

# Guidance

---

## **Carbon Capture Usage and Storage: cost assessment guidance for Transport and Storage Companies**

---

Publication date: 11 December 2024

---

Contact: Henry Kemp

---

Team: Low Carbon RAB

---

Email: [rabmodel@ofgem.gov.uk](mailto:rabmodel@ofgem.gov.uk)

---

This guidance document is for developers, Licensees and other market participants to understand how Ofgem as the Economic Regulator intends to assess costs submitted to it for approval under the Carbon Capture Usage and Storage (CCUS) Transport and Storage Company (T&SCo) Regulated Asset Value (RAV) Licence ('the Licence').

This guidance document is intended to assist potential Licensees with their applications and sets out a number of processes that Ofgem expects to apply. However, it is subordinate to the Licence itself and Ofgem's statutory duties. This guidance document has been specifically created for CCUS Transport and Storage (T&S) Networks ('the Networks'). It is for guidance only and is not intended to be a legal document. Licensees should seek their own legal and technical advice.

This guidance document is intended to be read alongside the Licence. Where there is any conflict between this guidance document and the Licence, the Licence stakes precedence. Capitalised terms in this guidance document are as defined in the Licence unless the context suggests otherwise, and we may replicate any definitions in this guidance document for clarity.

## Guidance – CCUS: cost assessment guidance for T&SCo.

---

© Crown copyright 2024

The text of this guidance 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 guidance 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.

This publication is available at [www.ofgem.gov.uk](http://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](mailto:psi@nationalarchives.gsi.gov.uk)

## **Contents**

|   |    |
|---|----|
| 1. Executive Summary .....                              | 4  |
| 2. Introduction .....                                   | 5  |
| 3. Business planning and defining Value for Money ..... | 7  |
| 4. Cost assessment process .....                        | 9  |
| 5. Uncertainty Mechanisms .....                         | 18 |
| 6. Cost reporting .....                                 | 22 |

## **1. Executive Summary**

1.1. This guidance document has been written to describe the process and principles to which Ofgem currently expects to have regard when assessing costs submitted by licensed T&SCos operating the Networks. It applies to cost assessment activities we expect to undertake as part of periodic reviews, as well as relevant Licence re-openers, and reporting against allowances set at Licence award.

1.2. Our approach to cost assessment is aligned with the National Audit Office (NAO) [definition of Value for Money \(VfM\)](#), for both users of the Networks (Users) and consumers, where appropriate. Good VfM is the optimal use of resources to achieve the intended outcomes. 'Optimal' means 'the most desirable possible given expressed or implied restrictions or constraints'. It is important to note that VfM is not simply about achieving the lowest up front costs.

1.3. The approach to cost assessment is based on ex-ante statements of costs which allows us, as the Economic Regulator, to set an appropriate ex-ante allowance with incentivisation and risk sharing. We expect to base our determinations on:

- the Secretary of State for the Department for Energy Security and Net Zero's ('the Secretary of State') original costs assessment work
- any relevant ongoing cost assessment work being carried out by the Secretary of State
- the views and submissions of the Licensee (which we expect to include appropriate market testing)
- statutory or voluntary consultations if deemed necessary
- our own technical analysis of relevant submissions

## **2. Introduction**

### **Legislative context**

- 2.1. Ofgem is the independent energy regulator for England, Scotland and Wales (Great Britain). We are also the Economic Regulator for CCUS activity in Northern Ireland. We are governed by the Gas and Electricity Markets Authority ('the Authority'). The terms "Ofgem", "the Authority," "we", "us" and "our" are used interchangeably in this guidance document.
- 2.2. The Authority's statutory powers, duties and objectives in relation to the economic regulation of a Licensee are set out in the Energy Act 2023 ('the Act'). Broadly, the Authority's principal objectives in relation to CCUS are to:
- protect the interests of current and future Users of the Networks
  - protect the interests of any consumers whose interests the Authority considers may be impacted by the exercise of its functions
  - promote the efficient and economic development and operation of the Networks, having regard to the need for the Licensee to be able to finance its licensable activities
- 2.3. The Authority must carry out its functions in the manner that it considers is best calculated to further the principal objectives by:
- promoting effective competition between persons engaged in, or in commercial activities connected with, the licensable activities
  - promoting the resilience of the Networks
  - protecting the public from dangers arising from the construction, operation and decommissioning of infrastructure used for the purposes of the licensable activities
- 2.4. In carrying out our functions, we must have regard to the principles under which regulatory activity should be:
- transparent
  - accountable
  - proportionate
  - consistent
  - targeted only at cases in which action is needed
- 2.5. We must also have regard to any other principles that represent best regulatory practice, and of the need to contribute to sustainable development.
- 2.6. "Licensable activities" as defined in the Act are:
- operating a site for the disposal of carbon dioxide by way of geological storage

## Guidance – CCUS: cost assessment guidance for T&SCo.

---

- providing a service of transporting carbon dioxide by a licensable means of transportation.

