

Guidance

Price Control Deliverable Reporting Requirements and Methodology

Document: Version ~~32~~

Publication date: ~~16 February 2023~~ **17 March 2021**

Contact: ~~Networks Directorate, RIIIO Price Controls~~

Team: Networks Directorate, RIIIO Price Controls

Tel: ~~020 7901 7000~~

Email: ~~RIIO2@ofgem.gov.uk~~

This document is directed at gas and electricity transmission network companies, **electricity distribution network companies** and gas distribution network companies (for the purposes of this document 'network companies' or **'licensees'**), as well as their stakeholders.

The purpose of this document is to set out requirements in relation to the reports that Gas Distribution (GD), Gas Transmission (GT), **Electricity Distribution (ED)** and Electricity Transmission (ET) licensees are required to provide in relation to **evaluative** Price Control Deliverables (PCDs) and the methodology that the Authority will use when assessing PCDs.

© Crown copyright 2023~~2~~

The text of this document may be reproduced (excluding logos) under and in accordance with the terms of the [Open Government Licence](#).

Without prejudice to the generality of the terms of the Open Government Licence the material that is reproduced must be acknowledged as Crown copyright and the document title of this document must be specified in that acknowledgement.

Any enquiries related to the text of this publication should be sent to Ofgem at:
10 South Colonnade, Canary Wharf, London, E14 4PU. Alternatively, please call Ofgem on 0207 901 7000.

This publication is available at www.ofgem.gov.uk. Any enquiries regarding the use and re-use of this information resource should be sent to: psi@nationalarchives.gsi.gov.uk

© Crown copyright 20221

The text of this document may be reproduced (excluding logos) under and in accordance with the terms of the [Open Government Licence](#).

Without prejudice to the generality of the terms of the Open Government Licence the material that is reproduced must be acknowledged as Crown copyright and the document title of this document must be specified in that acknowledgement.

Any enquiries related to the text of this publication should be sent to Ofgem at:
10 South Colonnade, Canary Wharf, London, E14 4PU. Alternatively, please call Ofgem on 0207 901 7000.

This publication is available at www.ofgem.gov.uk. Any enquiries regarding the use and re-use of this information resource should be sent to: psi@nationalarchives.gsi.gov.uk

Contents

1. Introduction	5
Background	5
2. PCD principles	7
Section summary	7
3. PCD specification and types	9
Section summary	9
4. PCD delivery status	11
Section summary	11
5. Adjustments to allowances	13
Section summary	13

Mechanistic PCDs	13
Evaluative PCDs	13
6. PCD reporting	17
Section summary	17
Background	17
Evaluative PCD reporting requirements	17
7. Process for the assessment of PCD delivery and allowance adjustments	21
Section summary	21
Mechanistic PCDs	21
Evaluative PCDs	22
Supplementary Questions	24
Index of Appendices	25
Appendix 1: Definitions	26
Definition of PCD terms	26
Appendix 2: Illustrative scenarios	28
Appendix 3 – Gas Transmission: Supplementary PCD Reporting Requirements for Hatton - Compressor emissions Re-opener and Price Control Deliverable (CEPt)	32
Appendix 4: Cyber Resilience PCD Reporting Guidance	33
Appendix 5 – Gas Transmission: Supplementary Re-opener Reporting Requirements - Final Option Selection Report	34

1. Introduction

Background

1.1. Price Control Deliverables (PCDs) are a key component of the RIIO-2¹ framework. Under our framework for PCDs, price control funding is linked to the delivery of outputs specified in the licence. This framework provides for the adjustment of the level and timing of allowances in the event the output is not delivered, not delivered to the specification required, or delivered late.

1.2. We are publishing this document in line with Special Conditions 9.3 ~~(Price Control Deliverable Reporting Requirements and Methodology Document)~~ that apply to the Gas Distribution (GD), Gas Transmission (GT) and Electricity Transmission (ET) sectors (effective from 1 April 2021), and in line with Special Condition 9.3 of the Electricity Distribution (ED) sector (effective from 1 April 2023).

1.3. This document sets out the following:

- The types of PCDs we will use to hold network companies to account for **delivery of outputs linked to** price control funding, namely evaluative and **Mechanistic** PCDs;
- ~~The principles that we will use when assessing delivery of PCDs and any adjustments to allowances~~ underpin our use of PCDs;
- ~~The types of PCDs we will use to hold network companies to account for price control funding;~~
- ~~Possible outcomes of our assessment of delivery of PCDs; and~~
- ~~Our approach to the adjustment of allowances associated with PCDs;~~
- requirements that the licensee must follow in its reporting on evaluative PCDs, including
- ~~Information that the licensee is required to provide; as part of PCD reporting; and,~~
- ~~The process and timelines for our assessment of PCD delivery and allowance adjustments.~~

1.4. Certain PCDs may have additional reporting requirements or may require a different approach to assessment of delivery, and adjustments to associated allowances. Where

¹ For the purposes of this document, RIIO-2 refers to the price controls of the Gas Transportation and Electricity Transmission Licensees, running from 1 April 2021 – 31 March 2026, and the price control of the Electricity Distribution Licensees, running from 1 April 2023 – 31 March 2028.

applicable, these are set out in appendices to this document, and, ~~or in the Regulatory Instructions and Guidance (RIGs)~~. This document ~~is intended to~~ should be read in conjunction with its appendices. ~~The reporting requirements set out in this document do not apply to the Network Asset Risk Metric (NARM).~~

1.5. As specifically provided for in ~~Special Condition 9.3 Price-Control Deliverable Reporting Requirements and Methodology Document licence condition~~, this document, including any appendices, ~~may~~ may be added to or modified by the Authority following the consultation process set out in the licence condition.

~~1.5.1.6.~~ In this Guidance, we use the terms 'Ofgem' and 'the Authority' as well as the terms 'we', 'us' and 'our' interchangeably. Ofgem is the Office of the Gas and Electricity Markets. The Authority is the Gas and Electricity Markets Authority and is the governing body of Ofgem, consisting of executive and non-executive members.

2. PCD principles

Section summary

This ~~section~~ chapter sets out further guidance on the principles that underpin the PCD framework.

