM Variable Value revisions for actual Totex expenditure

6.20. 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 6.1 below, should be revised to match the equivalent actual expenditure values in the licensee's annual cost reporting submission for the Totex sub-division shown in column 2 of Table 6.1.

6.21. As noted in paragraph 6.14, the Authority can also determine and direct revised PCFM Variable Values for actual Totex expenditure for years earlier than Formula Year t-2 where that is necessary to address a restatement of, or correction to, price control cost information submitted by the licensee.

Table 6.1 – PCFM Variable Values for actual Totex

| PCFM Variable Value | Totex sub-division |
|---|---|
| ALC | Actual load related capex expenditure |
| ARC | Actual asset replacement capex expenditure |
| AOC | Actual other capex expenditure |
| ACO | Actual controllable opex |
| ANC | Actual non-operational capex |
| SOACO[29] | Actual controllable opex (system operator) |
| SOANC[34] | Actual non-operational capex (system operator) |

6.22. The items of expenditure included in each of the Totex sub-divisions set out in Table 6.1 are specified in the Cost and Revenue Reporting RIGs.[30]

## Notification and direction of revised PCFM Variable Values

6.23. The PCFM exists as a constituent part of Special Condition GTC57 (Governance of ET1 Price Control Financial Instruments). It has an input area for each licensee containing both fixed values and variable values - contained in a PCFM Variable Values table.

[29] NGGT only

[30] Insert link

6.24. As set out in paragraphs 6.13 and 6.19, 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 GTC 47, requires the Authority to give the licensee at least 14 days notice of any such proposed revisions, to allow for any representations or objections. The Authority is required to have due regard to any representations or objections received from the licensee and to give reasons for its decisions in relation to them.

6.25. 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 16 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. Ofgem will carry out the Annual Iteration Process in accordance with Special Conditions GTC 47 and 66 (see Chapter 1).

# 7. Uncertain costs allowed expenditure - financial adjustment methodology

## Part 1 - Overview

7.1. Appropriate levels of allowed Totex[31] expenditure for some transmission business activities/requirements, will be uncertain at the time of the RIIO-T1 Final Proposals. For RIIO-T1 Final Proposals, opening base revenues will have been modelled using forecast values relating to these uncertain cost categories.

7.2. The GT1 Price Control Financial Model (PCFM) contains values relating to allowed Totex expenditure on uncertain cost categories that can be varied for the purposes of the annual iteration process. This means that the term $MOD_t$ included in the formula for the licensee's base revenue (and the term $SOMOD_t$ included in the formula for internal costs revenue[37]) can take account of up to date allowed expenditure levels for uncertain cost categories for the purposes of the Totex Incentive Mechanism described in chapter 6 of this handbook.

7.3. PCFM Variable Values relating to uncertain cost categories are stated in constant 2009-10 prices, consistent with the price base used in the PCFM and the values for the terms MOD and SOMOD. The allocation of allowed expenditure for uncertain cost categories into the Totex sub-divisions referred to in paragraphs 6.3, and 6.19 to 6.21 of chapter 6 is handled automatically under the annual iteration process using fixed attribution rates contained in the PCFM.

7.4. Special conditions GTC 28 (Arrangements for the recovery of uncertain costs) and GTC 117 (Arrangements for the recovery of SO uncertain costs)[32] provide for the Authority to determine relevant adjustments to allowed Totex expenditure on uncertain cost categories following a proposal made either by the licensee or the Authority.

7.5. Special conditions GTC 28 and GTC 117 also provide for the Authority to determine revised PCFM Variable Values for uncertain costs categories in accordance with the methodology set out in this chapter to give effect to adjustments which have been determined. They also set out the procedures for the direction of revised PCFM Variable Values so that they can be used for the annual iteration process.

7.6. The uncertain cost categories are set out in Table 7.1 below, alongside the applicable licence condition. Table 7.1 also shows whether each uncertain cost

[31] See Glossary

[32] For National Grid Electricity Transmission plc (NGET) only

category applies to the TO or SO and the name of the associated variable value contained in the PCFM.

