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Guidance

RIIO-GD2 Price Control Financial Handbook

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This is the RIIO-GD2 Price Control Financial Handbook which forms part of Special Condition 8.1 (Governance of the RIIO-GD2 Price Control Financial Instruments) of the Gas Transporter licence held by gas distribution network operators.

This document consists of:

a) a description of the RIIO-GD2 Price Control Financial Model (PCFM) and the Annual Iteration Process (AIP) for it, used to calculate licensee's Allowed Revenue during the course of the RIIO-GD2 Price Control Period
b) an overview of the variable values used in the RIIO-GD2 PCFM during the AIP, in accordance with the Special Conditions of the licence
c) details of how certain variable values are revised or calculated.

The procedures relating to modification of this handbook and the RIIO-GD2 PCFM are contained in Special Condition 8.1 and up to date versions of both can be accessed on the Ofgem website.

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1. Introduction

1.1. Under RIIO-GD2, Special Condition 2.1 (Revenue restriction) determines the annual Allowed Revenue a licensee can recover in respect of its network business through charges. The calculation of annual Allowed Revenue is performed using the RIIO-GD2 Price Control Financial Model (PCFM).

1.2. Each year, certain inputs to the RIIO-GD2 PCFM (the variable values) are updated through the Annual Iteration Process (AIP), resulting in updates to Allowed Revenue within the RIIO-2 Price Control Period. These inputs reflect a range of factors including past and forecast performance and activity levels, and changes in the cost of capital.

1.3. We have chosen to have a RIIO-GD2 PCFM with an AIP because it:

a) incorporates 'real time' adjustments to financial allowances
b) uses a financial model for the purpose of computing interactions between financial adjustments where the relevant algebra would be excessively complicated to set out on the face of Special Conditions
c) provides transparency on adjustments to Allowed Revenue, that have taken place since the licence, this handbook, the RIIO-GD2 PCFM and variable values have been published; and
d) allows stakeholders to keep abreast of Allowed Revenue levels and to carry out business sensitivity analysis.

1.4. This document is the RIIO-GD2 Price Control Financial Handbook (PCFH, or handbook) and, along with the RIIO-GD2 PCFM, is a RIIO-GD2 Price Control Financial Instrument, which forms part of Special Condition 8.1. The PCFH and RIIO-GD2 PCFM are subject to a formal change control process set out in Special Condition 8.1.

1.5. This handbook supports the annual determination of Allowed Revenue by providing:

a) a description of the RIIO-GD2 PCFM and the AIP
b) an overview of the variable values used in the RIIO-GD2 PCFM during the AIP; and
c) details of how certain variable values are revised or calculated.

Related documents

1.6. This handbook is one of several documents relevant to the calculation of Allowed Revenue. Other key documents include:

a) Final Determinations[1]
b) Special Conditions
c) RIIO-GD2 PCFM
d) Associated Documents including PCFM Guidance (see Table 3.1).

1.7. In any case of conflict of meaning between these documents, the following order of precedence applies:

a) the relevant licence conditions
b) the handbook
c) the RIIO-GD2 PCFM
d) NARM handbook and Network Asset Risk Workbook
e) Associated Documents including the PCFM Guidance
f) Final Determinations. [2]

Document structure

1.8. The remainder of this handbook is structured as follows:

a) Section 2 provides an overview of the RIIO-GD2 PCFM and details of the AIP
b) Section 3 lists the PCFM Variable Values used in the RIIO-GD2 PCFM and updated through the AIP
c) subsequent sections provide details of how certain variable values are revised or calculated (along with further details on the RIIO-GD2 PCFM).

[1] https://www.ofgem.gov.uk/publications-and-updates/riio-2-final-determinations-transmission-and-gas-distribution
[2] Final Determinations do not form part of the licence and have legal effect only insofar as they are specifically referenced in the other documents listed at 1.7 a-e.

2. The RIIO-GD2 PCFM and the Annual Iteration Process

2.1. This section provides an overview of the RIIO-GD2 PCFM, the terms of reference for the PCFM Working Group (which reviews issues arising with respect to the form or usage of the RIIO-GD2 PCFM), and details on the AIP through which the variable values and Allowed Revenue are updated annually.

The Price Control Financial Model

2.2. For each Regulatory Year, the RIIO-GD2 PCFM provides for the calculation of:

- 'Live' Calculated Revenue (R_t), which is updated at least annually to reflect new information
- The value of Adjusted Revenue, a nominal revenue allowance reflecting true-ups for retroactive updates to the PCFM Variable Values in the RIIO-2 Price Control Period
- Allowed Revenue, which is the sum of Adjusted Revenue, corrections for charging over/under-recovery (K_t), and a true-up for changes prior to the RIIO-2 price control period (LAR_t).

2.3. The RIIO-GD2 PCFM contains both fixed values and a variable values table input area for the licensee. The Allowed Revenue figure for the licensee for each Regulatory Year of the Price Control Period is calculated as per Special Condition 2.1, using the fixed values, the variable values, and the formulae and functions embedded in the RIIO-GD2 PCFM.

2.4. At the outset of the Price Control Period, Allowed Revenue is calculated by the RIIO-GD2 PCFM, using the variable values at that time. Each year, through the AIP, the variable values must be updated, resulting in updated Calculated Revenues (R_t) and consequently updated Adjusted Revenue, flowing through to Allowed Revenue. To understand the factors that can change Allowed Revenue, it is helpful to discuss its three components:

$$AR_t = ADJR_t^* + K_t + LAR_t$$

Adjusted Revenue ($ADJR_t$)

2.5. $ADJR_t$* is a value published by Ofgem as part of the AIP based on the PCFM inputs available at the time. These values are recorded by the RIIO-GD2 PCFM at the time of publication (the Saved Results tab). The published value for the Regulatory Year t is the sum

of the current view of Calculated Revenue (R_t) in nominal prices ($R_t \frac{PI_t}{PI_{2018/19}}$) , plus an adjustment for revisions to years that have already passed (ADJ_t):

$$ADJR_t = R_t \frac{PI_t}{PI_{2018/19}} + ADJ_t$$

2.6. When time value of money adjustments are made for retroactive changes, it is with reference to these previously published values of $ADJR_t$*. Revisions to Calculated Revenue and the inflation forecast are trued up at vanilla WACC via the ADJ term, as defined in the RIIO-GD2 PCFM (see the time value of money section).

Calculated Revenue (R_t)

2.7. Calculated Revenue (R_t) is the 'live' calculation of real revenue allowances (in 2018/19 price terms). It is a live calculation in that Calculated Revenue (R_t) for a given Regulatory Year will be different at different points in time if the inputs are changed.

2.8. Chapter 3 of this Handbook details the variable values that can change through the Annual Iteration Process, including those that result in updates to Calculated Revenue (R_t).

Return Adjustment ($RTNA_t$)

2.9. Return Adjustment ($RTNA_t$) is a RIIO-2 close-out estimate (in 2018/19 price terms) in accordance with Special Condition 2.3. It is not linked to revenue allowances during RIIO-2 for the following reasons. First, $RTNA_t$ requires close-out values for other PCFM inputs, which will not be available until RIIO-2 ends, and it requires the Authority's final direction as a result of a review of Operational Outperformance. Second, the implementation of $RTNA_t$ is subject to variation requests from any affected company, in line with RIIO-2 Final Determinations.[3]

[3] See paragraph 8.21 of the Draft Determinations Finance Annex for example: https://www.ofgem.gov.uk/system/files/docs/2020/12/final_determinations_-_finance_annex.pdf#page=107

2.10. The $RTNA_t$ term calculated on row 84 of the ReturnAdj sheet of the RIIO-GD2 PCFM will be linked to the $RTNA_t$ line in the "Revenue" sheet after the end of the Price Control Period, following the Authority review of Operational Performance.

2.11. The inclusion of $RTNA_t$ within the RIIO-GD2 PCFM improves transparency during the RIIO-2 period, and will support the close-out of RIIO-2 during the AIPs we plan to conduct during November 2026 and November 2027.

Correction Term (K_t)

2.12. K_t provides for the correction of over or under recovery of revenue in previous years, compared to the corresponding value of Allowed Revenue.

2.13. This recovery error is trued up with interest equal to the average SONIA rate in the year plus 1.15%. In the GD and GT sector, a penal rate of interest of +/- 1.15% is applied if there are under or over-recoveries in excess of 6% from a target revenue. This penal rate of interest may be waived by direction of the Authority.

2.14. If, during an AIP, the variable value for recovered revenue for the upcoming year is set assuming collection will equal Allowed Revenue, then at the next AIP this value can be updated if there is a better estimate available (forecast, as the Regulatory Year is not yet complete). This allows for an up to date calculation of the K correction factor on a one-year lag.

Legacy Adjustments (LAR_t)

2.15. The LAR_t term is an adjustment in nominal prices reflecting true-ups from the RIIO-1 Price Control Period. It is described in Chapter 8.

Price base

2.16. When ascertaining Calculated Revenue (R_t), the RIIO-GD2 PCFM works in a constant 2018/19 price base, except in respect of some calculations internal to the model that use nominal prices, eg tax and legacy calculations. The use of nominal prices in the RIIO-GD2 PCFM tax calculations is meant to more accurately reflect the licensee's tax expenses profile in revenue allowance calculations.

2.17. Where variable values need to be deflated from a nominal price base to the 2018/19 price base used in the RIIO-GD2 PCFM, the following formula will be used:

$$\text{value}_{2018/19\text{ prices}} = \text{value}_{\text{nominal}} \cdot \frac{\text{PI}_{2018/2019}}{\text{PI}_{\text{t}}}$$

Where:

$\text{value}_{2018/19\text{ prices}}$	means the deflated/restated value in 2018/19 prices
$\text{value}_{\text{nominal}}$	means the value in a nominal price base or in prices of a Regulatory Year other than 2018/19
PI_{t}	is the arithmetic average value of each of the twelve monthly values of PI_{m} from 1 April to 31 March within Regulatory Year t derived in accordance with the following formula:

$$PI_m = \begin{cases} RPI_m, & \text{if } m < April\ 2021 \\ PI_{m-1}\left(0.5\dfrac{CPIH_m}{CPIH_{m-1}} + 0.5\dfrac{RPI_m}{RPI_{m-1}}\right), & \text{if } m = April\ 2021 \\ PI_{m-1} \cdot \dfrac{CPIH_m}{CPIH_{m-1}}, & \text{if } m > April\ 2021 \end{cases}$$

where:

m	refers to a year and month;
RPI_{m}	means the Retail Prices Index (all items) (series: CHAW) published by the Office for National Statistics (ONS) for the year and month m.[4]

[4] https://www.ons.gov.uk/economy/inflationandpriceindices/timeseries/chaw/mm23

$CPIH_m$	means the "Consumer Price inflation including owner-occupiers' housing costs" (series L522) published by the ONS for the year and month m.[5]

Forecasting the price index PI_t

2.18. At each AIP, outturn data for RPI_m and $CPIH_m$ will be updated by Ofgem, for the period to June of the prior year (e.g. for AIP in November 2021, for Regulatory Year 22/23, the outturn data values will be entered to June 2021).

2.19. The PCFM "Monthly Inflation" and "Annual Inflation" tabs contain a method for forecasting future price index values, given calendar year forecast assumptions. The calendar year forecasts are labelled "$CYRPIF_t$" and "$CYCPIH_t$".

2.20. These forecasts will be the Office for Budget Responsibility's (OBR) forecast of CPI and RPI from the "economic and fiscal outlook". Ofgem will update the forecast assumptions from the most recent outlook available as at 31 October at each AIP. The data will be sourced from following files based on their availability, with preference being given to them in accordance with the order they are listed below:

1. The OBR historical official forecasts database[6], tabs "CPI" and "RPI"
2. The charts and tables datafile published with the economic and fiscal outlook
3. The economic and fiscal outlook document

2.21. The forecast rates will be used to create a forecast of the monthly index. The OBR growth rate forecasts compare year over year index averages, so the rates are assumed to apply midpoint each year from July to June. The last outturn value of RPI and CPIH will be grown by a monthly rate in accordance with the following formula:

$$RPI_m = RPI_{m-1} \cdot (1 + CYRPIF_m)^{\frac{1}{12}}$$

[5] Historical data - https://www.ons.gov.uk/economy/inflationandpriceindices/timeseries/l522/mm23

[6] https://obr.uk/data/

where,

RPI_m	is the RPI price index value for a given year-month "m".
$CYRPIF_m$	Means the OBR RPI forecast (annual rate) applicable to year-month m, where the OBR forecast for a calendar year is applicable from 6 months prior to the start of that calendar year, to six months after (eg the 2021 OBR forecast would be applicable from July 2020 to June 2021). If the forecast year-month falls after the range covered by OBR forecasts, the longest dated forecast year is used (eg if the November OBR forecast covered 2020-2024, then the forecast for year 2024 would be used for 2025 and 2026).

2.22. The forecast for $CPIH_m$ is calculated in the same way as above, substituting in the CPIH values.

Long term inflation assumption ($LTCPIH_t$)

2.23. To correspond to the long-term assumption used in the WACC allowance model, the long term inflation assumption (labelled $LTCPIH_t$) will be updated for the upcoming Regulatory Year from the OBR forecast published prior to October in the Regulatory Year t-1. For example, the assumption for 2021/22 will be from the March 2020 outlook. The percentage will be rounded to 1 decimal place (e.g. 2.0%)

Temporal convention

2.24. The following conventions apply throughout this handbook:

a) Relative references: The AR_t term is licensee's Allowed Revenue for each Regulatory Year t during the Price Control Period. References in this handbook to Regulatory Years are made relative to that usage. For example, in the context of AR_t for Regulatory Year 2022/23, a reference in the same context to Regulatory Year t-1 would mean 2021/22 and so on

b) Absolute references: A reference to, for example, 'the EDE value for 2022/23' means the EDE value in the 2022/23 column of the variable values table for the licensee contained in the RIIO-GD2 PCFM.

Forecast variable values

2.25. In calculating Allowed Revenue for Regulatory Year t, the RIIO-GD2 PCFM uses some forecast variable values both for Regulatory Year t and preceding Regulatory Years. For example, in the case of expenditure, there is a two-year lag before outturn values can be reflected in Allowed Revenue, and so forecasts are used.

2.26. The licensee must submit updates to forecast variable values annually, through the AIP, in accordance with the requirements of the PCFM Guidance. These updates can apply to all Regulatory Years.

2.27. For the avoidance of doubt, while a licence condition may refer to actual delivered outputs, for future years this relates to forecasts of delivered outputs.

Time Value of Money (TVOM)

2.28. The RIIO-GD2 PCFM uses a 'time value of money' adjustment to incorporate the financial impact of the timing of cash flows, eg from switching revenues between years as a result of changes to previous years' Allowed Revenue. Ofgem will use two TVOM approaches[7] in the RIIO-GD2 Price Control Period as follows:

a) nominal Vanilla Weighted Average Cost of Capital (WACC) for revisions to allowances, including but not limited to totex, output delivery incentives and pass-through costs as reflected in the AIP adjustment term (ADJ.); and
b) the twelve months average[8] of the daily overnight SONIA (the Sterling Overnight Index Average, expressed as a nominal rate, published by the Bank of England[9] (series IUDSOIA)) rate plus a 115bp margin for correction term K_t or any other adjustments where appropriate.

2.29. For future years, forecasts of SONIA and WACC[10] will be used and updated at subsequent AIPs when out-turn data are available. SONIA will be forecast using a Bank of

[7] Ofgem will review the case for use of one TVOM approach applicable to all revisions and corrections and will consult on any changes to its TVOM approaches where appropriate.
[8] the annual arithmetic averages from 01 April to 31 March, inclusive, for each year.
[9] https://www.bankofengland.co.uk/
[10] Forecast for WACC is based on the forecasting approach for CDE and RFR described in section 4 of this handbook.

England instantaneous forward curve[11] as published on the Bank of England website and will be updated during the AIP with outturn values.

Changing the RIIO-GD2 PCFM

2.30. The RIIO-GD2 PCFM exists as a constituent part of Special Condition 8.1 and will be maintained by Ofgem on its website as well as internally. The RIIO-GD2 PCFM can be changed in two ways:

a) an Annual Iteration Process - which will change the variable values and recalculated values which are directly or indirectly dependent upon them under the process set out in Special Condition 8.2; or
b) a modification of the RIIO-GD2 PCFM under the procedures set out in Special Condition 8.1 (Governance of RIIO-GD2 Price Control Financial Instruments) or section 23 of the Act.

2.31. A copy of the RIIO-GD2 PCFM in its latest state will be maintained on the Ofgem website, and Ofgem will upload an updated copy by 30 November[12] each year (after each AIP). This will allow the licensee and other stakeholders to make copies of the RIIO-GD2 PCFM so that they can:

a) use their own forecasts of Variable Value revisions to forecast Allowed Revenue and conduct sensitivity analysis; and
b) reproduce the calculation of Allowed Revenue.