2.7. The Authority must, in carrying out its functions, also have regard to:

- the need to assist the Secretary of State's compliance with its duties under sections 1 and 4(1)(b) of the Climate Change Act 2008 (carbon targets and budgets)
- the specific targets under the Climate Change (Scotland) Act 2009, the Climate Change Act (Northern Ireland) 2022 and the Environment (Wales) Act 2016
- the strategic priorities set out in the CCUS strategy and policy statement (as defined in the Act)

2.8. In exercising its functions in relation to licensable activities, the Authority may have regard to the desirability of the efficient and effective operation of the energy system (or any part of it) in the United Kingdom or any part of the United Kingdom.

2.9. Economic regulation works to ensure that the Licensee, as a monopoly supplier of T&S services, delivers these VfM services to Users fairly. Once a Licence is granted, we (as the Economic Regulator) are responsible for ensuring that Users' charges represent good VfM by only exposing Users to costs which are economic, efficient and effective.

### Network characteristics

2.10. The Networks underpin the Government's strategy for CCUS clusters through collecting and storing the CO<sub>2</sub> captured by emitters in these clusters. The Networks consist of:

- branch and trunk pipelines onshore that collect CO<sub>2</sub> from connected emitters (i.e. Users)
- compressors which move CO<sub>2</sub> through the Network
- an offshore pipeline that brings CO<sub>2</sub> to the well head
- wells which allow the CO<sub>2</sub> to be piped into the storage sites
- any other aspects required to efficiently operate the Network

### Document Scope

2.11. This guidance document describes the processes and principles that we expect to follow to assess the cost of work proposed by Licensees to determine allowances that should be granted and to log the actual cost of this work for the purposes of calculating the RAV, or Shadow RAV (SRAV).

2.12. The processes and principles described herein are intended to be applied wherever we are required to assess the costs of work to be carried out by the Licensees, including, but not limited to:

- Licence re-opener applications which require a new, or reassessment of an existing, allowance
- Periodic Reviews which include all anticipated spend within the forthcoming regulatory period

### **3. Business planning and defining Value for Money**

**1. Throughout the Licence, conditions reference Economy, Efficiency and Effectiveness which provide the basis for a VfM assessment as set out in this section.**

**2. Conditions in the Licence to which this section is most relevant includes section H28 'Periodic Reviews'.**

#### **Business planning process**

- 3.1. The Periodic Review Business Planning process is the mechanism for the Licensee to submit all forecasted costs for the upcoming regulatory period, from which allowances can be calculated.
- 3.2. To enable this, at least 24 months ahead of the beginning of each Regulatory Period, the Licensee should submit to us all costs for the upcoming Regulatory Period in the form of a Business Plan and accompanying templates. In line with other regulated networks, such as RIIIO, costs will be determined on an ex-ante basis. We will consider the application of uncertainty mechanisms for unexpected changes during the Regulatory Period if the Licensee has provided satisfactory justification for the application of these mechanisms.
- 3.3. We will assess the total spend identified by the Licensee following our cost assessment process. Alongside Periodic Reviews, the Licence also contains a number of re-openers (see section 0). During construction and in the First Regulatory Period, these re-openers reflect the original agreed project scope and risk allocation for each Network between the Secretary of State and the Licensee. Costs associated with these re-openers may be assessed outside of the Periodic Review, although depending on the timing of the trigger of any relevant re-openers we may include our assessment as part of the Periodic Review

process (for example, if a re-opener request is concurrent with the Periodic Review process).

- 3.4. Where we merge the assessment of a re-opener with the assessment of the Business Plan, we expect that it will only be done to expedite the administration of the Licence and will not be done if it will have a detrimental impact on the work cost or schedule.
- 3.5. At each Periodic Review we will scrutinise the Licensee's Business Plan submission and approve costs which the Licensee has demonstrated to be good VfM. At this review, we would also expect the Licensee to report its assessment of upcoming major Capex investments and Devex proposals for expansion.