**Table 7.1 – Relevant cost categories**

| Uncertain cost | Licence Condition | TO or SO affected | PCFM Variable Value name |
|---|---|---|---|
| Enhanced physical site security<br>Transmission Owner | GTC 28 | TO | IAEEPS |
| Enhanced security<br>System Operator | GTC 117 | SO | SOIAEEPS |
| Quarry and lost development claims | GTC 28 | TO | IAEQL |
| Industrial emissions | GTC 28 | TO | IAEIE |
| Pipeline diversions | GTC 28 | TO | IAEPD |
| One off asset health costs | GTC 28 | TO | IAEAH |
| SO agency costs | GTC 117 | SO | SOIAECA |
| Network Flexibility | GTC 28 | TO | IAENF |

**Overview of uncertain cost categories**

7.7. Special conditions GTC 28 and GTC 117 specify that any proposal for a relevant adjustment to an uncertain cost category must:

- be based on information about actual or expected costs that was not available when the licensee's opening base revenues were calculated;
- take account any prior relevant adjustments;
- relate to a material amount;
- relate to costs incurred or expected to be incurred after 1 April 2013; and

- constitute an adjustment that cannot be made under the provisions of any other Special Condition of the licence.

7.8. The stipulation that proposals must take account of any prior relevant adjustments is intended to ensure that relevant costs are not ignored on the one hand, or double counted on the other.

*Enhanced physical site security – Transmission Owner*

7.9. This category relates to costs incurred by the licensee in complying with any requirements or formal recommendations issued by the Secretary of State for Energy and Climate Change in relation to the physical security of sites associated with the licensee's Transmission System.

*Enhanced security System Operator*

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

*Quarry and lost development claims*

*7.11.* This category is applicable to the TO only. It relates to claims that the licensee could receive from landholders in respect of compensation in respect of quarry and lost development claims.

*Industrial emissions directive*

*7.12.* This category is applicable to the TO only. It relates to 'relevant adjustments' to the licensee's allowed expenditure levels in respect of new obligations under the Industrial Emissions Directive.

*Pipeline diversions*

*7.13.* This category is applicable to the TO only. It relates to 'relevant adjustments' to the licensee's allowed expenditure levels in respect of expenditure on diversions of pipelines that is both significant and unrecoverable by other means. This applies to circumstances where there is either sleeping extant liabilities or other obligations that sit within leases/wayleaves as a result of liabilities or obligations taken on by NGGT's predecessor organisations ie the Gas Council or British Gas regarding requirements for the diversion of pipelines.

*One off asset health costs*

*7.14.* This category is applicable to the TO only. It relates to adjustments to the licensee's allowed expenditure levels in respect of asset health costs.

*Agency costs*

*7.15.* This category is applicable to the SO only. It relates to the costs of the central agent (ie Xoserve).

*Network flexibility*

*7.16.* This category is applicable to the TO only. It relates to 'relevant adjustments' to the licensee's allowed expenditure levels in respect of costs incurred in relation to additional projects required to meet peak day requirements as a result of changes in flow patterns.

**Temporal conventions**

7.17. For the purposes of Special Conditions GTC 28, GTC 117 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[33], is used in the formula for the licensee's Base Transmission Revenue [34]. References to Formula Year t-1 etc should be construed accordingly.

7.18. A reference to, for example, *the IAEEPS value for 2015-16* means the IAEEPS value in the 2015-16 column of the PCFM Variable Values Table for the licensee contained in the ET1 Price Control Financial Model.

7.19. Where revisions to PCFM Variable Values are directed for Formula Years earlier than Formula Year t, the effect of using those revised values in the Annual Iteration Process for the GT1 Price Control Financial Model will, subject to a time value of money adjustment, be reflected in the calculation of the term MOD, or as applicable, SOMOD for Formula Year t and, for the avoidance of doubt shall not have any retrospective effect on a previously directed value of the term MOD or SOMOD.

7.20. 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

[33] and/or SOMOD for NGGT

[34] See Special Condition GTC 20 (Restriction of Transmission Network Revenue) and GTC 12 (Restriction on System Operator Internal Revenue).

further determinations) have status as values determined under the provisions of Special Condition GTC 28 or, as applicable, GTC 117

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

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

**Determinations in relation to proposed adjustments**

7.22. Proposals for relevant adjustments in respect of uncertain cost categories, with the exception of Network Flexibility, can only be made by the licensee or the Authority during two application windows specified in Special Condition GTC 28. These are:

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

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

7.23. There are no application windows for proposals for relevant adjustments in respect of Network Flexibility so that 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 Network Flexibility.

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

- consult with the licensee concerned;
- have particular regard to the purposes of the licence condition; and
- take no account of the general financial performance of the licensee under the price control arrangements

7.25. If the Authority does not make a determination decision in relation to a duly submitted adjustment proposal within the four month period referred to in paragraph 7.20, then the adjustment is deemed to have been made.

