

Decision

RIIO-3 Final Determinations – Electricity Transmission

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The next set of price controls for the Electricity Transmission (ET), Gas Distribution (GD) and Gas Transmission (GT) sectors will cover the five-year period from 1 April 2026 to 31 March 2031 (RIIO-3). In December 2024, the network companies in these sectors submitted their RIIO-3 Business Plans for this period to Ofgem. We assessed these plans and published our Draft Determinations for consultation on 1 July 2025. Following consideration of consultation responses, this document and others published alongside it set out our Final Determinations for the RIIO-3 price controls.

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1.Introduction

Purpose of this document

1.1 This document sets out our Final Determinations for the Electricity Transmission (ET) price control for the three Transmission Owners (TOs) in Great Britain (GB) covering the five-year period from 1 April 2026 to 31 March 2031 (RIIO-ET3). All figures in this document are in 2023/24 prices except where otherwise stated.

What is Electricity Transmission?

- 1.2 The ET network transmits high-voltage electricity from where it is produced to where it is needed throughout GB. ET assets consist of high-voltage electricity wires which extend across GB and nearby offshore waters, transporting electricity between power stations, interconnectors with external systems, large users, and interfaces with Electricity Distribution (ED) networks at local substations.
- 1.3 Three TOs own, maintain, and develop the ET system within their own areas. These are National Grid Electricity Transmission plc (NGET) for England and Wales, Scottish Power Transmission limited (SPT) for southern Scotland and Scottish Hydro Electric Transmission plc (SHET) for northern Scotland and the Scottish islands.
- 1.4 GB's ET system is operated by the National Energy System Operator (NESO). The NESO is responsible for ensuring the stable and secure operation of the ET system, from the day-to-day operation, through to managing the commercial terms of connecting to and using the network and longer-term network planning.

What are we deciding?

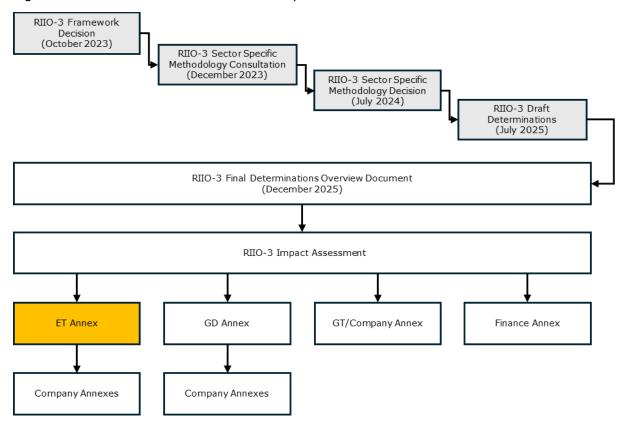
- 1.5 In Chapter 2 we summarise the key aspects of the RIIO-ET3 price control.
- The core outputs and incentives that underpin RIIO-ET3 are explored in Chapter 3. This includes incentives to drive TO behaviour which will bring benefits to consumers, such as delivering network upgrades and innovations on time, limiting the duration of unplanned outages and the leakage of harmful gases. Chapter 3 also describes the outputs that will be set in RIIO-ET3 to hold TOs accountable for critical network upgrades and/or maintenance.
- 1.7 Chapter 4 sets out how we will manage uncertainty during RIIO-ET3. It describes the suite of uncertainty mechanisms (UMs) which will ensure that the investment that TOs identify as being required in-period can be assessed and funded by us in a timely manner without causing unnecessary delays to network reinforcement.

1.8 In Chapter 5 we outline how we have approached our assessment of TO costs and engineering justifications for RIIO-ET3 to ensure that TOs are sufficiently funded to be able to deliver their plans, and that ongoing TO activities and investment to upgrade the network comes at a low cost for existing and future consumers. Chapter 5 also covers our approach to setting the Totex Incentive Mechanism (TIM) and assessing Stage B of the Business Plan Incentive (BPI) for RIIO-ET3. Our approaches to stages A and C of the BPI were common across all sectors so are described in our Overview Document.

Navigating the RIIO-3 Final Determinations documents

1.9 The RIIO-3 Final Determinations are comprised of an Overview Document, a Finance Annex and sector annexes for ET, GD and GT. This document is the sector annex for ET. The sector annexes are underpinned by a RIIO-3 Impact Assessment, company annexes¹ and, where relevant, technical annexes. Figure 1 below maps all documents relevant to our suite of RIIO-3 Final Determinations, including the framework and methodology documents that have preceded it.

Figure 1: RIIO-3 Final Determinations map



¹ Throughout this document, 'company annexes' refers to the three TO-specific annexes to this document (their abbreviated names are NGET Annex, SHET Annex and SPT Annex).

1.10 Our Final Determinations have considered all previous feedback and consultation responses from network companies and other stakeholders, including the reports from the Independent Stakeholder Groups (ISGs) that were established to challenge each of the network companies on their stakeholder engagement and business plans, and the feedback received in response to our RIIO-3 Call for Evidence.² Further details on our approach to embedding the consumer voice is set out in the RIIO-3 Overview Document.

² <u>Call for evidence on the electricity transmission, gas transmission and gas distribution business plans for RIIO-3 | Ofgem</u>

2.RIIO-ET3 at a glance

We want TOs building a resilient network that will help bring down energy costs...

- 2.1 To bring the energy bills down we need to reduce our reliance on wholesale gas prices, reduce constraint costs and enable a cleaner electricity system.
- 2.2 Ensuring a safe and resilient ET network has been a central aim of every ET price control that we have set, and RIIO-ET3 is no different. We are granting £3.5bn of allowances for TOs to replace ageing or faulty assets, and where necessary implementing controls to ensure this money is either spent as intended or returned to consumers in full.
- 2.3 To achieve a more secure, resilient and lower cost energy system, significant investment is needed to build new transmission lines and reinforce the grid to carry electricity around the country from where it is generated to where households and businesses are located. These upgrades to the network will connect more low-carbon generation to the network, reduce our reliance on wholesale gas prices and support GB's legislated decarbonisation targets.

 Upgrades are also required to connect increased demand, including the growth in industry, data centres and Artificial Intelligence (AI) zones, all of which will support GB's economic growth targets.
- 2.4 The timing and location of these upgrades remain uncertain, which is why RIIO-ET3 will use a flexible in-period approvals framework so that consumers will only face costs when there is more certainty as to the precise scope. This approach will keep us off the critical path where possible, without diminishing our ability to protect consumers. Our suite of load-related baseline funding and UMs should ensure that the TOs can:
 - deliver the network investments that they have identified and sought funding for now;
 - develop and contract for additional projects using ~£1bn of indirects funding to build their capability, ~£800m of Pre-Construction Funding (PCF) to design and consent projects, and our ~£4bn Advanced Procurement Mechanism (APM) to secure supply chain capacity; and
 - secure funding in-period for new investments as and when the need for, or design of, projects become more certain through a combination of streamlined re-openers and automatic mechanisms.

2.5 This network investment will ensure we maintain world-class levels of network reliability, further reducing the frequency and duration of unplanned outages and power cuts, and ensuring long-term safety and resilience. Across the RIIO-3 sectors we have also increased our focus on cyber and climate resilience, whilst our Network Asset Risk Metric (NARM) tool will ensure the underlying health of the network assets across the electricity and gas networks remains world leading.

Prioritising consumer needs and environmental sustainability...

- 2.6 We are establishing a significantly stronger incentive package than RIIO-ET2 to drive the prompt delivery of network upgrades and customer connections, and promote interventions which reduce constraint costs and limit the leakage of harmful gases. This includes incentives brought forward and strengthened from RIIO-ET2, in particular the ability to earn rewards on all Dynamic Line Rating works done during the period, and introducing powerful new incentives on major project delivery, connections and innovative delivery. High-performing TOs will be able to earn significant returns through this incentive package, but only if they are successful in delivering outcomes that deliver the most short- and long-term consumer value.
- 2.7 We also want to maintain the progress seen in previous RIIO price controls in relation to TOs providing services which consumers value, including to deliver a network which is environmentally sustainable. As such, RIIO-ET3 will include:
 - provisions for TO expenditure to meet all Biodiversity Net Gain (BNG) legal requirements, likely to cost more than £1bn during RIIO-ET3, as well as around £500m to support other interventions that will reduce the environmental impact of TOs and their work;
 - a mechanism to deliver the government's planned Community Benefit
 Funding in areas affected by new ET infrastructure which could be worth around £550-800m over the period; and
 - a £164m Network Innovation Allowance (NIA) across ET and access to the £500m Strategic Innovation Fund (SIF) to support network innovation that contributes to decarbonisation.

Maximising value for consumers

- 2.8 To deliver these objectives as efficiently as possible we have proposed baseline totex allowances for all TOs of £10.3bn, which is £1.7bn lower than business plan submissions, as detailed in Chapter 5.
- 2.9 This difference is due to three main factors. The first is where we have undertaken a robust assessment of proposed costs and set allowances at what we

consider is the efficient level. For the most part we are not rejecting the need for new investments, but we have identified that some of them, as well as broader TO operating costs, could be delivered for less. The second is where our Draft Determinations acknowledged the need for the investment in principle but we did not consider the underlying justification robust. We received additional evidence that in many instances improved the justification for an investment, resulting in increased allowances. However, where justification remained weak, we have removed the associated costs. The third driver of variation is where we consider that a decision on certain allowances is better made during the period when there is more clarity on what activities and associated expenditure is required. This helps to protect consumers from committing to investment that is not yet properly understood, while providing TOs with a clear pathway to the necessary funding when they have more certainty.

- 2.10 We will retain a stretching but deliverable ongoing efficiency target of 1.0% for all companies across RIIO-3. We consider this reflects the overall scale of investment expected, the opportunities presented from new technologies and approaches, including through data and digitalisation and AI, and efficiency gains and innovation in the wider economy. We recognise that to achieve this, companies will need to find for new ways to drive costs lower, including by becoming more productive and innovative.
- 2.11 We have introduced a new approach to the TIM whereby the sharing rates applied would reduce the further from target totex that the TOs get. We consider that this will help protect TOs from exposure to dramatic cost overruns that are beyond their control, whilst maintaining a strong incentive to keep costs down in areas that they can control.

3. Outputs and incentives

Introduction

- 3.1 This chapter sets out the package of outputs that will apply in RIIO-ET3, including Licence Obligations (LOs), Price Control Deliverables (PCDs), Use-It-Or-Lose-It (UIOLI) allowances and Output Delivery Incentives (ODIs).³ It focuses on the common outputs which will apply to all TOs for details of outputs which only apply to a single TO, see the company annexes.
- 3.2 The outputs are set out under the headings of the RIIO-3 outcomes:
 - infrastructure fit for a low-cost energy transition;
 - secure and resilient supplies; and
 - high quality of service from regulated firms.
- 3.3 Table 1 and Table 2 outline the outputs and incentives for RIIO-ET3 and set out where you can find full details.

Table 1: Cross-sectoral outputs and incentives in RIIO-3

Output name	Output type	Sector(s)	Further detail
Network Asset Risk Metric (NARM)	PCD, ODI-F and ODI-R	ET, GD, GT	Overview Document
Physical Security	PCD and re-opener	ET, GD, GT	Overview Document
Cyber Resilience	PCD and re-opener	ET, GD, GT	Overview Document
Environmental Action Plan (EAP) and Annual Environmental Report (AER)	ODI-R and LO	ET, GD, GT	Overview Document and this document
Strategic Innovation Fund (SIF)	UIOLI	ET, GD, GT	Overview Document
Network Innovation Allowance (NIA)	UIOLI	ET, GD, GT	Overview Document
Totex Incentive Mechanism (TIM)	ODI-F	ET, GD, GT	This document
Operational Transport Emissions Reduction	PCD	ET, GD	Overview Document

³ ODIs can be either financial (ODI-F) or reputational (ODI-R).

Table 2: Sector specific outputs and incentives in RIIO-ET3

Output name	Output type	Further detail
Major Projects	ODI-F	This document
Innovative Delivery	ODI-F	This document
Connections	ODI-F	This document
Insulation and Interruption Gas (IIG) emissions	ODI-F	This document
SF6 Asset Intervention	PCD	This document
Energy Not Supplied (ENS)	ODI-F	This document
SO:TO Optimisation	ODI-F	This document
Accelerated Strategic Transmission Investment (ASTI)	ODI-F	December 2022 Decision ⁴
Innovative Delivery	ODI-F	This document
Network Access Policy (NAP)	LO	This document
Landscape Enhancement Initiative (LEI)	UIOLI	This document
CSNP ⁵ Coordination	LO	This document
New Infrastructure Stakeholder Engagement Survey (NISES)	ODI-R	This document

Overall balance of the incentive package

- 3.4 We are establishing a strengthened incentive package to drive the prompt delivery of network upgrades and connections, and promote interventions which reduce constraint costs and limit the leakage of harmful gases.
- 3.5 Table 3 shows the maximum potential upside and downside outcomes for the six financial incentives that we are setting for RIIO-ET3. We do not consider that all of these upsides are simultaneously achievable, but we firmly believe that this table, and the supporting detail in this chapter, demonstrates that:
 - there is significant scope for TOs to earn high returns if they perform well in areas which provide significant value for consumers, with even greater returns available for better performance, eg:
 - (1) even if TOs only deliver 60% of connections projects on time they will be able to earn 0.16% return on regulated equity (RoRE) annually through the Connections ODI-F;

⁴ <u>https://www.ofgem.gov.uk/decision/decision-accelerating-onshore-electricity-transmission-investment</u>

⁵ Centralised Strategic Network Plan.

- (2) 0.38% RoRE is available annually if TOs deliver just 60% of projects under the Major Projects ODI-F early or on-time, on average across the next ten years (many projects may be delivered in RIIO-ET4);
- (3) the Innovative Delivery ODI-F provides each TO with an opportunity to be rewarded up to 0.20% RoRE on average annually if they can demonstrate innovation in how they deliver; and
- (4) TOs that roll out Dynamic Line Rating (DLR) at scale will be able to earn 10% of the constraint costs each intervention saves, which based on RIIO-ET2 estimates could see returns of 0.13% RoRE, though this could be significantly higher depending on network constraints; and
- the overall package is asymmetrically tilted in favour of the TOs, which
 provides them with the strongest possible incentives to undertake actions
 which provide even greater value to consumers. With investments incentivised
 under the Major Projects ODI-F potentially delivering more during RIIO-ET4
 than in RIIO-ET3, the tilt caused by this incentive in particular would be
 expected to apply beyond the five-year price control we are setting now.

Table 3: Overview of financial incentives in RIIO-ET3 (% RoRE average annual)

ODI-F name	Upside - maximum	Downside - maximum
ENS	0.01%	-0.38%
IIG	0.28%	-0.28%
SO:TO	0.20% (but actually uncapped)	n/a – no penalty
Innovative Delivery	0.20%	n/a – no penalty
Connections	0.40%	-0.20%
Major Projects	3.75%	-1.87%

3.6 In addition to the RIIO-ET3 incentives that we are setting now, the ASTI ODI-F established during RIIO-ET2 will impact TO financial performance during RIIO-ET3. As the ASTI ODI-F targets delivery of projects mostly clustered around a December 2030 delivery date, we expect that the overall financial impact from it during RIIO-ET3 will be positive (if projects are delivered early) and that any negative impacts would occur in RIIO-ET4 (if projects are delivered late). With the incentive having been in place for a couple of years, and project delivery already underway, TOs are best placed to know their likely outturn ASTI performance and as such we haven't shown it in Table 3.

Infrastructure fit for a low-cost energy transition

Major Projects ODI-F

Purpose: To incentivise the timely delivery of significant new ET projects where this provides a meaningful consumer benefit.

Benefits: To encourage the timely delivery of infrastructure to ensure that consumers realise benefits as early as possible and are compensated for delays, and to support delivery of the United Kingdom's (UK's) decarbonisation targets.

Final Determinations summary

Design	Final Determination	Draft Determination
ODI type	Financial – reward and penalty.	Same as FD.
Scope	All CSNP Re-opener Outputs, and other projects providing significant consumer value.	Same as FD.
Measurement	Delivery date achieved as compared to the Major Projects ODI-F Target Delivery Date (TDD).	Same as FD but subject to minimum availability standard (MAS).
Target	The TDD will be set as the P50 delivery date or NESO's Optimal Delivery Date (ODD), whichever is later.	Change - NESO's ODD.
Incentive exposure	Upside of up to 20% of project totex, 6 downside of up to 10% of project totex.	Change - Upside of up to 10% of project totex, downside of up to 5% of project totex.
Incentive value	If ODD is on or before the P50 delivery date, or ODD is unknown, per annum reward of 30% of constraint costs (between 2% and 5% of project totex) or 2% of project totex if ODD or constraint costs are unknown. Lump sum reward of 1% of project totex for all projects delivered on or before TDD. Annual penalty half the size of reward for that project. If ODD is after the P50 delivery date, reward is lump sum of 1% of project totex if delivered on or before TDD and penalty is 0.5% of project totex per annum for up to	Change - Per annum reward of 30% of constraint costs (between 2% and 5% of project) or if unknown, 2% of project totex. On-time lump sum of 2.5% of project totex. Annual penalty half the size of reward for that project.

⁶ Throughout this section "project totex" means the cost for that project as forecast at the time of setting the ODI-F.

Design	Final Determination	Draft Determination
Delay Events	Approved Delay Events postpone penalty and adjust the delivery date in the CSNP Reopener. Does not change the date on which rewards cease.	Change - Impact on dates same as FD.
	Applies to qualifying events only and subject to best endeavours to avoid or mitigate impact.	Non-exhaustive list of qualifying events subject to reasonable endeavours to avoid or mitigate impact.
Reporting	Confirmation of delivery including evidence from the NESO. Progress updates annually throughout construction phase, including warning of any potential delays.	Change - Not specified.
Applied to	All TOs.	Same as FD.
Associated document	Major Projects ODI-F Governance Document.	Change - New since DD.

Final Determination rationale and Draft Determination responses

- 3.7 We have set an incentive, the Major Projects ODI-F,⁷ that encourages and rewards early or on-time delivery, and which has asymmetric penalties. Since our Draft Determinations we have adjusted some of the parameters and design principles in response to feedback and further policy development.
- 3.8 All three TOs and six other respondents agreed with the broad concept of an incentive focused on the delivery of major network projects. NGET, National Grid Electricity Distribution (NGED), SHET and a consumer group said that it is difficult to consider the balance of risk and reward given the uncertainty around exactly which projects would be in scope and the draft status of the CSNP methodology that would feed into the inputs to the ODI.
- 3.9 Stakeholders had mixed views on the asymmetry. All three TOs, Northern Powergrid (NPg) and NGED supported the asymmetry and inclusion of a lump sum and deadband. Three other respondents said that the incentive was overall too generous including one consumer group which said that the inclusion of a deadband and Delay Events means that TOs are doubly protected and consumers bear disproportionate risk. NGET argued that the incentive needs to be a "fair bet" for each project, without relying on a portfolio effect.
- 3.10 We set out in the sections below our assessment and judgement of individual design elements within this incentive. The design elements need to be taken

⁷ In our Draft Determinations this was named the CSNP-F ODI-F.

together, and when considered in the round our judgement is that the overall balance of risk is fair both to TOs and consumers. We have balanced competing objectives:

- TOs will have adequate opportunities to outperform on this incentive if they
 deliver the critical transmission infrastructure on time whilst improving overall
 consumer outcomes, such as lower constraint costs and a faster renewables
 rollout.
- To protect consumers from the costs caused by late delivery, TOs are exposed to reasonable downside risks.
- We have provided an asymmetric incentive with higher rewards available than penalties. In our view, this correctly balances the risks that TOs face, given that the complexity of these projects means that there will be some risk of delays for all TOs. Our view is that the balance of an asymmetric upside on the size of rewards as compared to the delay penalties, means that the package is consistent with the concept of a "fair bet" for TOs.

Scope

- 3.11 We have decided that the scope of the Major Projects ODI-F will be:
 - all NESO-developed projects recommended during RIIO-ET3 for delivery by the TOs that meet the requirements to be designated as a CSNP Re-opener Output under the CSNP Re-opener; and
 - other load-related projects that are considered to be strategically important, which are submitted to us during RIIO-ET3.
- 3.12 This is the same as the proposal set out in our Draft Determinations. We discuss the responses and our rationale on these two parts of the scope below, as well as our approach to licence modifications to include new projects in the Major Projects ODI-F in the RIIO-ET3 period.

CSNP Re-opener Outputs

3.13 Three respondents (including a consumer group and NPg) agreed with having all CSNP Re-opener Outputs in scope to streamline the regulatory approach. SHET said that the incentive should only focus on strategically important CSNP projects. Three respondents, including NGET and NGED, said that we should limit the scope to only projects for which we have identified clear benefits such as in timely delivery or acceleration. Our position remains that this incentive is focused on timely delivery, not just acceleration, given the potential for consumer benefits of

- on-time delivery (and detriment of late delivery) of the CSNP projects and other strategically important projects.
- 3.14 NGET requested clarification on our statement in our Draft Determinations that "we consider that, as CSNP-F Outputs are optimised as a portfolio of projects (eg through the CSNP) we should incentivise them as such." This statement was intended to clarify why our scope for this ODI is all CSNP projects (excluding those recommended for competitive tender), rather than to suggest that delivery of one project against the incentive would depend on delivery of any other project(s) against the incentive. The proposal was and our decision is to apply the incentive to each project individually.

Non-CSNP Re-opener Outputs that are considered to be strategically important

- 3.15 We have decided that projects that are not CSNP Re-opener Outputs may be subject to the Major Projects ODI-F, and that we will consider any such projects on a case-by-case basis.
- 3.16 To determine whether we can and should apply the ODI-F to projects that are not CSNP Re-opener Outputs, we will consider the consumer benefit of applying the ODI-F, in particular focusing on whether the project is strategically important and the importance of timely delivery.
- 3.17 For Load Re-opener Outputs, we intend that whether these projects have the ODI-F applied is considered for each project at the Eligibility Assessment stage of the Load Re-opener. We will consult on any proposal to apply the Major Projects ODI-F to any non-CSNP projects, setting out our proposals for:
 - the application of the ODI-F to this project;
 - the proposed TDD; and
 - the proposed incentive parameters.
- 3.18 This aligns with the proposal in our Draft Determinations.
- 3.19 Stakeholder views on applying this incentive beyond CSNP Re-opener Outputs were mixed. NPg agreed with our approach to using a principles-based approach to applying the incentive to non-CSNP projects.
- 3.20 SHET disagreed with including Load Re-opener projects as it said that the lack of NESO-generated inputs could make this impractical. SPT said that CSNP and non-CSNP projects should not have different incentive calibrations. NGET highlighted the difficulties with developing inputs for non-CSNP projects. Another respondent said that the NESO should provide the required inputs for non-CSNP projects.

- 3.21 The final design of this incentive aligns the approaches for CSNP and non-CSNP projects through setting out our requirement for a consistent methodology for developing the P50 delivery date (which is detailed from paragraph 3.36). It would not be appropriate to request that the NESO develop inputs such as the ODD and constraint costs for projects outside of its remit. This results in the alternative design, Design B, which sets an alternative annual incentive value in the absence of constraint costs and does not rely on the ODD for determining the incentive cap.
- 3.22 SHET and one other respondent said that there may be overlap between this incentive and RIIO-ET3's Connections ODI-F and that we should not apply the Major Projects ODI-F to any project that could be subject to the Connections ODI-F. We disagree because we expect that in most cases these two incentives would target different projects (ie the Major Projects ODI-F focuses on large boundary transfer projects and the Connections ODI-F will incentivise more localised upgrades). If there were occasional overlaps on a project, we consider that these would be justified given the differing outcomes that each incentive is driving, which would still be relevant ie the timely delivery under Major Projects ODI-F will relieve constraint costs and timely delivery under the Connections ODI-F will ensure that contracted connections dates are met.
- 3.23 NGET and SHET requested clarification on whether the projects in the tCSNP2⁸
 Refresh, due to be published in 2026, will be eligible for the Major Projects ODI-F.
 NGET said that, based on the importance of timely delivery of the tCSNP2
 Refresh, its projects should be included in the incentive. We will assess whether tCSNP2 projects will be included in the Major Projects ODI-F after publication of the tCSNP2 Refresh:
 - Whether a tCSNP2 project is subject to the CSNP Re-opener will depend on the requirements as set out in our section on the CSNP Re-opener scope in Chapter 4, and all CSNP Re-opener Outputs will be subject to the Major Projects ODI-F.
 - For any tCSNP2 Refresh project not designated as a CSNP Re-opener Output, we would separately consider whether the ODI should be applied using the considerations as set out in our decision above.
 - It is possible that some tCSNP2 projects are designated as CSNP Re-opener Outputs while others are not, and that only some are subject to the ODI-F, as

⁸ The second transitional CSNP.

we will apply the criteria on a project-by-project basis rather than to a tranche of projects.