2.32. Ofgem will keep a log of modifications to the RIIO-GD2 PCFM and publish this log on its website.

Error in the functionality of the RIIO-GD2 PCFM

[11] https://www.bankofengland.co.uk/statistics/yield-curves
[12] Except when the AIP is not completed by 30th November, as stated in Special Condition 8.2, Part C.

2.33. In the event that an error of functionality is discovered in the RIIO-GD2 PCFM, the following procedure will be followed:

a) the issue will be considered at the earliest opportunity by the PCFM Working Group (see next section) and a corrective modification will be proposed by Ofgem
b) if the functional error has distorted the calculation of a previously published value of Allowed Revenue, the determined modification will include any time value of money adjustments necessary to correct for that distortion in the next calculation of Allowed Revenue; and
c) the procedure in Special Condition 8.1 for modifications to the RIIO-GD2 PCFM will be followed.

The RIIO-GD2 Price Control Financial Model Working Group

2.34. Ofgem will facilitate an industry expert working group to review issues arising with respect to the form or usage of the RIIO-GD2 PCFM. The terms of reference for The PCFM Working Group ('the working group') are set out below.

Terms of reference

Purposes of the working group

2.35. The purposes of the working group are:

a) to review the ongoing effectiveness of the RIIO-GD2 PCFM in producing a value for Allowed Revenue and capturing financial performance data for each Regulatory Year
b) to provide, when requested by the Authority, its views to the Authority on the impact of any proposed modifications on the RIIO-GD2 PCFM; and
c) to provide such views or recommendations to the Authority with regard to the RIIO-GD2 PCFM (including as to proposals to modify the RIIO-GD2 PCFM) as it sees fit.

Composition

2.36. The composition of the group will be:

a) Ofgem (chair)
b) Ofgem (secretary)

c) one representative per GDN; and
d) Energy Networks Association representative (optional).

Timing and duration of the group's work

2.37. The working group's incumbency will run from 01 April 2021 to 31 March 2026.

2.38. The group will meet at least once between 01 January and 01 April 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 RIIO-GD2 PCFM modifications (see paragraph 2.29 b).

2.39. In convening any meeting of the working group, Ofgem will give at least 10 working days notice of the proposed meeting date to the licensee.

2.40. Representatives may attend meetings in person or through video or telephone conferencing facilities.

2.41. A meeting of the working group will be quorate, for the purpose of expressing a view or recommendation in respect of the RIIO-GD2 PCFM, when at least one representative from Ofgem, and at least one representative from every different GDN ownership group are present (in person or virtually).

Resources

2.42. 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 RIIO-GD2 PCFM. A copy of the record of each meeting will be provided to the licensee as soon as is reasonably practicable and to representatives who attended the meeting, and Ofgem will take account of any comments received in finalising the record.

The Annual Iteration Process (AIP)

2.43. The AIP is the process carried out by the licensee and Authority each year[13] in order to calculate Allowed Revenue (AR_t for Regulatory Year t) by updating the Variable Value inputs to the RIIO-GD2 PCFM.

2.44. The AIP will be completed by 30 November prior to each Regulatory Year t, or as soon as is reasonably practicable thereafter. The deadline of 30 November reflects the need for the licensee to have confirmation of its Allowed Revenue in time to calculate and set its use of system charges.

2.45. The steps of the AIP are specified in Special Condition 8.2, Part A and the process is further described below.

Submission of RIIO-GD2 PCFM

2.46. The licensee must use the version of the RIIO-GD2 PCFM provided to it by the Authority and which incorporates any modifications made to it following discussion with the PCFM Working Group. This version of the RIIO-GD2 PCFM will be the one used in the upcoming AIP and will be published by the Authority by the functional cut-off dates set out in Table 2.1.

2.47. Prior to each Regulatory Year, the licensee must submit to the Authority the RIIO-GD2 PCFM by the submission date listed in Table 2.1 with a completed variable values table (covering activity in the prior Regulatory Year and changes to forecast activity[14]), which has been run to calculate AR_t and $ADJR_t$.

2.48. This submitted version of the RIIO-GD2 PCFM may contain provisional values for variable values that are unknown at the time of submission. An example of a variable values which will not be known by 31 August is a re-opener term which is subject to an outstanding decision by the Authority.

[13] Except for 2025/26, when there will be no AIP (see Special Condition 8.2.15).
[14] Variable values for Regulatory Years later than Regulatory Year t do not feed into the calculation of the term AR_t. Therefore, calculated values in the PCFM for Regulatory Years later than Regulatory Year t represent only a forecast. This is without prejudice to the status of the variable values concerned, which may have been decided and/or directed under licence conditions and which may or may not be subject to subsequent revision.

2.49. Where a variable value is unknown at the time of submission, the licensee must calculate a provisional value using the approach specified within this handbook or the PCFM Guidance, as applicable, and otherwise provide its best estimate with the information available at the time.

2.50. Ofgem will review the submitted RIIO-GD2 PCFM and confirm whether these have been prepared in accordance with the PCFM Guidance. Where values have not been prepared in accordance with the PCFM Guidance, Ofgem will amend such variable values, as appropriate, taking into account any decisions it has made in relation to those values.

Dry Runs process

2.51. This process of confirming and amending values will normally take place over a number of months from 31 August to early November and will be iterative to account for updates to the variable values as they become known.

2.52. There will be one or more dry runs of the RIIO-GD2 PCFM between the licensee's initial submission of the RIIO-GD2 PCFM and the final run in early November. The number of dry runs needed will depend on the number and timing of Variable Value updates required for the licensee in any particular Regulatory Year.

2.53. Where the Authority amends a Variable Value from an earlier licensee submission, either due to a licensee error or to reflect updates to a provisional value, it will notify the licensee and request a resubmission of the RIIO-GD2 PCFM. Following updates to variable values, the RIIO-GD2 PCFM should be re-run by the licensee and AR_t and $ADJR_t$ should be recalculated to reflect the impact of the updated values.

2.54. Where a licensee has not complied with Step 1 of Special Condition 8.2 and has failed to submit a populated RIIO-GD2 PCFM by 31 August, Ofgem will complete the variable values table and run the macro on the User Interface sheet of the model to calculate AR_t.

2.55. In order to facilitate publication of AR_t and $ADJR_t$ by 30 November, Ofgem will normally expect to apply the following annual cut-off dates:

a) 01 June in respect of functional changes to the RIIO-GD2 PCFM, RIIO-GD2 PCFH and PCFM Guidance; and

b) 31 October in respect of information submitted by the licensee.[15]

Final Run

2.56. The final run of the RIIO-GD2 PCFM will take place in early November and will be performed by Ofgem. This will take into account the variable values in the latest submission from the licensee, as confirmed by Ofgem and will also reflect the updated cost of debt (CDE) and risk free rate (RFR) variable values, the latter of which is dependent on government bond yield data published by the Bank of England in the first week of November.

2.57. Having determined any revisions to variable values for the licensee, Ofgem will update the RIIO-GD2 PCFM as follows:

a) revised variable values will be entered in the appropriate Regulatory Year columns of the variable values table for the licensee
b) the macro in the UserInterface sheet of the RIIO-GD2 PCFM will be run so that: all calculated values within the RIIO-GD2 PCFM will be updated, including:
   i. the Calculated Revenue (R_t) figure for the licensee for each Regulatory Year of the Price Control Period, and
   ii. the modelled Regulatory Asset Value (RAV_t) balance for the licensee
c) the RIIO-GD2 PCFM will output the values of AR_t and $ADJR_t$ for Regulatory Year t for the licensee.

2.58. The Authority will give the licensee at least 14 days notice of the value AR_t and $ADJR_t$, and a copy of the RIIO-GD2 PCFM used to calculate it (including the licensee's variable values, which may have been revised through the AIP), in accordance with requirements in the licence, to allow for any representations.

2.59. The Authority will then (by 30 November in Regulatory Year t-1, or as soon as is reasonably practicable thereafter) publish the value of AR_t and $ADJR_t$ and a copy of the RIIO-

[15] In applying this cut-off date, Ofgem will, through business correspondence, apprise the licensee of any provisionality it has attached to information submissions, that might involve a restatement of the information by the licensee for the purpose of making a further revision to the Variable Value(s) concerned for use in a subsequent Annual Iteration Process.

GD2 PCFM used to calculate AR_t and $ADJR_t$. The value of AR_t and $ADJR_t$ in the publication will be stated in £ millions to one decimal place.

2.60. Where certain information is considered to be commercially sensitive, the licensee may request that this information be redacted before the RIIO-GD2 PCFM is published. The Authority will consider the request and will share the version of the RIIO-GD2 PCFM for publication including any redactions as considered necessary with the licensee in advance of the publication.

2.61. Part C of Special Condition 8.2 specifies what will happen if the Authority does not publish a value for AR_t and $ADJR_t$ by 30 November in Regulatory Year t-1.[16]

Re-publication of the RIIO-GD2 PCFM after 30 November

2.62. The AIP provides the value of ADJR* which the licensee must use to determine the value of ARt.

2.63. Part B of Special Condition 8.2 specifies that the Authority may re-publish the values of AR_t and $ADJR_t$ after 30 November and before the 30 January in Regulatory Year t-1.

2.64. The ability to re-publish the RIIO-GD2 PCFM after the 30 November AIP has been published, enables the Authority to update the published values of AR_t and $ADJR^*_t$ thereby enabling the licensee to reflect the impact of any unforeseen events on the fixed component of ARt (ADJR*) in time for it to set its tariffs for the Regulatory Year t.

2.65. If the licensee becomes aware of an event which will have or is estimated to have a material effect on its ADJR* for the Regulatory Year t, it may notify Ofgem requesting a re-publication under Part B of Special Condition 8.2 between 01 December and 05 January[17] in the year t-1. A material effect is one which is greater than the licensee's Materiality Threshold as defined in the Special Conditions.

[16] Except for 2025/26, when there will be no AIP (see Special Condition 8.2.15).
[17] The notification cut-off date is 05 January in the Regulatory Year t-1 to accommodate for the 14-day notice period required prior to a re-publication of the PCFM.

2.66. Revising the value of K_t or LAR_t prior to charge setting does not require a re-publication.

2.67. A notification under paragraph 2.65 of this handbook must contain the following

a) A description of the event and an explanation of why it was unforeseen;
b) The quantum of the impact on the licensee's Allowed Revenue;
c) A statement confirming the Materiality Threshold has been exceeded;
d) A description of the adjustment that is required to be made to the most recent published RIIO-GD2 PCFM to reflect the impact; and
e) A copy of the most recently published RIIO-GD2 PCFM containing the required adjustment.

2.68. The Authority will consider any request for a re-publication on a case by case basis. Where it considers that a re-publication is the appropriate course of action, the Authority will notify the licensee.

2.69. The Authority will review the submitted RIIO-GD2 PCFM and confirm or amend the variable values, as appropriate and in accordance with the PCFM Guidance before giving the licensee notice which will not be less than 14 days.

2.70. The Authority will then re-publish on its website the version of RIIO-GD2 PCFM that is to be used for tariff setting in accordance with Part B of Special Condition 8.2 (Annual Iteration Process for the GD2 Price Control Financial Model) and Special Condition 2.1 (Revenue restriction).

2.71. This version of the RIIO-GD2 PCFM will supersede the version published following the most recent November AIP and will be referred to as the "Re-published RIIO-GD2 PCFM November 20XX".

2.72. Table 2.1 below summarises the timings for the AIP during the Price Control Period.

Table 2.1 - Summary of timings for the Annual Iteration Process[18]

AIP Year	Licensee submits populated RIIO-GD2 PCFM	RIIO-GD2 PCFM functional change cut-off	Regulatory reporting information cut-off	Notice of proposed variable value revisions by	AIP completed and AR_t and $ADJR_t$ published by	Regulatory Year t in which AR_t applies
Nov-2021	31 Aug 21	01 Jun 21	31 Oct 21	15 Nov 21	30 Nov 21	2022/23
Nov-2022	31 Aug 22	01 Jun 22	31 Oct 22	15 Nov 22	30 Nov 22	2023/24
Nov-2023	31 Aug 23	01 Jun 23	31 Oct 23	15 Nov 23	30 Nov 23	2024/25
Nov-2024	31 Aug 24	01 Jun 24	31 Oct 24	15 Nov 24	30 Nov 24	2025/26

2.73. Some financial adjustments provided for under the RIIO-GD2 Final Determinations will remain outstanding at the end of the Price Control Period, because relevant data will not be available in time for inclusion in the last AIP. For example, adjustments under the Totex Incentive Mechanism relating to actual and allowed expenditure levels in Regulatory Years 2024/25 and 2025/26 will remain outstanding. For the avoidance of doubt, adjustments of this type will be addressed as part of the close out of RIIO-2 or as part of the RIIO-GD3 price control arrangements.

[18] Use previous working day if these dates fall on a weekend or bank holiday.

3. The PCFM Variable Values

3.1. This section lists all the variable values (including the relevant Special Condition and Associated Documents, where relevant, for each).

PCFM Variable Values

3.2. The variable values that can be revised during an AIP are set out in Table 3.1 below.

3.3. For each variable value, the table provides a description, cross-references to the relevant Special Condition(s) (where appropriate), and details of Associated Documents (where relevant). It also identifies the variable values for which further details are provided in subsequent sections of this handbook. This includes the approaches to variable values calculated by Ofgem (eg cost of debt and Real Price Effects) and details for some variable values in addition to that provided in Special Conditions (SpC) and other Associated Documents (eg taxation and pensions).

Processing of different types of variable values

3.4. Table 3.1 presents the variable values according to the different types, which reflect the components of revenue to which they relate, as follows:

Totex allowance

3.5. The following types of variable values contribute to the calculation of the totex allowance[19], through the Totex Incentive Mechanism:

a) Variant Allowances (adjustments to totex allowances); and
b) Actual totex

[19] Subject to "Capitalisation rate 1" and "Capitalisation rate 2" which relates to "Ex-ante Baseline totex + PCDs" and "Uncertainty Mechanisms only" respectively.

3.6. These types of variable values are used in the Totex Incentive Mechanism to determine the amounts that should, subject to the Totex Capitalisation Rate for the licensee, be processed as:

a) Fast Money (FM_t) – flowing directly into the Calculated Revenue (R_t) figure for the Regulatory Year to which the amount relates
b) Slow Money – addition to the licensee's RAV in the Regulatory Year to which the amount relates, contributing indirectly to Calculated Revenue (R_t) through the return (RTN_t) on RAV and depreciation (DPN_t) over multiple Regulatory Years.

Pass-through expenditure

3.7. This type of variable value is allowed expenditure, comprising certain costs that can be passed through to consumers, and flows directly into Calculated Revenue (R_t). It is not used in the Totex Incentive Mechanism and does not have a slow money component.

Incentive Revenue

3.8. This type of variable value penalises or rewards licensees for incentive performance and flows directly into Calculated Revenue (R_t).

Other Revenue Allowances

3.9. This type of variable value comprises expenditure incurred on innovation projects (by means of Network Innovation Allowance) and any other similar allowances that can be processed as Fast Money (FM_t), which flow directly into Calculated Revenue (R_t).

Legacy Adjustments

3.10. This type of variable value relates to adjustments for previous price controls and comprises:

a) *Legacy Revenue adjustments (LAR_t)*: These types of adjustments flow directly into Allowed Revenue (AR_t).
b) *Legacy RAV Additions Adjustment ($LRAV_t$)*: These variable values contribute indirectly to Calculated Revenue (R_t).

Directly Remunerated Services (DRS)

3.11. This type of variable value is used to derive the DRS adjustment term that feeds directly into Calculated Revenue (R_t).

Finance Inputs

3.12. This category comprises:

a) Cost of capital percentage ($iBTA_t$ and RFR)[20]: This type of variable value affects the allowance provided to the licensee for financing their capital needs and contributes to Calculated Revenue *(*R_t*)* indirectly.
b) Allowed Revenue setting: This type of variable value is used in the calculation of Allowed Revenue and comprises SONIA, RIIO-1 Allowed Revenue, Penal Rate Proportion and Recovered Revenue.
c) Tax allowance[21]: This type of variable value relates to taxation of the licensee and contributes indirectly to Calculated Revenue (R_t) or, in the case of $TAXA_t$, flows directly into Calculated Revenue (R_t).
d) Real Price Effects (RPE_t)[22]: This is the annual growth rate used for the derivation of the RPE indexation values. These in turn are applied to the relevant allowed totex spend, to derive the related RPE totex allowance.

Totex Variant Allowances Allocation Percentages (TVAAt)

3.13. These variable values comprise totex variant allowance allocation percentages, used in the RIIO-GD2 PCFM to allocate variant totex allowances between the five categories of totex as listed below:

1. Load related capex
2. Non-load related capex - other
3. Business support (opex)
4. Directs opex

[20] See Section 4 of this handbook.
[21] See Section 6 of this handbook.
[22] See Section 5 of this handbook.