**Determination of PCFM Variable Values**

7.26. It follows from the timetable outlined in paragraphs 7.19 to 7.21 above that the Authority will only determine revised PCFM Variable Values relating to uncertain cost categories (as set out in Table 7.1) for use in the following Annual Iteration Processes:

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

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

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

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

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

- on or shortly after 1 June, a check will be made on whether any relevant adjustments were proposed during the application window which have just closed and the position noted;
- liaison will be maintained with the Ofgem team responsible for the review of proposed adjustments and any determination made by the Authority will be noted;
- on or shortly after 1 October the aggregate net adjustment (whether upward or downward) for the licensee in respect of each uncertain costs category will be ascertained by totalling the amounts of:
    - any determinations of relevant adjustments made by the Authority;
    - any adjustments duly proposed by the licensee, and not withdrawn, which have not been determined by the Authority;

  and

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

7.29. Each aggregate net adjustment ascertained under paragraph 7.24 will be applied to the equivalent pre-existing PCFM variable value contained in the PCFM for

the licensee and the resulting figure will be determined by the Authority to be the revised PCFM Variable Value for that uncertain costs category.

7.30. For the avoidance of doubt, under the procedures outlined in paragraphs 7.24 and 7.25, the Authority can determine a revision to the PCFM Variable Value relating to an uncertain cost category for any Formula Year during the RIIO-T1 price control period, where that is necessary to reflect the determination (or deeming) of a relevant adjustment in respect of that uncertain cost category.

## Part 3 - Notification and direction of revised PCFM Variable Values

7.31. Special Condition GTC 28 provides for the licensee to be notified of any relevant adjustment determinations within 14 days of the making of the determination. However, consistent with the provisions of other Special Conditions providing for the determination of PCFM Variable Values, there is an additional formal procedure for the notification and direction of revised PCFM Variable Values, set out in Part C of Special Condition GTC 28:

7.32. The Authority will give notice of the PCFM Variable Value revisions that it proposes to direct by 16 November, being at least 14 days before the deadline date for the direction of revised PCFM Variable Values which is 30 November. The notice will confirm that:

- any revised PCFM Variable Value determinations have been made in accordance with Part B of Special Condition GTC 28, which cross refers to this chapter of the ET1 Price Control Financial Handbook; and
- the licensee has 14 days from the date of the notice in which to make any representations concerning the proposed PCFM Variable Value revisions.

7.33. The Authority is required to have due regard to any representations or objections made by the licensee and to give its reasons for any decisions in relation to them.

7.34. As set out in paragraphs 7.22 and 7.23, the Authority will not determine PCFM Variable Value revisions for uncertain cost categories by November 2013, 2014, 2016, 2017 or 2019. However, the overall direction issued in those years will include a facsimile of the PCFM Variable Values Table(s) for the licensee showing the post direction state of all PCFM Variable Values. This will serve to confirm the state of the PCFM Variable Values relating to uncertain cost categories.

**Delay in direction of revised PCFM Variable Values**

7.35. If the procedures set out in Special Condition GTC 28 and in Parts 2 and 3 of this chapter call for the Authority to direct revised PCFM Variable Values for uncertain cost categories by 30 November 2015 and/or 30 November 2018 and, in either case, the Authority does not make such a direction, then Special Condition GTC 28 requires that the values should be directed by the Authority as soon as is practicable to facilitate the notification and direction of the value of the term $MOD_t$ under Special Condition GTC 26 (Annual Iteration Process for the GT1 Price Control Financial Model).

# 8. Incremental entry capacity allowed expenditure - financial adjustment methodology

8.1. Special condition GTC 3 (Determination of incremental obligated entry capacity volumes and the appropriate revenue drivers to apply) contains a mechanism for adjusting the licensee's allowed expenditure in respect of the construction of incremental obligated entry capacity.

8.2. When NGG receive a signal that additional firm entry capacity is required at an entry point they will follow a predetermined methodology (GTC121 Entry and Exit Capacity Methodologies and Statements) to establish how the capacity will be provided. This will be in one of two ways:

(a) Funded incremental obligated entry capacity; or

(b) Non-incremental obligated entry capacity provided by entry capacity substitution in accordance with GTC121 (Entry and Exit Capacity Methodologies and Statements).