Measurement

- 3.24 The date on which the project was delivered will be compared to that project's TDD to determine the level of reward or penalty that will be applied. This broad principle remains unchanged from our Draft Determinations, although we have made changes to the setting of the TDD, as discussed from paragraph 3.44.
- 3.25 We have decided that the delivery of a project, for the purpose of calculating the incentive under the Major Projects ODI-F, will be assessed against the "Fully Delivered" definition in the TOs' licence.
- 3.26 The MAS will therefore not be taken into account in the Major Projects ODI-F. The MAS will be set as a standalone requirement for CSNP Re-opener Outputs in the CSNP Re-opener, as discussed in Chapter 4. This is a change from our Draft Determinations position, in which we proposed that the MAS would determine whether the project could be considered as delivered for the purpose of the incentive, as projects would be required to meet the MAS for a given period (proposed as 24 months) after the date on which the asset is delivered.
- 3.27 SHET disagreed with the MAS affecting the date on which a project is considered to have been developed for the incentive. It said this would create uncertainty around the achievement of the incentive as the TO would not be sure if the incentive has been achieved until two years after the date on which it delivered the project. Through responses to the RIIO-3 initial licence consultation in July 2025, 9 NGET also raised that combining the MAS onto the incentive makes it more difficult to implement and understand the incentive. We believe that it is beneficial to take a simpler approach that does not add further complexity to the incentive. We consider that it will be sufficient to ensure there is a MAS requirement with a licence obligation in the CSNP Re-opener, and that additional interactions with the Major Projects ODI-F are unnecessary.
- 3.28 All three TOs disagreed with the MAS level proposed in Draft Determinations (93% availability for two years), requesting that we develop project-specific values. As we are not applying the MAS in the Major Projects ODI-F, we discuss our updated approach in the CSNP Re-opener section in Chapter 4.

⁹ RIIO-3 initial licence consultation | Ofgem

Target

- 3.29 The ODI target is the Major Projects ODI-F TDD, which is the date after which rewards cease and penalties begin (unless there has been an approved Delay Event which postpones the start of penalties).
- 3.30 Our approach to setting the TDD will differ depending on whether the NESO has developed an ODD to indicate the date on which delivery of the project would bring the highest consumer benefit (eg in terms of avoided constraint costs):
 - where the NESO has developed an ODD for the project, the TDD will be the later of the P50 delivery date and the ODD;¹⁰ or
 - where the NESO has not developed an ODD, the TDD will be the P50 delivery date.
- 3.31 We discuss the development of the P50 delivery date from paragraph 3.36.
- 3.32 This is a change from our Draft Determinations, in which we proposed that the TDD for all CSNP Re-opener Outputs would be set to the NESO's ODD. We stated our understanding that in setting the ODD the NESO would take into consideration the TOs' views on deliverability. Given our updated understanding that the ODD may in some circumstances be earlier than the P50 delivery date, we have reconsidered the target for the incentive. We consider that setting the P50 delivery date across all projects to the same methodology will mean that there is consistency in how challenging the incentive is across all projects and TOs. This consistency is an important consideration in the development of the P50 delivery date methodology. While there may be a small number of projects for which the ODD is later than the P50 delivery date, it would not be appropriate for the TDD to be the P50 delivery date as this would mean the TO could face a penalty if the project is delivered on the P50 delivery date. In these cases, the TDD will be the ODD.
- 3.33 It is also a change from our Draft Determinations proposal for establishing the TDD for non-CSNP projects. Previously, we proposed that if the NESO has determined an ODD this would be used. Otherwise, the TO would be required to propose a TDD with justification and evidence demonstrating why delivery on this date is most beneficial for consumers. NGET and SHET requested further guidance on the methodology TOs should follow in developing and evidencing this date. Our

 $^{^{10}}$ Our current understanding of the CSNP methodology is that the TDD here would equal the NESO's CSNP Recommended Delivery Date (RDD). We understand that NESO's RDD will be the later of the ODD and the Estimated Delivery Date (EDD), and that the EDD will be calculated as a P50 delivery date.

- decision now means that we will only consider ODDs developed independently by the NESO, as any project without an ODD will have its TDD set solely based on the P50 delivery date.
- 3.34 SPT said that the TDD should be set as the P50 delivery date. NGET proposed that the TDD is set as the later of the P50 and the ODD (ie the RDD), while SHET broadly supported use of the RDD but said that it could not opine on the proposed approach due to insufficient detail about the NESO's approach to determining the RDD. All three TOs said that it is important that they provide input to the TDD to ensure that it is a deliverable date, as they are best placed to assess delivery risk.
- 3.35 Three respondents, including a consumer group, supported the use of the ODD, but we recognise that these respondents may have been responding in the context of our statement that the ODD would take into account deliverability our updated position appropriately adjusts our Draft Determinations approach to take deliverability into account while retaining the ODD as a relevant part of the incentive design as summarised in Table 4.

P50 delivery date methodology

- 3.36 We have decided that we will only enter projects into the Major Projects ODI-F once we have confirmed an established methodology for setting or verifying the P50 delivery dates. This applies for all projects subject to this incentive, whether or not they are CSNP Re-opener Outputs. When setting the incentive for a project, we will use the P50 delivery date as estimated at that time and in accordance with the requirements set out in this section.
- 3.37 The use of a P50 delivery date, and the robustness of a clear and collaborative methodology for developing the date, is important for ensuring that the date the TOs are assessed against is as likely to be achieved as it is to be missed, making the incentive a 'fair bet' for TOs.
- 3.38 This methodology needs to provide a P50 delivery date that is created from probability risk at the 50th percentile, taking into account project-specific factors including location and technology as well as the TO's wider pipeline. For us to have confidence in using a P50 delivery date in this ODI-F, it is important that it has also:
 - had input from the relevant TO, regardless of whether the TO or a third party initially suggested the project (eg for inclusion in the CSNP); and
 - been verified by either by NESO (in the case of CSNP projects) or by us (in other instances), which will involve reviewing the proposed P50 delivery

date alongside the agreed methodology, drawing on an understanding of deliverability and risks for both the TOs and for infrastructure projects more widely in GB.

- 3.39 Our current understanding is that the NESO will develop the methodology for the P50 delivery date through working groups which will be attended by us and the TOs, to facilitate development of a collaborative methodology that is practical and fit for purpose. While that methodology has not yet been finalised, it is important that we give the TOs and other stakeholders an understanding of what to expect from this. We will only apply the Major Projects ODI-F if the methodology and P50 delivery date meets the requirements set out above.
- 3.40 Our understanding is that the NESO would publish it P50 delivery date methodology as part of its CSNP guidance. While this methodology is being developed primarily for the CSNP, we will apply it as a consistent approach for setting the P50 delivery date for all projects under this ODI-F.
- 3.41 Should the NESO not develop a methodology that can be used to develop suitable P50 delivery dates, we will lead workshops with the TOs to develop an alternative approach that can provide a reliable and consistent methodology to be applied across the TOs' projects. If this is required, we would publish the guidance through an update to the relevant associated documents.
- 3.42 For all CSNP Re-opener Outputs, we expect that a P50 delivery date will have been determined as part of developing the CSNP. For other projects that are to be included in the ODI-F, if there is not already a P50 delivery date developed in accordance with the agreed methodology, we will require that the TO proposes one. We will then verify that P50 delivery date alongside the methodology, and will engage with the TO on any revisions that we consider necessary. The P50 delivery date to be used for a project will be included in our statutory consultation on the proposed modification to the TO's licence.
- 3.43 We had not proposed using the P50 delivery date in our Draft Determinations and had set out our proposal that the TDD would be a project's ODD at only a high level. Our decision sets out more detail on our approach to setting the TDD, which includes the requirements that a methodology will need to comply with in determining the P50 delivery date. All three TOs requested more clarity around the methodology and emphasised the importance that their understanding of project delivery is factored into the setting of the TDD. In response to our Draft Determinations, the NESO highlighted the importance of reaching a reasonable

TDD and reiterated its continued commitment to working with us and the TOs on developing its approach.

Timing of setting the Target Delivery Date

- 3.44 We have decided that the TDD will be set in the TO's licence at the time of entering a project into the Major Projects ODI-F by statutory licence modification. For CSNP Re-opener Outputs, this will be shortly after the publication of the relevant CSNP. For other projects, this will be when we are undertaking the eligibility assessment under the Load Re-opener (see Chapter 4). This is unchanged from the position in our Draft Determinations.
- 3.45 NGET and SPT said that the TDD should be set as part of the CSNP Re-opener Project Assessment Decision,¹¹ so that the project design is more developed and the relevant estimates (eg P50 delivery date) are more certain than they would be if set at the time of CSNP publication.
- 3.46 In deciding when to set the TDD, we recognise that there are trade-offs. The earlier the TDD is set, the more clarity the TOs will have on our expectations. The later the TDD is set, the more certainty there is over project delivery timelines.
- On balance, we consider that there is consumer benefit in incentivising decision-making during the period leading up to the TO's Project Assessment submission. By providing the TOs with a clear early signal of our expectations for the project, these expectations can be taken into account when the TO is making early decisions (eg during the design phase and early procurement) that can have a critical impact on the overall project timeline. We also consider that our updated incentive design calibrated to the P50 delivery date (unless an ODD is later), rather than our Draft Determination proposal to target the ODD, provides additional assurances for the TOs that the TDD will be a date that they consider is realistically deliverable, taking into account project-specific factors.
- 3.48 We have decided that, as with ASTI, the TOs may request an adjustment to the TDD in response to a material scope change that means that what is being delivered essentially constitutes a new project for example as a result of a substantive redesign required to obtain planning approval or as directed by the NESO. If such a change means that the original TDD is no longer considered achievable, we will consider whether there is sufficient evidence to suggest that it

¹¹ The CSNP Re-opener Project Assessment Decision is our decision following a submission by the TO of its cost and design proposals for a CSNP Re-opener Output, which takes place after it has submitted all required planning and consenting applications. See Chapter 4.

is appropriate to update the TDD. We expect there to be limited occasions and circumstances in which such a change will be considered. If a change is large but not enough to constitute a new TDD, eg it is a modification to the project rather than a substantively new project, the project may instead be eligible for a penalty exemption period through the Delay Events mechanism discussed from paragraph 3.81.

NESO inputs to the Major Projects ODI-F

- 3.49 All three TOs requested clarity on the involvement of the NESO and us in setting the parameters for the Major Projects ODI-F, including questioning how we will address any situation if the NESO outputs are not as expected.
- 3.50 SHET asked for clarity on how we will address a situation in which a project has been proposed by a third party but the NESO has determined that it should be delivered by a TO. In instances such as this, we would need to engage with the NESO and TOs and consult on determining a robust P50 delivery date that is relevant to the TO (rather than to that third party) when preparing to include the project in the Major Projects ODI-F.
- 3.51 NGET and SPT requested further detail on how the NESO's publications on the CSNP will inform the CSNP Re-opener and the Major Projects ODI-F, and NGET additionally raised a concern about the way in which we will incorporate this information into the regulation of the TOs. It is appropriate that we seek to act upon the NESO's recommendations, but before doing so we will review the NESO's CSNP outputs and methodology to establish confidence in their being appropriate as the basis for the Major Projects ODI-F. We will also consult on any project being included in the Major Projects ODI-F as part of the statutory modification process. Stakeholders also raised this concern in relation to the CSNP Re-opener, as we discuss in the relevant part of Chapter 4.

<u>Incentive exposure</u>

3.52 The overall exposure through the Major Projects ODI-F in RIIO-ET3 will be determined at the time that the incentive is set for any given project or tranche of projects (eg tCSNP2 Refresh). We have provided incentive caps on both the upside and downside, which are linked to the forecast totex for, and constraint costs relieved by, the project at the time of setting the ODI-F.

Incentive value

3.53 We have decided to set three designs of the Major Projects ODI-F:

- Design A is for projects with an ODD that falls on or before the P50 delivery date. This is the design that we expect to apply to the majority of projects that are subject to the Major Projects ODI-F, as we expect most projects from the CSNP to meet the criteria. We expect to have an estimate of constraint costs for all Design A projects, but provide a backstop for exceptions.
- Design B is for projects for which the ODD estimate has not been developed on an independent basis, eg by the NESO. This will likely apply to projects from the Load Re-opener that are subject to the Major Projects ODI-F.
- Design C is for projects with an ODD that falls after the P50 delivery date.
 We expect this to apply to a limited number of projects recommended by the NESO in the CSNP, but it is necessary to treat these projects differently to ensure that the TO does not incur a penalty if it delivers a project on or before the ODD.
- 3.54 We summarise the differences between these three designs in Table 4, and then discuss each of the design elements in turn.

Table 4: Summary of incentive parameters for designs as set out in paragraph 3.53

Design element	Design A	Design B	Design C
Scope	ODD on or before P50 delivery date.	No ODD determined.	ODD after P50 delivery date.
Annual reward amount, to be pro- rated for actual delivery date.	30% of constraint costs associated with one year of delay, within 2% and 5% of project totex. If constraint costs are unknown: 2% of project totex.	2% of project totex.	None, lump sum only.
Lump sum	1% of project totex if delivered on or before P50 date.	1% of project totex if delivered on or before P50 date.	1% of project totex if delivered on or before ODD.
Maximum reward	The lower of: 20% of project totex, and the reward available if delivered exactly on the ODD.	10% of project totex.	1% of project totex.
Annual penalty amount, to be pro- rated for actual delivery date.	Half the annual reward amount.	Half the annual reward amount.	0.5% of project totex.
Deadband	No deadband.	No deadband.	No deadband.
Maximum penalty	Half the maximum reward.	Half the maximum reward.	1% of project totex.

Rewards for delivery on or before the TDD

- 3.55 We have decided that for all projects with an ODD on or before the P50 delivery date or without an ODD (ie Designs A and B), each project will be eligible for two elements of reward:
 - an "early delivery reward" which provides additional incentives for the TO
 to deliver earlier than the P50 date, recognising the potential consumer
 value of early delivery, for example in reducing constraint costs; and
 - a lump sum reward for on-time delivery (on or before the P50 delivery date), of 1% of project totex.
- 3.56 For projects with an ODD that falls after the P50 delivery date, ie Design C, we consider that an early delivery reward is not appropriate as it would reward delivery earlier than is optimal for consumers. These projects will therefore be eligible for the on-time lump sum reward, but not for an additional early delivery reward that accrues daily.
- 3.57 Together, these two design elements provide a strong incentive for timely delivery and tie the TOs' incentives to the consumer impact, helping to minimise constraint costs incurred. Designs A and B are in line with the proposal in our Draft Determinations for a two-part reward, while the formulation of Design C is adjusted to recognise that for some projects the ODD may be later than the P50 delivery date.
- 3.58 One respondent disagreed with there being any rewards for early delivery at all and stated that the incentive should be downside-only as TOs have sufficient upside due to the addition to their RAVs through these projects. An addition to the RAV should not in itself be considered a reward, and we consider that it is appropriate to incentivise the TOs to deliver early where this can help to reduce constraint costs incurred by consumers.
- 3.59 We have decided to set the annual delivery reward value as follows, with the actual reward earned in a year being pro-rated according to the actual date of delivery within the year:
 - Where we have an ODD and an estimate of constraint costs, ie Design A, the per annum early delivery reward would be calculated as 30% of the constraint costs associated with delivery being delayed one year past the ODD. This per annum potential reward would be subject to a cap and floor of 5% and 2% of forecast totex for that project at the time of setting the incentive. This is a similar approach to that in ASTI.

- Where estimates do not exist for the ODD and constraint costs, ie Design B, the per annum early delivery reward would be 2% of forecast totex for that project at the time of setting the incentive.
- 3.60 The calculation of annual reward values is in line with our proposal in our Draft Determinations, with the exception of the introduction of Design C to offer clarity that there will be no annual reward value available when the ODD falls later than the P50 delivery date. NGET, NPg and a consumer group all supported our decision to link reward values to constraint costs where information is available, with one stating that this aligns the incentive with consumer outcomes as TOs and consumers share in the savings achieved by earlier delivery.
- 3.61 One respondent stated that the annual reward value should be focused on the benefit of acceleration, not the benefit of avoiding a year of delay, as there could be different constraint costs either side of the ODD (the proposed TDD in our Draft Determinations). We consider that this issue does not arise in the design set out here; the TDD is set to the P50 delivery date for projects with an annual reward value (ie Designs A and B) and so is always based on constraint costs after the ODD. SPT said that there should not be alternative incentive values for non-CSNP projects. We agree that there would be some benefits to using the same inputs for both, but we consider that it is valuable to use constraint costs where they are known and appropriate to use a de minimis value where they are not. One other respondent said that the NESO should provide the required inputs for all projects subject to the incentive, but this is not within the NESO's scope.
- 3.62 We have decided that the on-time lump sum reward will be 1% of forecast totex at the time of setting the incentive, for all three designs. For Designs A and B, this will apply for delivery up to or on the P50 delivery date. For Design C, this will apply for delivery up to or on the ODD, as we consider it is appropriate to continue to incentivise delivery up to the ODD when it falls later than the P50 delivery date.
- 3.63 This lump sum is lower than the 2.5% of project totex proposed in our Draft Determinations but is treated additionally to the annual reward. Tos agreed with the proposal for a lump sum. Conversely, four respondents either disagreed with there being a lump sum reward or commented more generally on the asymmetry being too generous. On balance, we decided on a lower level of lump sum to provide an incentive for on-time delivery but retaining a strong incentive for the TOs to deliver earlier than the TDD.

3.64 SPT proposed a higher lump sum of 5% to provide a stronger incentive for meeting Clean Power 2030 (CP2030) targets. Given that most projects under this incentive will have TDDs after 2030, we do not consider this necessary.

Reward cap

- 3.65 We have decided that the reward for early delivery, including the lump sum, will be subject to an overall cap of:
 - Design A: 20% of project totex, or the early delivery reward that the
 project would be eligible for it if were to deliver the project precisely on the
 ODD, whichever is lower. This is a change to our approach proposed in the
 Draft Determinations, explained further from paragraph 3.66.
 - Design B: 10% of project totex. This is the same as that proposed in our Draft Determinations for projects for which the NESO does not provide an estimate of constraint costs. We did not receive feedback on this proposal.
 - Design C: 1% of project totex. This is a new design has been introduced following feedback on our Draft Determinations, and reflects that the only reward available under Design C is the lump sum of 1% of project totex.
- 3.66 For Design A, we have decided that the TO will be eligible for a reward that represents the constraint costs saved by delivering the project between the ODD and the P50 delivery date. For example, if a project is eligible for the maximum annual reward value of 5% of project totex a year (ie the constraints costs are high as compared to the project totex), and the ODD is three years before the P50 delivery date, the cap for this project is 16% of project totex: three years of the annual reward value of 5% of project totex, plus the lump sum of 1% of project totex.
- 3.67 SPT disagreed with our proposal for "a double cap for reward" of 10% of project costs and 30% of forecasted constraint costs, arguing that it made the total reward cap artificial and unachievable. We disagree that the overall reward cap will be unachievable in all cases; we expect some projects to have significant scope for acceleration beyond the TDD and the cap has been set to recognise these instances rather than to provide a target for smaller and less urgent projects.

Deadband

3.68 We have decided that the penalty will accrue from the day after the TDD - ie there will be no deadband. This is a change from our Draft Determination proposal to include a deadband of 12 months after the TDD.

- 3.69 We have decided that there will be no deadband on the basis of reduced uncertainty and less challenging TDDs:
 - Our revised approach to setting the TDD means that that the TDD will be, at the earliest, the P50 delivery date. This date will have been set considering TO input and using a methodology to be applied consistently across TOs. While that methodology is not yet set, this approach reduces uncertainty compared to the proposal in our Draft Determinations where we intended to use the NESO's ODD for the project, which may have been set as early as the "earliest in-service date".
 - Our updated approach to setting the TDD will, for many projects, result in a
 later TDD than in the proposal in our Draft Determinations. For most
 projects we expect the P50 delivery date (ie the TDD under Designs A and
 B) to be later than the ODD (ie the TDD in our Draft Determinations
 design). For any projects for which the ODD is later than the P50 delivery
 date (Design C), the TDD is set as the ODD (ie after the P50 delivery date).
- 3.70 We consider that it is therefore not in consumers' interests to offer a deadband as well as a lump-sum for timely delivery and the overall incentive asymmetry. Two respondents argued that the deadband should be removed as it is too generous. Conversely, all three TOs and NPg supported the inclusion of a deadband based on the design proposed in our Draft Determinations.

Penalties for delivery after the TDD

- 3.71 For Designs A and B, we have decided to retain the asymmetry between reward and penalty values proposed in our Draft Determinations, ie the annual penalty value and overall penalty cap for these projects will be half the corresponding rewards parameters for that project.
- 3.72 This asymmetry matches the proposal in our Draft Determinations, although there the maximum reward was 10% of totex for all projects and the maximum penalty was 5% for all projects. All three TOs, NPg and NGED welcomed this asymmetry and noted the difficulties of the long "tail risk" in major project timelines. Three respondents disagreed and stated that it is detrimental to consumers. As discussed in paragraph 3.9, we consider that the design, in particular the focus around a P50 delivery date and ODD, represents a fair balance between incentivising TOs to deliver in the interests of consumers while recognising the risks they face in delivering major projects.
- 3.73 For Design C, we have decided that it is appropriate to introduce a small annual penalty of 0.5% of project totex for up to two years after the TDD. Design C

involves no annual reward value and only a lump sum reward for delivery up to or on the TDD, and so we have introduced a lower penalty than in Designs A and B, which will be in place for up to two years. While this means that the total penalty available equals the total reward available, we consider that this is an appropriate modification given the relative ease of delivering a Design C project by the TDD (as compared to Design A and Design B) because the TDD falls later than the P50 delivery date.

- 3.74 In summary, we have decided that the annual penalty values will be as follows, pro-rated to the actual delivery date within the year:
 - Design A: Half of the annual reward value, subject to a floor of 1% and a cap of 2.5% of project totex, or 1% of project totex if constraint costs are not known. This is the same as the proposal in our Draft Determinations.
 - Design B: 1% of project totex. This is the same as the proposal in our Draft Determinations for non-CSNP projects.
 - Design C: 0.5% of project totex. Design C was not included in our Draft
 Determinations and has been introduced alongside our updated Design A.
- 3.75 In summary, we have decided that the overall penalty caps will be as follows:
 - Design A: either 10% of project totex, or half the reward that the TO would be eligible for if it delivered the project exactly on the ODD, whichever is lower. This is half the reward cap, as proposed in our Draft Determinations, although the values have changed as a result of our change to the reward cap values for Design A. This exposure is consistent with ASTI.
 - Design B: 5% of project totex. This is the same as the proposal in our Draft Determinations for non-CSNP projects.
 - Design C: 1% of project totex. This represents two years of penalties. This is a new design element as Design C is new since our Draft Determinations.

When the incentive will apply

3.76 We have decided that the incentive will be applied to a TO's revenue through the Price Control Financial Model in the regulatory year that it is incurred. For example, if a project is delivered one calendar year early but its delivered year falls into a different regulatory year than its TDD, it will receive its reward spread across those two years in accordance with the formula that will be set out in the licence condition for the Major Projects ODI-F. We did not discuss this proposal in our Draft Determinations, as it is the standard way for incentives to be reflected in a TO's revenues.