~~(all definitions are outlined in Annex 1 of this document and in Special Conditions 1.1.)~~

~~PCD Principles~~

2.1. Our PCD framework is based on the following principles. We will have due regard to these principles when implementing our PCD framework during the RIIO-2 period:

- ~~e~~Each PCD is defined by the output, as specified in the licence², that we expect the licensee to deliver, the date by which the output is to be delivered in full, and the price control allowances associated with that PCD;
- ~~P~~price control allowances associated with each PCD are provided on the condition that the licensee will deliver the PCD as specified in the licence by the delivery date. We will not make an adjustment to allowances if this condition is met;
- ~~I~~f the licensee does not deliver the PCD as specified in the licence on time, the Authority may make a downward adjustment to the price control allowance associated with the PCD so that consumers only pay the efficient costs of work that has been delivered. For the avoidance of doubt, the value of such downward adjustments will not exceed the value of allowances associated with the relevant PCD~~;-~~;
- ~~F~~for ~~e~~Evaluative PCDs, licensees may deliver an alternative specification to the one in the relevant licence condition. In such cases we will adjust allowances downwards to match the efficient cost of delivering the alternative, unless the licensee can demonstrate that:
 - the alternative specification delivers an equivalent or **materially** better Consumer Outcome compared to the original specification in the licence; and

² In relation to certain PCDs the licence specifies the output by reference to a separate confidential document.

- where there are any cost savings compared to the value of allowances associated with the relevant PCD output, the cost savings are attributable to Efficiency or Innovation.

2.2. The onus is on the licensee to demonstrate any cost savings achieved are due to Efficiency or Innovation.

2.3. The work associated with certain PCDs may be subject to incentive mechanisms. These will be set out in the relevant licence conditions and Price Control Financial Model and will take effect in parallel with, and separate from, the funding adjustments under the PCD framework.

3. PCD specification and types

Section summary

This ~~section~~ ~~chapter~~ ~~explains~~ ~~provides~~ ~~guidance on~~ the types of PCDs that Ofgem uses to hold network companies to account for the output(s) that they are funded to deliver through their totex allowances.

3.1. In general, each PCD in the relevant licence condition is defined by the following information:

- ~~t~~The output(s) a licensee is funded to deliver³
- ~~t~~The delivery date of the output(s)
- ~~t~~The totex allowances associated with the output(s)
- ~~h~~How Ofgem will determine any adjustments to associated totex allowances.

3.2. We have created two types of PCDs, Mechanistic and ~~e~~Evaluative:

- **Mechanistic PCDs** are set in cases where work is defined by volumes or numbers of units of deliverables, or activities that are typically repeatable and we can set allowances by reference to the unit costs. The output is typically defined by reference to a volume or number of units to be delivered. In such cases, the reporting requirements are relatively light and the adjustments to allowances for non-delivery of work is ~~intended to be~~ automatic or largely automatic.
- **~~e~~Evaluative PCDs** are set in cases where there is some flexibility in the output to be delivered, either in terms of the scope of works, costs, the specifications delivered, or the timing of delivery. The output is typically defined by reference to the specification of work to be delivered. For ~~e~~Evaluative PCDs, there are more detailed reporting requirements on licensees, and our approach allows for a proportionate ex-post assessment of PCD delivery in accordance with ~~the methodology specified in the licence and~~ this Associated

³ In relation to certain PCDs the licence specifies the output by reference to a separate confidential document.

Document to determine whether an adjustment to allowances is necessary to protect consumers.⁴

⁴ The PCD created by SpC 9.12 (HyNet Front End Engineering Design Price Control⁴ Deliverable) of the Gas Distribution licence, is an exception and this document does not apply. Instead please refer to Final Determinations and the licence.

4. PCD delivery status

Section summary

This ~~section chapter explains~~ **provides guidance on how Ofgem will determine sets out the possible** ~~the~~ delivery statuses **es** ~~which~~ **Ofgem will determine of for** the **PCD** outputs that network companies are funded to deliver.


4.1. The assessment of delivery status for Mechanistic PCDs ~~are~~ **is** based on units or volumes delivered, based on the metric used to specify the PCD in the licence. It is not possible for a Mechanistic PCD to be delivered to a different specification. Licensees are required to report on the number of units or volumes of each Mechanistic PCD that have been delivered in the relevant **R**egulatory **Y**ear.

4.2. Evaluative PCDs may be assigned one or more of the following delivery statuses for reporting and assessment purposes. ~~These terms are defined in the licence.~~

- Fully Delivered. ~~Where the licensee has delivered the output specified in the relevant licence condition on or before the delivery date set out in the relevant licence condition.~~
- Fully Delivered With **An** Alternative Specification. ~~Where the licensee has delivered a different specification to the one set out in the licence, while achieving a Consumer Outcome that is materially equivalent or better than what would have been delivered by the original specification, on or before the delivery date set out in the relevant licence condition⁵~~
- ~~Partially Delivered. Where the licensee has delivered some, but not all, of the works specified in the licence.~~
- ~~Partially Delivered With Alternative Specification. Where the licensee has delivered a different specification to the one specified in the licence, while achieving only a part of the Consumer Outcome that would have been delivered by the original specification, on or before the delivery date set out in the relevant licence condition.~~

⁵ In relation to certain PCDs the licence specifies the output by reference to a separate confidential document.

- Delayed. ~~Where the licensee has not delivered the PCD output by the delivery date specified in the relevant licence condition but intends to deliver in full or part at a later date.~~
- Not Delivered. ~~Where the licensee has not delivered the PCD output by the delivery date specified in the relevant licence condition and does not intend to deliver in full or part at a later date.~~

4.3. We expect licensees to set out their view of the delivery status of each  evaluative PCD as part of the relevant Basic PCD Report (see chapter 6 on PCD reporting). We will form our own view of the delivery status once we have completed our assessment of the information provided by the licensee.

5. Adjustments to allowances

Section summary

This ~~section-chapter sets out~~ provides guidance on our approach to determining the value of any adjustments to totex allowances that Ofgem considers necessary following our assessment of PCD delivery status.

Mechanistic PCDs

5.1. For Mechanistic PCDs, where a licensee does not deliver the volumes or numbers of units of the output by the delivery date, as set out in the relevant licence condition, the value of adjustments to allowances will be calculated in accordance with the formula and parameters set out in the relevant licence condition.

5.2. The value of adjustments to allowances associated with the relevant PCD output will be calculated based upon the data submitted by licensees as part of the annual **Regulatory Reporting Packs** (RRPs), which may be subject to validation by Ofgem. There are no upward adjustments to associated allowances if the licensee delivers more than the volume or number of units of the output.⁶

Evaluative PCDs

5.3. ~~In line with our PCD framework principles~~ Ofgem will not make adjustments to allowances associated with **E**valuative PCDs in the following circumstances:

- ~~The~~ PCD output is assessed by us as Fully Delivered; or
- ~~The~~ PCD output is assessed by us as Fully Delivered With **An** Alternative Specification and any underspends achieved by the licensee relative to associated allowances ~~is-are~~ demonstrated by the licensee to be attributable to Efficiency and/or Innovation.