5. Repex

3.14. These allocation rates enable actual and forecast allowances to feed into Calculated Revenue (R_t) through the Totex Incentive Mechanism (see para 3.6) and relate specifically to any re-opener or uncertainty mechanism, which have not been pre-populated in the RIIO-GD2 PCFM as a "yellow box" hard-coded input.

Table 3.1 - PCFM Variable Values (VV)

VV	Description	SpC	Cross-reference / Associated Document
Variant Totex Allowances			
$NARM_t$	The Baseline Network Risk Outputs	SpC 3.1	PCFM Guidance, Network Asset Risk Workbook, NARM Handbook
$CROT_t$	Cyber resilience OT Baseline	SpC 3.2	PCFM Guidance, PCD Reporting Requirements and Methodology Document
$CROTRE_t$	Cyber resilience OT non-baseline	SpC 3.2	PCFM Guidance, Re-opener Guidance and Application Requirements
$CRIT_t$	Cyber resilience IT Baseline	SpC 3.3	PCFM Guidance, PCD Reporting Requirements and Methodology Document
$CRITRE_t$	Cyber resilience IT non-baseline	SpC 3.3	PCFM Guidance, Re-opener Guidance and Application Requirements
$PSUPRE_t$	Physical Security Price Control Deliverable - Re-Opener Element	SpC 3.4	PCFM Guidance, Re-opener Guidance and Application Requirements
$PSUP_t$	Physical Security Price Control Deliverable	SpC 3.4	PCFM Guidance, PCD Reporting Requirements and Methodology Document
RDF_t	Net zero and re-opener development UIOLI	SpC 3.5	PCFM Guidance Net Zero and Re-opener Development Fund Governance Document
NZ_t	Net Zero Re-opener	SpC 3.6	PCFM Guidance, Re-opener Guidance and Application Requirements
$NOITRE_t$	Non-operational Capex IT Re-opener	SpC 3.7	PCFM Guidance, Re-opener Guidance and Application Requirements
CAM_t	Coordinated Adjustment Mechanism Re-opener	SpC 3.8	PCFM Guidance, Re-opener Guidance and Application Requirements
NZP_t	Net Zero Pre-construction Work and Small Net Zero Projects Re-opener	SpC 3.9	PCFM Guidance, Re-opener Guidance and Application Requirements
$T1MD_t$	Tier 1 Mains decommissioned Price Control Deliverable	SpC 3.10	PCFM Guidance
$T1SR_t$	Tier 1 Services Repex Price Control Deliverable	SpC 3.11	PCFM Guidance
CAP_t	Capital projects Price Control Deliverables	SpC 3.12	PCFM Guidance, PCD Reporting Requirements

VV	Description	SpC	Cross-reference / Associated Document
			and Methodology Document
OTC_t	Commerical fleet Price Control Deliverable	SpC 3.13	PCFM Guidance
FPA_t	Fuel Poor Network Extension Scheme Volume Driver	SpC 3.14	PCFM Guidance, FPNES Governance Document
CA_t	Domestic Connections volume driver	SpC 3.15	PCFM Guidance
RE_t	Tier 2A Mains and Services Replacement Volume Driver	SpC 3.16	PCFM Guidance
REP_t	HSE policy Re-opener	SpC 3.17	PCFM Guidance, Re-opener Guidance and Application Requirements
$STUB_t$	Tier 1 Stubs Repex policy Re-opener	SpC 3.18	PCFM Guidance, Re-opener Guidance and Application Requirements
$HPRA_t$	Heat policy and energy efficiency Re-opener	SpC 3.19	PCFM Guidance, Re-opener Guidance and Application Requirements
DIV_t	Diversions and Loss of Development Claims policy Re-opener	SpC 3.20	PCFM Guidance, Re-opener Guidance and Application Requirements
$MOBS_t$	Multiple Occupancy Buildings safety Re-opener	SpC 3.21	PCFM Guidance, Re-opener Guidance and Application Requirements
$NLLR_t$	New Large Load Connections Re-opener	SpC 3.22	PCFM Guidance, Re-opener Guidance and Application Requirements
SMR_t	Smart Metering Roll-out Costs Re-opener	SpC 3.23	PCFM Guidance, Re-opener Guidance and Application Requirements
STW_t	Specified Streetworks Costs Re-opener	SpC 3.24	PCFM Guidance, Re-opener Guidance and Application Requirements
$GHRR_t$	Gas Holder demolitions Price Control Deliverable (WWU/NGN)	SpC 3.25	PCFM Guidance
PWF_t	Personalising welfare facilities Price Control Deliverable (Cadent)	SpC 3.26	PCFM Guidance, PCD Reporting Requirements and Methodology Document
LMP_t	London Medium Pressure Price Control Deliverable (Cadent)	SpC 3.27	PCFM Guidance, PCD Reporting Requirements and Methodology Document
IPR_t	Intermediate Pressure Reconfigurations Price Control Deliverable (SGN)	SpC 3.28	PCFM Guidance

VV	Description	SpC	Cross-reference / Associated Document
RPM_t	Remote pressure management Price Control Deliverable (SGN)	SpC 3.29	PCFM Guidance, PCD Reporting Requirements and Methodology Document
BMI_t	Biomethane improved access rollout Price Control Deliverable (SGN)	SpC 3.30	PCFM Guidance, PCD Reporting Requirements and Methodology Document
GER_t	Gas escape reduction Price Control Deliverable (SGN)	SpC 3.31	PCFM Guidance, PCD Reporting Requirements and Methodology Document
Actual Totex			
Capitalisation rate 1:			
ALC	Actual load related capex		PCFM Guidance
AOC	Actual other capex		PCFM Guidance
ACO	Actual business support (opex)		PCFM Guidance
ADO	Actual directs (opex)		PCFM Guidance
ARE	Actual replacement expenditure		PCFM Guidance
Capitalisation rate 2:			
ALCU	Actual load related capex		PCFM Guidance
AOCU	Actual other capex		PCFM Guidance
ACOU	Actual business support (opex)		PCFM Guidance
ADOU	Actual directs (opex)		PCFM Guidance
AREU	Actual replacement expenditure		PCFM Guidance
Pass-through expenditure			
LF_t	Licence Fees	SpC 6.1, Part A	PCFM Guidance
RB_t	Prescribed Rates	SpC 6.1, Part B	PCFM Guidance
PD_t	Pension Deficit Charge Adjustment (NTS Pension Recharge)	SpC 6.1, Part A	PCFM Guidance
$TPWI_t$	Third party damage and water ingress	SpC 6.1, Part C	PCFM Guidance
$CDSP_t$	Gas Transporters' share of Xoserve costs	SpC 6.1, Part A	PCFM Guidance
MP_t	Miscellaneous pass-through	SpC 6.1, Part A	PCFM Guidance
TG_t	Gas theft	SpC 6.1, Part A	PCFM Guidance

VV	Description	SpC	Cross-reference / Associated Document
EC_t	NTS Exit costs	SpC 6.1, Part A	PCFM Guidance
SL_t	Shrinkage costs	SpC 6.1, Part D	PCFM Guidance
EDE_t	Established Pension Deficit Recovery Plan Payment	SpC 6.1, Part A	PCFH section 7
$SLDZ_t$	Other - Stranraer LDZ (SGN Scotland only)	SpC 6.1 Part A	PCFM Guidance
Incentive Revenue			
CS_t	Customer satisfaction Survey ODI	SpC 4.2	PCFM Guidance
CM_t	Complaints metric ODI	SpC 4.3	PCFM Guidance
SM_t	Shrinkage management ODI	SpC 4.4	PCFM Guidance
UIP_t	Unplanned interruption mean duration ODI (NGN, SGN, WWU)	SpC 4.5	PCFM Guidance
UIP_t	Unplanned interruption mean duration ODI (Cadent only)	SpC 4.5	PCFM Guidance
CSW_t	Collaborative streetworks ODI (Cadent, EOE, SGN SO Networks only)	SpC 4.6	PCFM Guidance
Other Revenue Allowances			
NIA_t	RIIO-2 Network Innovation Allowance	SpC 5.2	PCFM Guidance, RIIO-2 NIA Governance Document
$CNIA_t$	Carry-over Network Innovation Allowance	SpC 5.3	PCFM Guidance, RIIO-1 NIA Governance Document
VCM_t	Vulnerability and Carbon Monoxide Allowance	SpC 5.4	PCFM Guidance, VMCA Governance Document
SIF_t	The strategic innovation fund	SpC 5.5	PCF Guidance, SIF governance document
Legacy Adjustments			
LPT_t	Legacy pass-through	SpC 7.2	PCFH section 8, PCFM Guidance
$LMOD_t$	Legacy MOD	SpC 7.3	PCFH section 8, PCFM Guidance
LK_t	Legacy K Correction	SpC 7.4	PCFH section 8, PCFM Guidance
$LTRU_t$	Legacy TRU term	SpC 7.5	PCFH section 8, PCFM Guidance
$NOCO_t$	Close out of the RIIO-1 Network Outputs	SpC 7.6	PCFH section 8, PCFM Guidance

VV	Description	SpC	Cross-reference / Associated Document
$LDRW_t$	Close out of the RIIO-GD1 Discretionary Reward Scheme	SpC 7.8	PCFH section 8, PCFM Guidance, Stakeholder Engagement Incentive Guidance
LBM_t	Close out of the RIIO-GD1 Broad Measure of Customer Satisfaction Incentive	SpC 7.9	PCFH section 8, PCFM Guidance
$LSHR_t$	Close out of the RIIO-GD1 Shrinkage Allowance Revenue Adjustment	SpC 7.10	PCFH section 8, PCFM Guidance
$LEEI_t$	Close out of the RIIO-GD1 Environmental Emissions Incentive	SpC 7.11	PCFH section 8, PCFM Guidance
$LFPI_t$	Close out of the RIIO-GD1 Fuel Poor Network Extension Scheme Incentive	SpC 7.12	PCFH section 8, PCFM Guidance
LEx_t	Close out of the RIIO-GD1 Exit Capacity Cost Adjustment	SpC 7.13	PCFH section 8, PCFM Guidance
$LRAV_t$	Legacy net RAV additions (after disposals)	SpC 7.14	PCFH section 8, PCFM Guidance
$LSOLR_t$	Legacy supplier of last resort		PCFM Guidance
COA	Closeout adjustment	SpC 7.3	PCFH section 8, PCFM Guidance
REV_t	Revenue for TRU term	SpC 7.5	PCFM Guidance
$RPIF_t$	RIIO-1 RPI forecast term	SpC 7.5	PCFM Guidance
Directly Remunerated Services			
$PREDRS_t$	Pre-vesting directly remunerated services		PCFM Guidance
$POSDRS_t$	Post-vesting directly remunerated services		PCFM Guidance
$OIDRS_t$	Other income from directly remunerated services		PCFM Guidance
$IDRS_t$	Identified directly remunerated services costs		PCFM Guidance
Finance Inputs			
RFR	Risk-free rate		PCFH section 4, PCFM Guidance
$iBTA_t$	iBoxx trailing average		PCFH section 4, PCFM Guidance
I_t	Sterling Overnight Index Average (SONIA)	SpC 1.1, Part B	PCFH section 2, PCFM Guidance
RPE_t	RPE annual growth		PCFM Guidance
AND_t	Adjusted net debt		PCFM Guidance
$TDNI_t$	Tax deductible net interest cost		PCFM Guidance
$TAXA_t$	Tax allowance adjustment	SpC 2.2	PCFH section 6, PCFM Guidance

VV	Description	SpC	Cross-reference / Associated Document
TTE_t	Tax liability allowance adjustments - driven by tax trigger events		PCFH section 6, PCFM Guidance
$OGPA_t$	General pool opening balance adjustment		PCFM Guidance
$OSRPA_t$	Special Rate pool opening balance adjustment		PCFM Guidance
OGP_t	General pool capital allowance opening balance brought forward		PCFM Guidance
$OSRP_t$	Special Rate capital allowance opening balance brought forward		PCFM Guidance
$OSBP_t$	Structures and buildings capital allowance opening balance brought forward		PCFM Guidance
$ODRP_t$	Deferred revenue expenditure opening balance brought forward		PCFM Guidance
$LODRP_t$	Deferred revenue pool additions (RIIO1) plus opening balance at start of RIIO1		PCFM Guidance
OTL_t	Tax loss brought forward		PCFM Guidance
$ARGP_t$	Totex Allocation to "General" tax pool		PCFM Guidance
$ARSR_t$	Totex Allocation to "Special Rate" tax pool		PCFM Guidance
$ARSB_t$	Totex Allocation to "Structures and Buildings" tax pool		PCFM Guidance
$ARDR_t$	Totex Allocation to "Deferred Revenue" tax pool		PCFM Guidance
ARR_t	Totex Allocation to "Revenue" tax pool		PCFM Guidance
$ARNQ_t$	Totex Allocation to "Non Qualifying" tax pool		PCFM Guidance
CT_t	Corporation tax rate		PCFM Guidance
GCA_t	General pool capital allowance rate		PCFM Guidance
$SRCA_t$	Special Rates capital allowance rate		PCFM Guidance
$SBCA_t$	Structures and buildings capital allowance rate		PCFM Guidance
$DRCA_t$	Deferred Revenue Expenditure capital allowance rate		PCFM Guidance
$RIIO\text{-}1AR_t$	RIIO-1 allowed revenue		PCFM Guidance
PRP_t	Penal rate proportion	SpC 2.1, Part H	PCFM Guidance
$RIIO\text{-}1 ExitAR_t$	RIIO-1 exit allowed revenue		PCFM Guidance
$RIIO\text{-}1 SAR_t$	RIIO-1 supplier of last resort allowed revenue		PCFM Guidance

VV	Description	SpC	Cross-reference / Associated Document
BRR_t	Recovered revenue billed basis		PCFM Guidance
BD_t	Bad Debt		PCFM Guidance
RR_i	Recovered revenue	SpC 2.1, Part B	PCFM Guidance
$ExitRR_t$	Exit recovered revenue		PCFM Guidance
SRR_t	Supplier of last resort recovered revenue		PCFM Guidance
Totex variant allowances allocation percentages			
$TVAA_t$	The range of totex variant allowance allocation percentages relating to any re-opener or uncertainty mechanism, which have not been pre-populated in the RIIO-GD2 PCFM as a "yellow box" hard-coded input.		PCFM Guidance
RAV and assets			
$DISP_t$	Disposals net sales proceeds		PCFM Guidance

4. Cost of debt and cost of equity indexation

4.1. The licensee's Calculated Revenue (R_t) includes amounts which cover the efficient cost of raising finance for the transportation business from external sources, commonly referred to as the 'cost of capital'. These amounts are calculated as a percentage return on the licensee's RAV. The Allowed Return on Capital is Ofgem's estimate of the transportation businesses' Weighted Average Cost of Capital (WACC). This is calculated on a real basis determined using a pre-tax real allowed return on debt percentage, a post-tax real allowed return on equity percentage and a notional gearing percentage weighting.

4.2. Under the RIIO-GD2 price control, the notional gearing percentage is fixed for the Price Control Period. However, the cost of debt percentage (CDE)[23] and the cost of equity percentage through changes to the real (CPIH) risk-free rate (RFR) are updated by Ofgem on an annual basis. The updates are given effect through the AIP and the approaches to determining the updated variable values are described below.

Cost of debt

4.3. The RIIO-GD2 PCFM as at 01 April 2021 includes opening cost of debt percentages (CDE) for the licensee for every Regulatory Year of the Price Control Period.

4.4. Revised CDE values for all future Regulatory Years in the Price Control Period will be calculated by Ofgem in accordance with the approach set out below and published in respect of each AIP. In brief, revised CDE values will be determined using an iBoxx Trailing Average ($iBTA_t$) of the pounds sterling indices of bonds issued by utilities that have a remaining maturity of 10 or more years contained in the Markit iBoxx® database of bond market data, or forecasts of the same. The averaging periods for the Daily Utilities Index (DUI_t), set via the AIP, commence with an eleven-year period[24], and then extend by one year as each Regulatory Year of the Price Control Period elapses.

[23] Also referred to as "Allowed return on debt" in RIIO-GD2 PCFM.
[24] A ten year period having been used to set opening CDE values at the outset of the Price Control Period.

4.5. The steps Ofgem will follow to determine revised CDE and $iBTA_t$ values are:

Step 1 – obtain or forecast nominal bond yields

For each day from 01 November 2010 to 31 October 2024, obtain a nominal bond yield as follows:

a) for days up to and including 31 October in the year in which the AIP is being conducted, obtain from the Markit data service the nominal yield in % for the iBoxx Utilities 10yr+ index (ISIN reference DE0005996532); and
b) for all other days, forecast a nominal bond yield as the sum of:
   i. the 3-year trailing average spread between the yield on the iBoxx Utilities 10yr+ index and the yield for British government securities, 10-year nominal zero coupon (series reference IUDMNZC),[25] using data up to and including 31 October in the year in which the AIP is being conducted
   ii. a forecast of the yield for British government securities, 10-year nominal zero coupon. The forecast is derived from the Bank of England's estimated nominal yield curves for British government securities[26] (using data up to and including 31 October in the year in which the AIP is being conducted) by a no arbitrage condition, where a 10 year rate x years in the future can be derived from the x year rate and 10+x year rate. The forecast is made for dates on half-yearly intervals, and then linearly interpolated between those dates.