- 3.77 In our initial licence consultation in July 2025, we included a draft of the Special Licence Condition for the Major Projects ODI-F, in which we included a formula for the calculation of the recovery of the rewards and penalties, reflecting this approach. We received responses from all three TOs requesting that we phase rewards and penalties over several years, eg 10-20 years to mitigate potential cashflow issues. These responses referenced the ASTI decision, in which we stated our intention to spread the recovery of ASTI rewards and penalties over time. We do not consider that it is necessary or appropriate to spread the recovery of Major Projects ODI-F rewards and penalties over several years.
- 3.78 It is important to retain the strength of the incentive without weakening it by spreading it across multiple years, given the consumer value of delivering these strategically important projects in a timely manner. There are also potential issues of intergenerational fairness if consumers in ten or more years (as per SHET's proposal) are paying higher bills as a direct result of a reward paid to a TO for helping to reduce constraint costs within the RIIO-ET3 period. Because of this, combined with our understanding that the Major Projects ODI-F is unlikely to result in excessive volatility to TO revenues or consumer bills (paragraph 3.79), we will not spread the impact of this incentive.
- 3.79 We recognise that spreading the incentive could be beneficial to smooth the impact of revenue adjustments on TOs' revenues, network charges, and consumer bills. The main motivation for spreading the incentive would therefore be if we consider that the maximum potential incentive falling in a single year, positive or negative, could cause excessive volatility in TO revenues or consumer bills. For example, while responses referenced the ASTI decision, many ASTI projects have TDDs "clustered" in 2030 or 2031 to support delivery of government's target for 50GW of offshore wind, which results in a large spike of potential penalties across a few years if these projects are all delayed. We do not expect the projects under the Major Projects ODI-F to face the same clustering issue. We have not seen any suggestion of clustering of delivery dates in the tCSNP2 tranche of projects, for example, and such an issue is less likely with the Major Projects ODI-F given that the TDD is centred around a project-specific P50 delivery date rather than a system-led ODD.
- 3.80 In the coming years we will continue to monitor the timing and incentive size of projects that we introduce into this ODI, to retain an updated view of the potential impact on revenues and bills. We will continue to engage with the TOs to

¹² ASTI decision doc | December 2022

determine an appropriate approach to adjusting revenues for rewards and penalties under the ASTI framework.

Delay Events

- 3.81 We have decided that TOs will be able to apply for a Delay Event for a project subject to the Major Projects ODI-F.
- 3.82 We have decided that a Major Projects ODI-F Delay Event means an event that is outside the licensee's control, causes a delay of at least 30 days, and which the TO has used its best endeavours to prevent the occurrence of, and to mitigate the impact of. Qualifying event types are:
 - acquisition of land/necessary land rights via compulsory acquisition;
 - · delays in obtaining planning approval and consents;
 - delays regarding seabed leasing or agreements for interaction with other third-party infrastructure;
 - extreme weather conditions (lower than a 1-in-10 probability);
 - · pandemic or livestock epizootic;
 - significant archaeological discoveries;
 - significant change to project scope;
 - significant protestor action;
 - unforeseen and significant ground or seabed conditions;
 - unforeseen changes in law, regulation, and international treaties applicable to the UK;
 - unforeseen unexploded ordinance mitigation; or
 - war, hostilities, or terrorist events.

TO actions to avoid delay

3.83 Our Draft Determinations proposed that we would require the TOs to have used reasonable endeavours to avoid or mitigate the delay. We did not receive any responses directly on this proposal. As part of providing the additional clarity requested by NGET and SHET on our approach to Delay Events, we have decided that consumers' interests are best represented by a requirement that TO has used its best endeavours to prevent the occurrence of, and to mitigate the impact of a qualifying Delay Event. This obligation requires TOs to act in a prudent, determined and reasonable way. It differs from a simple 'reasonable endeavours' obligation in that it may in certain cases require TOs to consider and pursue a number of reasonable courses to prevent the occurrence of a Delay Event, rather

- than merely one (as might arguably be true of a simple 'reasonable endeavours' obligation).
- 3.84 We do not consider this obligation requires TOs to incur expenditure in a manner that would be harmful to consumers. It does not require expenditure to be incurred where there are low prospects of securing the desired result (such actions not being prudent, determined and reasonable).

List of qualifying events

- 3.85 Our decision above sets out is a more targeted list than proposed in our Draft Determinations and also sets out this list as exhaustive. In our Draft Determinations, we described the causes of a Delay Event at a more general level excluding delays caused by supply chain constraints, and with the option for unlisted Delay Event types. NGET and SHET requested more specific language on what constitutes a Delay Event, and we consider that our decision above provides more clarity. We will provide additional commentary and guidance in the Major Projects ODI-F Governance Document.
- 3.86 A consumer group said that we should limit Delay Events to 1-in-20 weather events instead of 1-in-10 weather events, as the TOs should be able to mitigate a 1-in-10 weather event. We consider that the definition for a 1-in-10 weather event is sufficient for our purposes, recognising the additional requirement for the TO to demonstrate that it has taken best endeavours to avoid or mitigate the impact of such an event.
- 3.87 All three TOs disagreed with the exclusion of supply chain events from Delay Events because there may be some events which cannot be mitigated through the APM, such as skills shortages, resource availability, and market capacity. NPg supported the inclusion of supply chain events in Delay Events. A consumer group supported the exclusion of supply chain events due to the introduction of the APM.
- 3.88 We consider that the APM provides a substantial potential allowance for the TOs to address supply chain constraints, transferring risk from the TO to consumers, and we do not think that it is therefore necessary or appropriate to further this with the potential for Delay Events in this area. The APM allows TOs to access allowances once the need for procurement is known, without having to wait for the full project allowance to be made available.
- 3.89 SHET said that the Delay Event mechanism must align with ASTI. We have justified the design of the Major Projects ODI-F on its own merits, but highlight

- that differences to ASTI are either a result of differences between ASTI and the Major Projects ODI-F (such as the urgency of the ASTI portfolio and the introduction of the APM after ASTI was set) or lessons learned through ASTI processes in recent years.
- 3.90 NGET said that the Independent Technical Adviser (ITA) should be used as part of the assessment of Delay Events. We consider this to be outside of the initial remit of the ITA but are open to reconsidering this position when we review the ITA role as it develops.

Impact on reward and penalty dates

- 3.91 We have decided that an approved Delay Event will change the date on which the TO may incur a penalty for late delivery, but it will not change the date on which the TO will incur a reward for early or on-time delivery. This will be done by a Delay Event resulting in an increase to the "Major Projects ODI-F Penalty Exemption Period", without a change to the Major Projects ODI-F TDD.
- 3.92 While we believe a TO should not incur a penalty due to an approved Delay Event, adjusting the date on which a reward can be obtained by a TO as a result of a Delay Event would not be aligned with the intent of the mechanism, ie that a TO is rewarded for delivering better-than-average performance and the consumer benefits are achieved by accelerated delivery from the P50 delivery date.
- 3.93 This approach is unchanged from the proposal in our Draft Determinations, and is also the same approach as that taken in the ASTI ODI-F. All TOs argued that Delay Events should result in a change to the TDD rather than to the penalty exemption period. Any approved Delay Event in the Major Projects ODI-F will also affect the delivery date in the relevant re-opener (ie the CSNP Re-opener or Load Re-opener), such that the PCD and LO which apply to a project under the re-opener are updated to take account of the approved Delay Event.

Reporting

- 3.94 The TO is required through Standard Condition B15 (Regulatory Instructions and Guidance) to report annually during the construction phase on expenditure and progress in delivering the output. As part of this, the TO will be required to provide an update on the status of the project against the project delivery plan, with an explanation of any divergences from that plan and any concerns that the TO has about delivery progress.
- 3.95 Once the output has been delivered, the TO should confirm this and provide evidence of delivery and the date of delivery. The delivered date for the purpose

of the Major Projects ODI-F means the date on which the asset has been "Fully Delivered", ie we are satisfied that the asset has been made available to the NESO for operational service and configuration. The TO's evidence of delivery should therefore include confirmation from the NESO.

Connections ODI-F

Purpose: To incentivise TOs to deliver connections projects in a timely manner.

Benefits: Having customers connected to the network in a timely manner will mean

that GB is well placed to reach its CP2030 targets.

Final Determinations summary

Design	Final Determination	Draft Determination
ODI type Financial – reward and penalty.		Same as FD.
Measurement The number of scheduled connection projects that a TO connects within RIIO-ET3.		Change - two DD options, FD is Option 1.
Target All connections that have a contracted connection date within RIIO-ET3, following confirmation of the reformed connections queue.		Change - two DD options, FD is Option 1.
Connection trigger	The signing of Part 1 of the Acceptance Certificate as part of System Operator Transmission Owner Procedure (STCP)19-4 Commissioning and Decommissioning.	Change – none provided.
Incentive exposure A maximum reward which is equivalent to an average of 0.4% of RoRE per year of RIIO-ET3, and a maximum penalty which is equivalent to an average of 0.2% of RoRE per year of RIIO-ET3.		Same as FD.
Incentive value		
Deadband	A 30-day period after the contracted connection date in which a connection will not be rewarded or penalised.	Change – none provided.
Exemptions	Where a customer has missed two consecutive milestones, or a single milestone if it is the customer's last milestone, and the project is subsequently delivered late, the project will be marked as if delivered in the deadband.	Change – none provided.
	Where 16% or more of a TO's scheduled connections within RIIO-ET3 are delayed	

Design	Final Determination	Draft Determination
	due to planning delays and the projects are subsequently delivered late, all projects within scope will be marked as if delivered in the deadband.	
Reporting	Annual Regulatory Reporting Pack (RRP).	Change – none provided.
Applied to	All TOs.	Same as FD.

Final Determination rationale and Draft Determination responses Measurement

- 3.96 We have decided to set an incentive, the Connections ODI-F,¹³ which measures the timely connection of customers to the network during RIIO-ET3. This was our preferred option in our Draft Determinations, with the other option consulted on being a measure of network capacity additions.
- 3.97 Through this incentive we want TOs to be ambitious in the connection dates set for customers. This ambition will be measured based on how close offered dates are to either NESO advice on dates that optimise benefits to the system, or dates requested by customers. TOs will be rewarded for the on-time or early connection of projects against the date set, and penalised if customers are connected more than 30 days late.
- 3.98 SHET, SPT, NESO and four other stakeholders broadly supported the incentive design we favoured in our Draft Determinations, though the two TOs also set out some concerns. We have since developed this incentive through working groups with TOs and stakeholders, responding to calls for more detail.
- 3.99 Although SPT stated its support for our favoured option, it proposed to instead link the incentive to the amount of MVA installed from such projects, appreciating the impact of different sized connection projects. This was different from our less-favoured option, which SPT stated would have been difficult to benchmark.
- 3.100 NGET presented a further option for consideration that set annual targets for MW to be connected, baselined from projects in the connections queue. We have concerns that this would allow TOs to be rewarded for the delivery of connections many months after the contracted connection date as long as it is made within the same year. We do not feel that this behaviour would benefit either the connecting customer with which they are contracted, or GB energy consumers.

¹³ In our Draft Determinations this was named the Connections Capacity ODI-F.

- 3.101 One stakeholder supported our preferred option but suggested any connections incentive should be penalty-only. It reasoned that there is benefit for the TOs in having an increased RAV from investing in new infrastructure. We consider it important, especially during RIIO-ET3, that connections are made in a timely manner and the TOs should be positively incentivised to achieve this over and above benefits they receive from additions to the RAV. In any event, the increase to the RAV will be realised regardless of how timely the connection is made.
- 3.102 We have broadened the incentive from the scope suggested in our Draft
 Determinations following feedback from all TOs and two additional stakeholders to
 include generation and demand customers, and where the TO is contracted to
 accommodate DNO requests. As such, we will consider all connection projects
 with a TO Construction Agreement (TOCA¹⁴). This captures the decarbonisation
 and economic benefits that generation and demand connections should achieve.
- 3.103 As signalled by NGET and NPg in their responses, this may result in a small number of occasions where a project is incentivised under both this incentive and the RIIO-ET3 Major Projects ODI-F. We consider that these rare occasions are justified as the different mechanisms are distinct in their ambitions. For example, the Major Projects ODI-F is in place to focus on the delivery of strategic projects including those which can relieve constraint costs, while the Connections ODI-F focuses on TO contractual arrangements with their customers.
- 3.104 Another related area is the Connection End-to-End Review update, to be published in December 2025. That will set out an intention to build on the existing Guaranteed Standards of Performance (GSoP) framework to enable connection customers to seek compensation from TOs if connections are delivered late. We consider there is merit to allowing both incentive penalties and procedural customer redress on late connections to co-exist. There is a clear distinction between the two, as one financial payment goes to the customer as compensation against their damage or loss, while the other is returned to consumers.
- 3.105 We have decided that TO connection delivery will be measured against its completion dates¹⁵ in the TOCA. While not set out in our Draft Determinations, this received support during subsequent working groups.
- 3.106 TOs are the bodies which offer completion dates to connection customers, that, once signed, become the completion dates in the TOCA.

 $^{^{14}}$ A TOCA is a contractual agreement between the relevant TO and NESO.

 $^{^{15}}$ Defined in the TOCA as the date for completion of the Transmission Construction Works as set out in the TO Construction Programme.

- 3.107 There are provisions which allow for movement of dates:
 - A customer may request a change to its contracted connection date through the modification application process, which if accepted, in accordance with the Connection and Use of System Code (CUSC),¹⁶ replaces the completion date in the TOCA.
 - Either the TO or NESO can propose a change within the TOCA.
- 3.108 If additional TOCAs are agreed in-period and those projects have completion dates scheduled on or before 31 March 2031, those projects will be eligible for a reward or penalty and therefore be added to the count of projects across which the total incentive value is spread. If a project's completion date is moved to being after 31 March 2031, any such project will no longer be eligible for a reward or penalty through the RIIO-ET3 ODI-F and therefore be removed from the count of projects across which the total incentive value is spread.
- 3.109 Where staged builds are required, TO performance will be marked against the connection of the last stage. This ensures that the project as a whole has been connected and customer expectations have been met.

Managing policy uncertainty

- 3.110 NGET queried how future changes in connections policy could impact the incentive. If major developments in government or regulatory policy necessitate additional changes to the connection dates of a significant number of TO projects, outside of the processes outlined above, we would review the appropriateness of the affected target dates.
- 3.111 Any rewards must be conditional on the determination of ODDs, either in terms of optimising benefits to the system and/or meeting customer expectations. We are conscious of the risk that this incentive could, in theory, encourage TOs to delay connection offer dates to customers until towards the end of the period to increase their chances of reward, or to avoid penalties for late delivery. To protect against this risk, we may commission an independent audit/review of some or all TO connection dates offered through connections reform before setting the dates in this incentive. The purpose of this audit/review would be to assess the magnitude of (and reasons for) changes to the offer dates provided by the TO, the ambition of the dates offered by the TO, and how the dates offered relate to customer and wider system needs. To support this, we will ask the NESO to

 $^{^{16}}$ The CUSC is the contractual framework for connecting to and using the National Electricity Transmission System.

- record all prioritised connection offers and provide the required data on the date requested versus the date offered, which will feed into the audit/review.
- 3.112 If this audit/review identifies that a TO has attempted to delay connection offer dates beyond a reasonable period after the date requested by the customer or the TOCA previously agreed, we may exclude identified projects from rewards under the incentive or change the date from which rewards are granted. If the audit/review identifies these issues occurring at a significant scale we may look to revisit all the parameters of this incentive before establishing the list of projects it will be assessed against, and will also consider whether other courses of action are necessary. This may include incentivising TOs against dates agreed prior to the re-ordering of the queue, introducing a penalty-only incentive, or removing the incentive entirely.
- 3.113 These options may be implemented if TO behaviour warrants it. The TOs will be required to create and maintain a connections project register, listing all connection projects and their contracted completion dates, detail of which will be set out in the Regulatory Instructions and Guidance (RIGs).

Connection trigger

- 3.114 The incentive requires a point at which we accept that a TO has completed its works and that the TO can be marked against its contracted completion date to attribute a reward or penalty. This was not explored in our Draft Determinations but has been subsequently discussed at working groups.
- 3.115 We have decided to use the signing of Part 1 of the Acceptance Certificate as part of STCP 19-4 Commissioning and Decommissioning¹⁷ as it marks a clear point by which a TO has concluded all works within its control.
- 3.116 An alternative that we considered is the point at which the customer is issued the Energisation Operational Notification (EON). While this was heavily favoured by one stakeholder, we decided against using the EON because it may be issued sometime after a TO has concluded its works (eg after outages) and therefore could result in a penalty even if the TO has run to schedule up until that point.

Incentive exposure and value

3.117 We have decided to set a maximum reward across the period which is equivalent to an average of 0.4% of RoRE per year of RIIO-ET3, and a maximum penalty across the period which is equivalent to an average of 0.2% of RoRE per year of

¹⁷ STCP 19-4 Issue 009 Commissioning and Decommissioning 25 April2023 1.pdf

- RIIO-ET3, in line with our Draft Determinations position. This results in an overall exposure of +2%/-1% of RoRE for each TO across the period. Each eligible connection project due for completion within RIIO-ET3 will be attributed an equal potential reward of the maximum of that TOs' overall upside exposure, and a potential penalty of the maximum of that TOs' overall downside exposure.
- 3.118 We feel this asymmetry, in addition to the exemptions process set out below, offers an important risk mitigation to the TOs for delays to connection delivery for reasons beyond their control, while also offering rewards that recognise the challenge the TO may face on occasion in delivering connections on time or early.
- 3.119 NGET stated its support for our Draft Determinations position of setting annual limits of +0.4%/-0.2% annually but urged us to allow for annual breaches in response to volume fluctuations if doing so would not breach the overall upside or downside limits across the period. Our approach to setting the incentive value allows for these slight annual differences in the number of projects being connected, while ensuring that all projects are equally valued.
- 3.120 Rewards and penalties will be issued annually, although some adjustment will be made to the unit value of each already delivered connection if the number of projects in scope changes at the end of RIIO-ET3.

Deadband

- 3.121 We have decided to implement a deadband of 30 calendar days after the contracted connection date, during which there will be no reward or penalty. It is only after this 30-day period that a penalty will be applied to a project. We did not propose a deadband in either of our Draft Determination proposals.
- 3.122 All TOs argued for a 12-month deadband. We consider that a 30-day deadband is appropriate for this incentive. We have chosen this length to recognise that slight delays may happen outside of the TOs' control and may not have an especially severe customer or consumer impact. An exemptions process is available for more severe delays that are demonstrably far outside of TO control, see below.

Exemptions

- 3.123 We have decided to implement a limited exemptions procedure for projects that are delivered late, and where connections dates could not be contractually altered, made up of:
 - missed customer milestones; and
 - planning decision delays in some circumstances.

3.124 In our Draft Determinations, we proposed that no exemptions would be included, due to the asymmetric nature of the incentive which, we considered, removed the need for an administratively burdensome and iterative exemptions procedure. All TOs disagreed and pointed out the high level of risk that they would be exposed to, for causes beyond their control. One stakeholder agreed with our initial stance, highlighting the level of control that TOs have in terms of system access as a potential cause of delays. Considering the responses we received, and discussions held in subsequent working groups, we have decided to create two exemptions which are designed to mitigate specific extreme circumstances: missed customer milestones and planning decision postponements. In either case, exempt projects will be marked as being delivered in the deadband.

Missed customer milestones

3.125 Where a customer has missed two consecutive NESO user progression milestones, ¹⁸ or a single user progression milestone if said milestone is the customer's last before completion. We have decided to implement this because we consider that it would be unfair to penalise the TO if project progress has been slowed or halted by the customer.

Planning decision postponements

- 3.126 Where 16% or more of a TO's scheduled connections within RIIO-ET3 are caused by consenting delays with up to three local planning authorities, and the projects are delivered late as a direct result of the planning delay.
- 3.127 We have decided to implement this because we consider this to be an appropriate response to TO concerns about the effect of regional sensitivities to new, and the expansion of existing, energy infrastructure.
- 3.128 We decided on the 16% threshold because if 50% of projects are delivered on time TOs still earn a reward, and 16% is the volume of additional projects that would then need to be late to move the TOs to penalty territory.
- 3.129 By setting a maximum threshold of three planning bodies, we are ensuring that this exemption only applies in the most significant cases of regional planning uncertainty, ie certain authorities cause issues for TOs, rather than from TOs being consistently ineffective at dealing with authorities. This targeted approach

 $^{^{18}}$ User progression milestones in the CUSC are categorised into Conditional Progression Milestones and Construction Progression Milestones.

- avoids the risk of exemption misuse, which could undermine the purpose of the asymmetry and deadband mechanisms.
- 3.130 We do not want to allow exemptions due to planning delays in all circumstances. TOs are expected to manage the end-to-end planning process to produce thorough planning applications. This exemption is in place to address situations in which delays are caused by systemic delays outside of the TOs' control.

Quality of Connections Survey

- 3.131 We have decided to exclude RIIO-ET2's Quality of Connections (QoCS) ODI-F from RIIO-ET3, consistent with our RIIO-3 Sector Specific Methodology Decision (SSMD) position. In our Draft Determinations we remained open, at the request of the TOs, to arguments on the benefits of retaining the QoCS if our concerns, as stated in our Draft Determinations, were resolved in a revised incentive design.
- 3.132 The TOs shared a joint proposal in response to our Draft Determinations, including reasons to why certain key incentive design aspects were decided upon. We consider that the TOs' proposal represented minimal changes from the existing RIIO-ET2 incentive design and as such did not address the issues that led to our initial decision to remove the incentive, eg TOs not suggesting revisions to counter low and inconsistent responses.
- 3.133 We communicated this decision to the TOs and interested stakeholders in a policy working group discussion in September.

Environmental Action Plan (EAP) and Annual Environmental Report (AER) ODI-R commitments and outputs

Purpose: To ensure TOs outline their environmental commitments for RIIO-ET3 and demonstrate their performance against these commitments annually.

Benefits: A more environmentally sustainable network which focuses on mitigating emissions, limiting impact on the natural environment, and ensuring efficiency in operations.

Final Determinations summary

Design	Final Determination	Draft Determination
ODI type	Reputational.	Same as FD.
Measurement	EAP commitment milestones and metrics specified by the licensee in its EAPs.	Same as FD.
Target	EAP commitment targets are specified by the licensee in its EAPs.	Same as FD.

Design	Final Determination	Draft Determination
Reporting	Progress again EAP commitments reported by the licensee in its AERs.	Same as FD.
EAP commitments	We have accepted all EAP commitments not specified here. This includes NGET's energy efficiency and oil contamination EAP commitments, which we have decided to fund with bespoke PCDs. We have decided to reject: Non-statutory biodiversity commitments	Change - we proposed to reject: • Energy efficiency and oil contamination EAP commitments (NGET only).
	(all TOs). We have decided to accept with cost modification:	All Low Carbon Materials and Opportunities UIOLI proposals (all TOs).
	 Low carbon materials cost uplift (all TOs). Carbon compensation UIOLI (NGET and SPT only). Vehicle costs associated with operational transport emissions reduction (all TOs). 	
Transmission losses	Losses will be included within the scope of the Innovative Delivery ODI-F.	Change - we consulted on whether the Innovative Delivery ODI-F or SO:TO Optimisation ODI-F could be used to incentivise reduction in losses.
Applied to	All TOs.	Same as FD.
Associated document	Environmental Reporting Guidance.	Same as FD.

Final Determination rationale and Draft Determination responses

EAP Commitments

- 3.134 We have decided to retain our Draft Determination position and accept the majority of the TOs' EAP commitments, providing approximately £700m in baseline allowances. Given that we expect significant use of the Load and CSNP Re-openers, we also expect a significant amount of additional funding to deliver these environmental commitments to be granted during the price control period, primarily due to the delivery of BNG required by consenting bodies. The cost changes since our Draft Determinations are because of our decisions to:
 - provide a cost uplift for known low-carbon construction materials see paragraphs 3.149-3.154;

- update the Operational Transport Emissions Reduction PCD methodology –
 see the Overview Document;
- update the Carbon Compensation UIOLI methodology see paragraphs
 4.238-4.242; and
- create new bespoke PCDs for energy efficiency and oil contamination for NGET – see the NGET Annex.
- 3.135 Around 60 Draft Determinations responses regarding the TO's EAP commitments were in relation to biodiversity and/or embodied carbon these topics are discussed separately in the following sections. In the six responses that commented on the remainder of the EAP commitments there was broad support for our position.
- 3.136 One response proposed additional sulphur hexafluoride (SF6) considerations for AER ODI-R reporting, which we will factor into our updated Environmental Reporting Guidance. Two stakeholders also highlighted the importance of us reporting on TO environmental performance for the effectiveness of this incentive. We agree that third-party assessment, such as ours, on the performance of TOs is important. We commit to including our assessment of TO progress within our annual reporting.
- 3.137 For our decision on our cross-sector EAP & AER ODI-R policy, please see Chapter 4 of the Overview Document.