~~5.4.~~ In all other cases, the Authority will consider making adjustments to the value of allowances associated with the relevant PCD output, ~~taking account of the particular~~

⁶ For the avoidance of doubt, this does not cover the Gas Distribution Repex PCD.

~~characteristics of the PCD, factors outside of the licensees' control, and what was delivered by the licensee in accordance with the methodology set out in Special Condition 3.3 of the Electricity Distribution Licence, and Special Conditions 9.3 of the Electricity Transmission, Gas Transmission and Gas Distribution Licence. based upon the following principles:~~

~~5.5.—Where the PCD is assessed by us as 'Not Delivered', we will reduce allowances by the entire amount associated with the PCD less the efficient costs of undertaking reasonable and necessary work up to the point of cancellation, e.g. upfront engineering assessments. It is the responsibility of the licensee to demonstrate that such costs were reasonable, necessary, incurred efficiently and not funded through other price control mechanisms.~~

~~5.6.—~~

~~5.7.—Where the PCD is assessed by us as 'Delayed', we may re-profile allowances associated with the relevant PCD output to match the profile of actual delivery of work or expenditure with the updated timing for the outputs. Ofgem will only re-profile allowances where doing so would have a material impact upon current and future consumers. If appropriate, we will notify to the licensee an alternative submission date for the Basic PCD Report taking account of the licensee's updated delivery plan. The re-profiled allowances may be subject to an adjustment if the output delivered does not meet the requirements in paragraph 5.3~~

~~5.8.—~~

~~5.9.—Where the PCD output has been assessed by us as Partially Delivered, or Partially Delivered With Alternative Specification (and the licensee can robustly justify that any cost savings are attributable to Efficiency and/or Innovation), and where the proportion of the output or Consumer Outcome associated with the work delivered can be robustly estimated, the value of any adjustments to allowances associated with the relevant PCD output may be determined by Ofgem as follows;~~

~~5.10.—***Adjustment to allowances = ((1 — Proportion of output delivered) * ex ante allowance***~~

~~5.11.—Where paragraphs 5.3, 5.4.1 and 5.4.2 do not apply, and where the adjustment methodology set out in 5.4.3 is not appropriate, we will determine the value of any adjustments to allowances according to the actual work carried out. In doing so we may rely on benchmarking against historical cost data where these are available. Where reliable historical data are not available, we may use bespoke engineering and cost assessment and~~

~~employ qualitative techniques to supplement technical methods to enable a determination of efficient costs.~~

~~5.12.—~~

~~5.13.—The outcome of any adjustment to allowances will not be an increase in the total RIIO-2 allowance associated with the PCD output, as defined in the relevant licence condition or relevant confidential documents.~~

~~5.14.—Where we make an adjustment to allowances, we will determine the proportion of the adjustment that should be attributed to each Regulatory Year of RIIO-2, on a pro-rata basis to match the profile of actual expenditure reported by the licensee.~~

~~5.15.5.4. Ofgem will determine the split between Fast Money and RAV additions for the value of the adjustment to allowances having regard to the original split of the allowance linked to the PCD.~~

~~5.16.5.5. Where applicable, further specifics are set out in the relevant appendices to this document (e.g. Cyber, GT-PAP).~~

~~5.17.5.6. In all cases, we will determine adjustments to allowances using a transparent approach,⁷ having consulted with licensees and other stakeholders. We will take account of all relevant information provided by licensees and other stakeholders. We will take account of any representations made by licensees and other stakeholders in line with our legal duties.~~

Specifically, Ofgem will consult on the wording of its proposed direction for a period of not less than 28 days in accordance with the licence. Ofgem's consultation will include:

- Ofgem's proposed PCD output delivery status~~;~~
- the value of any adjustments to allowances associated with the relevant PCD output~~;~~ ~~and,~~
- the methodology and data used to determine the delivery status and the value of any adjustments to allowances associated with the relevant PCD output.

5.7. If Ofgem makes an adjustment for any relevant evaluative PCD allowance that:

- **is calculated relative to actual expenditure and**
- **adjusts allowances that attract real price effect (RPE) allowances in the PCFM,**

⁷ Subject to requirements for confidentiality.

the Authority will direct allowances adjustments in such a way that, once the RPE allowances calculated in the Price Control Financial Model are taken into account, the total of the adjusted allowances and RPE allowances summates to the relevant actual costs.

6. PCD reporting

Section summary

This ~~section~~ chapter sets out the background on PCD reporting and the evaluative PCD reporting requirements for licensees.

Background

6.1. For all PCDs, licensees are required to submit completed reporting templates and associated commentary as part of the RIIO-2 Regulatory Reporting ~~Templates-Packs~~ (RRP) as directed by the relevant Regulatory Instructions and Guidance (RIGs).

6.2. For Mechanistic PCDs, the reporting requirements are ~~intended to be~~ proportionate and used for the purposes of tracking delivery of PCDs and calculating the value of any adjustments to allowances associated with the relevant PCD output in line with the licence.

6.3. For ~~r~~Evaluative PCDs, the reporting templates ~~are intended to~~ capture high-level information about the status of each PCD on an ongoing basis, including:

- ~~P~~progress towards delivery of the relevant PCD output~~;~~
- likely date of project completion~~;~~
- any external factors that may impact delivery~~;~~
- the use of alternative specifications to deliver the PCD output.

Evaluative PCD reporting requirements

6.4. The licensee must by 31 July of each Regulatory Year, or such later date directed by the Authority, send to the Authority a Basic PCD Report on each ~~e~~valuative PCD for which the delivery date specified in the relevant licence condition was in the previous Regulatory Year. For each Delayed evaluative PCD, licensees must submit a further Basic PCD Report once delivery has been completed in full or in part. ~~For each Evaluative PCD, licensees are required to submit a Basic PCD Report along with the RRP templates due in the regulatory year following the regulatory year in which the delivery date occurred.~~ We also expect the licensee to notify the Authority and provide a further Basic PCD Report on a delayed evaluative PCD by 31 July of the Regulatory Year following:

- the licensee subsequently deciding not to complete in full or in part the delivery of an evaluative PCD previously reported Delayed or
- the PCD being further delayed beyond the end of the price control period in which the licence specified the output was due to be delivered.