Step 2 – obtain inflation forecast

4.6. For each day from 01 November 2010 to 31 October 2024, obtain an inflation value from the OBR's Historical official forecasts database[27], as follows:

a) for days up to and including 31 October in the year in which the AIP is being conducted, the inflation value is the latest Office for Budget Responsibility (OBR) year 5[28] forecast of CPI that was available on that given day, subject to the assumption

[25] Sourced from the statistics page of the Bank of England's website: https://www.bankofengland.co.uk/
[26] https://www.bankofengland.co.uk/statistics/yield-curves
[27] Sourced from the data page of the OBR website: https://obr.uk/download/historical-Official-forecasts-database/
[28] The longest horizon available from this database is currently the inflation forecast for 5 years time.

that the OBR forecast is available from the first day of the month following the month of publication; and

b) for all other days, the inflation value is the latest OBR year 5 forecast of CPI available on 31 October in the year in which the AIP is being conducted,

in each case using the year 4 forecast for the year if the year 5 forecast is not available.

4.7. Currently as per Historical Official forecasts database on OBR website, there are generally two publications in a year. Publication in October in a given year for the period 'November to March' shows a year 5 forecast and publication in March for the period 'April to October' shows a year 4 forecast. For example, the inflation values for 01 November 2018, are the OBR year 5 forecasts of CPI (for 2023) published in October 2018 and the inflation values for 31 October 2018 are the OBR year 4 forecasts of CPI (for 2022) published in March 2018.

Step 3 – calculate real Daily Utilities Index (DUI_t) for each trading day

4.8. This step converts the nominal bond yields to a real value, incorporating additional costs of borrowing. For each day in the period from 01 November 2010 to 31 October 2024, add 25 basis points (for additional costs of borrowing) to the daily yield figure obtained under Step 1, and deflate it using the inflation figure obtained under Step 2, using the following formula:

$$DUI_t = (1 + iBoxx + 0.0025) / (1 + \pi) - 1$$

where:

DUI_t	is the "Daily Utilities index", obtained as the daily real value of iBoxx utilities bond yield plus 25 basis points (additional costs of borrowing);
iBoxx	is the daily yield figure obtained under Step 1 expressed as a Decimal Percentage; and

However, if a longer horizon is published then the longest horizon available will be used in all instances where a year 5 forecast is mentioned in this chapter for the purposes of return allowance calculations.

$\mathcal{T}$ is the inflation figure obtained under Step 2.

Step 4 – calculate iBoxx Trailing Average ($iBTA_t$) and average allowed return on debt (CDE_t) for trailing period

4.9. For each Regulatory Year, calculate the arithmetic average value of the DUI_t using the periods shown in Table 4.1 .

Table 4.1 – time periods for calculation of iBoxx Trailing Average ($iBTA_t$) by Regulatory Year

Regulatory Year	*Time period for calculation*
2022/23	01 November 2010 to 31 October 2021
2023/24	01 November 2010 to 31 October 2022
2024/25	01 November 2010 to 31 October 2023
2025/26	01 November 2010 to 31 October 2024

4.10. The resulting averages, expressed as a percentage, constitute the revised Variable Value for $iBTA_t$ for each Regulatory Year.

4.11. In the PCFM, the $iBTA_t$ percentages derived above are rounded to two decimal places and result in derivation of a CDE value by applying an uplift adjustment ($CDEU_t$) specific to each operator.

4.12. Ofgem will provide the licensee with a copy of the spreadsheet used to calculate revised $iBTA_t$ and CDE values at the same time as giving the notice (paragraph 2.58).

4.13. The data and spreadsheet used to calculate revised $iBTA_t$ values will be published on the Ofgem Website (by 30 November in each Regulatory Year, or as soon as reasonably practicable thereafter (see para 2.59).

Non-availability or changes to basis of data for cost of debt

4.14. If, for any reason, the iBoxx, or OBR series identified above cease to be published (or data is missing for a period considered material by Ofgem), or if Ofgem believes there is a material change in their basis, Ofgem will consult on alternatives, as well as on any reconciliation that may need to be undertaken between the above series and any replacements. If the consultation is not completed in time to determine revised variable

values for the cost of debt for any AIP, Ofgem may use an interim approach to ensure timely completion of an AIP.[29] Any such interim approach for a given Regulatory Year will be revised at the subsequent AIP.

4.15. If, for reasons other than stated in paragraph 4.14, iBoxx data are unavailable for an entire trading days period in time to determine revised variable values for the cost of debt for any AIP then, for that AIP only, the trading days period concerned will be deemed to have ended on the last trading day for which data has been published. If the data concerned is subsequently published, revised variable values for the affected Regulatory Years will be determined and published.

Cost of equity – risk-free rate

4.16. The RIIO-GD2 PCFM as at 01 April 2021 includes opening real (CPIH) risk-free rates (RFR) for the licensee for every Regulatory Year of the Price Control Period. Changes in RFR result in changes to the cost of equity percentage value used in determining the Allowed Return on Equity (determined in the PCFM).

4.17. Revised RFR values for all future Regulatory Years in the Price Control Period will be calculated by Ofgem in accordance with the approach set out below and published in respect of each AIP. In brief, revised RFR values will be calculated using yields on government securities (20-year real zero coupon) and applying an adjustment for the difference between RPI and CPIH inflation expectations.

4.18. The steps Ofgem will follow to calculate the revised RFR values are:

Step 1 – obtain real government bond yields

4.19. For each Regulatory Year, obtain a real government bond yield for the days shown in Table 4.2 , as follows:

[29] This interim approach is not restricted to using the value from the most recent publication that did contain the value (as required of the licensee under Special Condition 8.2.8(b)).

a) for days up to and including 31 October in the year in which the AIP is being conducted, obtain the yield (these figures being percentages) for British government securities, 20-year real zero coupon (series reference IUDLRZC)[30]; and
b) for all other days, forecast a yield (percentages) for British government securities, 20-year real zero coupon. The forecast is derived from the Bank of England's estimated real yield curves for British government securities[31] (using data up to and including 31 October in the year in which the AIP is being conducted) by a no arbitrage condition, where a 20 year rate x years in the future can be derived from the x year rate and 20+x year rate. [32] The forecast is made for dates on half-yearly intervals, and then linearly interpolated between those dates.

Table 4.2 – time periods for calculation of risk-free rate by Regulatory Year

Regulatory Year	*Time period for calculation*
2022/23	01 October 2021 to 31 October 2021
2023/24	01 October 2022 to 31 October 2022
2024/25	01 October 2023 to 31 October 2023
2025/26	01 October 2024 to 31 October 2024

Step 2 – obtain RPI and CPI inflation forecasts

4.20. For each Regulatory Year, obtain inflation forecasts of CPI and RPI for the days shown in Table 4.2 from the OBR's Historical official forecasts database[33], as follows:

a) for days up to and including 31 October in the year in which the AIP is being conducted, the inflation forecasts are the latest OBR year 5 forecast of CPI and year 5 forecast of RPI available on that given day, subject to the assumption that the OBR forecast is available from the first day of the month following the month of publication; and
b) for all other days, the inflation forecasts are the latest OBR year 5 forecast of CPI and year 5 forecast of RPI available on 31 October in the year in which the AIP is being

[30] Sourced from the statistics page of the Bank of England's website: https://www.bankofengland.co.uk/
[31] https://www.bankofengland.co.uk/statistics/yield-curves
[32] For example, if A is the current 20+x year spot rate and B is the current x year rate, the 20-year rate x years into the future is given by [A*(20+x) - B*x]/20

[33] Sourced from the data page of the OBR website: https://obr.uk/download/historical-Official-forecasts-database/

conducted, subject to the assumption that the OBR forecast is available from the first day of the month following the month of publication,

in each case using the year 4 forecast for the year if the year 5 forecast is not available.

4.21. Currently as per Historical Official forecasts database on OBR website, there are generally two publications in a year. Publication in October in a given year for the period 'November to March' shows a year 5 forecast and publication in March for the period 'April to October' shows a year 4 forecast. For example, the inflation values for 01 November 2018, are the OBR year 5 forecasts of CPI and RPI (for 2023) published in October 2018 and the inflation values for 31 October 2018 are the OBR year 4 forecasts of CPI and RPI (for 2022) published in March 2018.

Step 3 – derive an RPI-CPIH inflation wedge

4.22. For each day in the periods shown in Table 4.2 , calculate an RPI-CPIH wedge using inflation values from step 2 and applying the following formula:

$$Wedge = \frac{1 + RPI\ year\ 5\ forecast}{1 + CPI\ year\ 5\ forecast} - 1$$

Step 4 – calculate real risk-free rate (RFR) for each day

4.23. This step converts each of the daily real (RPI) 20-year gilt yields collected in Step 1 to daily real (CPIH) RFR by using the RPI-CPIH wedge calculated in Step 3 according to the following formula:

$$Real\ (CPIH)\ RFR = (real\ 20yr\ gilt\ yields + 1) * (1 + wedge) - 1$$

Step 5 – calculate average real (CPIH) RFR

4.24. For each Regulatory Year, calculate the arithmetic average value of the real (CPIH) risk-free rates from Step 4 across the periods shown in Table 4.2 .

4.25. The resulting averages, expressed as a percentage and stated to two decimal places, constitutes the revised Variable Value for the real RFR value for each Regulatory Year.

4.26. Ofgem will provide the licensee with a copy of the spreadsheet used to calculate revised RFR values at the same time as giving the notice (paragraph 2.51).

4.27. The data and spreadsheet used to calculate revised RFR values will be published on the Ofgem Website (by 30 November in each Regulatory Year, or as soon as reasonably practicable thereafter (see para 2.52).

Non-availability or changes to basis of data for cost of equity – risk-free rate

4.28. If, for any reason, the Bank of England, or OBR series identified above cease to be published (or data is missing for a period considered material by Ofgem), or if Ofgem believes there is a material change in their basis, Ofgem will consult on alternatives, as well as on any reconciliation that may need to be undertaken between the above series and any replacements. If the consultation is not completed in time to determine revised variable values for the risk-free rate for any AIP, Ofgem may use an interim approach to ensure timely completion of an AIP.[34] Any such interim approach for a given Regulatory Year will be revised at the subsequent AIP.

4.29. If, for reasons other than stated in paragraph 4.28, Bank of England data (20-year real zero coupon, para 4.19) are unavailable for an entire trading days period in time to determine revised variable values for the RFR for any AIP then, for that AIP only, the trading days period concerned will be deemed to have ended on the last trading day for which data has been published. If the data concerned is subsequently published, revised variable values for the affected Regulatory Years will be determined and published.

[34] This interim approach is not restricted to using the value from the most recent publication that did contain the value (as required of the licensee under Special Condition 8.2.8(b)).

5. Real Price Effects

5.1. The RIIO-GD2 price control includes an allowance for differences between the Price Index applied to AR_t and certain input price indices. We refer to these differences as Real Price Effects.

5.2. The Variable Value RPE_t, expressed as a percentage to two decimal places, identifies annual differences between the price control inflation and input price indices inflation.

5.3. The Variable Value RPE_t is used in the RIIO-2 PCFM to derive the RPE Index ($RPEI_t$) applied to certain totex allowances (in 2018/19 price terms) to allow for Real Price Effects. The totex allowances to which $RPEI_t$ applies are identified in the PCFM and the calculation of the allowance for Real Price Effects is done within the PCFM.

5.4. The RIIO-GD2 PCFM, in its state as at 1 April 2021, includes opening RPE_t values for the licensee for every Regulatory Year of the Price Control Period based on forecasts of the Price Index and input price indices.

Formula for calculating the Real Price Effects (RPE_t) term

5.5. Ofgem will revise RPE_t values at each AIP in accordance with the following formula:

$$RPE_t = \sum_{j=1}^{10} W_j \left(\left(\frac{IP_{j,t}}{IP_{j,t-1}} \right) \Big/ \left(\frac{PI_t}{PI_{t-1}} \right) - 1 \right)$$

where,

W_j	means the weight applied to the input price index j, which is fixed for the price control period and takes the value in Table 5.1
$IP_{j,t}$	means the arithmetic average of the input price index j between each of the monthly periods from 1 April to 31 March in Regulatory Year t
PI_t	means the Price Index derived in accordance with Part F of Special Condition 2.1 (Revenue Restriction)

5.6. The input price indices (IP_j), their weightings (W_j) in the calculation of RPE_t, and the sources of out-turn values are in Table 5.1 below.

Table 5.1 – Input prices indices and weightings

j	Identifier	Index Description	Source	(A) Index weight within cost category	(B) Cost category weight	(A)x(B) Index weight (Wj)
		Labour				
1	K54V	AWE: Private Sector Index: Seasonally Adjusted Total Pay Excluding Arrears	ONS	1/3	69.88%	23.29%
2	K553	AWE: Construction Index: Seasonally Adjusted Total Pay Excluding Arrears	ONS	1/3	69.88%	23.29%
3	BEAMA	Electrical engineering labour	BEAMA	0	69.88%	0.00%
4	4/CE/01	4/CE/01 Civil Engineering Labour	PAFI published by BCIS	1/3	69.88%	23.29%
		Materials				
5	4/CE/24	4/CE/24 Plastic Products (including pipes)	PAFI published by BCIS	1/3	13.88%	4.63%
6	3/S3	3/S3 Structural Steelwork - Materials: Civil Engineering Work	PAFI published by BCIS	1/3	13.88%	4.63%
7	4/CE/EL/02	4/CE/EL/02 Electrical Engineering Materials	PAFI published by BCIS	0	13.88%	0.00%
8	FOCOS	FOCOS Resource Cost Index of Infrastructure: Materials FOCOS	BCIS	1/3	13.88%	4.63%
		Plant and Equipment				
9	70/ 2	70/ 2 Plant and Road Vehicles: Providing and Maintaining	PAFI published by BCIS	0	4.37%	0.00%
10	K389	7112280000: Machinery & Equipment n.e.c.	ONS	0	4.37%	0.00%

*values are rounded, unrounded values are in the corresponding workbook

Formulae for calculating the Real Price Effects Index ($RPEI_t$) and RPE totex allowance ($RPEA_t$)

5.7. The RPE_t values are used in the PCFM to derive the RPE indexation term $RPEI_t$ as follows:

$$RPEI_t = \prod_{i=2020/21}^{t} (1 + RPE_i)$$

5.8. The total RPE totex allowance ($RPEA_t$) is determined applying $RPEI_t$ to the applicable totex allowance:

$$RPEA_t = (RPEI_t - 1) \cdot Tx_t$$

where,

Tx_t	means the Totex allowance for the Regulatory Year t to which RPE indexation applies. The applicable totex is identified in the PCFM.

5.9. The PCFM will allocate the RPEA values to appropriate capitalisation rate buckets based on the capitalisation rate of the totex allowance the RPE was applied to.

Use of outturn or forecast values

5.10. In calculating input price indices $IP_{j,t}$ Ofgem will update for outturn data that is available as of 31 October prior to each AIP. This will include updating values in Regulatory Years where a forecast was previously used. For the months where outturn values are not available then Ofgem will forecast the values as follows:

a) For labour indices, outturn data will be updated to month of March prior to the AIP, and forecast monthly values will use a monthly growth rate calculated from the most recent average earnings forecast published by OBR[35] applied to the previous value:

$$IP_m = IP_{m-1} \cdot (1 + OBREF_m)^{\frac{1}{12}}$$

where,

IP_m	is the labour input price index value for a given year-month "m".

[35] Sourced from the data page of the OBR website: https://obr.uk/download/historical-Official-forecasts-database/

$OBREF_m$	Means the OBR average earnings forecast (annual rate) applicable to year-month m, where the OBR forecast for a calendar year is applicable from 6 months prior to the start of that calendar year, to six months after (eg the 2021 OBR forecast would be applicable from July 2020 to June 2021). If the forecast year-month falls after the range covered by OBR forecasts, the longest dated forecast year is used (eg if the November OBR forecast covered 2020-2024, then the forecast for year 2024 would be used for 2025 and 2026).

b) In all other cases, forecasts will be based on applying the long-term annual average growth assumptions:

$$IP_m = IP_{m-1} \cdot (1 + LTAG_m)^{\frac{1}{12}}$$

where,

IP_m	is the labour input price index value for a given year-month "m".
$LTAG_m$	has the long term average annual growth assumption applicable to that input prices index, given in the list below: • 4/CE/24: 2.29% • 3/S3: 4.02% • 4/CE/EL/02: 0.72% • FOCOS: 4.32% • 70/ 2: 2.65% • K389: 1.89%

5.11. At each AIP, Ofgem will also update the OBR inflation forecast and the "Monthly Inflation" tab of the PFCM for outturn RPI and CPIH index data that is available as of 31 October prior to each Regulatory Year t. The forecast values are calculated directly in the PCFM using the same methodology the labour input price index with the latest available OBR forecasts for CPIH and RPI. The recalculated values of PI_t term will be used to calculate both RPE_t and Allowed Revenue (AR_t).