8.3. This section of the handbook deals with how allowances for type (a) only are directed.

8.4. For the avoidance of doubt, entry capacity signalled before the start of RIIO-T1 will be dealt with under the appropriate previous regime. Expenditure relating to this signalled supply of capacity is not included in Totex or subject to RIIO-T1 sharing mechanisms.

**Temporal convention**

8.5. For the purposes of Special Condition GTC 3, 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 transmission revenue.

8.6. Required adjustments are applied through the Annual Iteration Process for the GT1 Price Control Financial Model (PCFM) using revised PCFM Variable Values determined under Special Condition GTC 3.

**Methodology for determining revised PCFM Variable Values for incremental obligated entry capacity expenditure**

8.7. Special condition GTC 3 sets out the procedures governing the determination of additional funding for incremental obligated entry capacity. Part A of that condition details the steps that the licensee must follow to obtain funding.

8.8. Part B of Special condition GTC 3 details how the additional Totex allowance for a given Entry point is calculated.

**Use of revised PCFM Variable Values in the Annual Iteration Process**

8.9. The Authority will direct revised EntRD values by no later than 30 November in each Formula Year t-1 in accordance with Part [X] of Special Condition GTC 3. Notice of proposed revised values will be given to licensees at least 14 days before the date of the direction.

***Indicative Example***

During the first year of RIIO-T1, before the cut-off date for notification, the licensee gives notice that it has received a firm commitment for entry capacity at an entry point> The licensee confirms that this request cannot be met by a variation to the constraint management target capacity or by substitution of capacity. This capacity is to be delivered in year t+2.

The allowed expenditure is calculated based on the unit cost for the additional capacity at that point multiplied by the level of capacity increase multiplied by the RPE factor for the year.

The allowed expenditure is then directed by the Authority as additional allowances for year t (20%); year t+1 (80%) and 1 per cent for the remaining years of RIIO-T1.

# 9. Incremental exit capacity allowed expenditure - financial adjustment methodology

9.1. Special condition GTC 4 (Determination of incremental obligated exit capacity volumes and the appropriate revenue drivers to apply) contains a mechanism for adjusting the licensee's allowed expenditure in respect of the construction of incremental obligated exit capacity.

9.2. When NGG receive a signal that additional firm exit capacity is required at an exit point they will follow a predetermined methodology (GTC121 Entry and Exit Capacity Methodologies and Statements) to establish how the capacity will be provided. This will be in one of two ways:

(c) Funded incremental obligated exit capacity; or

(d) Non-incremental obligated exit capacity provided by exit capacity substitution in accordance with GTC121 (Entry and Exit Capacity Methodologies and Statements).

9.3. This section of the handbook deals with how allowances for type (a) only are directed.

9.4. For the avoidance of doubt, exit capacity signalled before the start of RIIO-T1 will be dealt with under the appropriate previous regime. Expenditure relating to this signalled supply of capacity is not included in Totex or subject to RIIO-T1 sharing mechanisms.

**Temporal convention**

9.5. For the purposes of Special Condition GTC 3, 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 transmission revenue.

9.6. Required adjustments are applied through the Annual Iteration Process for the GT1 Price Control Financial Model (PCFM) using revised PCFM Variable Values determined under Special Condition GTC 4.

**Methodology for determining revised PCFM Variable Values for incremental obligated exit capacity expenditure**

9.7. Special condition GTC 3 sets out the procedures governing the determination of additional funding for incremental obligated exit capacity. Part A of that condition details the steps that the licensee must follow to obtain funding.

9.8. Part B of Special condition GTC 4 details how the additional Totex allowance for a given Exit point is calculated.

**Use of revised PCFM Variable Values in the Annual Iteration Process**

9.9. The Authority will direct revised ExRD values by no later than 30 November in each Formula Year t-1 in accordance with Part [X] of Special Condition GTC 4. Notice of proposed revised values will be given to licensees at least 14 days before the date of the direction.

***Indicative Example***

During the first year of RIIO-T1, before the cut-off date for notification, the licensee gives notice that it has received a firm commitment for exit capacity at an exit point. The licensee confirms that this request cannot be met by a variation to the constraint management target capacity or by substitution of capacity. This capacity is to be delivered in year t+2.

The allowed expenditure is calculated based on the unit cost for the additional capacity at that point multiplied by the level of capacity increase multiplied by the RPE factor for the year.

The allowed expenditure is then directed by the Authority as additional allowances for year t (20%); year t+1 (80%) and 1 per cent for the remaining years of RIIO-T1.