Biodiversity: statutory requirements

- 3.138 We have decided to accept the common TO EAP commitment to deliver a minimum 10% BNG on all projects requiring planning consent. The four responses regarding this EAP commitment supported this approach, which is to use a minimum 10% BNG as a proxy target for when a regional statutory target is not specified (eg "significant enhancement" in Scotland). We believe the delivery of this commitment, although highly material at an expected £850m-£1.4bn, represents a fair cost to energy consumers for biodiversity initiatives given its alignment to legislative requirements that will apply in RIIO-ET3.
- 3.139 We have received updated forecasts from NGET that reduce its total BNG cost by approximately 75% compared to that previously provided, to a range of £360m-£1.08bn. Although this significantly reduces the sector-wide cost of this commitment, the total figure remains material and a clear step change compared to previous price controls (reflective of the increased environmental impact of the TOs' broader business plans). Although there remain uncertainties regarding the

- eventual cost of this EAP commitment, our decision means roughly 85-90% of requested biodiversity-related funding in RIIO-ET3 is being granted.
- 3.140 Some respondents asked for clarification as to whether more than 10% BNG (or the regional equivalent requirement) will be funded on any given project. Stakeholders cited variable requirements of local planning authorities, challenges in delivering exactly 10% BNG, and risks to planning consent applications if requirements above 10% are not funded. We confirm that 10% BNG is a minimum target, not maximum. We will fund TOs to deliver more than 10% BNG when it can be justified by the circumstances of delivering planning consent requirements.
- 3.141 If new biodiversity legislation is introduced that materially impacts funding requirements, we have decided to include this in the scope of the Decarbonisation and Environmental Policy (DEP) Re-opener (formerly the Net Zero Re-opener).

 See Chapter 6 of the Overview Document for further information on this decision.

Biodiversity: non-statutory biodiversity commitments

- 3.142 We have decided to retain our Draft Determination position of rejecting additional funding requests for non-statutory biodiversity commitments. This includes:
 - NGET: Deliver 10% BNG on all construction activities in addition to those requiring planning consent (£45-134m).
 - SHET: Marine BNG outputs (£44.55m) and Species and Habitat Restoration UIOLI (£26.7m).¹⁹
 - SPT: Deliver Natural Capital enhancement across projects with a measurable impact on ecosystems (no cost specified).
- 3.143 Around 60 respondents disagreed with our consultation position. These stakeholders, primarily environmental groups, made a range of arguments as to why funding non-statutory biodiversity initiatives should be considered in the interest of energy consumers.
- 3.144 The common arguments made by respondents against our proposal to reject applications for non-statutory commitments, and our response to these, are:
 - It is against national and regional biodiversity strategic direction and government targets. We believe that given the extensive biodiversity legislation across the UK, it is the role of such legislation to dictate what is

¹⁹ Further detail on our decision regarding the SHET proposals can be found in the SHET Annex.

required of TOs. Although we acknowledge respondents' concern that current biodiversity legislation may not be enough to answer the biodiversity crisis, we do not want energy consumers to bear the burden of greater costs than are necessary and consider that maintaining consistency with government legislation is rational.

- It is against our own biodiversity duty as a public body. Our biodiversity duty requires us to consider what we can do, consistent with the proper exercise of our functions, to further the general biodiversity objective, defined as the conservation and enhancement of biodiversity. Based on that consideration, our biodiversity objective is as follows: within the proper exercise of our functions, to facilitate network companies to comply with their legal requirements to minimise and mitigate any biodiversity impacts from their activities and ensure a positive contribution (ie net gain) by network companies to biodiversity in line with relevant project planning consents. We consider that we have properly taken this into account in our RIIO-3 environmental mechanisms and funding decisions.
- It does not properly consider the intent of biodiversity legislation, with 10% BNG a minimum not maximum requirement. As clarified in paragraph 3.140 we do not consider 10% BNG a maximum limit if justified by a project's specific planning requirements. As to funding additional activities outside of the direct scope of legislation, we have not accepted these proposals for the reasons set out in paragraphs 3.145-3.146.
- It is a backwards step from RIIO-ET2 policy and is against precedent, such as
 that set by Ofwat in PR24 where the delivery of above 10% BNG is
 incentivised. We do not consider this critique justified given the significant
 increase in wider RIIO business plan costs, increased pressures on energy
 bills, and significantly greater biodiversity costs associated with meeting
 legislative requirements since setting RIIO-ET2.
- It is against energy consumer expectations, with evidence demonstrating they are willing to pay for environmental and sustainability investment. Although we agree environmental issues are clearly an important consideration for energy consumers, as represented by the significant funding agreed in our wider EAP decision-making, we do not consider that this overrides all other pressures (ie to minimise the impact of the energy transition on energy bills). We believe our decision is a pragmatic approach that balances significant environmental investment with minimising avoidable cost burden.

- It does not consider the co-benefits of biodiversity investment (ie local economic and societal benefits). We do not consider that any potential cobenefits of the commitments override the wider reasoning discussed, which is driven by our primary objective to protect the interests of GB energy consumers.
- It is inconsiderate of the relatively minimal cost of the rejected proposals. We do not consider the costs of the commitments to be negligible, especially given wider pressures on energy bills.
- 3.145 We acknowledge our decision will disappoint these respondents. However, we believe our decision is justified because of the already significant cost burden of meeting statutory biodiversity requirements alongside increased costs in the wider business plan, and broader societal pressures on managing energy bill increases. ²⁰ There are also other areas of RIIO-ET3 where consumers are funding TOs for work which will mitigate the impact of new transmission infrastructure. One example of this is the Community Benefits Funding Pass-through, where we will also enable TOs to meet legislative requirements on financial support for communities affected by new transmission infrastructure.
- 3.146 By committing to fund the TOs to meet legislative biodiversity requirements, we believe we set a clear position that ensures a fair cost to energy consumers whilst still delivering significant environmental investment. We also believe there is wider benefit to the clarity our decision grants, given the challenges in determining efficient and justified biodiversity costs beyond legislative requirements.
- 3.147 We expect TOs to ensure their biodiversity approach delivers both cost efficiency and environmentally optimal outcomes. We believe that project-level funding is justified given the uncertainties of portfolio-wide cost estimates and variation between project needs. This does not prevent the TOs from adopting a broader strategic approach where appropriate.

Biodiversity: new RRP reporting requirements

3.148 We have decided to introduce new RRP biodiversity reporting requirements in RIIO-ET3 to better understand the costs and outputs of biodiversity work, which was supported by two respondents.

²⁰ We have seen some non-statutory BNG commitments referred to as "voluntary". Our decision does not prevent TOs from delivering the proposed outputs in a truly voluntarily fashion, it means only that the costs cannot be recovered through energy bills.

Embodied carbon: Low carbon materials

- 3.149 We have decided to apply a 0.3% uplift to baseline load and non-load allowances for all TOs. This funding is to be used to reduce embodied carbon emissions using known low-carbon materials (eg low-carbon concrete and steel). This differs from our Draft Determinations position, where we rejected TO proposals for new Low Carbon Construction and Opportunities UIOLI pots, proposing instead that project-specific costs should be included in relevant re-opener submissions, with no baseline allowance funding.
- 3.150 Of the 21 responses to our Draft Determinations on this, 20 opposed our rejection of the TOs' UIOLI proposals. Two of these respondents acknowledged our concerns despite supporting the overall needs case. One consumer group supported our position to reject the proposals, citing high financial materiality and limited detail in the TOs' business plans. We believe our revised decision is justified as the funded emissions savings are cost efficient, with limited risk to consumers given any further funding must be justified as part of project costs.
- 3.151 All the TOs revised their business plan proposals in their Draft Determinations responses, setting out new baseline funding requests and varied governance approaches for pipeline funding. Table 5 sets out our funding decision and compares the cost to the TOs' business plan and Draft Determinations requests.

Table 5: Low-carbon construction funding decision compared to funding requests

то	TO business plan proposals (UIOLI)	TO Draft Determinations proposal (UIOLI)	Final Determination funding allowance (baseline)
NGET	£224.9m (1.1% capex uplift)	£56.20m (not calculated by uplift)	£4.76m (0.3% baseline capex uplift)
SHET	£140m (1% capex uplift)	£14m (1% baseline capex uplift)	£4.06m (0.3% baseline capex uplift)
SPT	£96.37m (1.4% capex uplift)	£5.65m (1.4% baseline capex uplift)	£1.57m (0.3% baseline capex uplift)

3.152 The TOs disagreed with our Draft Determination position, that funding should be justified at a project level in relevant re-opener submissions, and argued that it results in a funding gap for reducing embodied carbon emissions of baseline activities. Our decision to grant baseline funding for "known low-carbon materials", recognises this issue whilst limiting overall costs by rejecting the portion of funding we consider unjustified (ie funding associated with "low-carbon construction opportunities", the outputs of which we believe remain too uncertain and are more appropriate for innovation funding routes). We maintain our view

- that where new low-carbon material become viable for use in RIIO-ET3, they can be incorporated into projects business as usual (BAU) or existing re-opener project assessments for evaluation.
- 3.153 Stakeholder responses argued that our Draft Determinations position meant a missed opportunity for stimulating low-carbon industries, which would support UK growth targets. While we must consider economic growth, this must be balanced against our principal objective to protect the interests of energy consumers. In our view, the risks of funding these proposals as requested outweighed any potential co-benefits for economic growth.²¹
- 3.154 We expect the TOs to demonstrate the use of this baseline allowance funding (and any additional funding granted through UMs during RIIO-ET3) in their AER ODI-R reporting.

Energy efficiency and oil contamination

3.155 We have decided to fund NGET's energy efficiency and oil contamination EAP commitments, which were rejected in our Draft Determinations (while approving SPT and SHET's comparative proposals). The decision follows the provision of more evidence by NGET after our Draft Determinations to support the proposals. NGET's funding will be attached to bespoke PCDs to protect energy consumers from non-delivery. See the NGET Annex for further information on this decision.

Transmission losses

- 3.156 We have decided to include innovative TO actions to reduce transmission losses within the scope of the Innovative Delivery ODI-F. Of the seven respondents, two supported this position, while five (including the TOs) opposed adjusting the scope of either the Innovative Delivery ODI-F or the SO:TO Optimisation ODI-F to include transmission losses. We wish to incentivise losses reduction due to the environmental and system cost benefits TO innovation could deliver.
- 3.157 Three of the five opposing respondents, including NGET and SHET, said that the SO:TO Optimisation ODI-F would be the least appropriate of the two incentives considered in our Draft Determinations. We broadly agree with this sentiment, and do not consider the finalised scope of the SO:TO Optimisation ODI-F appropriate to incentivise losses reduction. This is because the incentive's scope is primarily focused on constraint reduction and could not include transmission losses without significant adjustment.

²¹ For further context regarding our growth duty, refer to the Impact Assessment Annex, where we detail why we expect overall RIIO-ET3 investment to stimulate economic growth.

- 3.158 The two stakeholders supportive of our position proposed a range of losses reducing behaviours that could be incentivised. These can be broadly summarised as technology use, operational behaviours such as coordination with NESO, and monitoring and reporting improvements. In consideration of the finalised scope of the incentive, we have decided to include losses in the 'design/engineering' criteria of the incentive. See paragraphs 3.227-3.238 for more detail our decision regarding the Innovative Delivery ODI-F criteria.
- 3.159 Three of the respondents stated that the Innovative Delivery ODI-F scope is not in accordance with losses reduction. SPT added that it considers the EAP & AER ODI-R a sufficient incentive for the TOs in this area. We consider the Innovation Delivery ODI-F scope aligns to the inclusion of losses, as any innovation could result in the delivery of better value for consumers. We have also considered stakeholder demand for more action from TO's to reduce losses in our decision.
- 3.160 NGET stated that if the following issues could be overcome, it would support the use of the incentive: the complexity of financial benefits of losses, the lead times for losses innovations to demonstrate results, and the often incremental nature of results. We do not consider all these issues specific to losses reduction nor consequential enough to prevent the inclusion of losses as a criterion. It is the role of the TO to consider appropriate innovations and demonstrate their value within the framework of the incentive to receive benefit.
- 3.161 One stakeholder proposed that the existing incentive framework is too complex and this would be exacerbated by including transmission losses in an incentive. We do not agree that including losses as a criterion within the Innovative Delivery ODI-F introduces any material complexity into the incentive package.

Insulation and Interruption Gas (IIG) emissions ODI-F

Purpose: To incentivise a reduction in the leakage of IIGs from assets on the ET network, and to support the transition to low greenhouse gas (GHG) alternative IIGs.

Benefits: Reduction to the volume of harmful leakage of GHG emissions from GB's ET network.

Final Determinations summary

Design Final Determination		Draft Determination	
ODI type	Financial – reward and penalty.	Same as FD.	

Design	Final Determination	Draft Determination
Measurement	Target IIG emissions measured in tonnes of carbon dioxide equivalent (tCO ₂ e).	Same as FD.
Target setting methodology	Set individually for each company in line with its Science-Based Target (SBT) for emissions reduction.	Same as FD.
Incentive exposure	There is a natural cap if the TO performs at 0 tCO ₂ e emissions. There is no collar.	Same as FD.
Incentive value	Reward/penalty calculated by applying the value of CO ₂ equivalent (using the Non-Traded Carbon price), for every tonne over or below the target, and applying the TIM sharing factor.	Same as FD.
Deadband	Bespoke deadband downside only deadband for SHET – calculated from its average performance during RIIO-ET2.	Same as FD.
IIG Exceptional Events: materiality threshold	15kg SF6.	5% of annual IIG ODI- F target in tCO ₂ e.
IIG Exceptional Events: historical IIG inventory accuracy	Further evidence to be submitted as part of IIG Exceptional Event mechanism.	Same as FD.
Reporting	Annual RRP reporting.	Same as FD.
Applied to	All TOs.	Same as FD.

Final Determination rationale and Draft Determination responses

Target setting methodology

3.162 We have decided to set RIIO-ET3 targets by using each TO's proportional IIG emissions reduction pathway required to achieve its SBT for emissions reduction, taking a yearly average from a 2018/19 baseline to 2030/31, to create annual tCO₂e emissions targets.²² The targets are shown in Table 6 below.

Table 6: RIIO-ET3 IIG ODI-F annual targets (IIG emissions in tCO₂e)

	2026/27	2027/28	2028/29	2029/30	2030/31
NGET	189,739	176,186	162,633	149,081	135,528

 $^{^{22}}$ An SBT for GHG emissions is consistent with what the latest climate science says is necessary to meet the goals of the Paris Agreement - to limit global warming to well-below 2°C above preindustrial levels and pursue efforts to limit warming to 1.5°C. All TOs have developed their targets with the Science-Based Target Initiative (SBTi) as part of the business planning process.

	2026/27	2027/28	2028/29	2029/30	2030/31
SHET	2,988	2,684	2,396	2,021	2,045
SPT	13,570	12,711	11,853	10,995	10,136

- 3.163 We received five responses regarding the IIG ODI-F target setting methodology. NGET and two other respondents supported our overall targeting approach.
- 3.164 SPT did not support the approach due to the lower improvement required to achieve a reward for SHET compared to the other TOs. Although our decision does mean SHET requires less improvement when compared to the other TOs, we believe this is justified given SHET's lower historical leakage rate and resultant differences in business carbon footprint (BCF) reduction requirements. For example, setting SHET's target in direct correlation with its overall SBT pathway (as with the other TOs) rather than a relative proportion, would require SHET to perform below manufacturer leakage rates by the end of RIIO-ET3 to not incur a penalty (ie approximately a 0.05% leakage rate).
- 3.165 SHET did not support our proposed targeting approach. It reiterated its proposal for a target based on its historical average performance equivalent to 0.26% leakage rate (roughly 5,000 tCO₂e by 2031). We do not agree with this approach as it would not hold SHET to account for worsening performance and does not incentivise performance improvements ambitiously enough.

Deadband

- 3.166 We have decided to set a bespoke asymmetrical deadband for SHET at 3,066 tCO₂e for each year of RIIO-ET3. This means annual emissions between this and SHET's annual targets (see Table 6) would result in no penalty. NGET and two other stakeholders supported this approach. SHET supported the use of a bespoke deadband but set at a 0.40% leakage rate (roughly equivalent to 8,000 tCO₂e by 2031). As with its proposed target, we do not consider that SHET's deadband proposal would appropriately incentivise performance improvement.
- 3.167 SPT did not agree with this approach as it does not believe SHET's performance warrants extra protection from penalty compared to the other TOs. Given the significantly lower baseline leakage rate of SHET compared to the other TOs, as well as its small reward potential, we believe the deadband is proportionate to the different circumstances of the TOs.

Incentive value

3.168 We have decided to apply the TIM sharing factor to this incentive. SHET said that this is removed given the updated target methodology no longer automatically

adjusts targets based on the annual impact of asset interventions funded through the SF6 Asset Intervention PCD. The TIM has applied to the IIG ODI-F in all RIIO price controls, as has funding for asset interventions. We believe the reasoning provided in our RIIO-ET1 Final Proposals,²³ that applying the TIM helps ensure there is an appropriate economic incentive on the TO to take decisions on the level of output delivered in the interests of consumers, still applies.

IIG Exceptional Events: materiality threshold

- 3.169 We have decided to set the IIG Exceptional Events materiality threshold at 15kg SF6. This is a change from Draft Determinations, where we proposed to set the threshold at 5% of each TO's annual IIG ODI-F target. All three TOs disagreed with our Draft Determination proposal. Our revised position balances adding any additional risk to the incentive whilst ensuring regulatory burden is minimised and providing improved clarity compared to the RIIO-ET2 threshold.
- 3.170 NGET and SPT argued that our Draft Determinations proposal would be unfair as it exposes the TOs to different levels of risk. For example, the carbon value of 5% of target emissions for NGET is significantly larger than SHET, which is reflected in the incentive monetary reward/penalty outcome. We have reviewed the impact of our Draft Determination proposal and agree that it would have unintended consequence regarding the size of IIG leakage events excluded for NGET.
- 3.171 SPT argued that a fixed monetary value would be more appropriate, whilst NGET proposed reverting to the RIIO-ET2 approach. We agree with SPT and have decided to set the limit at 15kg this is based on review of all historical IIG Exceptional Event claims (eg before SHET's 2024 Blackhillock claim of 6kg, no claim had been below 25kg).
- 3.172 SHET argued that our Draft Determination proposal would result in increased risk exposure for the TOs. We consider our revised approach to have minimal increased risk given it is below all but one of previously submitted claims. We have also set the limit between the previous lowest claim and SHET's most recent Blackhillock submission, in consideration of SHET's relatively low annual emissions targets compared to the other TOs.

²³

https://www.ofgem.gov.uk/sites/default/files/docs/2012/12/2 riiot1 fp outputsincentives dec12. pdf, paragraph 1.18.

IIG Exceptional Events: historical IIG inventory accuracy

- 3.173 We have decided to use the IIG Exceptional Event mechanism to manage issues with asset nameplate inventory inaccuracy highlighted by SPT during the business planning process. Four of the five respondents agreed with this proposal in our Draft Determinations, agreeing with the need to appropriately reflect the modified IIG Exceptional Event process and definitions in the licence.
- 3.174 SPT disagreed with our approach citing a risk of a perverse incentive to not remove SF6 (ie retrofilling SF6 assets with non-SF6 alternatives could indicate leakage incorrectly and so wrongly result in penalty). We think this risk can be managed with appropriate modifications to the IIG Exceptional Event mechanism (ie portfolio-level submission of retrofilled assets leakage on an annual basis to adjust the affected years performance if required).
- 3.175 We also consider that this approach allows for the issue to be fully considered before any other action is taken, given that thus far only SPT has presented evidence of this risk. If further action is required, the IIG Methodology Statement process provides some flexibility during the price control to update emissions calculations if required.

SF6 Asset Intervention PCD (NGET and SHET)

Purpose: To fund intervention programmes for assets containing SF6, reducing network emissions of SF6 over RIIO-ET3 and beyond, and contributing toward the achievement of TO emissions targets.

Benefits: Reduction in the volume of GHG emissions from NGET's and SHET's networks.

Final Determinations summary

Design	Final Determination	Draft Determination
PCD type	Evaluative.	Same as FD.
Output to be delivered	Delivery of site-specific interventions on assets containing SF6.	Same as FD.
Delivery date	Site-specific delivery dates.	Same as FD.
Allowance	NGET: £114.61m.	NGET: £132.57m.
	SHET: £12.70m.	SHET: £11.89m.
Reporting	PCD report and annual RRP reporting.	Same as FD.
Applied to	NGET and SHET.	Same as FD.

Design	Final Determination	Draft Determination
Associated document	Price Control Deliverable Reporting Requirements and Methodology Document.	Same as FD.

Final Determination rationale and Draft Determination responses PCD type

- 3.176 We have decided the SF6 Asset Intervention PCD will be evaluative. NGET, SHET and two stakeholders supported our Draft Determinations proposal. SPT did not support the proposed PCD, considering the outputs warrant baseline allowance funding with a re-opener to manage uncertainty. We believe a PCD is warranted given both applicable TOs proposed a PCD and the importance of holding them to account for delivery in this area.
- 3.177 One stakeholder proposed expanding the PCD scope to include the works of SPT. We do not believe this is necessary given that SPT's request is below the £15m PCD materiality threshold and it did not request a PCD (ie as SHET did although it is also narrowly below the threshold).
- 3.178 NGET proposed that the PCD could be a combination of evaluative and mechanistic due to the repetitive nature of its palliative coating works planned across 38 sites. We believe, given the relative materiality of this output (£8.10m), it is not worthwhile to separate this into a combined PCD. As such, we consider the portfolio of palliative coating work as a single output. We expect the associated PCD reporting to demonstrate comparable unit rates given the repeatability of delivery.

Cost and outputs

3.179 We have decided on the outputs as listed in Table 7 for NGET and Table 8 for SHET. NGET proposed that its £4.67m cost for IIG Management should not be included in the PCD, stating that it is not a clear deliverable. We agree with this position and have included the funding in its baseline allowance instead of in this PCD. We have reduced NGET's allowance because we have removed one scheme that was included in error in our Draft Determinations. Other minor changes to NGET and SHET costs are a result of updated efficiency modelling.

Table 7: NGET outputs under the SF6 Asset Prevention PCD

Site	Intervention	Delivery Date
City Road 132kV	Gas zone refurbishment	2027

Decision – RIIO-3 Final Determinations – Electricity Transmission

Site	Intervention	Delivery Date
Ealing 275kV	Asset replacement with SF6-free alternative	2028
Greystones 275kV	Gas zone refurbishment	2031
Hams Hall 400kV	Asset replacement with SF6-free HV cable	2029
Humber Refinery 400kV	Gas zone refurbishment	2029
Killingholme 400kV	Gas Zone Refurbishment including retro-fill	2031
Langage 400kV	Gas zone refurbishment	2028
Legacy 400kV	Gas zone refurbishment	2029
Macclesfield 400KV	Gas zone refurbishment	2029
Ryehouse 400KV	Gas zone refurbishment	2028
Sellindge 400kV	Online SF6 leak repair	2031
St Johns Wood 400kV	Gas zone refurbishment	2027
Baglan Bay 275kV	Gas zone refurbishment	2028
x38 sites	Palliative coating across 314 gas zones	2031
Richborough 400kV; Canterbury 200kV; Middleton 400kV; Connah's Quay 400kV	Retrofill Stage 1 across 4 sites to remove 23,468 KG of SF6	2031
Carrington 400kV; Cleve Hill 400kV; Bodelwyddan 400kV; West Burton 400kV	Retrofill Stage 2 across 4 sites to remove 7,969 KG of SF6	2031

Table 8: SHET outputs under the SF6 Asset Prevention PCD

Site	Intervention	Delivery Date
Dounreay 275kV	Protective coating and refurbishment	2031
Melgarve 132kV	Protective coating and refurbishment	2031
Melgarve 400kV	Protective coating and refurbishment	2031
Spitall 132kV	Protective coating, refurbishment and partial asset replacement	2031
Tomatin 132kV	Protective coating	2031
Blackhillock 400kV	Protective coating	2031

Secure and resilient supplies

Decision – RIIO-3 Final Determinations – Electricity Transmission

Energy Not Supplied (ENS) ODI-F

Purpose: To encourage TOs to improve network reliability in an efficient way by managing short-term operational risk.