6.4.6.5. The Basic PCD Report must include the following information:

- a. PCD identification (e.g. Licence Condition, Scheme Name)†
- b. ~~t~~The licensee's view of the delivery status of the PCD, as outlined in paragraph 4.2†
- c. ~~a~~A brief description of the work actually delivered†
- d. ~~i~~If the PCD has not been Fully Delivered in the view of the licensee, or if the work delivered does not meet the PCD specification, a brief explanation of the reasons for non-delivery or variation†
- e. ~~i~~If the delivery of the PCD has been delayed, a brief explanation of the reason for the delay and a timeline for completion†
- f. ~~A~~An annual breakdown of actual expenditure incurred, on a gross, net before non price control allocation and net after non price control allocation cost basis
- g. the indicative value of any potential adjustments to allowances associated with delivery of the PCD output that may be required. The licensee may wish to indicate which methodology of adjustment set out in the licence it believes would be appropriate.

6.5.6.6. Following our assessment of the Basic PCD Report, we will determine a provisional PCD delivery status and will decide whether to undertake a Full PCD Report Review. Where there is clear evidence and justification that the PCD is Fully Delivered we will not ~~direct the licensee to submit a~~ ~~undertake a~~ Full PCD Report ~~Review~~.

6.6.6.7. Where we have decided to undertake a Full PCD Report Review, we will direct the licensee to submit a Full PCD Report as set out below, which will generally be required ~~within 28~~by no later than 28 days ~~of from~~ the date of the direction. Licensees may request a longer period if that is deemed to be necessary, providing reasons.

6.7.6.8. The required contents of the Full PCD Report will depend on the individual circumstances of the PCD and its delivery status as determined by us. However, minimum required contents by PCD delivery status are given below in paragraphs 6.9 – 6.12.

~~6.8.6.9.~~ In the case of Delayed PCD output delivery, the requirements for the Full PCD Report will include:⁷

- a. ~~Aa~~ detailed description of what has been delivered and when, compared to the outputs in the relevant licence condition⁷
- b. ~~Aa~~ detailed delivery plan setting out the licensee's plans and timelines for completion of the delivery of the PCD output⁷
- c. ~~Tt~~the licensee's explanation of the proportion of the output and Consumer Outcome delivered compared to the requirements of the licence, along with supporting evidence of this⁷
- d. ~~Aa~~n explanation of the reasons for the delay along with details of steps taken to prevent further delays⁷
- e. ~~e~~Expenditure incurred to date, and forecast expenditure⁷
- f. ~~Tt~~the licensee's proposals for any re-profiling of the value of allowances associated with the relevant PCD output.⁷

~~6.9.6.10.~~ In the case of Partially Delivered and Partially Delivered With Alternative Specification, the requirements for the Full PCD Report will include:

- a. ~~Aa~~ detailed description of the work delivered compared to the requirements of the licence⁷
- b. ~~Aa~~n explanation for the partial delivery⁷
- c. ~~Tt~~the licensee's view of the proportion of output and Consumer Outcome delivered, including supporting evidence and analysis⁷
- d. ~~Tt~~the licensee's view of the efficient cost of delivering the specification that was actually delivered, along with supporting information⁷
- e. ~~Tt~~the licensee's proposals for any adjustments to allowances.

~~6.10.6.11.~~ In the case of Fully Delivered With ~~An~~ Alternative Specification, the requirements for the Full PCD Report will include:

- a. ~~Tt~~the licensee's explanation of how the Consumer Outcome delivered by the alternative specification compares in the short and long term with the original output, along with supporting evidence of this⁷
- b. ~~t~~~~Tt~~he licensee's view of ~~what~~ the efficient cost of delivering the alternative specification, along with supporting evidence⁷

- c. ~~T~~he licensee's actual incurred expenditure of delivering the alternative specification (if different from the above), along with supporting information~~;~~
- d. ~~W~~here the licensee's actual expenditure is lower than the value of allowances associated with the relevant PCD output, a statement of whether the licensee considers the savings achieved relative to the allowances is due to Efficiency and/or Innovation along with supporting evidence to demonstrate this.

~~6.11-6.12.~~ In the case where the output is Not Delivered, the requirements for the Full PCD Report will include:

- a. ~~a~~A statement explaining the reasons for non-delivery including any supporting evidence~~;~~
- b. ~~T~~he licensee's view of the efficient costs of reasonable works that took place leading up to the cancellation or deferral in the consumer interest along with supporting evidence~~;~~
- c. ~~T~~he licensee's actual incurred expenditure in undertaking ~~in~~ the works ~~in (b)~~ (if different from the above).

~~6.12-6.13.~~ -Where the licensee has schemes/projects that are covered by PCDs but also by other mechanisms that require additional information, then the Authority may allow the Full PCD Report to be combined with other reporting requirements.

~~6.13-6.14.~~ Some ~~e~~valuative PCDs may have additional reporting requirements. Where applicable, these are set out in relevant appendices to this document ~~or the licence~~.

7. Process for the assessment of PCD delivery and allowance adjustments

Section summary

This ~~section~~-chapter sets out the process we expect to follow as part of our PCD assessments.

7.1. The aim of the assessment process is to ensure the determination of PCD output delivery status and any adjustments to allowances is efficient, timely, transparent, and proportionate with respect to individual PCDs.

Mechanistic PCDs

7.2. For Mechanistic PCDs, our assessment of delivery will be based on data reported by licensees in the ~~PCD tracker template~~relevant tables that forms part of the RRP. Table 7.1 below sets out the assessment process for Mechanistic PCDs.

Table 7.1

Process for Mechanistic PCDs
1. Submission of PCD tracker templaterelevant tables as part of the Regulatory Reporting Packs
2. Assessment including supplementary question (SQ) process Using the data from the RRP, Ofgem will calculate the value of the adjustment to allowances (where required) using the relevant formulae as stated in the relevant licence condition. Ofgem may issue supplementary questions -(SQs), where it is necessary to complete the assessment.
3. Annual Iteration Process Allowances are adjusted via the Annual Iteration Process. When a PCD adjustment is input into the Price Control Financial Model, the resulting revenue adjustment is reflected in the following year. This may occur within the RIIO-2 period, where the final delivery date is within the RIIO-2 period, or as part of the RIIO-2 € close-out process in RIIO-3.

Evaluative PCDs

7.3. For **E**valuative PCDs, our assessments will usually commence upon receipt of the relevant Basic PCD Report. Licensees must submit the report by 31 July following the end of the **R**egulatory **Y**ear in which the PCD was due to be delivered unless otherwise directed by the Authority. For example, if the PCD delivery date is 31 March 2024³, the Basic PCD Report is due to be submitted by 31 July 2023⁴, and the assessment process will commence shortly thereafter. Licensees may submit the Basic PCD report earlier than the 31 July of the relevant year.