Provision and publication of RPE_t values

5.12. Ofgem will provide the licensee with a copy of the spreadsheet used to calculate RPE_t values at the same time as giving the notice (paragraph 2.58).

5.13. The data and spreadsheet used to calculate revised RPE_t values will be published on the Ofgem Website by 30 November in each Regulatory Year.

Non-availability of data

5.14. If, for any reason, the price indices used in calculating RPE_t cease to be published, or if Ofgem believes there is a material change in their basis, Ofgem will consult on alternatives, as well as on any reconciliation that may need to be undertaken between the above series and any replacements. If the consultation is not completed in time to determine a revised value for RPE_t for any AIP, Ofgem may use an interim approach to ensure timely completion of an AIP.[36] Any such interim approach for a given Regulatory Year will be revised at the subsequent AIP.

[36] This interim approach is not restricted to using the value from the most recent publication that did contain the value (as required of the licensee under Special Condition 8.2.8(b)).

6. Tax liability allowances

6.1. The PCFM calculates a licensee's tax liability allowance on a notional basis (ie as a stand-alone entity) using, among other inputs, corporation tax rates and capital allowance writing down rates. Where rate changes are announced, these can be reflected in the PCFM by updating the variable values for these rates (CT_t, GCA_t, $SRCA_t$, $SBCA_t$ and $DRCA_t$) at each AIP.

6.2. The RIIO-GD2 PCFM also calculates a tax clawback adjustment[37]. Where a licensee's gearing (calculated using the Adjusted Net Debt Variable Value (AND_t) and the closing RAV position uplifted to year-end nominal prices in the PCFM) is greater than the notional gearing level and where its Tax deductible net interest costs ($TDNI_t$) exceed the notional modelled interest costs, the tax benefit derived from its higher tax-deductible interest costs is clawed back and shared with consumers through the RIIO-GD2 PCFM.[38]

6.3. Tax liability allowances are also dependent on other variable values including:

a) Tax trigger events (TTE) - a licensee's notional tax liability[39] is subject to changes in existing legislation, case law, accounting standards and HM Revenue & Customs (HMRC) policy. Changes to these can trigger a change to tax liability allowances.

b) Tax allowance adjustment mechanism ($TAXA_t$) – this mechanism enables Ofgem to direct an adjustment to the notional tax allowance subject to a tax review and consultation with the licensee.

c) Regulatory Capital allowances: Opening pool balances (legacy) – opening balances of capital allowance pools can be revised, through variable values (OGP_t, $OSRP_t$, $OSBP_t$, $LODRP_t$ and $ODRP_t$). These balances will be rolled forward from the closing position in the RIIO-GD1 PCFM following the close-out of the RIIO-GD1 Price Control. We have introduced two variable values to adjust the general and special rate tax pool opening balances ($OGPA_t$ and $OSRPA_t$) in order to reflect the impact of the 'super-deduction'

[37] The tax clawback policy for RIIO-GD2 is to allow networks some headroom as regards the notional gearing level to be used for tax clawback purposes. The notional gearing target for each Regulatory Year for tax clawback purposes is set out in Table 37 of the Ofgem Draft Determinations Finance Annex.
[38] The tax clawback is calculated after the impact of any changes in corporation tax is taken into account.
[39] The tax liability which would be modelled if the event was taken into account.

legislation introduced in the Spring 2021 Budget on the general and special rate pool opening balances. These variable values will be used to adjust the opening pool balances in the 2022/23 and 2023/24 Regulatory Years.[40]

d) Capital allowances: allocation rates – the PCFM contains the rates that are used to allocate totex to each of the modelled capital allowance pools. These can be revised through variable values ($ARGP_t$, $ARSR_t$, $ARSB_t$, $ARDR_t$, ARR_t, $ARNQ_t$); and
e) Tax loss brought forward (OTL_t) – this represents the opening tax loss balance, which will be rolled forward from the closing position in the RIIO-GD1 PCFM following the close-out of the RIIO-GD1 Price Control.

6.4. All of these Tax related PCFM Variable Values (with the exception of the Tax Allowance adjustment term, $TAXA_t$) feed into the Tax Allowance term (TAX_t). Both the TAX_t and $TAXA_t$ terms feed into Calculated Revenue (R_t) as set out in Special Condition 2.1 (*Revenue restriction*).

6.5. Further below, the approach to determining or revising the variable values in paragraph 6.3 and/or the calculation in the PCFM are described.

6.6. It should be noted that underlying tax liability allowances for the licensee within the PCFM may also change under the AIP as a consequence of other variable values, such as changes in allowed totex. However, these changes are distinct from the specific adjustments to tax liability allowances in this chapter.

6.7. Any recalculation of the licensee's tax liability allowances necessarily includes an iterative modelling aspect: an increased allowance gives rise to an increased liability which requires an increased allowance and so on. The effect can be either positive or negative. This 'tax allowance on tax allowance' issue is dealt with by the functionality within the PCFM and is factored into Calculated Revenue (R_t) via the AIP.

Regulatory tax losses

[40] https://www.ofgem.gov.uk/publications/statutory-consultation-modify-price-control-financial-instruments-and-licence-conditions-gas-transmission-and-gas-distribution

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

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

6.10. Any surrender by a licensee of losses to a group company will not be reflected within the regulatory loss balance and similarly for consortium relief.[41]

Group tax arrangements

6.11. For the purposes of the approach set out in the tax trigger event and tax review sections of this chapter, tax liabilities, allowances and trigger events are considered on a notional 'licensee business' basis. Consequently, the following are disregarded in the assessment of tax liabilities and allowances for price control purposes:

a) the claim or surrender of group tax relief (including consortium relief);
b) interest payments (including any coupons on debt instruments or preference share dividends) and receipts that are not tax deductible or chargeable under HMRC rules for the purposes of computing the licensee's taxable profits, including but not limited to adjustments for transfer pricing and the 'Corporate Interest Restriction Rules'; and
c) any other adjustments required in appendix 1 of Ofgem's open letter dated 31 July 2009 (Claw-back of tax benefit due to excess gearing).[42]

[41] https://www.gov.uk/hmrc-internal-manuals/company-taxation-manual/ctm80530
[42] http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=49&refer=Networks and as amended for the treatment of hybrid financial instruments

6.12. For the purposes of the approach set out in the tax clawback section 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.

Accounting framework

6.13. For the purposes of the approach set out in the tax trigger event and tax review sections of this chapter, the accounting framework to be applied by the licensee for the purpose of computing tax liabilities is either:

a) EU-IFRS, if adopted for use by the licensee[43];
b) Financial Reporting Standard 101, EU adopted IFRS with reduced disclosures; or
c) UK GAAP under Financial Reporting Standard 102.

Tax trigger events

6.14. The PCFM allows for changes to a licensee's tax liability allowance, through TTE, for factors exogenous to the licensee, its owners or controllers that cause a change in its notional tax liabilities[44] for one or more Regulatory Years. These factors exclude changes to the corporation tax rate and writing down allowance rates, which are accounted for with the variable values (CT_t, GCA_t, $SRCA_t$, $SBCA_t$ and $DRCA_t$), but include:

a) changes to applicable legislation;
b) the setting of legal precedents through case law;
c) changes to HMRC interpretation of legislation; and
d) changes in accounting standards.

Notification of Tax Trigger Events

6.15. The licensee must notify Ofgem on or before 30 September in each Regulatory Year t-1 of all the tax trigger events that it has become aware of by that time, except those that have

[43] Including the provisions of IFRS 1 (First-time Adoption of International Financial Reporting Standards) where applicable.
[44] The tax liability, which would be modelled if the event were taken into account.

been previously notified. This requirement applies equally to events that could be expected to increase or to reduce the licensee's tax liability allowances. For the purpose of complying with this requirement, the licensee must seek to ensure that it identifies and records tax trigger events.

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

6.17. The notification should include, in respect of each tax trigger event:

a) a description of the event;
b) the changes in tax liability allowances that the event is considered to have caused and the Regulatory Years to which they relate;
c) the calculations (including all relevant parameters and values) that the licensee used to arrive at the amounts referred to in subparagraph (b) – in performing these calculations the licensee should include a 'tax allowance on tax allowance' factor as explained in paragraph 6.7 but should ignore the tax trigger deadband;
d) any relevant information provided by HMRC in relation to the event;
e) evidence of mitigating measures that the licensee has taken to minimise any additional liabilities arising from the event; and
f) comments by the licensee on:
    i. the relevance of the event to its tax position,
    ii. whether grounds exist to contest the applicability of the event to the licensee, and
    iii. the reporting treatment the licensee expects to apply in its tax submissions to HMRC and in its Regulatory Accounts or Statutory accounts where Regulatory Accounts are not prepared.

6.18. The licensee's notification should also state whether it considers that the materiality threshold (see paragraph 6.26) has been exceeded for the Regulatory 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.

6.19. Ofgem will review any notifications given to it by the licensee under paragraph 6.15 and may ask the licensee:

a) for additional information in respect of one or more of the notified events; and/or
b) to submit the results of agreed upon audit procedures specified by Ofgem and carried out by the licensee's Appropriate Auditor, to assist in confirming the appropriateness and accuracy of the licensee's calculations.

6.20. Ofgem will inform the licensee by 31 October in the same Regulatory Year t-1 whether, in respect of each tax trigger event:

a) it has agreed (on a provisional or confirmed basis) the change in tax liabilities figure calculated by the licensee;
b) it has determined (on a provisional or confirmed basis) a different change in tax liabilities figure from that calculated by the licensee; or
c) it has decided that consideration of any change in tax liabilities should be deferred until further/better information is available.

6.21. In deciding which of the actions set out in paragraph 6.20 should be taken, Ofgem will, without limitation, take account of whether the licensee has conclusively agreed its tax liabilities for the Regulatory Year concerned with HMRC. Where there has been a provisional agreement/determination or a deferral of consideration, the TTE values concerned will be subject to further revision for the purposes of a later AIP.

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

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

6.24. If Ofgem has not finished considering any matters raised by the licensee under paragraph 6.22 or paragraph 6.23 before notifying the licensee of tax trigger events that it proposed to take into account, the Authority will through business correspondence, apprise the licensee of any provisionality it has applied in determining the revised TTE values that it proposes to apply, that might entail a further revision to those values for use in the next AIP.

6.25. Where a tax trigger event changes the allocation of allowable expenditure into different statutory capital allowance pools, the applicable allocation and allowance rates will be adjusted to take into account the new expected allocation basis from the effective date of the new requirement. Ofgem will work with licensees to agree the financial effect of revised tax pool allocation requirements where these are not straightforward.

Materiality threshold and 'deadband'

6.26. A materiality threshold is applied to tax trigger events during the Price Control Period and a £m threshold amount for each Regulatory Year is included among the tax trigger deadband values on the 'Finance & tax' worksheet (Tax trigger calculations section) for the licensee in the PCFM.

6.27. A change to the licensee's notional tax liability allowance for a particular Regulatory Year is only applied where one or more trigger events would result in a tax liability allowance change for that year whose absolute value is greater than the threshold amount. Furthermore, any change to the tax liability allowance (upward or downward) is limited to the amount that is in excess of the threshold amount for the Regulatory Year concerned. Additionally, tax trigger events will only be taken into account for the purposes of increasing the licensee's tax liability allowances where the licensee has demonstrably used its reasonable endeavours to minimise any increase in its tax liabilities.

6.28. Where the change to the licensee's tax liability allowance for a particular Regulatory Year is below the threshold, subsequent tax trigger events, relating back to that Regulatory Year, could cause the threshold amount to be exceeded. In that case, a change to the licensee's tax liability allowance for the Regulatory Year concerned (a revised TTE value) would be determined once the threshold had been exceeded.

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

Logging of trigger events

6.30. Ofgem will keep a log of tax trigger events that have been subject to notifications by it or by the licensee showing for each event:

a) a description of the event;
b) the name of the party who notified the event (Ofgem or licensee);
c) the date of notification;
d) the amount of any change in the licensee's tax liabilities that has been determined; and
e) details of any events for which a determination is in abeyance and a description of the outstanding actions to be taken.

Tax review

6.31. Special Condition 2.2 (Tax allowance adjustment) sets out that the Authority will direct any value of $TAXA_t$ that it considers should be made after a Tax Review.

6.32. At the outset of the Price Control Period on 01 April 2021, the value of $TAXA_t$ is set at zero for the duration of the price control. Under Special Condition 2.2, Part A the licensee's tax liability allowance can be updated for any periods on or after 1 April 2021 following a Tax Review. The Authority may consider initiating a Tax Review if one or more of the events described below occurs.

Potential Trigger events

6.33. There are a number of scenarios in which the Authority may consider triggering a tax review; these are as follows:

a) if there are material, unexplained differences between the notional tax allowance and actual tax liability, which have not been adequately addressed in the supporting commentary to the reconciliation[45];
b) if Ofgem is notified in writing of a valid concern, whether by the licensee itself or another stakeholder; or
c) if a licensee undergoes a change in ownership or a material change in circumstances that is likely to affect its tax liability.

[45] The reconciliation referred to is the Tax Reconciliation template reconciling the notional tax allowance per the RIIO-GD2 PCFM and actual tax liability per their latest CT600 forms. This template forms part of the licensee's annual RIIO-GD2 PCFM submissions.

Materiality

6.34. Under paragraph 6.33, an unexplained difference between the notional tax allowance and actual tax liability will be subject to the same materiality threshold that is applied to Tax Trigger Events during the Price Control Period as described in paragraph 6.27 of this handbook. For the avoidance of doubt, an unexplained difference is considered material if it exceeds the threshold described.

6.35. Where the aggregate remaining variance in the submitted Tax Reconciliation is greater than the threshold amount, Ofgem would expect the licensee to provide supporting explanation(s) in the commentary to the Tax Reconciliation.

Notifying the Authority

6.36. A notification by the licensee under paragraph 6.33 must be made in writing to the Authority on or before 31 July in respect of the Regulatory Year two years prior and include statements setting out:

a) the reason for the notification including a description of the specific event(s) that the licensee considers will have an impact on their actual corporation tax liability;
b) the impact of the specific event(s) on the licensee's actual corporation tax liability and whether it is considered material;
c) the Regulatory Year(s) that the licensee considers will be affected by the event;
d) a calculation and the basis of the calculation for any proposed adjustments to the value of the $TAXA_t$ term; and
e) supporting evidence including any relevant information or correspondence received from HMRC and any other information that the licensee considers is relevant.

6.37. Where Ofgem receives a notification of a valid concern from any stakeholder after 31 July in any Regulatory Year and an adjustment is made following the process outlined in paragraphs 6.39 to 6.47, that adjustment will be made in the subsequent year in the AIP following the direction of the $TAXA_t$ term. In such a case, the functionality of the PCFM means that a Time Value of Money Adjustment would be applied.

6.38. If an adjustment is made to the $TAXA_t$ term for a period prior to the Regulatory Year in which the Tax Review is triggered, any resultant changes to Allowed Revenue will, subject to a Time Value of Money Adjustment, be brought forward. For the avoidance of doubt such an

adjustment will not have any retrospective effect on a previously published value of Allowed Revenue.

Preliminary assessment

6.39. Where one or more of the events under paragraph 6.33 occur, Ofgem will perform a preliminary assessment before deciding whether to undertake the review.

6.40. This preliminary assessment may involve requesting further information from the affected licensee(s) and explaining the Authority is considering undertaking a Tax Review.

Review process

6.41. If the preliminary information requested does not suitably address the concerns raised, Ofgem may undertake a formal Tax Review, which will require the affected licensee to procure, at its own expense, a review by an Appropriately Qualified Independent Examiner.

6.42. Ofgem will notify the licensee in accordance with Part A of Special Condition 2.2 (Tax allowance adjustment) in order to commence the review.

6.43. Throughout the course of the review, the licensee will have opportunities to comment on the examiner's findings and engage with both the examiner and Ofgem before the final report is submitted by the examiner.

After the review

6.44. Following the review, the Authority will consider the findings of the examiner's report and publish a direction on whether or not an adjustment is needed to the tax allowance through the Variable Value $TAXA_t$ in accordance with Part B of Special Condition 2.2 (Tax allowance adjustment).

6.45. Before making a direction, the Authority will consult on the proposed adjustment to the $TAXA_t$ for no less than 28 days.

6.46. Where the examiner's report contains information that is considered confidential or market sensitive, the licensee may request that this information be redacted from any

publication. Information agreed in writing as being confidential by the Authority will be excluded from any publications.

6.47. The adjusted value will be reflected in the RIIO-GD2 PCFM and will be published on the Ofgem Website by 30 November in each Regulatory Year.