### What is VfM?

- 3.6. Good VfM is the optimal use of resources to achieve the intended outcomes. 'Optimal' means 'the most desirable possible given expressed or implied restrictions or constraints'. VfM is not about achieving the lowest initial price. The NAO [uses three criteria to assess VfM](#):

- 3.6.1. Economy is minimising the cost of resources used or required (inputs), or spending less. Ensuring spend is economic means that Users' exposure (and consumers', where appropriate) to the overall size of the RAV is controlled to deliver lower bills for the service they receive. The Licensee may be able to demonstrate that its proposed costs are economic by showing that the resources are strictly necessary to deliver the Network, and by demonstrating that the specification has been suitably challenged to deliver an appropriately robust Network without 'gold-plating'.
- 3.6.2. Efficiency is the relationship between the output from goods or services and the resources to produce them, or spending well. Delivering projects efficiently means Users (and consumers, where appropriate) face lower costs for the services they receive as a result of the developer negotiating well with its supply chain. A Licensee may be able to demonstrate that a cost it proposes is economically efficient by introducing competitive pressures to secure the most cost-effective price for the relevant good or service. Clear and transparent tendering processes and reviews are essential to demonstrate that the most cost-effective price has been secured, and we expect evidence of this to be submitted to demonstrate that costs are efficient.
- 3.6.3. Effectiveness is the relationship between the intended and actual results of spending (outcomes), or spending wisely on the right things. Effective spend means that Users get the service they actually need, so that consumers (of energy and industrial products) are able to benefit from the low carbon products and services that they fund through Network costs. This means that the Licensee may be able to demonstrate that a solution can be most appropriate, even if it is not the cheapest, as it is the solution most likely to



fulfil the agreed scope. For the avoidance of doubt, a solution is ineffective by definition if it causes the Licensee to:

- Breach the terms of the Licence or the CCS Network Code;
- Fail to comply with other regulatory or legal obligations; or,
- Breach the terms of an agreement, framework, or obligation made with, or imposed by, HMG.

## **4. Cost assessment process**

### **Process outline**

4.1. When determining new (or re-opening existing) allowances, the proposed project spend will be assessed following an assessment gate process with the following stages:

- an Initial Re-Opener Submission (IRS, when re-opening existing allowances)
- a Strategic Outline Case (SOC)
- Outline Business Case (OBC)
- Final Business Case (FBC)

Cost estimates at later gates will mature per [IPA guidance](#) and [cost estimating requirements](#) (see *Stage gate process for new capex spend* and Figure 1). The purpose of the process is to define the desired outcomes of any investment, make sure all viable options have been considered, build confidence in the cost and deliverability of the proposed project and allow us to set an allowance for the work.

4.2. As the costs to develop an SOC may be material for the Licensee, allowances for producing future SOCs (and potentially OBCs/FBCs) may be set during Periodic Reviews instead of via an IRS if the Licensee has a reasonable degree of clarity over future developments. Gate reviews may or may not fall during Periodic Reviews and Licence re-openers may be used to allow the Licensee to deliver an efficient project without being tied to fixed Periodic Review periods.

4.3. The following sections describe the approach that we expect to take to review the project as it progresses through the gates outlined in the IPA project process.

4.4. We will assess applications in a timely manner, but our ability to do so is contingent upon candid provision of complete and accurate information by the Licensee.

**Stage gate process for new capex spend**

**1. Strategic outline case**

- Class 5 cost estimate
- +50% -20%
- High level needs case justification
- <5% project maturity

**Strategic outline case**

- Class 4 or 3 cost estimate
- +30% -15%
- <30% project maturity
- ER assesses options analysis wrt. Effectiveness and economy

**Strategic outline case**

- Class 3 or 2 cost estimates
- +10% -10%
- ER assesses final costs wrt. efficiency



Figure 1 – Cost maturation as described in IPA Cost Estimation Guidance

**Initial Re-Opener Submission**

1.1. The formal start of the Re-Opener process is the IRS. This should align with relevant windows or triggers, agreed and detailed in the Licence. The IRS should include a robust

## **Guidance – CCUS: cost assessment guidance for T&SCo.**

---

justification that relevant re-opener triggers have been met and that there is a legitimate case for work under the economic regime.

1.2. The purpose of this stage is to:

- check that the Licensee's proposal is allowed by the Licence
- make a preliminary assessment of the need for the projects
- assess the Licensee's proposal for undertaking Concept Selection
- approve estimated cost to build the SOC

1.3. The purpose of the IRS is not to propose a firm option but to propose types or styles of options that the Licensee may develop later.

1.4. The IRS must include a clear statement as to the need for the proposed development expenditure or the problem the Licensee is trying to address. This should be presented in the context of its significance for Users, network assets, alongside any other relevant benefits and any relevant reference to agreed works in the APDP. The affected Users or assets must be identified, and the associated risk should be quantified where possible. The IRS must also include a well justified proposal for all works required to build the SOC.

1.5. If the IRS gate is not appropriate (for example if works in the APDP need to be cancelled, or the Licensee is submitting a Business Plan), the Licensee may proceed directly to a later gate. In this case, we will determine whether the Licensee's proposal is allowed by the Licence at this later gate.

### **Strategic Outline Case**

1.6. Following normal early phase project processes, the purpose of the SOC is to propose the types or style of options that the Licensee proposes to develop during the following stages in the project process. The purpose of the SOC is not to select a firm option that cannot change as the project develops. One of the key outcomes of the SOC is that it should be able to demonstrate the benefits of the investment and this should be done using a robust benefits analysis to demonstrate the value of the proposed outcomes for Users. Where relevant, this may refer back to pre-agreed elements within the Approved Project Development Plan (APDP).