7.4. In some cases, the delivery of a PCD output is a trigger for a re-opener submission or is the **R**e-opener submission. In such cases, the PCD assessment will be undertaken as part of the re-opener assessment. For those PCD outputs that form part of a **R**e-opener assessment, the timing of assessments and submissions are specified in the relevant licence condition. Where appropriate we have provided additional guidance on reporting requirements in the relevant appendices within this document or the Re-opener Guidance and Application Requirements Document.

7.5. Table 7.2 below sets out the process for **E**valuative PCDs. We will seek to complete the assessment process within a period of **nine** months ~~or less~~, so that our decision on allowance adjustments can be reflected in the Annual Iteration Process ~~the year following the relevant review window~~. However, we recognise that for a variety of reasons this may not always be possible.⁸

Table 7.2

Evaluative PCD assessment process
<p>1. Preliminary Review</p> <p>Following the submission of the Basic PCD Report, Ofgem to will conduct an initial assessment of whether the delivery of the PCD output complies with the relevant licence condition, using information submitted.</p> <p>Where possible, Ofgem to initially determine if PCD output is:</p> <ul style="list-style-type: none"> • Fully Delivered • Fully Delivered With An Alternative Specification • Partially Delivered • Partially Delivered With Alternative Specification

⁸ Where a PCD relates to work associated with a subsequent **R**e-opener due to take place, we will seek to complete the assessment process as soon as is practicable and in-line with requirements of the associated re-opener.

- Delayed
- Not Delivered.

~~Ofgem to notify to licensee whether Ofgem will undertake a Full PCD Report review.~~
Ofgem may submit supplementary questions to clarify information. ~~If Ofgem can determine the delivery status or statuses using the information available to it, the process moves on to steps 4 or 5.~~

~~Ofgem to notify the licensee whether Ofgem will undertake a Full PCD Report Review.~~

If a Full PCD Report Review is required, Ofgem will initiate discussions with the ~~network company~~ licensee to determine data requirements, ~~and direct the licensee to provide a Full PCD Report, stipulating any specific submission requirements and the date such a report should be provided, which can be no sooner than 28 days from the date of the direction.~~ The licensee may request an extension to the 28 day requirement, providing reasons. ~~and provide additional guidance where appropriate for the Full PCD Report, including whether the 28-day deadline for submission could be extended~~

2. Full PCD Report submission

~~Network company~~ Licensee to submit its Full PCD Report to Ofgem by the specified deadline.

Ofgem may submit supplementary questions to clarify information.

3. Full PCD Review - including supplementary question (SQ) process

Ofgem will carry out a detailed assessment of delivery status and any proposed adjustments to allowances based upon the information from the Full PCD Report, responses to SQs and any other relevant information available to Ofgem.

4. Minded-To Decision (optional)

Ofgem may consult on a minded-to decision if it considers that to be necessary. Otherwise the process will move immediately to the ~~D~~raft ~~D~~ecision (below).

5. Draft Decision

~~Ofgem will consult on its draft decision.~~ - If a direction is considered necessary, Ofgem will consult on the wording of its proposed direction under the relevant PCD licence condition for a period of not less than 28 days in accordance with the licence.

6. Decision

~~Ofgem will publish its decision following consideration of responses received.~~ If necessary, Ofgem will issue a direction under the relevant PCD licence condition ~~following consideration of responses received~~⁹.

7. Annual Iteration Process

~~Adjustments to~~ allowances are ~~adjusted-reflected~~ via the Annual Iteration Process. When a PCD adjustment is input in the Price Control Financial Model, the resulting revenue adjustment is reflected in the following year. This may occur within the RIIO-2 period, where the final delivery date is within the RIIO-2 period, or as part of the RIIO-2 ~~C~~lose-out process in RIIO-3.

7.6. Adjustments to allowances may be made during or after the RIIO-2 period. In assessing the delivery status of ~~e~~Evaluative PCDs and any associated adjustments to

⁹ Depending on the timing of the delivery date, some PCDs may be treated as part of RIIO-2 ~~C~~lose-out. Such ~~an~~ example is ~~the set of~~ Cyber Resilience OT PCDs in the ~~gas distribution, gas transmission and electricity transmission sectors, which will be assessed as part of RIIO-2 Close-out due to its two stage assessment process.~~

allowances, we will consider all relevant, ~~including the most recently available,~~ information. ⁷
~~which~~ This may include information submitted by licensees in their RIIIO-2 Business Plans and
associated documents (including responses to SQs during the RIIIO-2 review process). ¹⁰

Supplementary Questions ~~(SQ)~~

7.7. The SQ process is intended for clarification purposes only. Network companies should not expect to use it as a means of submitting additional information that the Basic PCD Report and Full PCD Report should have included.

7.8. ~~Network companies~~ Licensees will be required to respond to an SQ within 5 or 10 working days, ~~depending on the complexity of the query, unless otherwise specified by Ofgem.~~

Index of Appendices

Appendix	Name of Appendix	Sector	Page No.
1	Definitions	ET, GT, GD, ED	26
2	Illustrative scenarios for adjustments to allowances	ET, GT, GD, ED	287
3	Supplementary PCD Reporting Requirements for Hatton - Compressor emissions Re-opener and Price Control Deliverable	GT	3230
4	Cyber Resilience IT and OT PCD Reporting Guidances	ET, GT, GD, ED	33 (confidential and issued directly to licensees)
5	Re-opener Reporting Requirements - Final Option Selection Report	GT	3432

Appendix 1: Definitions

Definition of PCD terms

Additional terms are defined in Special Condition 1.1 of the relevant licence.

Terminology	Definition
Evaluative PCD	This term is defined in the Special Condition 1.1 of the relevant licence.
Basic PCD Report	means a report the licensee is required to submit in accordance with Special Condition 9.3. submitted in accordance with and paragraph 6.4 of this document, which includes the information specified in paragraph 6.5 of this document. means the report the licensee is required to submit pursuant to paragraph 9.3.3 of Special Condition 9.3.
Full PCD Report	means a report the licensee may be directed to submit in accordance with Special Condition 9.3 submitted in accordance with and paragraphs 6.9-6.12 of this document , as applicable to the individual circumstances of the PCD concerned and its delivery status. means the report the licensee is required to submit pursuant to paragraph 9.3.4 of Special Condition 9.3.
Full PCD Report Review	means Ofgem's assessment of a Full PCD Report.
Mechanistic PCD	means a Price Control Deliverable where the relevant licence condition establishes ex-ante the adjustment that will be made to allowances in a mechanistic manner, where in the case of the associated output has not been not being delivered as specified in the licence. means a Price Control Deliverable where the relevant licence condition states the formulae that calculates an adjustment to allowances.
Efficiency	This term is defined in Special Condition 1.1 of the relevant licence. means investment decision making by the licensee that resulted in lower costs than could have been reasonably expected at