Capital allowances

Opening pool balances (legacy)

6.48. Tax liability allowance calculations under the AIP make use of regulatory tax pool balance figures held within the PCFM. The opening balances (as at 01 April 2021) for these tax pools may be subject to legacy price control adjustments through revisions to (OGP_t, $OSRP_t$, $OSBP_t$, $LODRP_t$ and $ODRP_t$) variable values.

7. Pensions

Financial Adjustments - Pensions

7.1. The PCFM contains a Variable Value (EDE) allowance[46] for Pension Scheme Established Deficit (PSED) repair expenditure for each Regulatory Year of the Price Control Period. Opening values for EDE are based on the outcome of a pension reasonableness review concluded in November 2020. EDE (or the pensions allowance value) will be updated during the Price Control Period, through the AIP, according to the provisions of this chapter.

Expected timing of pensions allowance revisions

7.2. The intention is that pensions allowance values will only be revised periodically in light of triennial actuarial valuations of the relevant pension schemes. Two pension scheme valuations are expected in the RIIO-GD2 price control period, as set out in Table 7.1, with only the first of these expected to result in publication of revised allowances within the period.

Table 7.1 – Expected timetable for pensions scheme valuations

Pension scheme valuation date	Completion of Reasonableness Review	Publication of revised pension allowance value
31 March 2022	31 October 2023 (rr = 2023/24)	30 November 2023
31 March 2025	31 October 2026 (rr = 2026/27)	30 November 2026

7.3. Although the intention is to revise pensions allowance values according to the timetable in Table 7.1, it may be necessary to revise them at different times if, for example, the outcome following any detailed review of an established surplus (see 7.12), or a scheme valuation or completion of a Reasonableness Review (see from paragraph 7.30) is delayed. In those circumstances, pensions allowance values would still be determined in a way that is consistent with the procedures set out in this chapter. The revision of Pensions Allowance

[46] In the context of PSED repair expenditure we refer to 'allowances' rather than 'allowed expenditure' because EDE is included in full in Calculated Revenue (R_t) in the RIIO-GD2 PCFM, ie it is not subject to the TIM.

values at a different time because of the delayed completion of a Reasonableness Review will not affect the timetable for subsequent reviews of Pensions Allowance referred to in Table 7.1.

7.4. Licensees whose scheme triennial valuation dates differ to those shown in the first column of Table 7.1 will be required to provide either a full valuation or an updated valuation on these dates. The approach that should be used by the licensee to produce an updated valuation is set out in the Authority's Pension Deficit Allocation Methodology, published in the Triennial Pension Reporting Pack as part of the Regulatory Instructions Guidance.

7.5. The remainder of this chapter sets out:

a) general provisions – in section 1
b) the timetable and process for revising pension allowance values, including details of the Reasonableness Review – in section 2
c) the calculation of revised pensions allowance values – in section 3.

Section 1 – General provisions

Price control pension principles

7.6. The Authority's price control pension principles are set out in Ofgem's guidance note on price control pension principles under RIIO issued as Appendix 3 to the decision letter, 'Decision on the Authority's policy for funding Pension Scheme Established Deficits' dated 7 April 2017.[47]

Pension Scheme Established Deficit

7.7. For the purposes of this chapter:

a) the term cut-off date refers to the date of 31 March 2013
b) the term Pension Scheme Established Deficit (PSED), or "established deficit", means an amount derived as the value of the liabilities within a defined benefit pension

[47] https://www.ofgem.gov.uk/system/files/docs/2017/04/decision_on_policy_for_funding_pseds.pdf

scheme (or schemes) sponsored (or co-sponsored, eg if part of a group scheme) by the licensee expressed as a positive number, less the corresponding assets, where those assets and liabilities are:

i. attributable to the licensee's transportation business, and

ii. attributable to pensionable service up to and including the cut-off date.[48]

7.8. The licensee's PSED will be calculated using:

a) the triennial actuarial valuation of the pension scheme or schemes that contain the PSED described in paragraph 7.7 b)
b) the allocation of assets and liabilities in the scheme(s) referred to in subparagraph a) to the PSED using the Pension Deficit Allocation Methodology;
c) the effective date for revised allocations at each triennial actuarial valuation that take effect in the year rr (see Table 7.1); and
d) the Reasonableness Review with respect to the price control pension principles which could, exceptionally, result in adjustments to the PSED figure on account of errors in methodology or data.

7.9. While the Price Control Period ends on 31 March 2026, Pensions Allowance values will be determined having regard to further PSED repair periods determined under the methodology set out in this chapter (and the associated Price Control Financial Instrument licence condition).

Established surpluses

7.10. The existence of an established surplus indicates that consumers have funded the relevant pension scheme more than it would now appear was necessary. One of the objectives behind our policy is to protect the consumer interest by encouraging strategies that ensure any over-funding can be returned to consumers, where appropriate, and that minimise the risk of a surplus being unrecoverable for consumers or being used, for example to de-risk the scheme, in a way that would not otherwise be in the consumer interest. Strategies may include careful management of deficit funding, the use of asset backed funding arrangements as described from paragraph 7.14, and the use of pension contribution

[48] This definition applies even if the value derived is a negative amount (a surplus position) and may be described as an "established surplus".

holidays, especially when a scheme still has a significant number of active members. The existence of a surplus does not necessarily mean consumers have overpaid, for example, an efficiently incurred surplus can be effectively used to de-risk scheme funding in a way that reduces the likelihood of consumers needing to fund future deficits.

7.11. In the event that an established surplus arises, it may be appropriate for a licensee and the pension scheme trustees to agree a programme of pension contributions below the level that would otherwise be necessary to fund the accruals of benefits for active members and any deficit relating to post cut-off service. These reduced contributions can be called a contribution holiday. It is important that a pension contribution holiday, to the extent that it is attributable to an established surplus, is returned to consumers.

7.12. As part of the Reasonableness Review (see paragraph 7.30) we will conduct an initial review of any established surplus to identify whether a more detailed review is required. This more detailed review would occur as part of the close out of RIIO-2, using the latest information available at that time. The review would take into account the mitigating actions a company has put in place to manage an unnecessary surplus, prevailing and forecast market conditions, the impact of any pension payment holidays (including the timing of those holidays) and the materiality of the surplus. If the review concludes an adjustment is required, it would be applied as part of RIIO-2 close-out.

Pension costs outside the scope of this chapter

7.13. The following costs are dealt with as totex in the relevant price control and therefore fall outside the scope of this chapter:

a) pension costs associated with employee service after the cut-off date
b) accrued liability costs associated with employee service after the cut-off date (Pension Scheme Incremental Deficit costs), and
c) pension scheme administration costs and Pension Protection Fund levy costs.

Asset-backed funding arrangements

7.14. The licensee may choose to enter into asset-backed funding arrangements with pension scheme trustees, either directly or indirectly through related parties. Such arrangements might include a range of alternative funding arrangements, for example, mechanisms involving contingent assets or loan notes benefitting relevant pension schemes.

7.15. Any asset-backed funding arrangements must be fully compliant with all conditions, for example relating to the ring fence, in the licensee's licence (except where appropriate consent has been granted under the terms of a condition).

7.16. Notwithstanding that an arrangement may be fully compliant with licence conditions, the licensee is encouraged to provide information on any such mechanism or prospective mechanism to the Authority at the earliest opportunity. In general, the Authority would encourage asset-backed funding arrangements that would facilitate the return of funds to consumers in the event that a pension scheme deficit turns out to be smaller than anticipated.

7.17. Asset-backed funding arrangements would in general be disregarded in the determination of revised Pensions Allowance values because allowances are provided for PSED repair and not for ancillary arrangements (such as asset-backed funding) per se. However, such arrangements would be relevant in any proposal by the licensee for Pensions Allowance values under the methodology set out in this chapter.

Section 2 – Timetable and process for triennial revision of pensions allowance values

Reasons for updating pensions allowance values

7.18. The licensee's pensions allowance values may be revised during the Price Control Period to reflect:

a) information contained in pension scheme actuarial valuation reports provided by the licensee to the Authority
b) the licensee's updated PSED
c) information on the history of actual amounts received by the relevant pension scheme(s) in respect of PSED repair payments, attributable to the licensee, submitted to the Authority
d) proposals made by the licensee for Base Annual PSED Allowances and payment history allowances
e) asset-backed funding arrangements associated with proposals referred to in subparagraph d)
f) the outcomes of Reasonableness Reviews (see from paragraph 7.30), and

g) any pension contribution holiday attributable in whole or in part to the existence of an established surplus.

Process steps in a year in which a reasonableness review is being conducted[49]

Step 1: by 31 July

7.19. The Authority will be in receipt of price control review information from the licensee for Regulatory Years up to and including the last complete Regulatory Year.

7.20. The Authority will obtain the licensee's Scheme Valuation Data Set for the relevant valuation of the licensee's defined-benefit pension schemes by 31 July and commence a Reasonableness Review.

7.21. The Scheme Valuation Data Set should comprise:

a) the actuarial valuation of each defined-benefit scheme in respect of which the licensee is a sponsoring employer, being either a full valuation or an update of the last preceding full triennial valuation, with the asset and liability values projected forward to the full valuation date on the basis set out in the Pension Deficit Allocation Methodology[50]
b) each scheme's statement of funding principles
c) each scheme's statement of investment principles; and
d) any other information reasonably required.

Step 2: by 31 August

7.22. The licensee will submit:

a) Explanations and supporting evidence where appropriate for how it has interpreted the interests of consumers to inform its participation in the governance of pension schemes, including setting investment and risk strategies

[49] Although the intention is to conduct the steps of the reasonableness review according to the dates specified in this section, it may be necessary to change these dates (eg as occurred with the review in 2020, when dates were changed as a consequence of the impacts Covid-19) whilst following the same steps.
[50] https://ofgem.gov.uk/publications-and-updates/notice-modify-regulatory-instructions-and-guidance-held-network-operators

b) Explanation of how it has responded to any recommendations set out by the Authority in preceding Reasonableness Reviews.

7.23. The licensee will also submit Pension Deficit Allocation Methodology information and its PSED figure as at the relevant valuation date indicated in Table 7.1 showing the movements from the previous valuation date.

Step 3: by 14 September

7.24. The licensee will submit:

a) its proposals with supporting explanation for

i. Base Annual PSED Allowances ($PBAPA_y$), under paragraph 7.46

ii. payment history allowances (PPH_y), under paragraph 7.52

iii. any proposed prospective discounting basis for payment history variances, reflected in $PhDR_y$, under paragraph 7.52.

b) explanation of how it has engaged with pension scheme trustees and managers to advocate for the interest of consumers with respect to the PSED.

7.25. In its explanations under paragraphs 7.24 b), the licensee should set out why it considers its proposals appropriately protect the interests of consumers. The licensee's explanations should, in each case where appropriate, refer to the prevailing level of Base Annual PSED Allowances, the profile of repair payments that can be agreed with the scheme trustees, how it has sought to maintain confidence of scheme trustees in the covenant with the licensee in support of such agreement, how it has sought to minimise the risk of stranded surplus, how it has sought to balance the interests of existing and future consumers, how it has sought to manage the volatility of revenues and financial ratios and any asset-backed arrangements that are intended to protect the consumer interest. The licensee's explanations should, where appropriate, refer to or be consistent with information it submitted in accordance with paragraph 7.22.

Step 4: by 30 September

7.26. The Authority will provisionally decide whether:

a) any change should be made to the licensee's proposals for Base Annual PSED Allowances and payment history allowances for reasons anticipated in paragraph 7.32 a) and b), and 7.33

b) to apply an existing adjustment factor, introduce a new adjustment factor or extend the scope or effect of an existing adjustment factor for reasons anticipated in paragraph 7.34. Adjustment factor can be either upwards or downwards
c) to set out any recommendation to the licensee to adopt good practice before the next reasonableness review under paragraph 7.38.

7.27. The Authority will give notice of any such provisional decisions to the licensee, allowing 14 days for representations to be made.

Step 5: by 31 October

7.28. The Authority will complete its Reasonableness Review:

a) determine the values $BAPA_y$, representing the Base Annual PSED Allowances, for each of the three years following the Reasonableness Review, giving reasons for any departure from those proposed in paragraph 7.46
b) determine the values PH_y, representing the payment history allowances, for each of the three years following the Reasonableness Review, giving reasons for any departure from those proposed in paragraph 7.52
c) determine the values AF_y, representing any adjustment factors, for each of the three years following the Reasonableness Review
d) calculate the Pensions Allowance values for each of the three years following the Reasonableness Review, such that:

$$EDE_y = BAPA_y + PH_y + AF_y$$

e) set out any recommendation to the licensee to adopt good practice before the next Reasonableness Review
f) determine the discount rates for payment history allowances, hDR_y, or an unambiguous basis for determining them, for each of the three years following the Reasonableness Review, giving reasons for any departure from those proposed in paragraph 7.52
g) confirm whether a more detailed review of any established surplus is required (see paragraph 7.12).

Step 6: by 30 November

7.29. The Authority will direct revised Pensions Allowance values and will publish a report on the Reasonableness Review.

Reasonableness Reviews and adjustment factors

7.30. After receiving the whole (or substantially the whole) of the licensee's Scheme Valuation Data Set (see paragraph 7.21) and its proposals for Base Annual PSED Allowances and Payment History Allowances (see paragraph 7.24) in respect of each defined benefit pension scheme, the Authority will review the way in which the licensee has:

a) formulated and justified its proposals for Base Annual PSED Allowances and Payment History Allowances
b) engaged with pension scheme trustees and managers to advocate for the interest of consumers with respect to the PSED, recognising the responsibilities of trustees and the regulatory framework they are subject to, recognising the uncertainties that exist in the PSED valuation and recognising the strength of the employer's covenant
c) responded to any recommendations set out by the Authority in preceding Reasonableness Reviews
d) otherwise followed good practice, informed by practice in the regulated and broader private sectors, taking into account statutory and regulatory factors affecting the relevant pension schemes and the specific circumstances of each scheme, in promoting consumer interests with respect to the PSED.

7.31. The review referred to in paragraph 7.30 is termed the Reasonableness Review for the purposes of this methodology.

7.32. Having completed the review, the Authority will consider whether there is any case for:

a) making corrections to the licensee's calculations in respect of its proposals for Base Annual PSED Allowances and Payment History Allowances due to data or methodological errors
b) determining Base Annual PSED Allowances and Payment History Allowances with different profiles (while maintaining the same overall prospective values) compared with those proposed by the licensee under paragraphs 7.46 and 7.52
c) continuing to apply, modifying the scope or modifying the effect of any existing adjustment factors affecting Pensions Allowance values that were put in place following a prior Reasonableness Review
d) applying any new adjustment factor under paragraph 7.34, and
e) conducting a more detailed review of any established surplus (see paragraph 7.12).

7.33. The Authority will only make a determination in respect of paragraph 7.32 b) if it considers the licensee's proposals under paragraphs 7.46 and 7.52 do not appropriately protect the interests of consumers, taking into account statutory and regulatory factors affecting the relevant pension schemes, which may relate to levels of uncertainty in the assumptions adopted in the valuation of the PSED.

7.34. Consistent with its price control pensions Principle 3,[51] the Authority will only apply adjustment factors referred to in paragraph 7.32 c) and 7.32 d) to the extent necessary to disallow any excess costs arising from a material failure in the licensee's responsibility for taking good care of entrusted pension scheme resources on behalf of consumers. New adjustment factors will only arise in the following limited circumstances:

a) where the Authority has established the licensee's recklessness, negligence, fraud or breach of fiduciary duty towards consumers, such as failures in its participation in the governance of a pension scheme to correct for poor governance or management of the scheme's resources, including any undue risk of a stranded surplus
b) inequitable charges for consumers arising from using the time value of money in paragraphs 2.28 and 2.29 in ascertaining the cumulative payment history variance under paragraph 7.49 for any materially accelerated PSED payments that would otherwise have been determined with reference to the discount rate specified in the licensee's Scheme Valuation Data Set
c) the licensee's failure to respond adequately to any recommendations set out by the Authority in preceding Reasonableness Reviews.

7.35. Any modification to the effect of existing adjustment factors affecting Pensions Allowance values that were put in place following a prior Reasonableness Review will be made after taking equitable account of the time value of money involved, in general with reference to hDR_y.

7.36. Before deciding to make determinations referred to in paragraphs 7.32 b), 7.32 c) and 7.32 d), the Authority will consult with the licensee (see paragraph 7.27), giving its reasons

[51] See Appendix 3, of https://www.ofgem.gov.uk/system/files/docs/2017/04/decision_on_policy_for_funding_pseds.pdf

with reference to paragraphs 7.33 and 7.34 and to the Pensions Principles referred to in paragraph 7.6.

7.37. After, considering any representations made by the licensee, the Authority will:

a) notify the licensee of its decision
b) set out the matters, referred to in paragraphs 7.33 and 7.34, that have led to its decision, and
c) Set out the basis on which it considers any adjustment factors referred to in 7.32 c) or 7.32 d) might be discontinued at the next Reasonableness Review.