1.7. Per IPA guidance, costs submitted at this stage should be at least class 5 and the Licensee is unlikely to have settled on a single option to deliver the relevant outcomes.

1.8. We will consider the VfM of the SOC in the context of allowances already provided to the Licensee. Where the Licensee's decision to produce an OBC is contingent upon a

## **Guidance – CCUS: cost assessment guidance for T&SCo.**

---

requirement to rework or fix something for which an allowance has already been provided, we will consider the funds already allocated to delivering the relevant output when determining whether the application represents VfM.

1.9. If we approve the SOC, the Licensee should proceed to develop an OBC for the work.

### **Outline Business Case**

1.10. The purpose of the OBC is to narrow the scope of the project by selecting a single option or scheme which will be developed during the FBC to generate a cost estimate that can be used to set the allowance for the project.

1.11. At the OBC stage, the Licensee must submit class 3/4 costs for only the options taken forward from SOC. The purpose of the OBC activities is to refine the options approved by us at the end of the SOC gate to build confidence in the costs, programme and outcomes of the project. The scope of the options considered in the OBC must be clearly described with appropriate technical documentation provided to allow us to conduct a detailed scope assessment of the works and outcomes noted in the OBC. The Licensee must also submit its actual costs incurred in producing the OBC and an estimate of costs to produce the FBC.

1.12. We will determine whether the Licensee's proposal represents good VfM by reviewing the Licensee's submission and through a series of engagements with the Licensee to understand how the decision to select the relevant solution was made when developing the OBC.

1.13. If we determine that costs do not represent good VfM, the Licensee must revise its application to address our concerns. If our concerns are not adequately addressed, we may not allow further costs associated with this work.

1.14. If we determine that costs do represent good VfM, the Licensee will proceed to deliver an FBC for the selected option.

### **Final Business Case**

1.15. The Licensee must submit the final cost estimate for the works with a class 2 (or class 3 in exceptional circumstances) estimate alongside the actual costs incurred in producing the FBC. This submission should include a robust justification of the procurement process followed to efficiently tender the work agreed with us to deliver the selected option at the OBC stage.

1.16. Work should be tendered in accordance with the public procurement principles as set out in The Procurement Act 2023.

1.17. We will assess the efficiency of costs by reviewing the tendering process and bid evaluation. We will consider, amongst other things, whether:

## Guidance – CCUS: cost assessment guidance for T&SCo.

---

- contracts are awarded to the most advantageous tender;
- bid evaluation is transparent, clearly documented, and follows a clear procedure;
- sufficient parties were invited to tender to generate competitive tension; and,
- associated party bids are made on a genuinely arm's length basis and subject to appropriate controls.

1.18. Work may only be procured on a single source basis in exceptional circumstances and the Licensee must provide a robust justification for doing so. The Licensee must demonstrate that the selected contractor is the only viable candidate for completing the work and that tendering the work would be economically disadvantageous for the project.

1.19. Work may not be procured on a single source basis from an Associate of the Licensee.

1.20. If multiple FBCs are submitted around the same time (for example if an FBC for a re-opener is submitted whilst we are determining the allowances for the upcoming regulatory period), we may merge these assessments. This will only be done to expedite the administration of the Licence and will not be done if it will have a detrimental impact on the cost or schedule of the work.

### Application

1.21. The applications must provide evidence to justify why the level of costs is efficient. Additionally, applications must include sufficient cost information to provide evidence to justify why the expenditure is additional to that already approved, either in the initial settlement, through a Periodic Review, re-opener, or other mechanism. The efficient level of costs will be determined at the time of the determination of an application.

1.22. The cost evidence included in the application must:

- use the same cost basis as allowances in the Licence (exceptionally for some major capex projects, we may allow the Licensee to use an updated cost base)
- be clearly labelled and set out in a logical manner, including, where appropriate, instructions on the operation of workbook/database functionality
- contain a sufficient level of detail to clearly demonstrate how overall values were derived and in a way that can be easily replicated, including the use of transparent formulae
- be laid out in a way that is easily comparable with other benchmarks, where applicable, or other data provided by the Licensee to us
- have all relevant assumptions and sources of data used provided, referenced, and clearly justified
- identify and justify key cost drivers explicitly

## Guidance – CCUS: cost assessment guidance for T&SCo.

---

- clearly identify, via a sensitivity analysis at an appropriate level of detail, all uncertainties in forecast cost levels and any potential mitigations
- include outturn data for similar projects, and a risk register and risk model for the specific project, for any allowances requested for project risk
- demonstrate that cost efficiency measures have been identified and their impact fully accounted
- demonstrate additionality (demonstrating the need for additional expenditure beyond that already provided through existing allowances, or that will be provided through other mechanisms)

1.23. The Licensee may request to skip the IRS or to make the submission of an SOC and OBC concurrently in order to expedite the process, for example if it believes that the benefits analysis is robust and simple and the options for carrying out the work are necessarily very limited.