# 10. Innovation Roll Out mechanism allowed expenditure - financial adjustment methodology

**Innovation roll out mechanism**

10.1. The purpose of this chapter of the price control financial handbook is to set out the methodology to determine the values relating to Innovation Roll-out allowed expenditure ('IRM' values) and the regulatory years to which those revisions relate.

10.2. The provisions for determining revised IRM values are contained in Special Condition [GTC 9] (The Innovation Roll-out Mechanism). All IRM values are stated in 2009-10 prices.

10.3. The application of the methodologies set out in this chapter of the handbook will mean that as a consequence of the annual iteration process, the value of the term MOD as calculated for formula year t will result in an appropriate adjustment of the base revenue of the licensee so that it is the same as it would have been had the forecast values used in the model been the same as the actual out-turn values.

10.4. The opening base revenue allowances ('PU' values) for each licensee, set down in the table at Appendix 1 to Special Condition [GTC 20] (Restriction of Gas Transmission Transportation Activity Charges) reflect allowed expenditure figures for forecast levels of innovation expenditure and will be zero at the outset.

10.5. The allowed expenditure figures constitute the 'IRM' values contained in the Variable Values Table of the RIIO-T1 Price Control Financial Model ('PCFM') as at 1 April 2013, the first day of RIIO-T1.

10.6. It may be necessary to revise IRM values during the course of RIIO-T1 so that they represent allowed expenditure levels driven by additional innovation funding. This ensures that the value of the term $MOD_t$ which is calculated through the Annual Iteration Process for the PCFM appropriately reflects updated allowed expenditure on innovation as a component of Totex in:

(i). fast and slow money allowed revenue calculations; and

(ii). allowed revenue adjustments under the Totex Incentive Mechanism (see chapter 6).

**Temporal convention**

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

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

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

**Determination and direction of revised IRM values**

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

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

10.10. Part C of Special Condition [GTC 9] (The Innovation Roll-out Mechanism) specifies two periods when these adjustments can be proposed:

(a) the first application window opens on 1 May 2015 and closes on 31 May 2015; and

(b) the second application window opens on 1 May 2018 and closes on 31 May 2018.

10.11. 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).

10.12. 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).

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

**Processing of IRM values under the Annual Iteration Process**

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

- fast and slow money[35] totals in accordance with the Totex Capitalisation Rate ( per cent) specified in the RIIO-T1 Final Proposals; and

[35] See Glossary

- the tax pools associated with innovation expenditure in accordance with the licensee specific tax allocation profile,

within the PCFM.

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

(i). in calculating the value of the term $MOD_t$ for Formula Year t including:

- fast money components,
- amounts of return and depreciation on the licensee's RAV balance,
- tax allowance effects,
- Totex Incentive Mechanism adjustments, and

(ii). to update Totex related balances held within the PCFM including the licensee's RAV balance.

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

10.17. 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 11.5 pending any subsequent revision. Accordingly, all calculated values in the PCFM for Formula Years later than Formula Year t have indicative status only.

# 11. Legacy price control adjustments - financial methodologies

## Overview

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

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

a) legacy price control revenue allowance adjustments (LAR and SOLAR values); and

b) legacy price control adjustments to RAV balance additions (LRAV and SOLRAV values)

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

**Table 15.1 – Legacy price control financial adjustment categories**

| Category | Licence Condition | PCFM Variable Value name | Component in PCFM Variable Value | See Part of this chapter |
|---|---|---|---|---|
| Pension adjustments | GTC 64 | PAR | LAR | 1 |
| Tax adjustments | GTC 64 | TAR | LAR | 2 |
| Capex incentive scheme adjustments | GTC 64 | CAR<br>CRAV | LAR<br>LRAV | 3 |
| Logged up and security costs | GTC 64 | SAR<br>SRAV | LAR<br>LRAV | 4 |

| | | | | |
|---|---|---|---|---|
| adjustments | | | | |
| Pension adjustments (SO) | GTC 67 | SOPAR | SOLAR | 1 |
| Tax adjustments (SO) | GTC 67 | SOTAR | SOLAR | 2 |
| Capex incentive scheme adjustments (SO) | GTC 67 | SOCAR<br>SOCRAV | SOLAR<br>SOLRAV | 3 |
| Capacity driver incentive scheme adjustments | GTC 67 | SODAR<br>SODRAV | SOLAR<br>SOLRAV | 5 |

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

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

a) determine each component term in the formulae for legacy price control financial adjustments for every Formula Year in the RIIO-T1 price control period; and

b) derive and direct LAR, SOLAR, LRAV and SOLRAV values which have been revised, where appropriate, to reflect the component term values calculated under sub-paragraph a).