7.38. Where, after consulting with the licensee (paragraph 7.27) and giving due weight to the licensee's representations, the Authority considers the licensee is not following good practice which would have the effect of promoting consumer interests with respect to the PSED, the Authority will set out recommendations to the licensee for it to adopt before the next reasonableness review where:

a) the Authority considers that adopting the recommendations would not conflict with statutory and regulatory factors affecting the relevant pension schemes
b) the Authority has taken into account the relative duties of the licensee and the pension scheme trustees and the extent to which the licensee is only able to influence trustee decisions
c) the Authority considers that adopting the recommendations would be in the interests of consumers and would not disproportionately impact the licensee
d) the Authority considers it is practical for the licensee to adopt the recommendations.

Section 3 – Proposals for revised pensions allowance values

7.39. This section describes what the licensee must take into account in making its proposals for:

a) Base Annual PSED Allowances
b) payment history allowances.

Base Annual PSED Allowances

7.40. Base Annual PSED Allowances represent how consumers will fund the established deficit as evaluated at the last triennial review. The licensee must set out its proposal for Base Annual PSED Allowances after taking account of the following paragraphs.

7.41. The licensee must set out its calculations of:

a) the indicative further PSED repair period, see from paragraph 7.42
b) the indicative base annual PSED allowance, see from paragraph 7.44 and
c) its proposal for Base Annual PSED Allowances, see from paragraph 7.46.

Indicative further PSED repair period

7.42. The indicative further PSED repair period represents a number of years (not necessarily a whole number) from the valuation date specified in Table 7.1 and is ascertained by taking the number of years that is the lower of:

a) the value irp, where irp is calculated using the following formula:

$$irp = \frac{-LN\left(1 - LN(1+DR) \times \frac{PSED}{EBAPA}\right)}{LN(1+DR)}$$

where:

PSED is defined in paragraph 7.7 b), expressed in 2018/19 price terms

LN returns the natural logarithm of the value to which it is applied

DR is an annual real (inflation-adjusted) discount rate specified in or justified with reference to the licensee's Scheme Valuation Data Set (established in accordance with Principle 4 - see paragraph 7.6), and

EBAPA is an average of the Base Annual PSED Allowance expressed in 2018/19 price terms for years rr-1 and rr, where the year rr is the Regulatory Year specified in Table 7.1 for the relevant Reasonableness Review.

and

b) 15.
In the event that the PSED is negative, irp is set to zero.

7.43. For example, if the discount rate was 2%, the PSED was £1m and the EBAPA value was £100k, then the Indicative further PSED repair period would be 11.14 years, being the lower of:

a) 11.14, calculated under the formula at paragraph 7.42 a), and
b) 15.

Indicative Base Annual PSED Allowance

7.44. The indicative amount for the Base Annual PSED Allowance, IBAPA, is zero if PSED is negative but is otherwise ascertained using the following formula:

$$IBAPA = PSED\,\frac{LN(1+DR)}{1-(1+DR)^{-irp}}$$

where:
irp is the indicative further PSED repair period ascertained under paragraph 7.42.

7.45. For example, if the PSED was £1m in 2018/19 prices, the Indicative further PSED repair period was 11.14 years, and the discount rate was 2%, the indicative Base Annual PSED Allowance would be £100k. IBAPA will equal EBAPA unless irp is limited to 15.

Proposal for Base Annual PSED Allowances

7.46. Subject to its consideration of the factors set out in subparagraphs (a) to (d) below, the licensee may propose allowances in line with the Indicative Base Annual PSED Allowance calculated under paragraph 7.44. The licensee may propose, with its supporting rationale, an alternative profile of Base Annual PSED Allowances over a repair period that may be shorter or longer than the period determined by paragraph 7.42 if it considers that the indicative Base Annual PSED Allowance calculated by paragraph 7.44 above either:

a) does not fairly represent a profile of repair payments that can be agreed with the scheme trustees,
b) following consultation with the Authority, does not appropriately protect the interests of consumers,
c) derives from an indicative further PSED repair period ascertained under paragraph 7.42 which is less than 5 years, or
d) is otherwise inappropriate or inequitable.

7.47. The alternative proposal under paragraph 7.46 must represent a profile of Base Annual PSED Allowances, $PBAPA_y$ for each year y subsequent to the valuation date specified in Table 7.1, such that

$$\sum_{y \geq rr-1} \frac{PBAPA_y(1 + f \cdot DR)}{(1 + DR)^{y+2-rr}} \leq PSED + LO - ABV$$

where:

$$f = \frac{1}{LN(1 + DR)} - \frac{1}{DR}$$

LO means the value of any assets included in the PSED valuation that represent an obligation from the licensee for future payments (or other consideration) to the relevant scheme(s) under an arrangement agreed between the licensee and the scheme(s)

ABV means the value of assets as at the PSED valuation date held under asset-backed arrangements that is fairly attributable to funding by the licensee out of negative cumulative payment history variances (see paragraph 7.49) up to the valuation date and where those assets are available under an agreement with pension scheme trustees only for future funding of an established deficit or for recovery on behalf of consumers, for example in the event that pension surpluses arise. Where relevant, the value should be determined using a methodology for the evaluation of ABV and ABC (see paragraph 7.52) agreed in writing by the Authority at or close to the inception of an arrangement, the Authority giving its reasons why it considers the methodology furthers the interests of consumers. In the absence of any such agreement, the licensee may make its own estimate of the value of ABV, which would have a symmetrical effect on the calculations in paragraph 7.52.

$PBAPA_y$ for years rr-1 and rr are the Base Annual PSED Allowances determined by the Authority for those years, and

"·" is a symbol for multiply (the mathematical operation of multiplication)

Payment history allowances

7.48. The determination of revisions to Pensions Allowance values for the licensee will include payment history allowances, which may be positive or negative, relating to the cumulative variance between the licensee's PSED repair payments and its historical allowances for PSED repair prior to the PSED valuation date. The payment history prior to a triennial valuation will affect that valuation, and thus the Base Annual PSED Allowances

needed to fund it as described in paragraph 7.40. Payment history allowances ensure that customers are properly compensated if the licensee has, prior to the triennial valuation, paid less in funding the PSED than it has received from consumers, and that companies do not lose out if they have paid more.

7.49. The cumulative pre-valuation payment history variance value at the end of the Reasonableness Review year, V_{rr}, is ascertained using a method permitted by paragraph 7.51 or using the following formula:

$$V_{rr} = LTU + \sum_{y=pco1}^{rr-2}\left(\frac{(D_y - E_y)(1 - CT_y)}{(1 + g_y \cdot hDR_y)(1 - CT_{rr+1})}\prod_{t=y}^{rr}(1 + hDR_t)\right) - \sum_{y=rr-1}^{rr}\left(\frac{PH_y(1 - CT_y)}{(1 + g_y \cdot hDR_y)(1 - CT_{rr+1})}\prod_{t=y}^{rr}(1 + hDR_t)\right)$$

where:

LTU is the legacy true-up value specified in paragraph 7.50, where relevant

pco1 means the first Regulatory Year subsequent to the cut-off date

rr is the Regulatory Year specified in Table 7.1 for the relevant Reasonableness Review

D_y means the net sum of the following, which may be positive or negative, expressed in 2018/19 price terms:

- amounts received by the relevant pension scheme(s) in respect of PSED repair during the course of year y, including amounts received in respect of an obligation accounted for in the LO term in paragraph 7.47
- less any amounts directly or indirectly returned to the licensee or a related undertaking by the relevant pension scheme(s) during the course of year y under an arrangement agreed between the licensee and the scheme(s),
- less the amount by which ongoing pension contributions (for active members) have been reduced on account of an established surplus as described in paragraph 7.11.
- plus any amounts determined by the Authority as advisory fees or other costs relating to the development or implementation of a pensions initiative, eg a contingent asset arrangement, following a review of evidence submitted by the licensee.

PH_y is the payment history allowance determined by the Authority at a preceding Reasonableness Review or price control review, in accordance with paragraph 7.28 or otherwise, and included in the licensee's revenue allowances for year y

E_y means the licensee's Base Annual PSED Allowances plus payment history allowances, PH_y (which may be positive or negative), included in revenue allowances for the year y expressed in 2018/19 prices in accordance with paragraph 7.48. E_y excludes any adjustment factor value AF but includes any prior period history allowances included in revenue allowances in the period since pco1 relating to any true-up value in LTU and any other relevant allowances, including contingent asset allowances. With the written agreement of the Authority, the licensee may adjust prior period history allowances to exclude those attributable to legacy true-up values excluded from the LTU term in accordance with paragraph 7.50.

CT_y means the actual or, in the case of CT_{rr+1}, prospective rate of Corporation Tax applicable to the licensee in year y

$\prod$ means the product of the series in the brackets for the specified range;

for example:

$$\prod_{t=rr-2}^{rr}(1+hDR_t) = (1+hDR_{rr-2})(1+hDR_{rr-1})(1+hDR_{rr})$$

hDR_y means the discount rate values under any alternative discounting basis determined by the Authority in the relevant reasonableness review for year y (see 7.28 e)) or, where no alternative discounting basis has been specified, the time value of money as described in paragraphs 2.28 and 2.29.

$$g_y = \frac{1}{2+hDR_y}$$

7.50. Where relevant,

a) Subject to subparagraph b), the legacy true-up value, LTU, represents the present value as at the end of the Reasonableness Review year of any arrangement or arrangements previously agreed or determined by the Authority for the post cut-off true-up of the licensee's pension deficit payment history or true-up of other pension-related costs prior to the cut-off date.

b) With the Authority's written agreement, the licensee may attribute payment history allowances to legacy true-up values identified in subparagraph a) on a present value neutral basis and exclude both attributable payment history allowances from the calculation of E_y in paragraph 7.49 and the attributable LTU value from the LTU term applied in paragraph 7.49.

7.51. The licensee may choose to present a truncated calculation of the term V_{rr} specified in paragraph 7.49, on a basis that is demonstrably consistent with the formula specified in paragraph 7.49. Such a truncated calculation would include cumulative pre-valuation payment history variance values calculated for a previous reasonableness review and rolled forward for payment history variances arising since the valuation date relevant to that earlier review, discount rates and, where relevant, changes in corporation tax rates.

7.52. The licensee should propose payment history allowances for future years y, PPH_y, such that:

$$\sum_{y \geq rr+1} \left(PPH_y \left(1 + h_y \cdot PhDR_y\right) \prod_{t=rr+1}^{y} \left(\frac{1}{1 + PhDR_t} \right) \right) \leq V_{rr} + ABC$$

$PhDR_y$ means the discount rate for payment history allowances for year y proposed by the licensee, or the rate forecast for year y according to the licensee's proposed basis of determining discount rates, in either case framed in accordance with paragraph 7.25. Such a proposal may relate $PhDR_y$ to the value of DR, the time value of money or rates of return on asset-backed arrangements. In the absence of any proposal, $PhDR_y$ is the time value of money in period rr+1 calculated in accordance with paragraphs 2.28 and 2.29.

ABC means the deemed present value as at the end of the Reasonableness Review year of the cumulative funding of asset-backed arrangements through negative cumulative payment history variances up to the valuation date and where those assets are available under an agreement with pension scheme trustees only for future funding of an established deficit or for recovery on behalf of consumers, for example in the event that pension surpluses arise. Where relevant, the value should be determined using a methodology for the evaluation of ABV (see paragraph 7.47) and ABC agreed in writing by the Authority at or close to the inception of an arrangement, the Authority giving its reasons why it considers the methodology furthers the interests of consumers. In the absence of any such agreement, ABC should be set at the present value of ABV specified

in paragraph 7.47 as at the end of the reasonableness review year, after applying appropriate discount rates (generally hDR_y).

$$h_y = \frac{1}{2 + PhDR_y}$$

8. Legacy Adjustments

Overview

8.1. This section of the handbook provides an overview of the legacy price control adjustments, which are necessary to take account of:

a) activities carried out by the licensee;
b) incentivised performance by the licensee; and / or
c) costs or expenditure incurred by the licensee,

relating to Regulatory Years prior to Regulatory Year 2021/22 (the "legacy period").

8.2. Legacy price control adjustments may be necessary where it was not possible to finalise values used in the calculation of the licensee's price control revenue at final determinations, because of the non-availability of outturn data and other relevant information. Adjustments may also be necessary to correct anomalous positions, acknowledged by Ofgem and the licensee.

8.3. Legacy price control adjustments are divided into two categories, listed below:

a) Legacy Adjustments to Revenue allowances - LAR_t[52]; and
b) Legacy Adjustments to RIIO-1 RAV additions – $LRAV_t$

8.4. The variable values LAR_t[53] and $LRAV_t$ give effect to legacy adjustments and represent respectively:

a) the net incremental changes (which may be positive or negative) to RIIO-2 revenue allowances; and

[52] The calculation of which is addressed in Special Condition 7.1.
[53] Note the LAR_t term is a licence term, the sub-components of which are PCFM Variable Values and can be seen in the calculation in Special Condition 7.1, in the PCFM Variable Values table in Chapter 6 of this handbook and on the GD2 PCFM input sheet. The LAR_t term is an aggregation of these PCFM Variable Values and is not a PCFM Variable Value itself, however for ease of reference we refer to both the LAR_t the $LRAV_t$ terms as variable values throughout this chapter.

b) the RIIO-1 Net RAV additions relating to the RIIO-1 Price Control Period.

8.5. Revisions to LAR_t and $LRAV_t$ affect the calculation of Allowed Revenue for the licensee, through the AIP, in the following ways:

a) adjustments to revenue allowances (LAR_t) flow directly into Allowed Revenue as fast money amounts
b) adjustments to the RIIO-1 Net RAV additions ($LRAV_t$) flow into Calculated Revenue (R_t) indirectly, by giving rise to adjusted return on RAV and depreciation amounts.

8.6. It should be noted, however, that revisions to LAR_t and $LRAV_t$ values will also have ancillary effects on other calculations which feed into Allowed Revenue, under the AIP.

8.7. The revised LAR_t value and its component values are denoted in nominal terms. $LRAV_t$ values will be denoted in 2018/19 prices, consistent with the price base used in the RIIO-GD2 PCFM.

8.8. On 1 April 2021, the LAR_t and $LRAV_t$ variable values will be provisional. These values will have been determined using forecast data at the time of final determinations for RIIO-GD2 and therefore will be adjusted when outturn data becomes available.

Revision to Legacy Adjustments

8.9. The Legacy PCFM Variable Values will be revised[54] as necessary during the Price Control Period. However, it is expected that legacy adjustments will be completed through the Close-out of the RIIO-1 price control, as part of the first two AIPs during the RIIO-2 price control period.

[54] Except for $LMOD_{2021\text{-}2022}$, which will not change in the RIIO-GD2 PCFM after it has been set for the Regulatory Year 2020/21.

8.10. Where applicable, Ofgem will use forecasts to determine a provisional value for legacy adjustments, which will be updated in subsequent AIPs when the outturn data becomes available.

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

- errors or omissions in the preparation of information or inconsistencies with the relevant Regulatory Instructions and Guidance (RIGs) or
- an efficiency review by Ofgem.

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

Legacy Adjustment to Revenue – (LAR_t)

8.13. LAR_t is derived in accordance with the formula in Part B of Special Condition 7.1 and comprises several legacy adjustments (see table 8.1). These legacy adjustments are determined in accordance with the methodologies set out in Chapter 7 of the special conditions.

Table 8.1 – Legacy Adjustments (LAR_t)

LAR_t Components	Description	SpC
LPT_t	Legacy pass-through	SpC 7.2
$LMOD_t$	Legacy MOD	SpC 7.3
LK_t	Legacy K Correction	SpC 7.4
$LTRU_t$	Legacy TRU Term	SpC 7.5
$NOCO_t$	Close out of the RIIO-1 Network Outputs	SpC 7.6
$LDRW_t$	Close out of the RIIO-GD1 Discretionary Reward Scheme	SpC 7.8
LBM_t	Close out of the RIIO-GD1 Broad Measure of Customer Satisfaction Incentive	SpC 7.9
$LSHR_t$	Close out of the RIIO-GD1 Shrinkage Allowance Revenue Adjustment	SpC 7.10

LAR_t Components	Description	SpC
$LEEI_t$	Close out of the RIIO-GD1 Environmental Emissions Incentive revenue	SpC 7.11
$LFPI_t$	Close out of the RIIO-GD1 Fuel Poor Network Extension Scheme Incentive Mechanism	SpC 7.12
LEx_t	Close out of the RIIO-GD1 Exit Capacity Cost Adjustment	SpC 7.13

8.14. Where a methodology for the calculation of a component of LAR_t refers to a calculation as set out in the RIIO-GD1 special licence conditions in force on 31 March 2021, this should be done with the exception of the Retail Prices Index Forecast Growth Rate calculation, the definition of which refers to "the HM Treasury "Forecasts for the UK Economy" publication, published in November each year."

8.15. Instead, from 01 April 2021, the Retail Prices Index Forecast Growth Rate should be calculated with reference to the August publication of the HM Treasury Forecasts for the UK Economy publication as the calculation will need to be done in time to feed the LAR_t Variable Value into the November AIP before the cut-off date set out in Chapter 2 of this handbook.