### Devex provision

1.24. At the first assessment gate review, the Licensee must submit the costs incurred in making the proposal.

1.25. If the proposal is not allowable, the application will be rejected. In this case, we will assess the costs incurred by the Licensee in making the relevant application and will approve the economic, efficient, and effective costs, unless we believe that the Licensee had no reasonable grounds for making the application or the costs have already been provided for under another allowance.

1.26. If the proposal is allowable, we will scrutinise the costs incurred in building making the application and those projected for reaching the next gate. We will take account of the circumstances of the Licensee at the time costs were incurred and the natural uncertainty of Devex costs.

1.27. We will approve Devex where they are well evidenced, and we are satisfied that:

- they are economic, efficient and effective
- do not constitute Excluded Project Spend
- they have not already been provided for under another allowance

1.28. Save where the Licence sets a specific mechanism for setting Devex allowances (for example, the Ongoing Devex mechanism), at each gate the Licensee should submit an estimate of costs to reach the next gate (except for FBC where the Licensee will be submitting the final Cost Estimate for the works). We expect to allow actual costs incurred in reaching the subsequent gate, provided that they are equal to or lower than this estimate and all other facts and circumstances remain equivalent. If the Licensee has

provided a robust justification for exceeding this estimate, we may, at our discretion, allow these additional costs.

### Assessment & Verification

*Conditions within the Licence to which this section is most relevant includes section B. 20 'Data Assurance', J. 10 'Excluded Project Spend'.*

- 1.29. We will review and approve (as appropriate) the business cases and estimates of Capex and Opex costs which the Licensee proposes during each Periodic Review. Additional costs may be considered, reviewed and approved (as appropriate) through re-opener mechanisms.
- 1.30. We typically identify the economy and effectiveness of costs by reviewing the scope of works at or before OBC approval. Efficiency of costs is typically identified through market testing ahead of the FBC approval.
- 1.31. At any stage of the Project, we may choose to conduct a forensic accounting review of the costs, to ensure the traceability and substantiation of Project costs, and to inform the SRAV or RAV.
- 1.32. Any costs at any stage that constitute Excluded Project Spend, including those which have been incurred dishonestly, illegally, or improperly, will be disallowed or clawed back. We may also consider enforcement action.

### Capex/Opex splits

- 1.33. We expect Licensees to report expenditure to us consistent with industry-recognised accounting standards (for example, International Financial Reporting Standards or UK-GAAP) to determine whether spend is Capex or Opex.
- 1.34. We expect the regulatory framework to largely align to the Licensee's own classification of costs, although we will review particularly large items of expenditure to ensure the regulatory treatment of costs is consistent with our statutory duties. In particular, we expect to review significant leases and decide whether and how they should be capitalised on the RAV on a case-by-case basis, taking into account representations from the Licensee and our statutory duties (notably those around financeability).
- 1.35. Capex bias could occur if Licensees deploy sub-optimal Capex schemes or projects over better VfM Opex solutions, as the Licensee considers it is in its own financial interests to do so. This could cause the Licensee to prefer proposing or utilising Capex solutions instead of Opex solutions, even if they would have chosen the Opex solution on merit alone.

## **Guidance – CCUS: cost assessment guidance for T&SCo.**

---

- 1.36. Where there is genuine ambiguity around whether an Opex or Capex solution represents better VfM, we encourage the Licensee to engage with us informally prior to making a formal submission.
- 1.37. When assessing the scope of work submitted for a re-opener or Business Plan review, we may disallow costs on the basis that we consider the Licensee is demonstrating Capex bias, or that the scope of the work does not deliver optimal VfM in delivering the required objectives. The Licensee may then make a renewed application for an allowance through the more appropriate mechanism. Based on our current evidence that a Totex approach (as utilised in other regulated networks such as RIIO) facilitates more streamlined approaches to economic regulation, we currently expect to adopt a Totex approach in future whereby we set a capitalisation rate for all spend.

### **Asset Management Plan**

*Conditions within the Licence to which this section is most relevant includes section B. 15 'Asset Management Plans'.*

- 1.38. The Licensee is expected to maintain an Asset Management Plan (AMP) detailing its strategy, expectations, and resources allocated to the maintenance and upkeep of the Network in the short- and medium-term.
- 1.39. The Licensee must include in each Periodic Review submission a summary of its AMP with sufficient detail to provide assurance that the Network can meet all relevant targets for the forthcoming Regulatory Period, without compromising the Network life or future ability to meet availability or capacity targets.
- 1.40. All material changes to the AMP from the previous Regulatory Period must be fully justified with the consequent impact on future reliability and cost clearly explained.