11.6. The application of the methodologies set out in this chapter of the handbook will mean that as a consequence of the annual iteration process, the values of the terms MOD and SOMOD, calculated for Formula Year t, will result in adjustments to the licensee's Base NTS Transportation Owner Revenue and Base NTS System Operation Revenue so that they appropriately reflect outturn levels of

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

in the legacy period.

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

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

11.9. All PCFM Variable Values relating to legacy items and revisions thereto are given in 2009-10 prices, consistent with the price base used in the GT1 Price Control Financial Model and with values for the terms MOD and SOMOD.

11.10. In the remainder of this chapter, references to the term MOD should be taken to include SOMOD and references to Special Condition GTC 64 should be taken to include Special Condition GTC 67.

**Temporal conventions**

11.11. For the purposes of Special Conditions GTC 64, GTC 67 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[36], is used in the formula for the licensee's Base NTS Transportation Owner Revenue [37]. References to Formula Year t-1 etc should be construed accordingly.

**Associated documents**

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

Transmission TPCR4 final proposals (Ref: 206/06)
TPCR4 Final Proposals

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

Transmission TPCR4 final proposals – main supplementary appendices (Ref:206/06b)
TPCR4 Appendices

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

[36] and/or SOMOD for NGET
[37] See Special Condition GTC 20 (Restriction of Transmission Network Revenue) and GTC 12 (Restriction on System Operator Internal Revenue).

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

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

Proposed licence modifications to extend the Transmission Investment Incentives (TII) framework to 2012-13 (dated 5 April 2012)
TII licence modifications April 2012

http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=49&refer=Networks/Trans/ElecTransPolicy/CriticalInvestments/InvestmentIncentives

Open letter dated 31 July 2009 regarding Clawback of tax benefit due to excess gearing
http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=49&refer=Networks

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

## Part 1 - Pension adjustments relating to the legacy period

11.13. The purpose of this part is to set out the methodology to determine the revised PCFM Variable Components (PAR & PRAV for TO and SOPAR & SOPRAV for SO) for the true-up of Pensions from the TPCR4 and transmission rollover price controls.

**Description of the pension true-up**

11.14. In the remainder of this section, references to the terms PAR and PRAV should be taken to include SOPAR and SOPRAV and references to special condition GTC 28 should be taken to include special condition GTC 117.

11.15. The previous price controls provided an allowance for funding past deficits as a pass-through.

11.16. TPCR4 final proposals supplementary appendices, appendix 6 paragraph 1.3 states:
"The basis on which allowances have been proposed at this review means that the extent to which pension contributions differ from the pension allowances will be offset against actual future pension costs in determining future pension allowances. Any such adjustments would be net of tax, to the extent that the over or under payment has reduced or increased tax payable".

11.17. The provisional pension true up amounts in respect of TPCR4 will have been spread over nine years as set out in March 2011 Strategy document at Table 6.2 of Chapter 6 of the Financial Issue supplement commencing 1 April 2012; and, for the 2012-13 rollover year, in Table 18 (TO) and Table 46 (SO)of the TPCR4 Rollover Final Proposals document. These were provisional subject to:

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

**Pension true-up calculation**

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

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

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

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

Step three is to collate the deficit actual that relates to the regulated entity from the RRPs for each year.

Step four is to deduct the allowance from the actual for each of the six years.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

## Part 2 - Tax adjustments relating to the legacy period

11.23. The purpose of this part is to set out the methodology to determine the revised PCFM Variable Components (TAR and SOTAR) for the tax clawback from TPCR4 rollover due to excess gearing.

11.24. In the remainder of this section, references to the term TAR should be taken to include SOTAR and references to special condition GTC 64 should be taken to include special condition GTC 67.

**Description of the tax clawback from TPCR4 Rollover**

11.25. A decision letter dated 31 July 2009 sets out Ofgem's implementation of the ex post adjustment considered in TPCR4 final proposals.