8.16. For this version of the handbook, further detail is only provided for $LMOD_t$ (Special Condition 7.3), a component term for LAR_t.

Legacy MOD ($LMOD_t$)

8.17. The Legacy MOD (LMODt) value represents an amount (either positive or negative) to be added to licensee's Allowed Revenue, which relate to the Regulatory Years prior to the current Price Control Period.

LMOD values for the first two years of RIIO-GD2

8.18. Ofgem will take the last published RIIO-GD1 PCFM (the RIIO-GD1 Price Control Financial Model following the AIP 2019) and extend the calculations to output a MOD_t value for Regulatory Years following the conclusion of RIIO-GD1. This extended version of the last published RIIO-GD1 PCFM will be referred to as the Legacy RIIO-GD1 PCFM.

8.19. As with the RIIO-1 process, a new MOD_t (eg $MOD_{2021/22}$ and $MOD_{2022/23}$) will be calculated and directed at each AIP, reflecting any changes related to the RIIO-1 variable values or from the closeout process.

8.20. As in the RIIO-1 process, the PCFM Variable Values feeding into the Legacy RIIO-GD1 PCFM are to be derived in accordance with Chapter 3 (Annual Iteration Process - Adjustments to the Revenue Restriction) of the Gas Transporter Licence special conditions as in force on 31 March 2021.

8.21. These MOD_t values will be denoted in £m 09/10 prices, and then inflated by the $RPIF_t$ term consistent with the RIIO-1 methodology and regulatory reporting packs. This nominal MOD is used as the value of $LMOD_t$ and is added directly to Allowed Revenue in the RIIO-2 period.

8.22. The RIIO-GD2 PCFM, in its state as at 1 April 2021 includes values for $LMOD_{2021/22}$ and $LMOD_{2022/23}$ (forecast), which are determined based on the calculations and formulae in the Legacy RIIO-GD1 PCFM and the data available at Final Determinations.

8.23. The value for $LMOD_{2021/22}$ relating to Regulatory Year 2019/20 is derived from outturn data submitted by licensees by 31 July 2020 in accordance with the Regulatory Instructions & Guidance (RIGs). Values of $LMOD_t$ will not change in any subsequent AIP.

8.24. In absence of outturn data[55], a provisional value will be calculated for $LMOD_{2022/23}$, as at 1 April 2021, based on forecast data. This will then be updated at the subsequent AIP in November 2021, following the submission of outturn expenditure data on 31 July 2021.

~~8.25. If necessary, such as due to a close-out methodology, there will be subsequent $LMOD_t$ values directed at the corresponding AIPs, calculated using the same methodology.~~

[55] There is a two-year lag in reflecting outturn data in Allowed Revenue i.e. outturn data relating to expenditure in Regulatory Year 2020/21 cannot be reflected until after the AIP in 2021 for the Regulatory Year 2022/23.

~~8.26.~~8.25. To calculate the value of LMOD in Regulatory Years 2021/22 or beyond, PVF terms for Regulatory Years within RIIO-2 is required to make the appropriate time value of money adjustment.

8.26. The PVF term will be the real rate that, when inflated by the corresponding RPI factor (RPIF), implies the same *nominal* time value of money (TVM_t) used in the RIIO-2 Price Control Financial model for that Regulatory Year.

8.27. For example, if the RIIO-2 term TVM_t has a value of 4.55%, a value of PVF will be used such that when inflated by RPI, the nominal rate is also 4.55%.

LMOD values to reflect the closeout of RIIO-GD1

8.28. Ofgem will take the Legacy RIIO-GD1 PCFM, and modify it to calculate a closeout adjustment value (COA) using the same approach as the MOD calculation, applying the same time value of money as would apply to MODt in 2021/22.

8.29. The value of LMODt for 2023/24, 2024/25 and 2025/26 is derived in accordance with Special Condition 7.3, based on a value of COA (the closeout adjustment) that the Authority will direct.

8.30. In order to direct the value of COA, the Authority will follow the following process:

- Coordinate adjustments to the legacy PCFM in accordance with the closeout methodologies listed in paragraph 8.32
- Ensure "31 March 2024" and the relevant licensee are selected on the "UserInterface" tab of the Legacy RIIO-GD1 PCFM
- Run the tax trigger, then switch the model back into licence model
- Calculate a value of COA using the modified Legacy RIIO-GD1 PCFM from paragraph 8.28
- Direct the value of "COA" (in 18/19 prices) from the "Legacy Summary" tab as the corresponding input to the ~~E~~GD2 PCFM.

8.31. Until the direction of COA, the value of the COA will remain provisional and licensees will use their best ~~estimate for the value of this term unless advised otherwise by the authority~~ forecast.

Closeout methodologies

8.32. The following adjustments will be made to the Legacy RIIO-GD1 PCFM in order to calculate a value of COA:

- Adjust the Fuel Poor Network Extension Scheme (FPNES) allowance on row 16 of company input tabs (variant allowed load related capex, IAEFP) in accordance with chapter 4 in the Decision on the closeout methodologies for RIIO-GD1[56]
- Adjust the Disposals (pre-vesting and post-vesting) amounts on rows 186 and 198 of company input tabs, in accordance with chapter 9 of the Decision on the closeout methodologies for RIIO-GD1.
- ~~[WWU Only] Adjust the tax clawback amount on row 24 of the company input tabs (TGIE) in accordance with chapter 8 of the Decision on the closeout methodologies for RIIO-GD1.~~
- Adjust the iron mains risk reduction program allowance on row 19 (RE, variant repex allowance) in accordance with Chapter 3 of the Decision on the closeout methodologies for RIIO-GD1.

Legacy Adjustment to RAV Additions ($LRAV_t$)

8.33. This section sets out the methodology by which the Authority will determine $LRAV_t$ (Special Condition 7.14) values for the licensee.

LRAV values ~~prior to the closeout of RIIO-GD1~~for the first two years of RIIO-GD2

~~8.27.~~8.34. The Authority will derive $LRAV_t$ values relating to RIIO-GD1 Price Control Period, at Final Determinations in accordance with the applicable RIIO-GD1 Cost, Volume and Revenue Reporting Regulatory Instructions and Guidance (RIGs).

~~8.28.~~8.35. $LRAV_t$ should be calculated in accordance with the PCFM Guidance. Ofgem will take the last published GD1 PCFM (the RIIO-GD1 Price Control Financial Model following the AIP 2019) and extend the calculations to enable the calculation of a RAV position for the final

[56] Ofgem, "Decision on the closeout methodologies for RIIO-GD1", 14 April 2022 https://www.ofgem.gov.uk/sites/default/files/2022-04/Decision%20on%20the%20closeout%20methodologies%20for%20RIIO-GD1.pdf

Regulatory Year of RIIO-GD1. Any net additions to RAV balances during this period represent $LRAV_t$ values.

~~8.29.~~8.36. The $LRAV_t$ values for Regulatory Year 2020/21 are provisional and will be updated with outturn data received as part of the AIP ending in November 2021.

~~8.30.~~8.37. By 31 October 2021, the Authority will derive finalised $LRAV_t$ values for the Regulatory Year 2020/21 for the licensee by inputting actual cost data submitted by 31 July 2021 into the GD1 PCFM and restating them in 2018/19 prices. There may also be subsequent updates to allowances or other RIIO-1 inputs following the 31 July data submission which will be processed in the same way.

~~8.31.~~8.38. The $LRAV_t$ values, as determined in paras 8.34 - 8.37, are used in the PCFM Variable Values table as historical additions to RAV (RIIO-1 Net RAV additions (after disposals)) relating to RIIO-GD1 Price Control Period and will flow indirectly into RIIO-GD2 Calculated Revenue (R_t).

~~8.32.~~8.39. The $LRAV_t$ values are contained in the Regulatory Year columns for 2013/14 – 2020/21 (RIIO-GD1 Price Control Period) in RIIO-GD2 PCFM.

Directing final values of $LRAV_t$ tax loss brought forward and capital allowance tax pool balances following the closeout of RIIO-GD1

8.40. In directing the value of COA in accordance with paragraph 8.30, the Authority will also direct the corresponding values of $LRAV_t$, ~~a~~the tax loss brought forward and the capital allowance tax pool balances from the Legacy RIIO-GD1 PCFM following implementation of the closeout methodologies in paragraph 8.32.

Appendices

Index

Appendix 1 – Glossary

A

Allowed Return on Capital

Ofgem allowance based on the assessed weighted average cost of capital (WACC).

Allowed Return on Debt

Ofgem allowance in respect of the cost of debt, calculated on a pre-tax basis with reference to a trailing average index of debt costs.

Allowed Return on Equity

Ofgem allowance based on the assessed cost of equity. Ofgem calculates the allowed return on equity and cost of equity on a post-tax basis.

Annual Iteration Process

The annual iteration process is the process of annually updating the variable values in the PCFM and running the PCFM calculation functions in order to provide updated Allowed Revenue (AR_t) for a licensee, see Chapter 2, para 2.43 - 2.45.

Associated Document

A supporting document needed to supplement the application or understanding of the licence and/or the variable values in Table 3.1

Authority's website

www.ofgem.gov.uk

B

Base Annual PSED Allowance

See chapter 7, Section 3

C

Capitalisation rate

The rate at which totex is added to RAV (ie treated as slow money). There are two rates for the RIIO-GD2 Price Control Period, Capitalisation rate 1 (base rate) and Capitalisation rate 2 (an uncertainty mechanism rate). Capitalisation rate 1 refers to the rate used for all relevant expenditure/allowances not dealt with under the uncertainty mechanism capitalisation rate. The Capitalisation rate 2 is applied to expenditure/ allowances under the uncertainty mechanism.

Consumer Prices Index Including Owner Occupiers' Housing Costs (CPIH)

The monthly values of the "CPIH All Items", series ID "L522", published by the Office for National Statistics (ONS) or any other public body taking on its functions.
Also see chapter 2, para 2.17.

Cut-Off Date

Means 31 March 2010 for DNOs, 31 March 2013 for GDNs and 31 March 2012 for TOs and SOs, see Chapter 7, para 7.7.

D

Defined Benefit Scheme

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

E

ENA

Energy Networks Association

Established surpluses

See chapter 7, section 1, para 7.10 - 7.12

F

Fast money

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

Final Determinations

Means the document of that name published on the Authority's Website in relation to the RIIO-2 price control.

Funding Adjustment Rate

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

G

GD2

Prefix/Suffix designating an item relevant to the RIIO-GD2 (gas distribution) price control review which will be applicable for the five years running from 1 April 2021 until March 31, 2026.

GDN

Gas Distribution Network

I

International Financial Reporting Standards (IFRS)

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

L

Legacy RIIO-GD1 PCFM

An extended version of the last published RIIO-GD1 PCFM used to calculate a legacy MOD_t value relating to RIIO-GD1 Regulatory Years, for inclusion in the LAR_t term.

N

NPV

Net Present Value

O

OBR

Office of Budget Responsibility

Ofgem

The Office of the Gas and Electricity Markets Authority.

P

PCFM

The RIIO-GD2 PCFM (see RIIO-GD2 Price Control Financial Model definition)

Pensions Allowance

See chapter 7, Section 3

Pension Principles

See Chapter 7, para 7.6

Pension Scheme Established Deficit (PSED)

The difference between assets and liabilities, determined at any point in time, attributable to pensionable service up to the end of the respective Cut-Off Dates and relating to Regulated Business Activities under Pension Principle 2. The term applies equally if there is a subsequent surplus.
Also see chapter 7, para 7.7

PCFM Variable Values

The variable values in Table 3.1 of this handbook or the PCFM Variable Values table in the RIIO-GD2 Price Control Financial Model.

PCFM Guidance

An Associated Document issued by the Authority under Part E of special condition 8.2 (Annual Iteration Process for the RIIO-GD2 Price Control Financial Model), to be used by licensee to populate variable values in PCFM for submission during AIP.

Price Control Period

The period of five years beginning on 1 April 2021 and ending on 31 March 2026.

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 as a part of its Allowed Revenue (AR_t).

Real Price Effects (RPE_t)

Ofgem sets price control allowances which can include a general inflation measure (CPIH) and certain price indices that reflect the external pressures on companies' costs. The difference between the Price Index (PI_t) and certain price indices are referred to as Real Price Effects (RPE_t).

Reasonableness Review

See Chapter 7, section 2, from para 7.30

Regulatory Year

A period of twelve months commencing on 1 April at 05:00 and ending on the following 1 April immediately before 05:00. The first such Regulatory Year (t=1) commences on 1 April 2021 at 05:00 hours during the RIIO-2 price control period.

Retail Price Index (RPI)

The monthly values of the "RPI All Items Index", series ID "CHAW", published by the Office for National Statistics (ONS) or any other public body acquiring its functions.
Also see Chapter 2, para 2.17

RIIO

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

RIIO-GD2 (Gas Distribution)

The price control arrangements which will apply to gas distribution licensees from 1 April 2021 until 31 March 2026

RIIO-GD2 Price Control Financial Model (PCFM)

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

(a) that is represented by a workbook in Microsoft Excel format maintained under that name detailed above, on the Authority's website; and
(b) that the Authority will use to determine the values of the term AR through the application of the Annual Iteration Process, whether under Special Condition 2.1, Part C of GD license.

The RIIO-GD2 PCFM calculates updated Allowed Revenue through an Annual Iteration Process - see chapter 2, para 2.43.

Slow money

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

SONIA

The daily values of the Sterling Overnight Index Average, series ID "IUDSOIA", published by the Bank of England or any other government department acquiring its functions.
Also see chapter 2, para 2.28

T

Tax Review

A review by the Authority of any material differences between the licensee's Calculated Tax Allowance and its Actual Corporation Tax liability.
See chapter 6, from para 6.31 - 6.47

Time Value of Money Adjustment

A multiplier used when the award or application of a financial value, attributable to a particular year, is deferred until a later year, even where the deferral is routine and in accordance with a price control mechanism.
In basic terms, for any one year, the multiplier is (1+X) where: X is the WACC or twelve months average of the daily overnight SONIA (see definition) for the licensee applicable to the period of deferral.
Also see chapter 2, para 2.28

Totex

See definition in Regulatory Instructions & Guidance (RIGs).

Totex Capitalisation Rate

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

Totex Incentive Mechanism (TIM)

See Appendix 2 ~~Appendix 2~~

Totex Incentive Strength Rate (TIS)

See Appendix 2 ~~Appendix 2~~ . It represents the percentage that a licensee bears in respect of an overspend against allowances or retains in respect of an underspend against allowances.

Triennial (pension scheme) Valuation

An actuarial valuation of a pension scheme which has been carried out to meet the requirements of Section 224(2)(a) of the Pensions Act 2004 and which results in a written report on scheme assets and liabilities by the scheme actuary. Interim updates to triennial valuations may also be produced.
Also see chapter 7, Section 2

U

Updated Valuation

A report, prepared and signed by the Scheme Actuary, which updates a Triennial Valuation to a later date. This is further defined in the Energy Network Operators' Price Control Pension Costs - Regulatory Instructions and Guidance: Triennial Pension Reporting Pack supplement including pension deficit allocation methodology.

V

Vanilla Allowed Return on Capital

See Allowed Return on Capital

Vanilla WACC

See WACC

W

WACC

The Vanilla Weighted Average Cost of Capital is equal to the Allowed Return on Capital. Vanilla WACC is used in some time value of money adjustments. 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:

i) the pre-tax cost of debt, and

ii) the post tax cost of equity

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).

Appendix 2 – Totex Incentive Mechanism

A2.1 The Totex Incentive Mechanism (TIM) enables licensees to retain a specified portion of underspending against totex allowances (with network users benefiting from the reciprocal portion) or to bear a specified portion of overspending (with network users funding the reciprocal portion).

A2.2 The TIM adjusts totex allowances for (forecast or outturn) over or underspend against those allowances. The adjustment depends on the amount of under or overspend and the Totex Incentive Strength (TIS) for the licensee. The TIS is the post-tax percentage the licensee bears of an overspend, or retains of an underspend, against allowances. The adjustment that is made to the totex figures is the Funding Adjustment Rate (often called the 'sharing factor') which is calculated as (1 – TIS) and is a fixed input value for the licensee in the PCFM. Applying the Funding Adjustment Rate to the over (or under) spend gives the amount that is added to (or subtracted from) the totex allowances, giving a post-TIM totex.

A2.3 The PCFM apportions post-TIM totex using the Totex Capitalisation Rate for the licensee as either fast money or slow money (see paragraph 3.6). The Totex Capitalisation Rate for the licensee for the relevant Regulatory Year is a fixed input value for the licensee in the PCFM. Under the AIP, the effects of this modelling treatment (including any ancillary effects such as the impact on tax allowances) are reflected in the value of the term R_t.

A2.4 A schematic of the TIM, with illustrative numbers showing an overspend, is provided in the chart below.

Figure A2.1: Illustration of the Totex Incentive Mechanism