Benefits: Improving the reliability of electricity supply and reducing the negative impacts of disruption on customers.

Final Determinations summary

Design	Final Determination	Draft Determination
ODI type	Financial – reward and penalty.	Same as FD.
Measurement	ENS volume, measured in MWh, set individually for each TO.	Same as FD.
Target setting methodology	Average of RIIO-ET1 and RIIO-ET2 (years one to three) performance (weighted equally) subtracted from the RIIO-ET2 target.	Change - two DD options, FD is Option 2.
Target	NGET: 125 MWh per year. SPT: 105 MWh per year.	Change - two DD options, FD is Option 2.
	SHET: 90 MWh per year.	
Incentive exposure	A collar on penalties of -0.38% of RoRE. A collar on penalties of -0.38% of RoRE. There is a natural cap on rewards if the TO performs 0 MWh, which is different for each TO:	Same as FD.
	NGET: 0.01% of RoRE.	
	SPT: 0.02% of RoRE.	
	SHET: 0.01% of RoRE.	
Incentive value	Difference between actual performance and the target, multiplied by the Value of Lost Load (VoLL) of £25,393/MWh, and then by the TIM rate of 25%.	Same as FD.
Incentive exclusions	Exclusions possible but all claims must be assessed by us.	Same as FD.
Applied to	All TOs.	Same as FD.

Final Determination rationale and Draft Determination responses Measurement

3.180 We have decided to continue the RIIO-ET2 measurement approach, setting bespoke annual targets for each TO to reflect the distinct nature of their networks. No respondents commented on this. We consider preserving the RIIO-ET2 approach provides continuity and ease of comparison over time.

3.181 The measurement of this incentive requires TOs to have an approved ENS methodology statement. This is to ensure that TOs have established processes in place to manage ENS and the statement must be submitted to us for approval before April 2026.

Target setting methodology and target

- 3.182 We have decided to set the RIIO-ET3 targets by taking the average of each TO's performance across RIIO-ET1 and the first three years of RIIO-ET2, with a 50:50 weighting for each price control period, subtracted from the existing RIIO-ET2 targets for each TO.
- 3.183 Our chosen methodology embeds the TOs' historical performance, ensuring the incentive rewards further improvements whilst penalising regressive performance. We have decided against extending the reference period to include performance under the TPCR4²⁴ regulatory framework. We consider that using more recent performance provides a more relevant reflection of current practice than data dating back beyond 2013.
- 3.184 SHET and SPT generally supported this position. NGET did not support either of our consultation options because it established its own methodology in its business plan which resulted in a less stretching target than the one set in RIIO-ET2. It acknowledged that this outcome may be unacceptable to its stakeholders a view we share. Although not supportive of either methodology, NGET later bilaterally signalled support for the target that our favoured option produced.
- 3.185 NGED stated its opposition to both methodologies; it said that the VoLL figure should not be a reason to support one set of targets over another, and disagreed with our proposal to strengthen targets.
- 3.186 We have decided to set the following annual targets for ENS in RIIO-ET3:
 - NGET: 125MWh per year.
 - SPT: 105 MWh per year.
 - SHET: 90 MWh per year.
- 3.187 ENS below this target will result in a reward, and ENS above this target will result in a penalty.

²⁴ Transmission Price Control 4 (TPCR4) ran until 2013, when it was replaced by RIIO-ET1.

Incentive value

- 3.188 We have decided to use the VoLL estimate of £25,393/MWh for the purpose of setting a value for this incentive.
- 3.189 This incentive is calculated as VoLL multiplied by the difference between the actual ENS and the target level, then multiplied by the TIM rate of 25%.
- 3.190 An economic study was undertaken to establishing a new VoLL figure²⁵. The Energy Networks Association (ENA), on behalf of the TOs and DNOs, provided two potential figures for use within the ENS incentive. The first assumed a 45-minute-long interruption and produced a figure of £25,468/MWh. The second assumed an hour-long interruption and produced a figure of £25,393/MWh.
- 3.191 We consider that the hour-long assumption, ie a VoLL of £25,393/MWh, is most appropriate for use in this incentive. This hour-long assumption was also used to estimate the VoLL figure established in the 2013 London Economics study which provided the VoLL figure used in RIIO-ET1 and which formed the basis of the figure used in RIIO-ET2, creating a regulatory precedent. The £25,393/MWh figure is also suggested for use in respect to NARM, therefore aligning our approach across the RIIO-3 price control.
- 3.192 The 45-minute assumption was created using historical data from 2019 to 2023. This is a limited dataset crossing the boundary between RIIO-ET1 and RIIO-ET2 which held different ENS performance targets for TOs. On this basis we consider that it is appropriate to instead use the more established hour-long approach.

<u>Incentive exposure</u>

- 3.193 We have decided to retain the natural reward cap, ie that if a TO records zero MWh of ENS it receives the ENS per-MWh reward for its entire outperformance compared to the target, rather than determining a cap below this level of reward.
- 3.194 Five stakeholders that responded to this were supportive. However, a consumer group proposed that the incentive should be penalty-only, on the basis that TO behaviour in this area is now embedded. We disagree, as achieving zero ENS is challenging given the need to balance TO efforts in reducing ENS against their targets given the significant increase in network envisioned for RIIO-ET3.

 Nonetheless, we support using the incentive to stretch companies, given the clear consumer benefits to an interruption-free transmission network.

²⁵ As at time of publication, a public copy of this report is not available.

- 3.195 We have decided to implement an annual penalty collar of -0.38% of RoRE, as proposed in our Draft Determinations.
- 3.196 NGET and SHET disagreed with this. NGET stated that our assertion that it was a like-for-like conversion from 1.9% of ex ante base revenue in RIIO-ET2 was incorrect due to the disparity in the penalty value from RIIO-ET2 to RIIO-ET3. SHET stated its concern that with the reward potential decreasing due to changes to the target and TIM rate, the incentive was essentially penalty-only. SPT made no direct reference to the penalty collar. NGET and SHET suggested new upper limits on penalties, of £20m and 0.1% respectively.
- 3.197 We believe that retaining -0.38% of RoRE as an annual penalty collar will act as a strong deterrent against excessive losses of supply. Such losses will have far reaching impacts on the consumer and therefore TOs should be exposed to this risk, beyond the limits NGET and SHET proposed.
- 3.198 Average TO performance in this incentive has been historically strong, therefore we consider it unlikely that the full extent of this penalty will be realised.

Incentive exclusions

- 3.199 We have decided to retain the list of exceptional events from RIIO-ET2.
- 3.200 SHET and SPT agreed with this position, although SPT also said that we should include a materiality threshold.
- 3.201 NGET proposed numerous additions to be included in the list of exceptional and excluded events, such as where the network is operated under increased risk to enable greater system access, as well as events involving the loss of supply to demand associated with defueling and post defueling of nuclear power stations. We do not agree with these proposals, or other exclusion expansions. The existing regime is appropriate, offering TOs sufficient flexibility to exclude faults outside of their control. Additionally, the proposals from NGET seem to be operational requirements that a TO would be expected to manage without suffering levels of ENS. We want TOs to have a strong incentive to manage the reliability of the network, and we consider our position preserves that incentive.
- 3.202 We have also decided not to implement a materiality threshold for RIIO-ET3. SPT and NGET supported the introduction of a materiality threshold which would set a level below which TOs could automatically self-claim against lost MWh. We consider that it is important for us to retain this regulatory oversight. We think it is appropriate that small, yet significant, failings in terms of MWh lost, within the TOs' control contribute to the overall incentive value.

3.203 We acknowledge the administrative work associated with managing the exclusion process but consider that maintaining it remains in the consumer interest, due to the importance of maintaining a reliable network.

High quality of service from regulated firms

SO:TO Optimisation ODI-F

Purpose: To encourage the TOs to proactively identify and provide enhanced services to the NESO to reduce the cost of operating the transmission system.

Benefits: To reduce constraint costs across the ET network.

Final Determinations summary

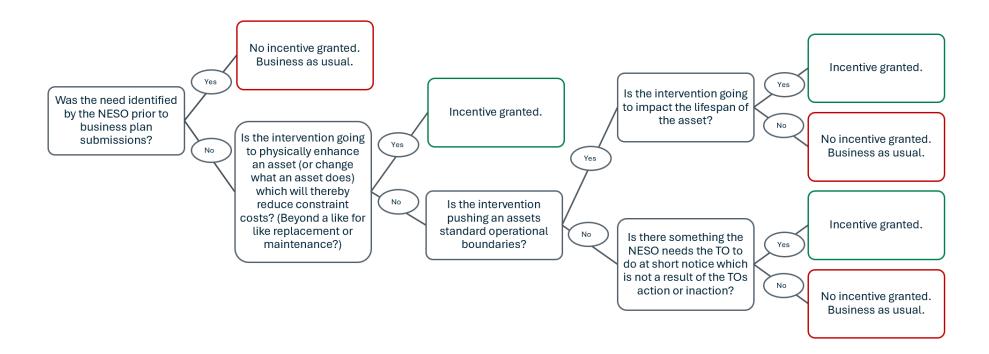
Design	Final Determination	Draft Determination
ODI type	Financial – reward only.	Same as FD.
Transitioning to BAU	Implement a set of new eligibility criteria to determine whether the enhanced services qualify for the incentive benefit or should be undertaken as a BAU activity.	Same as FD, with detail now further developed.
Measurement	The reward is calculated using a 50:50 weighting on forecast and outturn constraint costs savings.	Same as FD.
Incentive value	The incentive value will be 90:10 for all enhanced services.	Same as FD, other than for DLR.
Clawback mechanism	We will introduce a clawback mechanism to penalise TOs who fail to prioritise and implement enhanced services requested by the NESO.	Change - consulted on the introduction of a clawback mechanism.
Reporting	The NESO will continue to report on the incentive's outputs and benefits on a yearly basis.	Same as FD.
Applied to	All TOs.	Same as FD.
Associated document	SO:TO Optimisation Governance Document.	Same as FD.

Final Determination rationale and Draft Determination responses

Transitioning to BAU

3.204 We have decided to implement eligibility criteria to limit the types of enhanced services eligible for the SO:TO Optimisation ODI-F. This will protect consumers against paying out rewards for services from the TOs that should be considered BAU. The set of eligibility criteria is set out in Figure 2.

Figure 2: SO:TO Optimisation ODI-F set of eligibility criteria



- 3.205 The NESO agreed that there should be a mechanism in place to assess when an enhanced service has transitioned into a BAU activity and wanted confirmation that a TO would not revoke an enhanced service if or when the SO:TO Optimisation ODI-F is no longer available for an activity. We agree and so have decided to implement a clawback mechanism at RIIO-ET3 close out if TOs fail to offer unincentivised (or incentivised) enhanced services see paragraph 3.219.
- 3.206 SPT welcomed the approach to BAU activities. SHET also supported the principle of transferring activities to BAU but stated that the process and terminology need clearer definitions to avoid uncertainty regarding what is rewarded under the incentive. SHET stated that the transfer of activities to BAU should not erode the value driven by the incentive to reduce constraints and deliver significant consumer value. We do not consider this to be a concern as the sharing factor remains the same for all enhanced services so will still drive positive behaviour.
- 3.207 NGET stated that the changes proposed would materially reduce the power of the incentive to the detriment of consumers, and that the criteria proposed were ambiguous. NGET argued that all actions undertaken through STCP11-4 are not BAU and should therefore qualify for the incentive. We disagree; STCP11-4 specifies the process and procedures for the NESO to procure a service from a TO where that service is deemed to have a positive impact in assisting NESO in reducing system operating costs. Not all services the NESO will procure from a TO will be new, innovative or risky for the TO undertake, and STCP11-4 provides for TOs to be paid the cost of undertaking the activity.
- 3.208 One stakeholder stated that the SO:TO Optimisation incentive should be removed and replaced with an incentive for network utilisation to simplify the RIIO-ET3 framework. Another stakeholder raised concern that the incentive does not represent good value for money for consumers. We disagree as the SO:TO Optimisation ODI-F has saved consumers more than £551m to date and removing it would risk losing this value in future.
- 3.209 Another stakeholder supported a limited ODI-F, but only for the application of new techniques. This respondent stated the structure needs reviewing to ensure that the TOs are not over-rewarded and stated a preference for applying a margin to the TOs' cost to develop and implement new solutions. We disagree and consider that the current sharing factor mechanism has been a valuable tool to deliver significant savings to consumers and does not need changing so drastically.

3.210 The eligibility criteria will ensure that the rewards garnered under the SO:TO Optimisation ODI-F are focused on services that go beyond the TOs' standard obligations and represent an innovative approach or risk undertaken to the benefit of the reduction of constraint costs.

Measurement and incentive value

- 3.211 We did not receive any comment on our Draft Determinations proposal for how the reward is calculated, ie using a 50:50 weighting on forecast and outturn constraint costs savings, so we have decided to retain that approach used in RIIO-ET2 for RIIO-ET3.
- 3.212 We have decided to keep the incentive value at 10% of constraints saved too, again consistent with our Draft Determinations and RIIO-ET2. Views on this were typically expressed in relation to the discussed in the sub-section below, but from these we have taken broad support for retaining the 90:10 sharing factor.

Diverging approaches amongst the TOs and approach to DLR

- 3.213 In our Draft Determinations we put forward three options to address the disparity between the types of enhanced services the TOs are offering the NESO:
 - Option 1: a lower incentive rate reward, eg 95:5 for enhanced services that
 consider the network on a piece-meal basis with the 90:10 sharing factor
 being retained only for incentives that are deployed on a more system-wide
 basis.
 - Option 2: offering a RIIO-ET3 BPI reward for TOs that have proactively planned whole system enhanced services in their business plans.
 - Option 3: enhanced services that are superseded by the technological advancements of other enhanced services will not be eligible for the incentive benefit the SO:TO Optimisation ODI-F offers in RIIO-ET3.
- 3.214 We have decided that we will not be proceeding with any of the above options. Our rationale is that options 1 and 3 would be too complicated to implement because we would either have to differentiate between enhanced services that are system wide and those that are not, or rank the technological advancements of each enhanced service as more beneficial than others. Either option would involve a disproportionately burdensome process. Furthermore, we have decided that option 2 could not be done retrospectively in the manner suggested in our Draft Determinations.

- 3.215 One stakeholder focused their response on DLR and stated that there is a short-term benefit to incentivising TOs to rapidly roll out DLR across their networks. It said this would secure greater benefits for consumers via reduced constraint costs but that once DLR has been applied to all the areas of the system where it will provide the most benefit, it would be reasonable to treat it as part of BAU. We agree and see the rollout of DLR to reduce constraint costs faced by consumers as a key priority for RIIO-ET3. However, given the urgency with which we want TOs to roll DLR out, and the immediate benefits it can provide, we currently expect that SO:TO ODI-F rewards will only be available for DLR rollout during RIIO-ET3.
- 3.216 Another stakeholder stated that a modified option 1 would be the most effective. This stakeholder stated that the element of deployment that should lead to higher rate rewards is not whether it has been employed system-wide, but rather whether it has been deployed on a recurring, automated basis for that part of the network and that this should be rewarded at a higher rate. SPT also stated that option 1 was the most balanced option, acknowledging the varying scope and impact of TO contributions while maintaining a fair and consumer focused incentive structure. However, SPT stated for this option to work clear definitions would be essential. Whilst we envisaged this option would encourage a more proactive planning approach to reducing constraint costs system-wide we have decided against implementing option 1 because (as stated at paragraph 3.214) this would be too complex to implement successfully.
- 3.217 The NESO was supportive of option 1 and 2 but said option 3 was too complex to be of benefit. The NESO stated that whilst giving a smaller benefit could be a lot cheaper and quicker to deliver, it was important to factor in that some solutions/technologies may not be suitable for all locations across the three TO networks. We agree that option 3 would be more difficult to implement.
- 3.218 NGET and SHET stated that none of the three options were appropriate for addressing the different approaches taken by TOs to fund the physical enhancements such as DLR. Both said the three options add increased complexity to the ODI-F and may negatively impact the effectiveness of the policy intent of reducing short term constraint costs and the level of consumer benefit that can be achieved.

Clawback mechanism

3.219 We have decided that we are going to introduce a clawback mechanism that could be used at RIIO-ET3 close out if the NESO's requests for enhanced services are not met.

- 3.220 The NESO stated that whilst it was rare for a TO to decline a request, it wants a way to deter TOs from doing it in the future. Two other stakeholders stated that a clawback mechanism would be advantageous to ensure that consumers do not lose out on the potential benefits of requests made by the NESO that are unfulfilled by the TOs, and that the TOs are disincentivised to decline requests where the enhanced services are within their remit. We agree with both responses.
- 3.221 SHET and SPT stated if the clawback were to proceed the incentive would need further adjustment to allow TOs to submit reasons for non-implementation for our consideration, adding increased regulatory burden and subjectivity. We consider that this risk is mitigated by using a clawback mechanism at close out, alongside stronger reporting requirements in-period, to enable us to look in detail at the reasons behind TOs not fulfilling enhanced services and consult on our findings. We agree that the clawback mechanism will require work to ensure it operates effectively, but that this work would be essential to ensure that the ODI delivers long-term value to consumers.
- 3.222 SPT did not agree with the proposal to introduce a clawback mechanism, stating that this suggests that the TOs would not support or implement a STCP11-4 request. It also said that given TO and NESO cooperation is proposed to be monitored via the Innovative Delivery ODI-F, this clawback mechanism would not be required. We disagree because the Innovative Delivery ODI-F is reward-only so would not allow us to penalise poor TO behaviour.
- 3.223 NGET agreed to a clawback mechanism in principle, but stated further clarification is needed to the definition of qualifying circumstances, the scale of the clawback, the accountability and reporting requirements for both the NESO and the TOs. These elements of the clawback mechanism will be considered in our assessment of the SO:TO Optimisation ODI-F at close out.
- 3.224 We have decided to proceed with a clawback mechanism which could be used at close out. Whilst we will never penalise TOs such that the overall SO:TO Optimisation ODI-F reward falls below zero through this assessment, the clawback mechanism will enable us to penalise each TO for any enhanced services that it failed to provide to the NESO. In reaching our 'clawback values' we will consider, amongst other relevant factors, the consumer value lost from the service being withheld, the full extent of the work the TOs have undertaken through the ODI-F, and any mitigating circumstances presented by the TO.

Implications on the Network Access Plan (NAP) and STCP 11-4

3.225 We have decided that there is no need to alter the Network Access Plan (NAP) or STCP11-4 to refer to the SO:TO Optimisation ODI-F, or for more general changes, as we believe the ODI-F already works coherently with both documents. We disagree with SPT that the NAP needs updating to reflect Figure 2, which is clearly set out in this document and can be referred back to here.

Innovative Delivery ODI-F

Purpose: To improve TO approaches to the delivery of network investments in a way that speeds up delivery and provides value to consumers.

Benefits: Faster, better value and/or more innovative TO approaches to network investment.

Final Determinations decision and rationale

Design	Final Determination	Draft Determination
ODI Type	Financial - reward only.	Same as FD.
Scope	Demonstrable significant consumer value provided in relation to five TO behaviour areas in the delivery of RIIO-ET3 outputs:	Change -
		Area 1-3 same as FD, with weightings added at FD.
	1) savings in supply chain/contracting (15%);	Areas 4 and 5 were:
	2) innovations in design/engineering (30%);	4) Collaboration with the NESO on strategic planning and outages;
	3) speeding up delivery (10%);	and
	4) effective NESO collaboration (15%); and	5) Rollout of Network Innovation
	5) effective outage management (30%).	Competition (NIC)/NIA/SIF innovations.
Measurement	A 2027/28 (25%) and a 2029/30 (75%) Ofgem-led panel assessment of TO submissions to justify rewards in relation to the behaviour areas within scope.	Change - A 2028/29 and 2031/32 Ofgem- led panel assessment, with no weightings specified.
Incentive value	A maximum reward across the period which is equivalent to an average of 0.2% of RoRE per year of RIIO-ET3.	Change - 0.1%-0.2% of RoRE per year.
Applied to	All TOs.	Same as FD.

3.226 We have decided to implement the Innovative Delivery ODI-F as a reward-only incentive worth up to an average of 0.2% RoRE in each year of RIIO-ET3. All 11 responses on this area supported the introduction of this ODI-F and agreed that it would support effective delivery of network upgrades. Most of these respondents, including all three TOs, requested further detail on how the assessment would operate and provided suggestions on specific improvements. These are explored in the subsections below.

Scope

- 3.227 We have decided to establish the following five assessment areas for the Innovative Delivery ODI-F, with weights assigned to indicate how each area will be weighted during assessments (explained further at paragraph 3.242):
 - savings in supply chain/contracting (15%);
 - innovations in design/engineering (30%);
 - speeding up delivery (10%);
 - effective NESO collaboration (15%); and
 - effective outage management (30%).
- 3.228 In relation to all of the areas above, we have decided that we would only offer rewards where we are confident that:
 - rewards or funding have not been provided elsewhere in the price control for the same behaviour (eg through a delivery incentive or innovation rollout funding mechanism); and
 - the consumer benefit delivered by all examples submitted under each behaviour for each assessment window surpass £5m of consumer value (we also expect that rewards granted per TO and per assessment area will never surpass the consumer value provided).
- 3.229 Four respondents, including all three TOs, argued that the threshold of £10m of consumer value for each behaviour area proposed in our Draft Determinations may be too difficult to achieve. To ensure that TOs engage with this incentive as we intend, we have this reduced this to £5m.
- 3.230 In response to bilateral feedback from the NESO regarding the importance of outages to delivering network reinforcement during the next 5-10 years, we have included this as a separate assessment category. We agree that effective outage management (area 5), which both the NESO and TOs have a responsibility to facilitate, will be vital to achieving CP2030. As such, we have included this as the

- only assessment area which can trigger us applying a negative adjustment to overall rewards achieved through the incentive.
- 3.231 On reflection, we consider that the rollout of price control funded innovations should be a means to achieving some of the other behaviours that the incentive is seeking to drive, and not an end in itself. We have therefore removed this behaviour which was called out separately in our Draft Determinations.
- 3.232 All three TOs proposed a variety of scope additions, including behaviours that drive societal, sustainability, environmental or economic impacts. A different stakeholder suggested that engagement with local authorities should be considered as well as engagement with the NESO. We have not taken forward any of these suggestions because we consider that they would all detract from the delivery focussed behaviours that we're seeking to drive through this incentive.
- 3.233 In addition to the direct consumer value that we expect these behaviours could achieve, we also consider that encouraging the TOs to report transparently on the consumer value provided by these behaviours (and how they were achieved) will provide us with information about how TOs operate that enables us to regulate more effectively in the future.

Measuring success

Judging success

- 3.234 We have decided that any rewards provided under the Innovative Delivery ODI-F will be determined by us, supported by non-binding recommendations from a panel of independent experts. In our Draft Determinations we had proposed that the assessment panel should be formed of Ofgem, the NESO and an independent expert. On reflection we have decided that we should retain responsibility for the decisions reached, albeit informed by an independent panel of experts.
- 3.235 NGET suggested that a panel assessment may be too subjective and that ex ante quantitative assessment metrics should be used instead. SHET and SPT both requested additional clarity around how our assessment would be undertaken. Whilst we agree that we need to build out the detailed assessment criteria well in advance of the first assessments, we do not consider that establishing fully quantitative ex ante assessment criteria is realistic, given that lack of available useable data in most of the assessment areas we are targeting.
- 3.236 Panel members will need to be independent of the TOs, and expert in the fields of network regulation, electricity networks and/or large infrastructure delivery. The panel would not need to be appointed until closer to the time of the first

assessment, but we propose that it should include at least one appropriately senior NESO employee, and multiple industry experts. We consider that this would provide an appropriate balance of expertise.

Timing of assessments

3.237 We have decided to set two assessment windows for the Innovative Delivery ODI-F, one in 2027/28 and one in 2029/30. This is an acceleration on the two windows proposed in our Draft Determinations to reflect feedback from all TOs that 2028/29 and 2031/32 assessments would be too far into the future to affect TO change now. We have not adopted the request from all TOs for annual assessments as we consider that TOs will not be able demonstrate the structural and behavioural change that we want to see through such regular assessments.