	<p>the time of submitting the RIIO-2 Business Plan for the delivery of the PCD output and associated Consumer Outcome.</p> <p>But does NOT mean costs avoided by delivering a lower Consumer Outcome than the original PCD output, or as a result of external factors such as demand growth, government policy etc.</p>
Innovation	<p>This term is defined in Special Condition 1.1 of the relevant licence. means:</p> <p>Solutions that have been trialled by any licensee as part of a NIA innovation project during the RIIO-1 or RIIO-2 periods; or involves the application of novel technology, systems or processes that were not proven as at the time of submission of the RIIO-2 Business Plans.</p>
Consumer Outcome	<p>This term is defined in Special Condition 1.1 of the relevant licence. means the benefits to existing and future consumers in terms of maintenance of existing levels of, or improvements in the network's capability or resilience, or benefits to consumers in terms of service quality, that would have been delivered by the PCD output over the whole life of the PCD output as specified in the relevant licence condition.</p> <p>In the context of works delivered by the licensee, this means the benefits to customers or consumers in terms of maintenance of existing levels of, or improvements in the network's capability or resilience, or benefits to consumers in terms of service quality, that can be attributed to the works delivered by the licensee over the whole life of the works delivered.</p>

Appendix 2: Illustrative scenarios ~~for adjustments to~~ ~~allowances~~

In this appendix we provide illustrative examples of the potential ~~PCDs, delivery statuses, and~~ adjustments to the value of allowances associated with the PCDs ~~and possible links to re-~~
~~openers~~. These examples are purely illustrative, and Ofgem will determine adjustments to allowances on a case-by-case basis taking account of all relevant information.

Hypothetical example 1a (Delayed ~~and Partially Delivered~~):

Original defined PCD: £200m to deliver 1000MW boundary capability based on newbuild of OHL.

At the delivery date, £160m has been spent to deliver 800MW boundary capability based on the solution defined in the licence, licensee demonstrates that ~~they-it~~ intends ~~s~~ to deliver the remaining 200MW boundary capability late by one year.

Where we have evidence that the delay in delivering the PCD would have a material impact on ~~the~~ Consumer Outcome, we may decide to re-profile allowances to match the new expected delivery profile.

The licensee will ~~be directed to~~ provide ~~another~~ Basic PCD Report after the work is complete. ~~One year later, the licensee has delivered the 1000MW boundary capability late, but otherwise as specified in the licence. Where we have evidence that the delay in delivering the PCD has led to a reduction in Consumer Outcome as compared to if the output had been delivered on time, we may decide to adjust allowances down in line with the methodology set out in the licence.~~

Hypothetical example 1b (Delayed ~~and Partially Delivered~~ ~~With Alternative Specification~~)

Original defined PCD: £6m for installation of ~~two additional 33kV circuit breakers and two 33kV cable circuits between two specified sites, 33kV equipment and transformation on site and replacement of both 132/33kV transformers with 90MVA units, including associated 33kV cables. The investment is~~various assets expected to release 27MW demand capacity.

At the delivery date specified in the licence, in this example 31 March 2026, not all assets have been installed. By 31 July 2026, when the Basic PCD Report is due to be submitted, the licensee is still undertaking the works. As it intends to carry out further installations, it must assign the PCD the status Delayed. The licensee completes the programme of works by 15 August 2026, albeit to a different specification than set out in the licence, releasing 25 MW demand capacity. ~~It does not intend to complete delivery at a later date, it would assign the PCD the status Partially Delivered.~~

~~installation is complete, Delayed, as this was the PCDs' status on the last day of the Regulatory Year the report refers to.~~ The licensee ~~will~~ provides another Basic PCD Report once the work is complete, assigning the statuses ~~that covers the Regulatory Year in which delivery was completed; the statuses assigned would then be~~ Delayed and Partially Fully-Delivered With Alternative Specification. Ofgem will adjust allowances to take account of the fact that only part of the Consumer Outcome in terms of capacity released has been achieved. In this example case, it finds that the delay has not had a material impact on the Consumer Outcome, and will therefore not adjust allowances further.

Hypothetical example 2 (Fully Delivered With An Alternative Specification):

Original defined PCD: £200m to deliver 1000MW boundary capability based on newbuild of OHL.

At the delivery date, £160m spent to deliver 1000MW boundary capability based on a different specification than that specified in the PCD licence condition.

If the licensee can demonstrate that the cost savings of £40m is attributable to Efficiency or Innovation, we will not make any adjustments to allowances. Otherwise, we will assess the efficient costs of delivering the alternative specification, using the information and tools available to us. We will then adjust allowances downwards such that the allowance matches the assessed efficient costs.

Hypothetical example 3 (Partially Delivered):

Original defined PCD: £5m~~M~~ to install 50 new novel ~~h~~Instrument Transformers (ITs).

At the delivery date, £4m spent to install 46 new novel ITs. Where ~~at the end of the period~~ the licensee ~~has replaced 46 Its for £4m and~~ has not needed to replace the additional 4 ITs as

a result of **Efficiency or Innovation** ~~an Efficient or Innovative decision~~ (e.g. for this example - site rationalisation), we may follow two paths:

If the licensee can demonstrate that the cost savings of £1m ~~is~~ **are** attributable to Efficiency or Innovation (e.g. justified site rationalisation), ~~and the Consumer Outcome delivered by the programme is equivalent or better than would have been achieved if the licensee had delivered the output as specified in the relevant special condition,~~ we will not make any adjustments to allowances.

Otherwise, we will assess the efficient costs of delivering the 46 ITs, using the information and tools available to us. We will then adjust allowances downwards such that the allowance matches the assessed efficient costs of delivering the 46 ITs.

Hypothetical example 4 (Not Delivered)

Original **defined** PCD: investment of £4m to deliver 11MVA of capacity, equivalent to 150 ultra-rapid (150kw+) chargers at one Motorway Service Area, as part of a wider £20m programme to deliver 56MVA of capacity across 7 sites.

At the delivery date, none of the capacity has been delivered at the site specified, and £0.1m have been spent on system analysis. The programme was cancelled because the site in question required upgrades to the transmission system instead of the upgrades to the distribution system originally expected.

If the licensee can demonstrate that the expenditure on system analysis was efficient and necessary, we will adjust allowances downwards by £3.9m so that the licensee retains the efficient costs incurred in undertaking those activities.

Hypothetical example 45 (Not Delivered):

Original defined PCD: £200m to deliver 1000MW boundary capability based on new build of OHL.

Construction is cancelled due to innovations in other areas of the network mitigating the need for new investment. £1m spent on desktop studies and system analysis that led to the decision to cancel the project.