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

11.27. The tax clawback adjustment is triggered when in any year actual gearing exceeds notional gearing and interest costs exceed those modelled at the price control. When both of these conditions are satisfied, Ofgem will clawback the tax benefit which results from the difference between actual and modelled interest costs in that year. The rollover year clawback adjustment is to be calculated on the combined TO and the SO values. It should be noted that there is no provision to give additional tax allowances to the licensee if it chooses to operate at a level of gearing lower than the modelled one.

**Determination and direction of revised TAR value**

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

11.29. In summary the calculation:

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

11.30.

Interaction with unutilised regulatory tax losses

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

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

11.32. The purpose of this part is to set out the methodology to determine the revised PCFM Variable components (CAR & CRAV) for the TPCR4 Capital Expenditure

Incentive scheme and the TPCR4RO Capital Incentive Scheme. Additionally the final section sets out the methodology to determine the revised PCFM Variable component SOCRAV for the same period.

**Process to update the TO Capex incentive scheme adjustment for TPCR4**

11.33. For the TPCR4 TO allowed revenue, the term $CxIncRA_t$ means the capital expenditure adjustment term calculated in special condition C8B for NGG (Capital Expenditure Incentive and Safety Net).

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

11.35. Special condition C8B sets out the calculation of the capital expenditure adjustment term but this can be summarised as the sum of two calculations:

11.36. The first is calculated as the indexed value of the sum of the incentive sharing factor (CIR) less 0.25 times the present value factor (PVF) times the difference between base capex allowance (BC) and efficient outturn capex (AC).

11.37. The second is calculated as the indexed value of the sum of the sharing factor (CIR) times the present value factor times the excess cost of Milford Haven (up to a maximum of £75m in 2004-05 prices).

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

11.39. To revise the calculation we amend the workbook to:-

- Update for actual allowed capex (less any deemed inefficient)
- Recalculate the profile of adjustments to be made
- Compare to original values and calculate differences
- Uplift differences for time value of money
- The difference between actual spend and that forecast will also be used to amend opening RAV (less any consequent depreciation differences).

11.40. This calculation (together with the calculation for the TPCR4 Rollover) provides the CAR constituent part of LAR.

11.41. The workbook "RIIO-T1 legacy calculations" also shows the calculation of CRAV. Revised allowed capex spend (for both the TPCR4 and TPCR4 Rollover periods) will give rise to amendments to RAV.

11.42. The RAV adjustment required is calculated by comparing the actual efficient capex to that assumed in the modelling of final proposals. This value (net of any depreciation) will form the RAV adjustment for the TPCR4 capex incentive part of the CRAV term.

**Process to calculate the TO Capex incentive adjustment for TPCR4 Rollover**

11.43. Special condition C8B sets out the calculation of the capital expenditure adjustment term for the Rollover year. The approach is similar to that used for the full TPCR4 period.

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

11.45. To summarise the adjustment for actual performance in 2012-13 (the rollover year) we will:

- Use allowances and actual spend for 2012-13 (less any deemed inefficient) in a consistent price base
- Allow for outputs actually delivered and any consequent change to work in progress.
- Compare to original values and calculate differences
- Uplift differences for time value of money
- The difference between actual spend and that forecast will also be used to amend opening RAV (less any consequent depreciation differences).

11.46. Revised allowed capex spend will give rise to amendments to RAV. The RAV adjustment required is calculated by comparing the actual efficient capex to that assumed in the modelling of final proposals. This value (net of any depreciation) will form the RAV adjustment for the TPCR4 capex incentive part of the CRAV term.

**Adjustments required for differences in System Operator (SO) expenditure**

11.47. The purpose of this part is to set out the methodology to determine the revised PCFM Variable SOCRAV which represents changes in actual efficient expenditure from that forecast for the System Operator.

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

11.49. This calculation takes the following steps:

- Taking the original calculation of additions to RAV and noting the RAV additions profile (ie efficient capex plus incentive)
- Updating the actual efficient expenditure as required
- Comparing actual efficient expenditure to allowances and deducting 50% of overspend/ adding back 50% of overspend to give a revised RAV additions profile
- Calculating the difference in profiles between the original profile and revised profile
- Summing the differences to arrive at the SOCRAV term

## Part 4 – Logged up and security costs adjustments relating to the legacy period

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

11.51. In the remainder of this section, references to the terms SAR and SRAV should be taken to include SOSAR and SOSRAV and references to special condition GTC 64 should be taken to include special condition GTC 67.