Assessing success

- 3.238 All TOs asked for additional detail on specifically what behaviours or outcomes we would want to see in order to provide rewards under this incentive. Further detail will be set out on this when we develop the assessment guidance for the advisory panel during the first year of RIIO-ET3, but we have provided some additional detail against each assessment area here:
 - Significant savings, surpassing the £5m materiality threshold, in supply chain/contracting, eg demonstrably lower costs than other TOs for equivalent works, no delays caused by the supply chain or first-of-a-kind approaches used.
 - Innovations in design/engineering, eg innovative design approaches not seen by us or the advisory panel previously on GB networks, first of kind innovations for the TO used effectively to support delivery, innovations which reduce losses on the network, or rollout of NIA/NIC/SIF funded projects.
 - Speeding up delivery, eg any £100m+ schemes that the TO identifies as being deliverable within government's 7-year target or outstanding performance in managing delays in real-time.
 - Effective NESO collaboration, eg going over and above CSNP licence obligation, early provision of data to the NESO, or well developed CSNP inputs which don't change substantially in scope following NESO assessment.
 - Effective outage management, eg reduced outage churn (where the NESO receives late notice of an outage change, with an aim of only 20% of change in delivery period and 80% in medium term), reduced late return of equipment from outages or increased availability of reactive assets.

Incentive value

Total reward

- 3.239 We have decided, consistent with our Draft Determinations position, that the maximum reward on offer across all of RIIO-ET3 for each TO should be an average of 0.2% of RoRE per year, to be divided out across the two assessment windows. Given the scale of allowances likely to flow through RIIO-ET3, and the rewards already available under the ASTI delivery incentive and our new Major Projects ODI-F, we do not expect that a low materiality reward under this incentive would achieve the desired behavioural changes.
- 3.240 NGET argued that the size of the incentive on offer should be doubled. We disagree and consider that a total reward on offer should be sufficient to drive behavioural change.

Reward weightings

- 3.241 To reflect the limited change that may be achievable in the first two years of the price control, we have decided to weight the first assessment in 2027/28 as 25% of the total reward available, with the 2029/30 assessment being worth 75%. This should enable learnings from the first assessment to be reflected in TO performance at the second assessment.
- 3.242 Following feedback from all TOs regarding the need for further clarity on how we will approach our assessment, and to signal our priorities, we have decided to set three different weightings for the five assessment areas:
 - 30% for 'innovations in design/engineering' and 'effective outage
 management', reflecting the fact that these two areas are not specifically
 incentivised elsewhere in the price control and could have a significant impact
 in facilitating timely network upgrades;
 - 15% for 'savings in supply chain/contracting' and 'effective NESO
 collaboration' to reflect that these are key areas which are incentivised or
 obligated in indirect ways elsewhere in the price control; and
 - 10% for 'speeding up delivery', to reflect that whilst this will be critically
 important, it is already heavily incentivised in RIIO-ET3, and the subset of
 faster delivery we're targeting here will be challenging to achieve.

Decision – RIIO-3 Final Determinations – Electricity Transmission

CSNP Coordination LO

Purpose: To hold TOs to account for effective collaboration with the NESO in support of the development of the CSNP.

Benefits: Ensures effective and timely collaboration between TOs and the NESO that will result in timely delivery of the CSNP and will ensure the CSNP is of high quality.

Final Determinations summary

Design	Final Determination	Draft Determination
Scope	LO to ensure effective TO collaboration with the NESO during the development of CSNP.	Same as FD.
Measurement	NESO to periodically report to us the quality and timeliness of TO data submissions.	Same as FD.
Applied to	All TOs.	Same as FD.
Associated document	CSNP Coordination Governance Document.	Same as FD.

Final Determinations rational and Draft Determination responses

- 3.243 We have decided to introduce a new LO requiring the TOs to meet information exchange requirements necessary for the NESO to effectively deliver its responsibilities in relation to the CSNP.
- 3.244 The NESO and two other respondents agreed with our Draft Determinations proposal. A consumer group said that given that the CSNP will be one of the largest influences on the RIIO-ET3 period, and a key driver to ensure that CP2030 targets are met, an LO is the best mechanism for ensuring TOs focus their behaviour on the most important factors and to outline our basic expectations of the TOs in the next five years.
- 3.245 All three TOs objected to the introduction of the new LO claiming that it duplicates existing obligations. Their responses mentioned that Standard Licence Condition (SLC) E13²⁶ sets out the TOs' obligation to comply with the System Operator Transmission Owner Code (STC), which in turn covers data exchange. Our view is that the existing SLC to comply with STC is a general obligation, covering a wide

²⁶ The existing LO which is in place at the time of drafting this document is SLC E13: System Operator – Transmission Owner Code. The number may be different when RIIO-3 becomes live.

range of requirements. Although all STCs (and associated STCPs) are required for effective and efficient planning and operation of the ET system, deviation from some will have far greater impact on consumers than others. Specifically, suboptimal provision of information to NESO for the purpose of planning the ET network can lead to significant costs to consumers. This justifies a dedicated LO which puts the appropriate weight proportionate to the impact on consumers.

- 3.246 All TOs asked that if progressed, the LO should be coordinated and/or rationalised with other similar obligations on provision of information, such as the "Restriction on the use of certain information" and "Tender Support Activities in Onshore Electricity Transmission" obligations. We acknowledge that there are several similar requirements in other licence conditions, but we disagree that they overlap. If there is scope to collate all requirements related to data provision to NESO in one dedicated LO, we will explore this for RIIO-ET4.
- 3.247 SPT mentioned that there is an overlap with the Innovative Delivery ODI-F, described earlier in this chapter. We consider that the two areas complement each other, with the LO enforcing a minimum level of performance, and the ODI-F able to reward strong performance.
- 3.248 All three TOs mentioned the importance of scrutinising the NESO to ensure quality and clarity of data requests. We agree that for the LO to deliver on its objectives, clear and timely requests for data from the NESO to TOs are essential. The CSNP Guidance²⁷ sets out our expectations for the NESO in this regard.
- 3.249 SHET and SPT flagged risks associated with data sharing and the need for proper safeguards. In our CSNP Guidance, we've set out our expectations for NESO in this regard and expect the NESO to manage these risks appropriately. SHET and SPT also flagged that that the governance document associated with the LO has not been shared yet. We will be engaging with TOs and wider stakeholders and consulting on the governance document following Final Determinations and before the commencement of RIIO-ET3.

Landscape Enhancement Initiative (LEI) UIOLI allowance

Purpose: To fund landscape improvements relating to ET infrastructure mitigation.

Benefits: To make a positive contribution to wildlife, biodiversity, cultural heritage, the natural beauty, and public enjoyment of National Scenic Areas, National

²⁷ Centralised Strategic Network Plan | Ofgem

Parks, National Landscapes, Environmentally Sensitive Areas, Heritage Coastlines, National Nature Reserves, and Sites of Specific Scientific Interest.

Final Determinations summary

Design	Final Determination	Draft Determination
UM type	UIOLI.	Same as FD.
Scope of designated areas	Localised landscape improvements relating to ET infrastructure mitigation in National Scenic Areas, National Parks, National Landscapes, Environmentally Sensitive Areas, Heritage Coastlines, National Nature Reserves, and Sites of Specific Scientific Interest.	Change - only related to National Scenic Areas, National Parks and National Landscapes.
Scope of activities	A landscaping or environmental enhancement scheme that has been informed by stakeholder engagement, to mitigate the impact of pre-existing transmission infrastructure on the visual amenity of designated areas	Same as FD.
Funding	NGET: £11.6m	Change -
level	SHET: £11.6m	NGET and SHET: same
	SPT: £11.6m	as FD.SPT: £6.6m.
Reporting	The TO must provide relevant information on any LEI project in the AER and RRP.	Same as FD.
Applied to	All TOs.	Same as FD.
Associated document	Environmental Reporting Guidance.	Same as FD.

Final Determination rationale and Draft Determination responses Scope of designated areas

- 3.250 We have decided the scope of the LEI's designated areas should be expanded from National Scenic Areas, National Parks and National Landscapes to also include Environmentally Sensitive Areas, Heritage Coastlines, National Nature Reserves, and Sites of Specific Scientific Interest. These are all designated as areas for conservation by UK government agencies, in areas that may overlap with the current LEI boundaries but also include additional areas of conservational significance.
- 3.251 SHET and SPT both stated that under the approach proposed in our Draft Determinations, the LEI would not be of use to them because of the proposed designated areas: SPT would not have any designated landscapes to work with within its licensed area, and SHET has exhausted all possibilities of what it can do for the LEI within the existing boundaries.

- 3.252 Four other stakeholders had varied views on the proposed approach. One wanted to see a return of the RIIO-ET2 Visual Amenity PCD, another was disappointed that the proposed approach did not incorporate all the further changes proposed by NGET during RIIO-ET2 (eg an opportunity for top-up funding for in-flight schemes, reduce the matched funding to 10%, a £10k development fund per applicant and the inclusion of eligible buildings and related structures), and a third was disappointed the expansion of the remit to include rainforests was not going ahead. The fourth was broadly happy with the approach set out.
- 3.253 In our Draft Determinations we highlighted the impact that ET infrastructure can have on the visual appearance of areas of natural beauty, and that this can be a significant concern for local communities and users of those environments. We are therefore concerned that SHET and SPT would not be able to benefit from this UIOLI in RIIO-ET3 if the scope were to remain as it was set out in RIIO-ET2. For this reason, we have decided to expand the list of designated areas to include others designated as conservation areas by UK government agencies. We have targeted these areas because of their existing identification by UK government agencies for their conservational significance.

Funding level

3.254 We have decided the LEI UIOLI allowance will remain at £11.6m per TO for RIIO-ET3. NGET requested the LEI allowance be raised to £15m stating that cost pressures have increased throughout the RIIO-ET2 period, and that the current cap on individual grants (£200,000) is no longer fit for purpose, particularly considering inflation, and that this should be increased to £300,000. We agree with this proposed change and consider it supports our objective of seeing the LEI be better utilised, so will adjust the per-project cap to £300,000. However, none of the TOs have used the full allowance offered in RIIO-ET2 (SPT and SHET have not used any of the allowance, and NGET has used £3m to date) so we do not see a need for an increase to the overall allowance.

Data reporting requirements

- 3.255 We have decided TOs must report data in relation to the LEI through the RRPs and EAPs in RIIO-ET3.
- 3.256 NGET stated that the data collection requirements set out in our Draft

 Determinations are disproportionate to the level of expenditure involved. It was
 concerned that these requirements introduce unnecessary complexity and
 administrative burden which could reduce efficiency and detract from delivery.

 These new data reporting requirements will provide greater transparency on the

work completed through the LEI UIOLI in RIIO-ET3 and enable a more comprehensive analysis of the value of the LEI post RIIO-ET3.

New Infrastructure Stakeholder Engagement Survey (NISES) ODI-R

Purpose: To encourage TOs to survey stakeholders impacted by new transmission infrastructure on their engagement with the TOs.

Benefits: Increased stakeholder engagement and improved service.

Final Determinations summary

	mai Determinations summary		
Design	Final Determination	Draft Determination	
ODI type	Reputational.	Same as FD.	
Survey scope and methodology	Five questions based on five core indicators of stakeholder engagement. No minimum number of stakeholders to be surveyed, and no preferred method for surveying.	Same as FD.	
Reporting and publication	TOs publish an annual report of stakeholder scores and strategy to improve, submitted to us as part of RRPs. We will display results on our website.	Same as FD.	
Applied to	All TOs.	Same as FD.	

Final Determination rationale and Draft Determination responses

Survey scope and methodology

- 3.257 We have decided to maintain our Draft Determination position and introduce a common NISES ODI-R. The survey design will be based on the following five core indicators of stakeholder engagement:
 - promptness of engagement;
 - frequency of engagement;
 - · methods of engagement;
 - quality of engagement; and
 - responsiveness to feedback.
- 3.258 Against each of these core indicators, stakeholders will be asked to:
 - rate their satisfaction on a scale of 1 (worst) to 10 (best);
 - provide qualitative feedback on how the TO can improve; and

- provide additional feedback to qualify the score given, including suggestions of improvement.
- 3.259 We have also decided that we will not implement a minimum number of stakeholders we expect to see surveyed. This is because TOs may struggle to get many respondents to the survey, so it may be hard for TOs to meet a minimum number of respondents. However, TOs must use a range of surveying methods and techniques to reach the widest possible range of stakeholders. Three stakeholder groups should be surveyed, at a minimum:
 - local residents;
 - local business owners; and
 - local community groups.
- 3.260 A consumer group supported all aspects of our incentive design in its Draft Determinations response. The TOs were not opposed to the survey, but did not support the proposal in full.
- 3.261 NGET disagreed with our proposal to request responses on a scale of 1-10, instead suggesting a qualitative sliding scale. NGET's ISG also said that the survey needed a greater qualitative aspect. Our approach offers stakeholders a fair picture of comparable engagement scores while also giving the TO the opportunity to gather qualitative information where necessary, so we consider it to be sufficient.
- 3.262 SHET stated that it would like the ability to contribute to the decision-making process on how the survey is conducted. TOs can establish their own methods of collecting the survey, as long as they make genuine efforts to maximise stakeholder feedback.
- 3.263 SPT sought clarification on our desired approach for the TOs to identify stakeholders, giving varying levels of cooperation and differing opinions. SPT also asked for a requirement for the number of responses needed to create the TO league table. We believe we have set out a clear enough framework to identify a representative mix of stakeholders.
- 3.264 A copy of the survey design is in Appendix 1.

Reporting and publication

3.265 We have decided that each TO must publish the NISES results on its website by 30 September each year (excluding year one of RIIO-ET3). A NISES report must be comprised of two pages – one including the TO's individual and overall scores

- alongside the number of stakeholders surveyed and which designated stakeholder group they belong to, and a second allowing the TO to share qualitative responses, how it aimed to maximise responses, especially from minority and vulnerable stakeholders, and offer its reflective consideration for areas of improvement. We will publish each TO's report on our website, ranking each TO's overall engagement scores in a league table format.
- 3.266 All TOs disagreed with this approach, with SHET suggesting results are instead published in our RIIO annual report. It expressed concerns over the potential negative press which a comparative table may bring. Another stakeholder agreed with our approach to offering consumers a direct comparison of the TOs' performance in this area and urged us to further consider ways of monitoring performance to ensure improvements are made throughout RIIO-ET3.
- 3.267 We believe that our publishing of the TO's annual reports and presenting the established overall engagement scores will offer consumers a clear view of TO stakeholder engagement. Additionally, this approach should lead to improvements each year, due to the desire by TOs to see their scores improve. It will also ensure that TOs are held accountable to act on the feedback they receive. As emphasised above, TOs will have the freedom to request additional qualitative information alongside the survey and to provide relevant context in their reporting to us.

4. Managing uncertainty

Introduction

- 4.1 Business plans and price controls are based on a set of assumptions of what is required over the forthcoming period. There may be significant uncertainty over some of these assumptions, and where appropriate it may be better to use mechanisms that adapt certain elements of the price control during the period. These are referred to as UMs. As set out in the Overview Document, the UMs that we will use in RIIO-3 are volume drivers, re-openers, UIOLIs, pass-through, and indexation mechanisms.
- 4.2 This chapter sets out the UMs that will apply to all the TOs during the RIIO-ET3 price control period. For details of the UMs that only apply to a single TO, see the company annexes.
- 4.3 Table 9 and Table 10 outline the UMs that will apply for RIIO-ET3 and set out where you can find full details on each. UMs specific to a particular company are covered in that company's respective annex.

Table 9: Cross-sectoral UMs in RIIO-3

UM name	UM type	Sector(s)	Further detail
Business Rates (prescribed rates)	Pass-through	ET, GD, GT	Overview Document
Cost of debt indexation	Indexation	ET, GD, GT	Finance Annex
Cost of equity indexation	Indexation	ET, GD, GT	Finance Annex
Inflation Indexation of RAV and Allowed Return	Indexation	ET, GD, GT	Finance Annex
Ofgem licence fee costs	Pass-through	ET, GD, GT	Overview Document
Pension Scheme Established Deficit	Pass-through	ET, GD, GT	Finance Annex
Tax Review	Re-opener	ET, GD, GT	Finance Annex
Real Price Effects (RPEs)	Indexation	ET, GD, GT	Overview Document
Digitalisation	Re-opener	ET, GD, GT	Overview Document
Resilience	Re-opener	ET, GD, GT	Overview Document
Cyber Resilience	UIOLI and PCD	ET, GD, GT	Overview Document
NIS-R Cyber Resilience	Re-opener	ET, GD, GT	Overview Document
Co-ordinated Adjustment Mechanism (CAM)	Re-opener	ET, GD, GT	Overview Document

UM name	UM type	Sector(s)	Further detail
Decarbonisation and Environmental Policy (DEP)	Re-opener	ET, GD, GT	Overview Document

Table 10: ET-specific UMs in RIIO-ET3

UM name	UM type	Further detail
Pre-Construction Funding (PCF)	Re-opener and PCD	This document
Load	Re-opener	This document
Load	UIOLI	This document
CSNP	Re-opener	This document
Generation and Demand Connections	Volume driver	This document
Closely Associated Indirects (CAI)	UIOLI	This document
Business Support Costs (BSC)	Re-opener	This document
Non-Load	Re-opener	This document
Independent Technical Adviser	Pass-through	This document
Community Benefit Funding	Pass-through	This document
Carbon Compensation (NGET and SPT)	UIOLI	This document

Infrastructure fit for a low-cost energy transition

Background and context to our proposed 'load package'

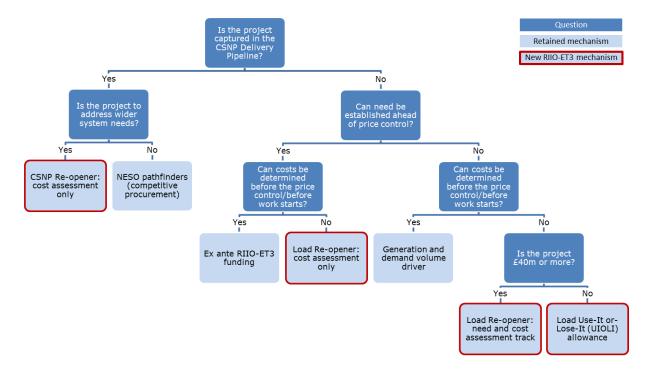
Drivers of uncertainty

- 4.4 GB electricity network developments are influenced by the UK government's decarbonisation targets. These targets include: bringing all GHG emissions to net zero by 2050, achieving Clean Power by 2030, increasing offshore wind capacity to 50GW by 2030, increasing low carbon hydrogen production to up to 10GW by 2030, and increasing solar power fivefold to as much as 70GW by 2035.
- 4.5 TOs' portfolios may change from their current expectations given ongoing work such as the NESO's connections reform work (due to be completed in 2026) and the Strategic Spatial Energy Plan (SSEP).
- 4.6 As a result of these uncertainties, TOs decided to leave the majority of their load programmes out of their baseline funding requests, instead seeking in-period approvals.

Overview of our approach to managing load uncertainty

4.7 We have decided on a load framework that has been developed to be flexible to this uncertainty. We have taken lessons from past price controls to ensure that regulatory processes do not delay critical investment while retaining strong consumer protections. Our framework for assessing RIIO-ET3 load projects is set out in Figure 3 and described in more detail in this chapter.

Figure 3: RIIO-ET3 load UM framework



- 4.8 We consider that this framework balances the challenge of accelerating network build while ensuring appropriate consumer protection. We will take a proportionate approach to the scrutiny of project need to reflect the complexity and materiality of projects. To minimise delays, we will use automatic mechanisms (volume drivers and UIOLIs) where possible.
- 4.9 There are also existing regulatory tools in RIIO-ET2 which will continue into RIIO-ET3 that support this UM framework, described in the sub-section below.

Existing regulatory tools

Advanced Procurement Mechanism

4.10 We introduced the APM in June 2025²⁸ to mitigate current and future supply chain constraints which might otherwise delay project delivery or increase project costs.

²⁸ <u>Decision to modify the special licence conditions in the electricity transmission licences:</u>
<u>Advanced Procurement Mechanism | Ofgem</u>

It provides the TOs with up to 20% of procurement costs to place early commitments with the supply chain, without needing to have achieved a confirmed needs case or cost assessment for the project. We introduced it as we considered that there exists a material risk of consumer detriment if the TOs are unable to deliver planned network build out due to supply chain constraints that result in extended lead times for critical components.

- 4.11 In our Draft Determinations we proposed to retain the APM without changes unless any evidence arose to suggest an alternative approach is necessary. All three TOs, NPg and a consumer group agreed with our proposal to retain the APM, mentioning its ability to mitigate the risk of supply chain constraints. The TOs did suggest some changes to the APM for RIIO-ET3, discussed below, but we do not consider that any of them are warranted at this time.
- 4.12 The APM was introduced following months of engagement with the TOs and with industry stakeholders (eg manufacturers) to allow us confidence that the APM design would be suitable to address the constraints experienced now and expected in the coming years.
- 4.13 We will review the APM over the coming years to ensure that it is operating as intended. We are requesting annual reporting from the TOs and have committed to undertake a preliminary review of the mechanism around 2028.²⁹ This review will provide an opportunity to consider whether any changes should be made for the next price control. NGET said that we should undertake a review no earlier than 2028 to allow for a sufficient period of time for thorough testing of the APM. We will make a decision on the exact date of a review closer to that time.
- 4.14 In June 2025 we published the APM Governance Document,³⁰ which we will retain for RIIO-ET3. In it, we set out the eligibility criteria that APM Expenditure must meet and the requirements for the administration and delivery of the APM. This includes information we require from the TO (eg for reporting APM spend) and guidance as to how we will assess that data. Through responses to our Draft Determinations and bilaterally, TOs have asked how we will review spend and determine ineligible spend. We consider this has been set out within the APM Governance Document so have not addressed it in this document.

²⁹ <u>Decision on an Advanced Procurement Mechanism in Electricity Transmission</u>, paragraph 5.18.

³⁰ APM Governance Document

APM scope

- 4.15 While all three TOs supported the APM in their responses to our Draft
 Determinations, saying that it provides a useful means to mitigate supply chain
 constraints, they each requested expansions to the APM scope to further its
 usefulness. We set out and respond to each specific request below.
- 4.16 SPT said that the APM should include standalone services, ie services that are not directly linked to an equipment type that is designated as an APM Cost Category. We have retained our decision to only allow procurement of services through the APM when these can be clearly linked to a constrained equipment category. This is due to difficulties in tracing APM spend on, and use of, labour when not linked to equipment, which would increase the risk of double funding.
- 4.17 SHET said that the APM's effectiveness is limited by the focus on flexible procurement as it does not reflect all TOs' contracting approaches. We consider that flexible procurement is a necessary design element of the APM that provides us with confidence in offering early and non-project-specific funding while reducing the risk of stranded procurement. This is because it means that procured assets can be transferred to another project if the original envisaged need falls away. We continue to encourage TOs to work with their suppliers to adapt their procurement approaches to make the best use of this.
- 4.18 SHET also said that we should remove the 20% cap, as this does not reflect the commitments all TOs' have to make at the early engagement stage. The 20% cap is an average cap across all APM procurement over a five-year period. We consider that this provides the TOs with a meaningful option to secure supplier availability as identified through responses to our November 2024 APM consultation, while limiting consumers' exposure to the risk of stranded procurement. We also consider that having a 20% threshold incentivises TOs to get the best deal possible on behalf of consumers when negotiating with the supply chain, and that applying this as an average gives the TOs the flexibility and responsibility to manage and plan their procurement.
- 4.19 Our decision in March 2025 set out that a TO cannot use both APM and Early Construction Funding (ECF) on the same project; NGET and SPT both requested that we remove this restriction. We maintain that a project with access to ECF does not need the APM as ECF means that the TO has already been given access to advanced funds that can be used for procurement, but a TO is welcome to opt for APM funding if it has not yet made, or will not make, use of any ECF for that project.