If the licensee can demonstrate that the expenditure on desktop studies and system analysis was efficient and necessary, we will adjust allowances downwards by £199m so that the licensee retains the efficient costs incurred in undertaking those activities.

Hypothetical example 6 (new PCD following accepted re-opener application):

The Authority, following consultation, issues a direction on a licensee's re-opener application that includes a decision to provide allowances to establish 10 new transformers with associated infrastructure ahead of need, and to attach an evaluative PCD to the associated allowances.

The Authority modifies the licence to include the associated outputs and the delivery dates and amends the RIGs to include the relevant reporting requirements. If additional reporting requirements are necessary, the Authority modifies this document in accordance with the procedure set out in the licence, to add an Appendix that sets out the additional reporting requirements that apply to the newly created PCD.

Appendix 3 – Gas Transmission: Supplementary PCD Reporting Requirements for Hatton - Compressor emissions Re-opener and Price Control Deliverable (CEPt)

Paragraph 6.45. of this document requires network companies to submit a Basic PCD Report.

With reference to Special Condition (SpC) 3.11 Compressor emissions Re-opener and Price Control Deliverable (CEPt), where the PCD output for Hatton is “an Emissions compliant compressor procured for 41MW mechanical output power,” we require that the Basic PCD Report includes the following additional information:

If the relevant status is Fully Delivered or ~~Equivalent Delivery~~ Fully Delivered With An Alternative Specification, the Basic PCD Report must provide:

- ~~a~~An Asset Acceptance report for the new compressor unit from the National Grid Gas System Operator team¹¹ in line with NGGT’s T/PM/RE/18 process¹²;
- ~~c~~Confirmation of the capacity of the new compressor unit, either via a commissioning report or via specification documents or similar received during the procurement process; and
- ~~c~~Confirmation from the relevant environmental regulator of the acceptance of the new unit as meeting emissions compliance requirements, ideally in the form of an operating licence issued for the site.

11 NGGT acts as both Transmission Owner (TO) and System Operator (SO) for the Gas Transmission sector. In its role as TO, NGGT owns and maintains the network assets. It is responsible for maintaining the integrity of the networks, developing asset replacement schedules and for providing transmission services to the SO. In its role as SO, NGGT is responsible for the day-to-day operation of the national transmission system, including balancing supply and demand, maintaining satisfactory system pressures and ensuring gas quality standards are met.

12 NGGT’s management procedure for NTS Commissioning, Operational and Asset Acceptance.

Appendix 4: Cyber Resilience IT and OT PCD Reporting Guidances

This appendix is confidential and has been issued directly to licensees.

~~In relation to PCDs set under Special Condition 3.2 (Cyber resilience operational technology Re-opener, Price Control Deliverable and use it or lose it allowance) and Special Condition 3.3 (Cyber resilience information technology Re-opener and Price Control Deliverable), the requirement for a Basic PCD Report will be satisfied by compliance with the reporting requirements in those special conditions.~~

~~Our assessment of PCDs set under Special Condition 3.2 will take place as part of close out of the price control. This is because of the two stage assessment that is required. We will first consider whether any adjustment is required as a result of following the methodology for Evaluative PCDs in this document. We will then consider whether any Use It Or Lose It Adjustment is required. The Use It Or Lose It Adjustment will be determined by assessing the licensee's total efficient spend for qualifying cyber resilience OT activities against the total use it or lose it allowance for cyber resilience OT. We will make one adjustment, if required, to reflect both assessments.~~

Appendix 5 – Gas Transmission: Supplementary Re-opener Reporting Requirements - Final Option Selection Report

With respect to:

- Special Condition 3.10 Bacton terminal site redevelopment Re-opener and Price Control Deliverable (BTRt); and
- Special Condition 3.11 Compressor emissions Re-opener and Price Control Deliverable (CEPt);
- Special Condition 3.12 King's Lynn subsidence Re-opener and Price Control Deliverable (KLSt).

If the relevant status in each case is Fully Delivered or ~~Equivalent Delivery~~ Fully Delivered With An Alternative Specification, NGGT must submit a Final Option Selection Report (FOSR) for the Bacton Terminal Site Redevelopment, Wormington, King's Lynn, St Fergus, Peterborough and Huntingdon and King's Lynn Subsidence projects to enable the Authority to make a determination for re-opener applications under the respective licence conditions. The FOSR should be based on the Engineering Justification Paper (EJP) document templates and guidance issued as part of the RIIO-2 Investment decision pack ¹³. The FOSR should incorporate learning taken from the RIIO-2 process as well as the project specific points noted below in this document.

Bacton FOSR Specific Guidance– SpC 3.10 Bacton terminal site redevelopment Re-opener and Price Control Deliverable (BTRt)

The FOSR for Bacton should build upon the RIIO-T2 EJP and CBA, and must:

- Present credible Opex profiles for all options that incorporate efficiencies in site operation realised by the replacement or removal of assets. A document describing how the Opex profiles have been generated and the basis for all assumptions used must be provided as part of the submission.
- Investigate options that minimise the number of valve interventions for all asset health options in line with predicted UKCS decommissioning dates. This work must demonstrate that all of the equipment retained, refurbished or replaced is required to meet the predicted flows from the upstream supplying terminals. This work should be submitted at a "per incomer" level to ensure that all incomer connections are required to meet the

¹³ <https://www.ofgem.gov.uk/publications-and-updates/riio-2-final-data-templates-and-associated-instructions-and-guidance>

predicted flows and should demonstrate the value in retaining the current number of incomers to the site. Use updated FES and Network Capability modelled flows in the CBAs.

- Provide an updated breakdown of the capital costs and associated risk, project management, and other such contingencies in line with the RIIO-T2 EJP guidance, along with the basis of any calculations and details of any assumptions.

It is recognised that the NTS pipeline infrastructure could be repurposed in the future as parts of the system are decommissioned. Currently the belief is that the assets could be re-purposed for use in Hydrogen or Carbon Capture and Storage systems. With the potential for the repurposing of Bacton post Cessation of Production (COP), the project team should consider if low cost/no cost decisions can be made during this phase of the project to help enable future repurposing of the site. For clarity the intention of this guidance is not to change the design intent of the project but where it is possible, attempts should be made to select materials or equipment that are compatible with increased Hydrogen in Methane or CO₂ compositions if there is little/no cost or schedule impact on the project.