**Description of the TPCR4 Logged-up and Security costs**

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

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

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

**Calculation of TPCR4 Logged-up and Security costs adjustment**

11.55. Following an efficiency review of the logged up and security costs incurred in the period 1 April 2012 to 31 March 2013 and reported to the Authority in accordance with standard condition B15, the actual efficiently incurred logged up costs will be price index adjusted to RIIO-T1 base year prices and a return allowed for the time value of money.

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

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

11.58. The TPCR4 Logged-up and Security costs revenue adjustment will form the SAR component in the LAR PCFM variable value for 2013-14.

11.59. The TPCR4 Logged-up and Security costs RAV adjustment will form the SRAV component in the LRAV PCFM variable value for 2013-14.

## Part 5 - Capacity driver incentive scheme adjustments relating to the legacy period

11.60. [to be inserted]

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

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

11.62. Except where stated references to LAR and LRAV should also be taken to mean SOLAR and SOLRAV for the SO.

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

11.64. The Authority shall, by 30 November in each Formula Year t-1:

(a) determine whether any LAR or LRAV values should be revised in relation to one or more of the schemes and mechanisms referred to in Parts A and B of the condition; and

(b) issue a direction in accordance with the provisions of Part C of the condition specifying any revised values that have been determined and the Formula Years to which they relate.

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

11.66. Revised LAR and LRAV values will normally relate to Formula Year 2013-14.

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

$$LAR = PAR + TAR + CAR + SAR$$

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

$$SOLAR = SOPAR + SOTAR + SOCAR + SOSAR$$

11.68. Where, in each case, for the same Formula Year t:

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

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

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

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

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

LRAV = CRAV + SRAV

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

SOLRAV = SOCRAV + SOSRAV

11.70. Where, in each case, for the same Formula Year t:

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

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

11.71. Where the Authority directs any revised LAR values or LRAV values for Formula Years earlier than Formula Year t, the effect of using those revised values in the Annual Iteration Process for the GT1 Price Control Financial Model 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 (or SOMOD).

# Appendices

**Index**

# Appendix 1 - Glossary

**F**

Fast money

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

Formula Year

[•]

**G**

GT1

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

GT1 Price Control Financial Model

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

TPCR (Electricity Transmission)

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

**M**

MOD Term [TO and SO]

The term of that name included in the formula for Base Revenue set out in Special Condition X of the Electricity Transmission licence. It represents the incremental change to [base revenue] for the formula year concerned, ascertained in accordance with the methodologies set out in this Handbook. The value of the MOD term is calculated through the annual iteration of the GT1 Price Control Financial Model (see Chapter 2) and is specified in a direction given by the Authority by 30 November in each formula year.

**O**

### Ofgem

The Office of the Gas and Electricity Markets Authority.

**R**

### RAV – Regulatory Asset Value

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

### RIIO

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

### RIIO-T1 (Electricity Transmission)

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

**S**

### Slow money

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

### Shadow RAV

Refers to expenditure, already incurred, which has not yet been admitted to the licensee's formal RAV balance, but which is expected to be admitted at a future point.

### SO

[•]

**T**

### Time value of money adjustment

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

In basic terms, the multiplier is $(1+X)^Y$ where:

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

- Y is the number of years of deferral

### TO

[•]

### Totex

Total expenditure – the licensee's capital (capex), replacement (repex) and operational (opex) expenditure on its transportation business except for:

- costs relating to de minimis (non transportation business) activities;
- costs relating to excluded services;
- pension deficit repair payments relating to the established deficit and unfunded ERDC costs incurred after 1 April 2004;
- fines and penalties;
- compensation payments made in relation to standards of performance;
- bad debt costs;
- costs related to the SF6 incentive scheme;
- costs relating to pass-through items;
- finance and tax costs (except for some business rates and stamp duty land tax)
- other expenditure and accounting adjustments specifically excluded from Totex by the RIIO-GT1 Cost Reporting Regulatory Instructions and Guidance.

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

### Totex Capitalisation Rate

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

## U

### Unified Financial Model

The model used by Ofgem to ascertain opening base revenue values for all the network price controls and to allow financeability analysis of overall price control packages (compare to GT1 price Control Financial Model)

## W

### WACC

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

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

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

weighted according to the price control gearing assumption.

"Real Vanilla WACC" is used which gives a lower percentage than "Nominal Vanilla WACC" would (when inflation is positive). This is because inflation isn't taken into account in the determination of the Real Vanilla WACC percentage since revenue allowances (which include the Vanilla WACC return) are separately RPI indexed.