### **Strategic Spares Management Strategy**

- 1.41. Strategic spares are those spare parts that the Licensee has identified as necessary to hold to minimise Network outages. These spares may be held because they have a long lead time, high risk of obsolescence, or because they are critical to the operation of the Network, as the loss of the in-service part would result in a lengthy outage if the Licensee were not holding a spare.
- 1.42. The Licensee should provide us with its initial Strategic Spares Management Strategy 8 months prior to scheduled COD. This Strategy should include a description of its inventory of strategic spares and give a commentary on the expected consumption of these spares over the First Regulatory Period



## Guidance – CCUS: cost assessment guidance for T&SCo.

---

- 1.43. Subsequent Strategies should be submitted with each Periodic Review and should include a justification for the maintenance of its current inventory level, or any changes to this level. The Licensee may submit a revised Strategy between Periodic Reviews if it reasonably believes that the revised Strategy offers better VfM for Users. Where the Licensee proposes that spares are not replaced, it must explain the consequences of this on future reliability. The Licensee is prohibited from selling strategic spares to manage its cashflow. We will determine whether the proposed inventory is economic and effective.
- 1.44. The Strategy must also provide a robust justification of its procurement process for strategic spares. We will determine whether this process is efficient.
- 1.45. If we determine that the initial Strategy is inefficient we will explain why, and the Licensee should address our comments and resubmit a revised Strategy. We may withhold the approval of costs related to the management of Strategic Spares until the Licensee submits a Strategy to our satisfaction. If we determine that a revised Strategy does not represent VfM for Users, the Licensee must continue to comply with its previous Strategy.

### Associated Party Transactions

*Conditions within the Licence to which this section is most relevant include sections B. 9 'Prohibition of cross-subsidies', B. 13 'Restriction on activity and financial ringfencing' and B. 24 'Procurement obligations'.*

- 1.46. Associate Party Transactions (APT) refer to arrangements between parties that have participating interests between one another such as subsidiary-parent company relationships.
- 1.47. APT may create conflicts of interest in business dealings which may prevent VfM being realised through:
- hidden profit
  - inefficient tendering
  - weakened financial resilience
  - fraudulent dealing.

As such, the Licence includes robust provisions for business separation and prohibition of cross subsidies.

- 1.48. Any uncontrolled APT could be detrimental to Users and reduce the VfM of the relevant work, so these transactions must be subject to strict regulatory scrutiny.
- 1.49. The Licensee must inform us of any transaction it intends to conduct with an Associate or Related Undertaking so we can assess the risk degree of that this transaction poses to

VfM. We will apply a level of scrutiny to these costs commensurate with the risk posed by the transaction.

## **2. Uncertainty Mechanisms**

### *Uncertainty Mechanisms*

2.1. Beyond the First Regulatory Period, we may manage some elements of uncertain expenditure in the context of the Licence by drawing on our experience of other regulated networks such as RIIO where we include uncertainty mechanisms in Network price controls at our discretion. These may include:

- Indexation (both to inflation and external sector-specific cost drivers) to protect against the risk that outturn prices are different to those forecasted when setting a price control
- Pass-through mechanisms to adjust allowances for expenditure categories over which Licensees have limited control
- Volume drivers to adjust allowances in line with actual volumes where the volume of work required over the price control is uncertain (but where the cost of each unit is stable)
- Use-it-or-lose-it (UIOLI) mechanisms to adjust allowances where the need for work has been identified, but the specific nature of work or costs are uncertain

2.2. Such mechanisms provide Licensees with allowances and flexibility in delivering qualifying activities, while protecting Users at the same time by ensuring that unspent allowances are returned to them. In addition to the above, we ultimately rely on re-opener mechanisms to decide whether broader changes in allowances are needed within a Regulatory Period.

### *Allowance indexation*

**2. Conditions within the Licence to which this section is most relevant include sections F. 14 and G. 11 'Indexation'. H.9 'Calculation of Allowed Revenue during the Operational Period', J.8 'Regulator review of hedging strategies'.**

2.3. Where we grant the Licensee a significant new allowance to undertake work on the Network which covers more than one Charging Year, we would expect to link this allowance to a relevant index (or composite index) to preserve the Licensee's incentive to deliver the work efficiently. Where an incentive is applied around an allowance, we would also expect to link the targets and limits within the incentive to the same index.

2.4. In some cases, a simple index such as CPIH may be an appropriate index, but we will also consider the use of a composite index where some aspects of an allowance are

exposed to specific inflationary pressures that move independently from baskets such as CPIH.