- 4.20 SHET and SPT requested that the scope of the APM include strategic land purchases to reflect that they have found this useful under ASTI. As set out later in this chapter, we do not consider that land purchases require de-risking through advanced funding on an enduring basis (ie post-ASTI).
- 4.21 SPT said that gas insulated switchgear (GIS) should not be classified as bespoke procurement in the APM, as it can be flexibly procured and the bespoke classification results in unnecessary regulatory burden. We retain our March 2025 position that all procurement of GIS should be classified as bespoke for the purpose of the APM.³¹ A TO's overall APM budget can be used on any categories of flexible procurement as the TO considers necessary, but bespoke procurement has to be approved by us on a case-by-case basis.
- 4.22 We want TOs treat GIS procurement as bespoke, regardless of whether the TO is actually able to procure this flexibly, as we do not think it appropriate to encourage speculative purchases of GIS equipment. We want TOs to prioritise lower-emission air insulated switchgear (AIS) technology wherever possible and consider that allowing purchase of GIS as flexible procurement under the APM is in conflict with this objective.³² Nonetheless we recognise that GIS may be the optimal solution for some projects, and so will consider TO applications for GIS as bespoke procurement in those specific circumstances. We have already approved bespoke procurement APM requests for GIS for all three TOs and will consider new applications as necessary.

Accelerated Strategic Transmission Investment framework

4.23 Our decision is to retain the ASTI framework through specific licence conditions within the RIIO-ET3 price control, retaining the ASTI conditions introduced during RIIO-ET2.³³ The ASTI framework was introduced to address the urgent need for specific upgrades and expansions in the GB's ET network to meet the government's aim to connect 50GW of offshore wind by 2030. It was designed to support the expedited delivery of the investments recommended in the first transitional CSNP (tCSNP1) published in July 2022.³⁴

³¹ Table 3 of: APM Decision Document and Impact Assessment

³² Our stance on GIS and AIS was set out from paragraph 5.182 of our Draft Determinations.

³³ Decision on accelerating onshore electricity transmission investment | Ofgem

³⁴ Known at the time as Pathway to 2030, or the Holistic Network Design: <u>ESO publishes Pathway</u> to 2030 – major step to deliver 50GW of offshore wind by 2030

Second transitional CSNP (tCSNP2) and tCSNP2 Refresh

- 4.24 In March 2024, the NESO published the "Beyond 2030" network plan (also known as tCSNP2)³⁵ that recommended further network reinforcements needed beyond 2030 to support the energy transition. We have decided to retain the elements of tCSNP2 that have already been set as part of RIIO-ET2, ie decisions to provide development funding to the 'development track' projects and PCF to 'delivery track' projects as part of our December 2024 decision.³⁶ We discuss treatment of PCF for tCSNP2 projects under our section below on PCF for RIIO-ET3 more generally.
- 4.25 In 2026 the NESO will publish the tCSNP2 Refresh, which reconsiders the network plan in light of the expected updated status of the tCSNP2 development track projects, as well as taking into account wider changes such as through NESO's connections reform and 2025 pathways.³⁷ The tCSNP2 Refresh is occurring as a result of our view at tCSNP2 that many of the options put forward were not developed sufficiently for us to have confidence in approving the needs case.
- 4.26 tCSNP2 Refresh projects recommended for delivery by a TO (ie rather than by competitive tender) will be subject to the RIIO-ET3 funding mechanisms according to the eligibility criteria as set out in this chapter.

Other RIIO-ET2 funding routes

- 4.27 Our decision is to remove the RIIO-ET2 Large Onshore Transmission Investments (LOTI) and Medium Sized Investment Projects (MSIP) Re-openers, to be replaced with one consolidated Load Re-opener, discussed later in this chapter.
 - The LOTI Re-opener is designed to assess and approve funding for significant ET projects (£100m+) that arise during the RIIO-ET2 price control period.
 - The MSIP Re-opener caters to projects with costs below £100m that arise during the RIIO-ET2 price control period.
- 4.28 Projects approved through the LOTI and MSIP re-openers in RIIO-ET2 will continue to be funded and constructed during RIIO-ET3.

³⁵ Beyond 2030 | National Energy System Operator

³⁶ <u>Funding and approval framework for onshore transitional Centralised Strategic Network Plan 2 projects: decision | Ofgem</u>

³⁷ Future Energy Scenarios (FES) | National Energy System Operator

Pre-Construction Funding (PCF) PCD and Re-opener

Purpose: To provide TOs with funding at early stages of project development to continue to design and seek consent for large ET investments.

Benefits: Allows timely development of critical strategic projects, while limiting the costs that consumers are exposed to if the TO does not successfully achieve all material planning consents.

Final Determinations summary

Design	Final Determination	Draft Determination
UM type	Re-opener.	Same as FD.
Eligibility	Load and shared driver projects.	Change - Load projects.
Scope	PCF can be spent on surveys, assessments, stakeholder engagement, project design and engineering development, tasks associated with wayleaves and planning applications and Early Enabling Works (EEW).	Same as FD.
Funding level	Calculated at 8.2% of currently forecast total project costs: NGET £372.33. SHET £308.32. SPT £126.57.	Change - Calculated at 2.5% of currently forecast total project costs: NGET - £100.88m. SHET - £84.52m. SPT - £52.22m.
Cost oversight	All PCF PCD outputs will be reviewed on a project-by-project basis at closeout. The TOs will then receive a percentage of their PCD allowance according to whether they have achieved specified project milestones relating to obtaining all material planning consents.	Same as FD.
Treatment of tCSNP2 projects	RIIO-ET3 PCF will be available for eligible development and delivery track projects through the re-opener.	Same as FD.
Applied to	All TOs.	Same as FD.

Final Determination rationale and Draft Determination responses Eligibility

- 4.29 We have decided that load-related expenditure including shared driver³⁸ schemes for projects expected to cost more than £40m, will be eligible for PCF during RIIO-ET3. A consumer group agreed that load-related expenditure should be in scope for PCF.
- 4.30 NGET and SHET disagreed with our Draft Determinations proposals on eligibility for PCF, stating that it would be in the best interests of consumers to treat projects with shared and non-load drivers in a consistent manner to those with load-related investments. We agree that it would be of value for projects with shared drivers to receive PCF because these have a similar development cycle to that of a traditional load project. We do not consider that there is a need for PCF to cover non-load projects which will typically have a shorter and less externally facing development process.
- 4.31 SPT argued that PCF (including EEW) should be set on a programmatic basis to provide consistency and align with our introduction of the APM. There is a significant amount of work to be done in RIIO-ET3, and a lot of this work currently lacks certainty, so we consider that a project-by-project approach to PCF funding will be most effective at protecting consumers from the risks of changes to project requirements.

Scope

- 4.32 We have decided to maintain the scope of PCF proposed in our Draft Determinations. As a result, PCF will include:
 - surveys, assessments, and studies that inform environmental, consenting, and design feasibility decision making;
 - stakeholder engagement and consultation which will be key to informing project design and progressing through the consenting process;
 - project design and engineering development that move a project from being 'lines on a map' to a detailed project proposal that can be taken to the market for procurement;
 - tasks associated with wayleaves and planning applications; and

³⁸ We have decided to define 'shared driver' projects as related reinforcement works on existing or new substations, overhead lines (OHL) or cables, which include significant load and non-load related elements, or other external interfaces.

- EEW.
- 4.33 We consider this scope of PCF, including the addition of EEW, to be sufficient in enabling the TOs to obtain all material planning consents and prepare for construction to begin. Respondents broadly supported the scope proposed, with any exceptions described below.

Early Enabling Works

- 4.34 Consistent with our Draft Determinations, we have decided that EEW will be a part of PCF in RIIO-ET3. We take EEW to mean the establishment of site welfare and access, and validation of assumptions at design stage. Our non-exhaustive list of EEW activities includes:
 - the installation, testing and commissioning works for GIS bays, at existing substation sites;
 - busbar modifications at existing substations to facilitate future substation growth;
 - permitted development cable works or associated enabling works for this to occur;³⁹
 - modifications to the substation covered under permitted development;
 - progression of detailed design that typically would commence during the project assessment execution phase;
 - distribution and transmission diversionary works to existing assets or new connection works;
 - advanced civils works (access roads, public road improvements, horizontal directional drilling);
 - forestry; and
 - utility works (diversions, distribution network operator connections, BT upgrades due to electromagnetic compatibility requirements), and additional early contractor involvement (ECI) and initial works required to identify and quantify these.
- 4.35 Incorporating EEW into the scope of PCF will enable activities that were previously given accelerated funding under ASTI to benefit from the same advanced funding. This will enable PCF to bridge the gap between traditional pre-construction activities and ensures site readiness for construction to begin.

³⁹ 'Permitted development rights' enable specific projects to proceed without requiring planning permission.

- 4.36 One stakeholder welcomed the clarity on the exact definition of what constitutes as EEW. In their Draft Determination responses, prior to submitting updated PCF data to us in September 2025, the TOs said the following on EEW:
 - SPT set out that EEW would require 11.2% of total project costs and
 advocated that this should be included within PCF and follow the same
 regulatory treatment (be included in the PCF licence condition and in the
 PCF PCD assessment). SPT believed that it is imperative that the definition
 of EEW remains sufficiently flexible to accommodate project specific
 requirements as each project will be unique and associated costs will vary.
 - SHET stated that based on its ASTI projects, EEW of 2% would be required. SHET also stated that EEW is direct capex spend and asked us to consider the reporting of EEW separately to indirects within the RRP, and future Business Plan Data Templates (BPDTs). SHET raised concern that there is a potential for confusion and misreporting if EEW is embedded within PCF, which has been defined as an indirect activity. We disagree that this is an issue because PCF and the CAI UIOLI will operate as separate allowances and there is a clear distinction in the RIGs, with these costs already reported separately in RRPs in RIIO-ET2.
 - NGET stated that we should ensure that there is flexibility in regulatory
 processes to address the inherent variability of EEW needs across projects
 by being able to allocate a higher percentage beyond the pre-agreed
 percentage for PCF at the Eligibility Letter stage, if needed. We consider
 that the PCF Re-opener for existing allowances, established at RIIO-ET2,
 and being continued into RIIO-ET3, enables this flexibility.

Strategic land purchases

- 4.37 As per our decision in our SSMD, we will not provide accelerated funding for strategic land purchases in RIIO-ET3.
- 4.38 SHET echoed our position that full funding for land can be recovered through the Project Assessment, in the lead up to construction beginning. SPT strongly opposed our prior decision to exclude strategic land purchases from the scope of early development funding and argued that this approach is no longer adequate given the scale, urgency, and complexity of infrastructure upgrades. NGET requested the scope of RIIO-ET3 PCF to include equipment not covered by the APM and advanced land purchases.
- 4.39 We do not consider that land purchase should be within the scope of development funding on an enduring basis because TOs are best placed to manage any risk

associated with the purchase and the ability to conduct the future sale of the land largely insulates the TO from any potential risk associated with a stranded purchase. TOs will be able to request funding for land acquisition and purchase in cost assessments as has been the case previously under Strategic Wider Works, LOTI and MSIP.

<u>Funding level</u>

- 4.40 We have decided that PCF will be set at 8.2% of total forecast project costs for all eligible projects in RIIO-ET3. This figure takes into consideration the PCF and EEW data submitted by the TOs after providing their Draft Determination responses, and the scope of PCF established in our Draft Determinations, including EEW.
- 4.41 The data we received from the TOs for PCF was a mixture of historical levels of PCF incurred and data in relation to the likely PCF spend for RIIO-ET3 projects. The data in relation to EEW varied significantly, ranging from 0%-48.5% of total project costs. This data was therefore not of sufficient quality to determine a reliable EEW value, and as such did not directly factor into the final PCF figure set out above. To account for the poor EEW data and the fact that we accept that EEW will be necessary we chose a total PCF value right at the top of the 7.3%-8.2% range that TO data indicated, to accommodate an additional allowance for EEW.
- 4.42 In their Draft Determination responses, all TOs argued that the 2.5% we proposed in our Draft Determinations was insufficient and instead offered a range of figures varying from 3.3% to 11.7% (with some of these figures excluding EEW). These figures were not backed up by robust data and came from a mixture of historic and forecast project examples.
- 4.43 In September, after we had received Draft Determination responses and fed back the above, the TOs proposed a joint recommendation for the size of the total allowance of 14.5% as a percentage of total forecast project costs, including EEW. However, as set out at paragraph 4.41 the EEW portion of this value was not robust, and fluctuated significantly across different projects. Therefore, we consider the 14.5% figure presented by the TOs too high to be a credible option for PCF in RIIO-ET3.
- 4.44 SHET stated that RIIO-ET3 schemes and historical projects showed an average level of indirect spend on a large capital project of 19.74% of the projects total cost (excluding EEW). SHET stated that its analysis had identified that PCF inclusive of contactor indirects, as a subset of total indirects is 11.7%, and raised

concerns about our delineation between PCF and the CAI UIOLI. We consider that these should operate as separate allowances, and that there is a clear distinction in the RIGs, with these costs already separately reported in RRPs. The TOs do not need to use all of the PCF allowance before using the CAI UIOLI, or vice versa, and it is for the TOs to allocate the funding according to the RIGs. We are confident that taken in combination, our approaches to PCF and the CAI UIOLI provide sufficient coverage for project development.

4.45 One stakeholder was supportive of PCF being set at 2.5% of each TO's current forecast total project costs.

Cost oversight

- 4.46 We have decided that TOs will need to obtain all material planning consents for 100% of PCF to be allowed. If the TOs apply for material planning consents but these are not obtained, they will be entitled to 60% of the PCF spend. However, if the TOs do not apply for material planning consents, they will only be entitled to 20% of the PCF spend. These stages are accelerated slightly from the RIIO-ET2 LOTI design to reflect the increased urgency of network reinforcement.
- 4.47 A stakeholder agreed with our position in our Draft Determinations that all PCD outputs should be reviewed on a case-by-case basis, due to the lack of certainty regarding spend in RIIO-ET3.
- 4.48 NGET and SHET did not agree with the use of PCDs or staged releases to unlock PCF. They argued that the PCD structure is too rigid and disincentivises spending to accelerate project delivery, and that they add unnecessary regulatory burden, as clawback of allowances can be made through the closeout process if projects are cancelled. Our position is that while PCF is integral to expediting project development, consumers must be protected from the potential high cost of projects that do not get built, which the PCD mechanism and 'staged release' aspect of the design ensure. As far as we have seen, this design has worked effectively in RIIO-ET2.
- 4.49 SHET stated a commitment to report progress of PCF spending through the annual RRP but that there should be no requirement for additional reporting through PCDs. Our position is that the reporting requirements on the TOs for PCF are fair and reasonable given the magnitude of spend.
- 4.50 Setting a PCD for PCF will ensure that the consumer is protected against projects that do not materialise. Setting an objective for each project to have obtained all material planning consents ensures the consumer is only paying for projects to be expedited that are actually going to be constructed.

4.51 We consider that the availability of the 8.2% is sufficient to unlock immediate funding and de-risk the TOs work.

<u>Treatment of tCSNP2 projects</u>

Transfer of applicable projects

4.52 We have decided to transfer applicable tCSNP2 projects from the tCSNP2-specific licence condition in RIIO-ET2 (Special Condition 3.45) into the RIIO-ET3 PCF licence condition. All three TOs were broadly satisfied with this approach and we consider that this approach provides consistent treatment across similar projects.

Eligibility for PCF

- 4.53 We have decided that two types of tCSNP2 projects (as categorised in our December 2024 tCSNP2 funding decision⁴⁰) may be eligible for the RIIO-ET3 PCF allowance: delivery and development track projects. This is unchanged from the position in our Draft Determinations, and we set out further detail below.

 Additional detail will be included in the PCF licence condition.
- 4.54 tCSNP2 delivery track projects received a PCF allowance of 2.5% during RIIO-ET2. For these projects, TOs will be automatically eligible for further PCF funding up to a total allowance, across both price control periods, of 8.2% of the total forecast expenditure for that project. PCF for tCSNP2 delivery track projects in RIIO-ET2 requires submission of all material planning consents, but to reflect the increased allowance we will change this to require that the TO obtains all material planning consents for that project to receive all of the allowance.
- 4.55 tCSNP2 development track projects received initial Development Funding of 0.5% during RIIO-ET2 to enable the TOs to develop these projects further so that they are sufficiently mature to be assessed in the tCSNP2 Refresh. These projects will be eligible for the RIIO-ET3 PCF if the NESO's tCSNP2 Refresh recommends that the TO proceeds with these projects.
- 4.56 As outlined in our Draft Determinations, there is likely going to be a gap of several months from the start of RIIO-ET3 and the publication of the tCSNP2 Refresh. To ensure that projects can continue their development at pace during this period, we have decided that development track projects may continue to incur spend on project development activities (as per the approved activities for tCSNP2 Development Funding) and pre-construction works, where these are

⁴⁰ <u>Funding and approval framework for onshore transitional Centralised Strategic Network Plan 2 projects: decision | Ofgem</u>

critical to maintaining current project delivery timelines. Efficient incurred costs will be recoverable through RIIO-ET3 re-opener mechanisms. If the project need falls away following the tCSNP2 Refresh, TOs are to demobilise and stop incurring further expenditure.

Load Re-opener

Purpose: To enable TOs to request adjustments to their baseline allowances for new load projects which were not included in baseline allowances due to uncertainties relating to needs case, optioneering and/or costs.

Benefits: Provides flexibility for TOs to deliver at pace, whilst protecting consumers from unnecessary costs for those projects where the needs case, optioneering and/or costs are subject to uncertainty.

Final Determinations summary

Design	Final Determination	Draft Determination
UM type	Re-opener.	Same as FD.
Scope	Projects that have a load-related driver.	Same as FD.
Network company re- opener windows	First five working days in April and October, except the first window which will be 5-8 May 2026.	Same as FD, other than the May window addition.
Materiality threshold	Projects >£40m. COAE threshold of 10%.	Change - Projects ≥£25m.
	Co/ \(\text{\text{L}} \\ \text{\text{Col}} \\ \t	COAE threshold of 20%.
RPEs	Applied to all projects (see Overview document, Chapter 6).	Change – not specified.
Applied to	All TOs.	Same as FD.
Associated document	Load Re-opener Guidance Document.	Same as FD.

Final Determination rationale and Draft Determination responses <u>UM type</u>

4.57 We have decided to retain our Draft Determinations position to implement the Load Re-opener, but have increased the materiality threshold to £40m to reflect changes to the Load UIOLI. A consumer group and all three TOs were supportive of the introduction of the Load Re-opener, but TOs had comments on the scope of the re-opener, the assessment stages and the three tracks a project can progress through.

4.58 The Load Re-opener process combines two elements: Re-opener Assessment Tracks and Re-opener Assessment Stages. Tracks set the overall pathway, matching scrutiny to project complexity, while stages are the steps within each track, such as confirming eligibility, validating the needs case, and determining costs. Together, they provide a flexible framework that accelerates well-defined projects and ensures robust checks for those with greater uncertainty. These are covered in the subsections below.

Scope

- 4.59 We have decided to keep the scope of the Load Re-opener the same as in our Draft Determinations, to enable TOs to apply for adjustments to allowances to fund reinforcements on the ET network which ensure it can handle increased load (ie generation or demand) and maintain reliability. The scope of the re-opener includes projects with shared drivers where a significant driver is load but includes elements of non-load related works (eg asset health and network). SHET and SPT broadly agreed with the scope of the Load Re-opener.
- 4.60 NGET stated that having a different re-opener for load and non-load projects adds significant complexity, leading to difficulties for delivering at pace. We decided that having a separate re-opener for load and non-load is appropriate given the differences in development timelines between load and non-load projects, meaning that they require different assessment processes to enable the most expedient assessments.

Re-opener assessment stages

- 4.61 We have decided that there will be three assessment stages for projects progressing through the Load Re-opener:
 - Eligibility Assessment where the eligibility of projects for the Load Reopener is determined, PCF can be granted, and certain projects can be fasttracked to Project Assessment. At Eligibility Assessment we will also
 determine whether a project will be subject to the Major Projects ODI-F.
 - Needs Case Assessment where the need for, design of, and consumer value of projects is assessed and can be approved by us.
 - Project Assessment where the costs, outputs and delivery dates of projects are assessed and can be set in the licence by us.
- 4.62 We recognise the need to reduce the regulatory burden of our assessments as far as practicable while also ensuring we meet our statutory duties. We have decided

on a process which seeks to address this, but note that the timescales for review are often dictated by the quality of the submissions received from the TOs.

Eligibility Assessment

- 4.63 We have decided that the first step in the Load Re-opener process will be for TOs to submit an Eligibility Letter to us if they consider that a project is eligible for the Load Re-opener. TOs agreed with our Draft Determination proposal for the Eligibility Letter to be submitted at any time, following one month notice. However, we have decided to change this to allow TOs to only submit during the two submission windows each year, in April and October. This is to provide a more structured process, for both us and TOs, which supports timely assessments.
- 4.64 All three TOs expressed concern that the level of detail required for the Eligibility Letter is too extensive and may result in Eligibility Letters being submitted so late in the process that we would not be able to scrutinise optioneering without delaying project delivery. We have thus decided to reduce the scope of detail that we will require for the submission of an Eligibility Letter. This will allow TOs to submit them to us earlier. The submissions still need to contain sufficient detail to enable substantive comments from us, including a clearly stated preferred option if TOs expect the project to be fast-tracked.
- 4.65 The Eligibility Letter must clearly set out which assessment track the TO intends for the project to progress through, and why. TOs must set out their early views on project drivers, early needs case views, early technical views, early cost views etc. A full list of the details of the Eligibility Letter requirements will be set out in the Load Re-opener Guidance Document.
- 4.66 We welcome the TOs engaging with us in advance of submitting their Eligibility Letters, to allow us to give feedback to help the TOs improve their subsequent submission. We will aim to provide a response to the Eligibility Letter within three months of the TO's submission, but in instances where fast-tracking is being sought for a project this may take up to six months, as we may want or need to consult given the consumer costs at stake if we approve the need for the project.
- 4.67 This stage will determine whether the project progresses through Track 2 (ie fast-track) or is assigned to Track 3. The Load Re-opener tracks are set out in the subsection below. Principally, if there is sufficient clarity on the technical need for and consumer benefit of the project, and the engineering option aligns with our stated design and engineering principles, eg our developing Pre-Approval of Solution by Engineering (PASE) framework, the project will proceed under Track

- 2. Otherwise, it will be assigned to Track 3, where TOs will have the opportunity to provide further justification of their optioneering and needs case. Projects which cost over £300m will be automatically placed into Track 3 because we consider this to be the financial materiality at which additional scrutiny will always be in the consumers interest. PCF will be provided for all projects approved through the Eligibility Assessment, regardless of track.
- 4.68 PASE promotes the lowest whole-life cost solutions to a given set of criteria regarding existing network conditions. TO solutions that are in alignment with PASE help to reduce the risk of asset stranding and that any overbuild, if not used immediately, will provide future valuable optionality. While TOs are encouraged to adopt PASE-compliant solutions it is important to state that PASE should not determine the optioneering or design that a licensee selects. Alternatives to PASE can still be approved and/or expedited where the licensee can provide sufficient evidence that the proposed solution is justified.
- 4.69 An Eligibility Letter can be submitted at any time within the submission windows, in April and October (or between 5-8 May and October in 2026).

Needs Case Assessment

- 4.70 We have decided that projects eligible for Track 3 will undergo a Needs Case Assessment for us to assess in detail the engineering design and consumer value of the project, as well as any changes that have been proposed by the TO since the Eligibility Assessment. The reason for the Needs Case Assessment is to ensure that the technical requirement for the project is clear, that the proposed option selection (ie optioneering) is well justified, and that the project will deliver net benefits for consumers.
- 4.71 SHET said that projects driven by connections should not require a Needs Case assessment (or Eligibility Assessment) as this has already been confirmed by the signing of a TOCA and consumers are protected from the project falling away by the deposit paid by the connection customer. We do not agree that connection-driven projects should bypass the Eligibility Assessment or skip the Needs Case assessment. While a signed TOCA and customer deposit provide some assurance of intent, they do not replace the need for regulatory scrutiny of TO designs and whole-life costs.
- 4.72 The output of this stage, if our assessment is positive, is to formally confirm the need for the project, our views on the design of the project, and allow TOs to submit a Project Assessment in future. If a project is not approved through our Needs Case Assessment, it can be resubmitted in a later submission window.