To help inform the discussion around future re-purposing of the site it is requested as part of the FOSR to deliver the following documents/information to help inform future investment decisions at the site:

- A review of the potential upper concentration limits for Hydrogen in Methane if no changes to metallurgy or equipment are made and the terminal is specified for Methane only service.
- The potential cost implications to increase the Hydrogen in methane concentration from what could be achieved by a standard methane service design to higher purity levels. This should be completed in a stepwise manner selecting sensible break points based on equipment tolerance.
- The issues that would arise if the terminal is designed for methane service only and subsequently re-purposed to transport CO₂.
- A summary of any other potential options identified to allow the equipment onsite to be repurposed post COP.

This work that considers future repurposing of assets should be a “light touch” review of the proposed options given the unknown future usage case for the site and this activity should not lead to any significant cost increases or schedule challenges for the project. A decision on the project direction and spend associated with equipment changes to support future re-use of the site will be made as part of the options selection review process by Ofgem.

Common Compressor Emissions Requirements - SpC 3.11 Compressor emissions Re-opener and Price Control Deliverable (CEPt)

Each FOSR should build upon the existing material for the RIIO-2 submission in terms of EJP and Cost Benefit Analysis (CBA). The FOSR and supporting documents for compressor project submission must address the items below, alongside any further information provided.

Project Options

- Consider options that look to repurpose existing equipment with the aim of minimising capital costs and improving the CBA. The project should consider as a minimum:
 - options to retrofit a modern engine to the non-compliant units;
 - options that build on unused or decommissioned slots at compressor sites;
 - variations on de-rating and/or applying abatement on the existing non-compliant units.

These items are particularly relevant when future compressor usage is predicted to be marginally above or below the IED derogation limit of 500hrs/yr on a 5 yr rolling average, however as with other options the application of the above options is subject to the approval of the relevant environmental regulator.

- Consider variations on spend for options that derogate the non-compliant units to 500hrs/yr with the aim of minimising overall capex spend and maximising CBA value.
- Consider options that look to boost the availability of the compliant units at or linked to the site to minimise the number of hours the non-compliant unit would have to operate. Improving the availability of the machines at the site may reduce the requirement for the non-compliant units to run and allow derogations to be put in place. This approach could avoid significant new build projects for compressors that would operate close to the derogation limit of 500 hrs.
- Provide a detailed site availability model for each proposed option that can be audited by a third party to ensure that the assumptions built into this key metric are inline with accepted values for Gas Transportation and wider Industrial users of Gas Turbine Compressor units. The availability model should be based on run hour predictions based on the Network Capability Model.
- Provide an updated breakdown of the capital costs and associated risk, project management, and other such contingencies in line with the RIIO-T2 EJP guidance.
- Provide core engineering documents used to build the Capex estimates for the options considered at the site, such as material takeoff for bulk materials, OEM package quotes, Process Flow Diagrams and manpower estimates. A document detailing the cost

estimating method alongside the input data, “norms” and calculations must also be supplied to allow the estimates to be scrutinised.

CBA Development

- Use the most recently published Network Capability modelled flows in the CBAs. This must include localised flow predictions for each site as well as information on the wider system impacts.
- Compare and justify the frequency, magnitude, and cost of constraints forecast for each option against RIIO-2 and RIIO-1 outturn data.

St Fergus Specific Requirements - SpC 3.11 Compressor emissions Re-opener and Price Control Deliverable (CEPt)

St Fergus FOSR must be supported with the following:

- A detailed statement setting out the steps taken by NGGT to ensure a fair outcome for current and future consumers in terms of the impact of the proposed investment on charges, including any modifications to the UNC charging provisions put forward and progressed by NGGT.
- A re-worked constraints model that gives levels of Section I costs incurred that are comparable with the historical operation of the site. This must use the Network Capability Model as the basis to build a view on Section I costs and follow a common method used across the network.
- Provide the core engineering documents (e.g. layout drawings, Process Flow Diagrams (PFDs), Material Take Offs (MTO), manpower estimates etc) used to build the Capex estimates for the options considered at the site. A document detailing the cost estimating method alongside the input data, “norms” and calculations must also be supplied to allow the estimates to be scrutinised.
- A clear breakdown of how the specific works proposed for the compressor emissions, subsidence and asset health projects for the site differ to avoid double-counting between these projects.

It is recognised that the NTS pipeline infrastructure could be repurposed in the future as parts of the system are decommissioned. Currently the belief is that the assets could be repurposed for use in Hydrogen or Carbon Capture and Storage systems. With the potential for the repurposing of St Fergus post (COP), the project team should consider if low cost/no cost decisions can be made during this phase of the project to help enable future repurposing of the site. For clarity the intention of this guidance is not to change the design intent of the

project but where it is possible, attempts should be made to select materials or equipment that are compatible with increased Hydrogen in Methane or CO₂ compositions if there is little/no cost or schedule impact on the project.

To help inform the discussion around future re-purposing of the site it is requested as part of the FOSR to deliver the following documents/information to help inform future investment decisions at the site:

- A review of the potential upper concentration limits for Hydrogen in Methane if no changes to metallurgy or equipment are made and the terminal is specified for Methane only service.
- The potential cost implications to increase the Hydrogen in methane concentration from what could be achieved by a standard methane service design to higher purity levels. This should be completed in a stepwise manner selecting sensible break points based on equipment tolerance.
- The issues that would arise if the terminal is designed for methane service only and subsequently re-purposed to transport Hydrogen or CO₂.
- A summary of any other potential options identified to allow the equipment onsite to be repurposed post COP

This work that considers future repurposing of assets should be a “light touch” review of the proposed options given the unknown future usage case for the site and this activity should not lead to any significant cost increases or schedule challenges for the project. A decision on the project direction and spend associated with equipment changes to support future re-use of the site will be made as part of the options selection review process by Ofgem.

King’s Lynn Subsidence FOSR Guidance – SpC 3.12 King’s Lynn subsidence Re-opener and Price Control Deliverable (KLSt)

The FOSR for King’s Lynn Subsidence should build upon the RIIO-T2 EJP and CBA, and must:

- Quantify the rate of deterioration and the probability of failure to demonstrate the need for a major investment rather than mere ongoing monitoring.
- Demonstrate a thorough optioneering process to address the risks posed by the current King’s Lynn bi-directional pipework, including reference to the probability of failure. All options considered must have a cost estimate built to an equivalent accuracy to allow a fair comparison to be made.
- Use updated FES and Network Capability modelled flows in the CBAs.
- Include consideration of the probability of failure of the King’s Lynn bi-directional pipework.

- The CBA must also consider all key drivers of investment including safety and environmental risks and clearly set out any assumptions.
- Provide an updated breakdown of the capital costs and associated risk, project management, and other such contingencies in line with the RIIIO-T2 EJP guidance, and provide the basis of any calculations and key assumptions.