2.5. When setting the indexation for the allowance, we will work with the Licensee to understand the inflationary pressures associated with the work (and will specifically consider which indices have or should be embedded in supply chain contracts). We will also draw upon regulatory precedent, such as our use of Real Price Effects in our RIIO regime.

*Power price indexation*

2.6. Given the relatively volatile nature of GB power prices, and the Licensee's inability to control these prices, the volume of power consumed by the Licensee is subject to incentivisation. However, the price at which power is procured is not (provided that the Licensee follows its own agreed hedging strategy).

2.7. The Licensee must set a specific hedging strategy for submission to us in accordance with section 5.5 for power consumed by the Network at least 8 months ahead of the expected Commercial Operations Date for the first part of the Network.

2.8. For the purposes of forecasting and setting allowances, we expect to use the power price implied by the forward curve for the relevant delivery period. For power to be delivered relatively far in the future where the relevant curve is not available, we expect to use the use the furthest curve in the future for the relevant season. For example, for power to be procured in year  $t+4$ : if the curve for the relevant season 4 years hence were not available, we would look to the curve for that season in 3 years', 2 years' or 1 year's time.

*Foreign Exchange*

2.9. Where an element of the Licensee's allowance is priced in a non-GBP currency, we would, in the first instance, expect the Licensee to attempt to negotiate a GBP price for the work.

2.10. However, in exceptional cases where:

- a. the supplier:
  - i. has a compelling reason to price work in a non-GBP currency, or
  - ii. offers a GBP price which is inclusive of a poor VfM Foreign Exchange (**FX**) risk premium; and,
- b. competitor suppliers who price in GBP represent poorer VfM

then we expect to usually accept that it is in Users' best interests that the work remains priced in the original currency. We would expect the Licensee to provide us

## Guidance – CCUS: cost assessment guidance for T&SCo.

---

the cost of the work in GBP and the original currency and a justification as to whether this represents VfM.

2.11. Where costs in a given non-GBP currency are material to the project costs, the Licensee must set a specific hedging strategy for that currency for submission to us in accordance with the following paragraphs.

### *Hedging strategy submissions*

2.12. Where a hedging strategy is required to be submitted as described above, following the initial submission, the Licensee should resubmit the strategy on an annual basis. We expect this to be submitted to us alongside the Licensee's annual financial reports.

2.13. As and when the Licensee wishes to modify its hedging strategy, it should seek our approval at the earliest possible opportunity by submitting a new strategy. Whilst waiting for approval, hedges may be placed in line with either strategy. If the new strategy is subsequently rejected the Licensee will be exposed to the downside risk of these hedges.

2.14. We expect the Licensee's hedging strategy to provide for actions to be taken in the event of market crises or failures so that the Licensee is not required to seek additional approval from us for their actions in these scenarios.

### *Logging hedged costs*

Where the Licensee submits a hedging strategy (and this is approved by us) and they procure the relevant commodity in line with this strategy, we will log costs of that commodity when the cost is incurred, at the Licensee's hedged rate at the time the hedge was placed. For power costs, the cost will be logged at the point of delivery of the relevant power. For currency costs, the cost will be logged at the point the non-GBP priced goods or services costs are incurred.

2.15. If the Licensee fails to submit an approved hedging strategy, we will log costs at a reasonable and efficient rate. In order to determine this rate, we will have regard to:

- the Licensee's previous hedging strategies
- relevant hedging strategies used by other Licensees
- advice from our in-house, HMG, and/or contracted experts

2.16. If the Licensee hedges outside of the agreed hedging strategy, we will log costs:

- at the optimal rate at which (with the benefit of hindsight) would have been incurred if hedges were placed in line with the agreed hedging strategy in the case that this hedge were less efficient than a hedge placed in line with this strategy

- at the Licensee's actual hedged rate in the case that that this hedge is more efficient than the optimal rate which (with the benefit of hindsight) that a hedge placed in line with this strategy would have incurred

2.17. If a hedge is placed outside of an approved hedging strategy, but in line with a new hedging strategy which has already been submitted to us and is pending approval, we expect the hedge to be deemed compliant if the new strategy is subsequently approved. Hedges placed in line with the original strategy would continue to be compliant until the new strategy is approved and supersedes the original one.

2.18. For the purposes of forecasting and setting a GBP based allowance, we expect to use the exchange rate for the given currency implied by the forward curve for the relevant delivery period<sup>1</sup>.

#### *Pass-through cost scrutiny*

2.19. Costs are typically treated on a pass-through basis when the Licensee has little to no control over these costs and is not expected to own the risks associated with these costs.

2.20. The nature of pass-through costs is such that they largely fall outside of the scope of efficiency incentives. However, to protect Users from volatility in contributions, the Licensee must demonstrate that it has undertaken sufficient due diligence such that the costs are free of forecasting or accounting errors and that there are no surpluses or shortfalls arising from inefficiencies within the Licensee's finance team.

2.21. We will review the scope of pass-through costs and may reattribute costs as Opex or pass-through costs depending on the Licensee's ability to influence these costs. It is likely that the nature of pass-through costs will evolve throughout the Project so we will review the scope critically to avoid User detriment.

#### *Re-openers*

**3. Conditions within the Licence to which this section is most relevant include sections J. 2 'Supervening Event Re-openers, Insured Risk Events and Relief Events, J.5 'Ongoing Devex Re-opener', J.6 'Uncertain Cost Events'.**

2.22. Re-openers are a standard part of our regulatory toolkit, used to manage uncertainty within a price control period. For the Licensee to benefit from the re-openers in the Licence, it must demonstrate that relevant triggers and thresholds (where applicable) have been met, and in some instances that costs have changed materially. We have equivalent rights to re-open the base case to benefit Users if a re-opener may be triggered in Users interests.

<sup>1</sup> i.e. for work to be carried out in year t+2 we would use a 2 year forward contract rate; for work to be carried out 6 months after commencement we would use a 6 month forward contract rate.

- 2.23. This process for assessing new spend through a re-opener has been designed based on similar mechanisms in our RIIO framework and the IPA's [Cost Estimating Guidance](#) and [Cost Estimating Requirements](#).
- 2.24. As described in Section 4, we will typically test the economy and effectiveness of costs by reviewing the scope of work and/or changes proposed by the Licensee, and the efficiency of cost by reviewing the procurement and tendering process for the work. Additionally, we may use data from previous Regulatory Periods to assess the costs submitted by the Licensee.
- 2.25. Where we grant the Licensee a significant new allowance to undertake work on the Network, we may consider the application of further re-openers. When making such a decision, we will consider the risk profile of the work, contingency required to deliver the work without a re-opener, and relevant regulatory precedent.

### **3. Cost reporting**

*What is Cost Reporting*

#### **4. Conditions within the Licence to which this section is most relevant includes section B. '20 'Data Assurance'.**

- 3.1. Cost reporting is required once an allowance has been set, to allow us to understand how well work is progressing against the latest Project baseline. This allows us to anticipate the application of any relevant uncertainty or cost sharing mechanisms, and means that we can give the Licensee feedback and log costs as costs are incurred. This allows for smoother processes around our determinations and price controls as we discuss issues and discrepancies as they occur, rather than raising them for the first time when finalising a determination at the end of a project/spend period.

*Baseline*

- 3.2. The initial financial settlement contains an ex-ante assessment of the cost of Network development with some provisional allowances for costs which are deemed insufficiently mature at Licence Award. This assessment is agreed between the Licensee and the Secretary of State, and is embedded into the Licence at Licence Award.
- 3.3. The Licensee must submit its ex-ante cost estimate and Work Breakdown Structure (levels 0, 1 & 2) to us at Licence Award.

*Routine cost reporting*

- 3.4. During construction and commissioning of any assets, the Licensee will report the actual spend against expected spend and Earned Value (EV) according to the baseline plan. This

## Guidance – CCUS: cost assessment guidance for T&SCo.

---

reporting should be done on a quarterly basis with costs quoted in nominal prices to allow for an EV assessment of construction to be undertaken.

- 3.5. We currently expect to use the quarterly reports to understand the risk of overspend and delay relative to the base case forecast. We may raise any concerns about VfM being delivered and will work with the Licensee to identify measures to be taken to improve the VfM being delivered. If the allowance for construction or commissioning of the asset includes an incentive mechanism on cost or schedule then we may use this information to inform the valuation of that incentive.

### *Cost logging*

- 3.5.1. Cost logging is the process of incorporating the Licensee's allowable actual costs into the Price Control Financial Model to calculate the Licensee's Allowed Revenue. In order to do this efficiently, we will regularly assess the Licensee's actual costs to find the total spend for a given period (typically one quarter) that is eligible for addition to the SRAV or RAV. We will scrutinise the costs that the Licensee has reported to verify that the costs have been legitimately incurred as part of a contract which forms part of the agreed scope, and will work with the Licensee wherever there is any doubt or uncertainty surrounding any costs.
- 3.5.2. Where ex-ante allowances are subject to a sharing factor, Users are exposed to cost risk for inappropriate spend by the Licensee. We will therefore check that costs reported by the Licensee for addition to the SRAV or RAV are eligible as agreed under the initial settlement, subsequent Periodic Review process, or re-opener to ensure that neither Excluded Project Spend, nor any other prohibited cost is added to the SRAV or RAV.
- 3.5.3. The Licensee must submit actual spend figures to us on a quarterly basis so that we can check that these costs are allowable for addition to the SRAV or RAV. Where the Licensee is uncertain as to whether a cost constitutes Excluded Project Spend or is otherwise prohibited, we would encourage them to engage with us informally at the earliest possible opportunity.