Project Assessment

- 4.73 We have decided that the final assessment stage for all three tracks in the Load Re-opener will be the Project Assessment which will determine efficient cost allowances and set the output(s) for the project. The TO must engage with us with information about the project in the months leading up to its Project Assessment submission to help ensure we are able to conduct an effective assessment.
- 4.74 NGET and SHET said that in RIIO-ET2 there were occasions where decisions made at the equivalent of the Needs Case Assessment stage were subsequently revisited during the Project Assessment phase and sought assurances this will not be repeated. Where the project receives no changes to scope between the Needs Case Assessment and Project Assessment, our intent would be to not question previous decisions. We consider it may be justified and in consumer's interests to review the need and design of the project at Project Assessment stage if the project has significantly changed in scope or materiality.
- 4.75 The outcome of the Project Assessment will be that the project is established in the TOs' licence as an LO and a PCD, with cost allowances granted. We have decided that Load Re-opener projects will be set as both an LO and a PCD, so that if there is, for example, consumer detriment resulting from non- or late-delivery, we are able to consider enforcement action against the TO, but if there is not then we are able to claw money back through the PCD. NGET did not agree with the proposal to set LOs in addition to PCDs through the Load Re-opener, arguing that this introduces complexity and regulatory burden. We have decided to keep the application of LOs for all Load Re-opener investments to support timely delivery of projects and protection for consumers. Removing LOs could lead to TOs delaying or not delivering projects without negative consequences.

Re-opener tracks

4.76 All TOs and one consumer group said they agree with the rationale for introducing the assessment tracks, but each TO set out concerns with the scope of each track and argued for more flexibility for projects to progress through the fast-tracked route (Track 2). We cover these general concerns in the sub-sections below. Figure 4 summarises the three tracks under the Load Re-opener, which we will discuss in turn.

Project Assessment:

- Efficient costs and

output set

Track 1: Track 2: Track 3: Project's needs case and Project is eligible for Load Re-opener Project's needs case and optioneering approved at Final optioneering approved at but needs case and optioneering not Determinations: or Eligibility Assessment: approved at Eligibility Assessment; or Project has MSIP Stage 1 Project is PASE compliant; and Project costs >£300m approval Project costs <£300m **Eligibility Eligibility Assessment:** Final Determinations: Assessment: Pre-Construction Funding - Needs Case agreed - Needs Case agreed provided - Optioneering agreed - Optioneering agreed If significant - Pre-Construction changes occur - Pre-Construction to the project Funding provided Funding provided after Eligibility **Needs Case Assessment:** Assessment, we may ask - Needs Case agreed

projects to be

assessed under Track 3 - Optioneering agreed

Project Assessment:- Efficient costs and output set

Figure 4: Load Re-opener tracks

Track 1 (business plan track)

Project Assessment:

- Efficient costs and

output set

- 4.77 If a project's needs case and early optioneering is approved in our Final Determinations, but there is cost uncertainty, the project will be eligible for funding through Track 1, which progresses projects straight to Project Assessment. Track 1 projects have been provided with PCF in our Final Determinations. All TOs supported this approach.
- 4.78 SPT said that projects that had received MSIP Stage 1 approval during RIIO-ET2 (with needs case and optioneering agreed) should progress through Track 1. We agree with this suggestion and have decided that if there are projects that meet the Load Re-opener criteria with MSIP Stage 1 approved, those projects can progress through Track 1. This is because these projects have already had their needs case and optioneering approved and allowing them to progress through Track 1 avoids duplicating assessments, reduces regulatory burden, and accelerates delivery of critical projects. We are taking lessons learnt from RIIO-ET2 to minimise the number of duplicate submissions needed to be made by TOs.
- 4.79 Similarly, LOTI Re-opener projects from RIIO-ET2 can progress in the Load Re-opener from where they left off in LOTI, eg if the Final Needs Case had been approved in LOTI, the project will move directly to Project Assessment in the Load Re-opener. This ensures a seamless transition between mechanisms and reduces regulatory burden for both us and TOs.

Track 2 (fast-track)

- 4.80 If through the Eligibility Assessment we determine that a TO's proposed solution choice and the underlying needs case can be approved, the project can move directly to the Project Assessment stage, bypassing our Needs Case Assessment. If we confirm a project's eligibility for the Load Re-opener, we will provide PCF as an outcome of our Eligibility Assessment.
- 4.81 NGET and SHET disagreed with the £200m upper materiality threshold for Track 2 proposed in our Draft Determinations, arguing that it would expose too many projects to Track 3, increasing regulatory burden for limited additional consumer value. Taking on board this feedback, we have decided to increase the threshold to £300m based on analysis of pipeline data provided by TOs which showed that this could allowed 14 more projects to be fast-tracked across RIIO-ET3 while only increasing the average project cost by £10m (ie limited additional consumer exposure).
- A.82 NGET said that projects that do not comply with the Electricity Transmission
 Design Principles (ETDP) and/or do not meet the criteria outlined in the proposed
 PASE framework should not automatically be excluded from fast-track through
 Track 2 because there may be cases in which TO decision-making can be
 explained. PASE approval will be especially valuable for Track 2, but we accept
 that TOs can provide explanations for deviations from our stated design principles
 if they follow the additional criteria out set out in our Load Re-opener Guidance.
 PASE compliance will ensure we have confidence in the project's long-term
 consumer value and adaptability to technological and policy changes, reducing
 the need for a detailed optioneering review and speeding up our assessments.
- 4.83 NGET also suggested broadening the Track 2 eligibility to automatically include projects identified in the Connection Accelerator Service (CAS). Similarly, SHET said that projects which meet NESO's Gate 2 criteria should automatically progress through Track 2. We do not consider that it would be appropriate to automatically fast-track either of these project types because there may be instances where we identify inefficient TO network designs in Eligibility Letters that require further iteration through Track 3. However, CAS eligibility and Gate 2 will be a factor that we consider in our overall assessment of which track a projects should progress through.

Track 3 (business as usual track)

4.84 A project must proceed to the Needs Case Assessment stage before the Project Assessment, ie Track 3, if:

- it is expected to cost £300m or more;
- during the Eligibility Assessment we determine that a project's solution or needs case requires further scrutiny; or
- it is a Track 2 project that has undergone significant changes to its optioneering or needs cases since the eligibility assessment.
- 4.85 NGET disagreed with our proposal that Engineering Justification Papers (EJP) submitted in its RIIO-ET3 business plan that only presented a needs case and no optioneering information should move to Track 3. It suggested that these projects should be assigned to Track 1, with a streamlined assessment document that includes only new optioneering information. We disagree because of the lack of optioneering information we have seen in NGET's Business Plan and assurance as to ultimate consumer value. As a result, we have decided these projects still require optioneering to be approved, which can be done through Track 3. If, however, at the Eligibility Assessment stage we decide that a thorough optioneering assessment is not required, some may be eligible to progress through Track 2.

Network company re-opener windows

- 4.86 We have decided that the re-opener windows for projects progressing through Tracks 2 or 3 will be the first five working days in April or October (except the first window of the price control which will be 5-8 May 2026, to allow additional time to factor in changes resulting from connections reform) for each of the assessment stages, with a minimum of one month's notice to be provided to us ahead of submission.
- 4.87 TOs raised concerns over the speed and inflexibility of the submission windows. NGET said that there are not enough windows and that this would cause delays, arguing that monthly submission windows would be more suitable. We disagree because this would lead to overlap between submissions and as a result risk delays to our decisions. Having two submission windows allows for some flexibility for TOs. Furthermore, it provides TOs clear deadlines for bulk submissions (ie for multiple projects at once) and creates a regular cadence of work for us to resource up for.
- 4.88 We have decided that our target review times will be:
 - Eligibility Assessment: three months (or four to six months if assigning a project to Track 2).
 - Needs Case Assessment: four to six months.

- Project Assessment: four to six months.
- 4.89 To support meeting these assessment timescales we are establishing a Load Board, chaired by us and attended by the TOs, which will be used quarterly to escalate emerging issues and provide us with status updates on, and sight of, all load projects that the TOs are developing. TOs must use the Load Board to proactively identify new projects to us that are emerging in its pipeline.
- 4.90 SHET disagreed with these timescales and proposed reducing the Eligibility
 Assessment review to one month, Needs Case Assessment to three months and
 Project Assessment to four months, to speed up the process. We do not consider
 that these timescales are realistic given our experience of the quality of TO
 submissions, the need for robust assessment and consultation, where
 appropriate.
- 4.91 NGET also raised concerns over the review timescales and the lack of assurance provided for meeting these timescales as prolonged determination periods postpone investment delivery and present challenges for ongoing investment planning. NGET therefore suggested that we implement Service Level Agreements (SLAs) for our review timescales with a 'stop-the-clock' mechanism. We have decided against the implementation of these because our ability to assess projects in a timely manner is ultimately dependent on the quality of the submission made by TOs. Implementing a 'stop-the-clock' mechanism could lead to gaming by TOs, which might delay providing information to trigger clock stops, undermining process integrity. Furthermore, managing SLAs increases regulatory burden, diverting resources from reviewing projects.
- 4.92 TOs said that the submission windows for Needs Case Assessment and Project Assessment being the first five days in April will cause delays to the submission process due to public holidays. To account for this, the submission windows will be changed to the first five working days in April and October. For the first window in RIIO-ET3 we will amend the window to 5-8 May, to reflect changes resulting from reformed connections queue.

Materiality thresholds

4.93 We have decided on a materiality threshold of projects costing more than £40m for the Load Re-opener, increasing it from our Draft Determinations proposal of £25m. The TOs can make an application through the Load Re-opener for projects with an estimated cost of more than £40m. Projects below this threshold may be eligible for funding through the Load UIOLI.

- 4.94 NGET said that a materiality threshold of £25m would cause too many low materiality projects to undergo a time consuming and resource intensive reopener assessment and suggested increasing the materiality threshold to £50m. Based on our review of historical and expected future projects, we consider a £40m materiality threshold strikes the right balance of minimising regulatory burden while maintaining strong consumer protections and reflecting the expected volume of upcoming projects.
- 4.95 SHET suggested removing the materiality threshold altogether to allow TOs a backstop route for projects that do not fall into either the UIOLI or the volume driver. We have decided that having a materiality threshold is necessary, to avoid the submission of smaller projects through the Load Re-opener, which would be very resource intensive to assess and lead to unnecessary delays in projects progressing at pace. We do not consider that there are any gaps in our framework.
- 4.96 We have decided to reduce the Cost and Outputs Adjusting Event (COAE) materiality threshold to 10%, from the 20% as proposed in our Draft Determinations. All three TOs said that a COAE threshold of 20% is too high and should be lowered to 5%. We consider that reducing the threshold to 10% recognises the TO risk exposure due to the size and number of projects that could be introduced through the Load Re-opener. As projects in the Load Re-opener could be as low as £40m, a threshold lower than 10% would mean a very low threshold in absolute terms for smaller projects. It is lower than the 20% threshold that applied to LOTI in RIIO-ET2, which was for projects £100m or more.
- 4.97 We have decided that the Load Re-opener will also allow delivery date changes under the COAE. Where Load Re-opener projects are subject to the Major Projects ODI-F (as introduced in Chapter 3), we will be able to modify the delivery date in the Load Re-opener in line with an approved Delay Event or modification to the TDD in the Major Projects ODI-F without needing the TO to submit a COAE application under the Load Re-opener. This is similar to the approach under the CSNP Re-opener, as explained from paragraph 4.191.

Load UIOLI

Purpose: To accelerate funding for specified load related projects via a UIOLI allowance to reduce regulatory burden while allowing recovery of any unused allowance.

Benefits: Flexibility for TOs to prioritise activities whilst providing protection to consumers for activities not undertaken.

Final Determinations summary

Design	Final Determination	Draft Determination
UM type	UIOLI.	Same as FD.
Scope	Atypical connection projects, NESO-directed projects, NESO-driven requirements, harmonic filtering equipment requests, protection equipment, and projects to maintain Security and Quality of Supply Standard (SQSS) compliance.	Same as FD.
Funding level	NGET: £582.1m.	Change -
	SHET: £546.19m.	NGET: £425.25m.
	SPT: £324.51m.	SHET: £143.10m.
		SPT: £121.10m.
Materiality Threshold	Projects worth £40m and below.	Change - projects below £25m.
Reporting and governance	Through RRPs. Monitoring approach will be set out in the governance document.	Same as FD.
Allowance Recovery	Unused Load UIOLI allowances will be recovered at the end of RIIO-ET3.	Same as FD.
Applied to	All TOs.	Same as FD.
Associated document	Load UIOLI Governance Document.	Same as FD.

Final Determination rationale and Draft Determination responses UM type

- 4.98 We have decided to implement a ~£1.5bn UIOLI allowance to provide funding for TOs to use to build small and medium sized load projects.
- 4.99 All TOs agreed with the principle of including a Load UIOLI. NPg disagreed and stated that UIOLIs do not incentivise companies to find efficiencies, arguing that they should be used only where finding efficiencies is not a priority. We have decided that the Load UIOLI is an appropriate mechanism to grant TOs the flexibility needed to build out small and medium load projects at pace, while balancing the degree of regulatory oversight required to assess lower materiality projects.
- 4.100 We believe that the benefits of not applying the TIM to these works, ie providing TOs with no incentive not to invest, outweigh the cost efficiency benefits that may have been achieved by applying the TIM.

Scope

- 4.101 We have decided that the scope of the Load UIOLI is a project that costs £40m or less and which is one of the following:
 - Atypical connection projects: connection projects falling outside the 'atypical' volume driver thresholds.
 - NESO-directed projects: eligible projects that receive a robust justification or 'proceed' signal from the NESO.
 - NESO-driven requirements: eligible projects arising from written requests by the NESO for additional investment in relation to system operability and constraint management requirements.
 - Harmonic filtering equipment requests: eligible projects arising from requests from TO customers to aggregate and deliver harmonic filtering requirements, or following NESO or TO system studies showing a potential breach of planning limits.
 - Protection equipment: eligible projects arising from changes required to address system issues following NESO or TO system studies.
 - Operational Load Management Schemes, subject to the receipt of a STC planning request.
 - Projects to maintain SQSS compliance: eligible projects arising from TO
 justification of the need to modify the network to meet SQSS compliance
 for security and system operability.
- 4.102 SHET agreed with the scope of projects and welcomed the inclusion of atypical projects in our Draft Determinations, although it argued that Reinforced Autoclaved Aerated Concrete (RAAC) Remediation projects should not be included in the UIOLI pot because it is not a load project and does not meet the criteria. We agree with this position, so we have decided to remove all RAAC remediation projects from the scope of the Load UIOLI and add them to baseline allowances.
- 4.103 NGET argued for additional categories, including volume driver anticipatory investment, site separation and circuit breaker replacements, and the flexibility to expand these categories in the price control period. We consider that between the volume driver and the Load UIOLI there is already scope for anticipatory investment and that TOs should judge when and where it is in consumers interests to invest ahead of need. Asset replacement is not appropriate to include in a load mechanism and is covered under non-load funding.

4.104 SPT also disagreed with the categories, arguing that the interaction between the volume driver and UIOLI should be reviewed to consider whether more projects should be included in the UIOLI scope. The pot totals and the materiality thresholds of the Load UIOLI have increased to better capture atypical volume driver projects and provide greater flexibility for TOs.

<u>Funding level</u>

- 4.105 We have decided that the Load UIOLI pots will be: £582.1m for NGET, £324.51m for SPT, and £546.19m for SHET. These figures are comprised of:
 - eligible projects identified by TOs before 1 November 2025 that meet the materiality threshold;
 - an uplift to that funding, which was not included in our Draft Determinations, of 10% to account for uncertainty; and
 - an estimate of likely 'atypical' volume driver projects.
- 4.106 All TOs argued for larger Load UIOLI pots than proposed in our Draft Determinations, for reasons including:
 - funding projects not captured by the Load Re-opener;
 - covering RIIO-ET3 plus 2 years;
 - volume driver cost reflectivity and atypical projects; and
 - responsiveness to unforeseen changes.
- 4.107 We have decided to fund Load UIOLI projects for the five years of RIIO-ET3 and not to cover an additional two years because crossover projects can be picked up in RIIO-ET3 closeout, and we aim to support and encourage timely TO delivery ahead of 2030.
- 4.108 NGET and SPT argued that we should include a mechanism to amend the funding level during RIIO-ET3 to allow flexibility and manage uncertainty, should the pot be depleted. We have decided not to introduce a re-opener mechanism to amend the Load UIOLI allowances in the price control period because we expect that the allowances provided will be more than sufficient and we want to encourage TOs to use the funds as efficiently as possible.

Materiality threshold

4.109 We have decided that the Load UIOLI is for projects that cost £40m or less. This is an increase relative to our Draft Determinations proposal for it to be for projects below £25m. Projects above this threshold may instead be submitted into the Load Re-opener for assessment. We consider that this higher threshold

- provides the appropriate balance between minimising the regulatory burden on relatively lower value projects so that they can be progressed at pace, and maintaining closer oversight of higher value projects.
- 4.110 NGET and SPT requested a higher materiality threshold. We disagreed with NGET's proposal for a £50m threshold, and as explained under the Load Reopener we have chosen this £40m based on our review of historical and expected future projects.

Reporting and governance

- 4.111 We expect costs and volumes of projects that are funded through the Load UIOLI to be reported on and provided to the Authority on an annual basis through the RRPs. One stakeholder said that we should undertake periodic compliance reviews. We have decided that TOs annual reporting to us provides adequate compliance oversight.
- 4.112 We have decided to introduce a governance document setting out how we will monitor the use of the Load UIOLI. The Load UIOLI Governance Document will set out further detail on eligibility for the UIOLI, and make clear the circumstances under which we may disallow TO expenditure under the Load UIOLI.

Generation and Demand Connections Volume Drivers

Purpose: To deliver network capacity to accommodate the changing volumes of connection of generation and demand customers.

Benefits: Providing flexible funding for the TOs to invest in the transmission network in response to the uncertain need of new generation or demand customers to connect.

Final Determinations summary

Design	Final Determination	Draft Determination
UM type	Volume Driver.	Same as FD.
Scope	Variation in allowances for generation and demand connection projects from baseline allowances. Applied to:	Same as FD apart from NGET/SPT-specific volume drivers
	 Substation generation/demand; new/reconductored OHL; and cable. 	
	Additional volume drivers to DD:	

Design	Final Determination	Draft Determination
	NGET: OHL crossings.	
	SPT: OHL/cable voltage split by 132kV and 275/400kV.	
	See company annexes for individual volume drivers.	
Volume measurement	Substation volumes: MW/MVA OHL and cable volumes: km NGET OHL crossings: nr	Change - Substation volumes: MW/MVA. OHL and cable volumes: km.
	See company annexes for specific volume measurement.	
Unit costs	Improvements in data provision, cost mapping, outlier identification.	Change - Derived from BDPT cost and volume and
	Unit rates modelled through univariate regression. Direct costs are funded through unit rates and fixed cost allowances. A 10% uplift is provided for risk and contingency. CAI costs are funded through the CAI UIOLI.	scheme output data. Unit rates modelled through univariate regression. No fixed cost allowances.
	See company annexes for individual rates and fixed cost allowances.	
Ability to change during RIIO-3 costs	SHET only - mid-period recalibration of rates.	Change - N/A.
Reporting	Through RRPs.	Same as FD.
Managing risk	Cost risk is managed through the TIM. Mid-period true-up for SHET only to	Change - Cost risk is managed through the TIM.
Applied to	address project calibration risk. All TOs.	All TOs.

Final Determination rationale and Draft Determination responses UM type

- 4.113 We have decided to implement the Generation and Demand Connections Volume Drivers to provide allowances for load connection projects. They multiply predetermined unit rates by different volume types for connection projects to set annual allowances.
- 4.114 All TOs support the use of the volume driver mechanisms. However, SHET preferred the use of a pass-through mechanism, referencing the high variability in unit costs across projects and a connections project portfolio that may change

considerably as the connections queue develops. To retain uniformity across TOs, minimise regulatory burden and impose cost efficiency incentives, we have decided to apply the volume driver mechanism to set allowances for load connection projects.

Scope

4.115 We have set out the scope of the Generation and Demand Connections Volume Drivers. This includes the types of volume drivers and their measurements, which projects are to be funded through this mechanism, the profiling of allowances and how the mechanism applies to projects in the RIIO-ET2+2 and RIIO-ET3 crossover period.

Selection of volume drivers

- 4.116 We have decided to set the following volume drivers, which are consistent with Draft Determinations, for all TOs, with variations for NGET and SPT (detailed tables are set out in the company specific annexes):⁴¹
 - Substation generation MW/MVA;
 - Substation demand MW/MVA (NGET only);
 - OHL new km (SPT and SHET only);
 - OHL reconductoring km (NGET and SPT only);
 - OHL reconductoring crossings number (NGET only);
 - Cable (less than or equal to 1km) km; and
 - Cable (greater than 1km) km.
- 4.117 All TOs generally supported the selection of the same volume drivers proposed in our Draft Determinations but requested further granularity for some volume drivers to reflect material cost differences between projects within each volume driver. NGET proposed separating the OHL reconductoring volume driver between line length and number of crossings where an OHL crosses major roads, railway lines or rivers, incurring higher costs due to increased safety requirements. Where there is a high number of crossings this could lead to a high degree of under-recovery of expenditure if these costs are not accounted for. SPT and SHET proposed setting separate OHL and cable volume drivers for different voltage ratings, eg where costs for a 400kV line are higher than for a 132kV line due to more expensive components and using steel towers instead of wooden poles. Where there has been sufficient data and where the analysis has supported this,

⁴¹ Separate 132kV and 275/400kV volume drivers for OHL and cable apply for SPT.

- we have included more granular volume drivers. We have set more granular volume drivers for NGET and SPT. We did not set more granular volume drivers for SHET, because we did not receive sufficient data points to robustly set unit rates for additional volume drivers.
- 4.118 We have decided that for SHET and SPT, demand connection projects will be funded through either the Load UIOLI or Load Re-opener, depending on their cost relative to the materiality threshold. As both TOs are not expecting a high number of demand connections, there is insufficient data to model robust unit rates. To resolve potential funding gaps, SPT proposed either applying the substation generation unit rate to demand projects or automatically funding demand connection projects through the Load UIOLI or Load Re-opener UMs. SHET proposed the latter option. To inform whether generation unit rates would be reflective of potential costs of demand connections and would not lead to adverse outcomes, we analysed NGET's data, where there is a material difference in costs between generation and demand. Therefore, despite protection from atypical thresholds, there is a risk of material under-funding demand projects when applying the generation unit rates for SHET and SPT. Therefore, to minimise this risk, we have decided that demand projects for SHET and SPT will be funded either through the Load UIOLI or Load Re-opener.

Application of atypical thresholds

- 4.119 We have decided to apply the volume driver mechanism to load connection projects which are within the bounds of atypical thresholds. These thresholds are set according to a defined difference between total expected costs and allowances of each project. If the difference between allowances and expected costs exceeds the atypical threshold, the project's capex is recovered through the Load UIOLI (for projects £40m or below) or the Load Re-opener (for projects above £40m). This limits the risk of over- or under-funding through the volume driver mechanism. All TOs support the use of atypical thresholds.
- 4.120 We have decided that unit rates and allowances are set on direct capex costs for each volume driver. Risk and contingency costs are included in the unit rates using the same 10% uplift as for baseline load and non-load allowances, while CAIs can be recovered through the CAI UIOLI allowance described in Chapter 5.

Profiling of allowances

4.121 We have decided to profile allowances across a four-year period inclusive of the connection date, where they are profiled in advance of the contracted customer

- connection date.⁴² We have decided that when a connection is expected to occur in the first three years of RIIO-ET3, the allowances will be truncated at the first year of RIIO-ET3.⁴³ This reflects the fact that allowances cannot be provided in the past and must be provided at least from the first year of RIIO-ET3.
- 4.122 We have decided that the annual allowances for SPT and SHET will be split evenly across each year of the allowances profile 25% of total allowances per year unless the profile is truncated at the first year of RIIO-ET3. We have decided to set a non-linear allowances profile for NGET, more closely matching its expected expenditure profiles. The allowances profiles for each TO are set out in Table 11.

Table 11: Generation and Demand Connection Volume Drivers four-year allowances profiles

Year (t = year of connection)	t-3	t-2	t-1	t
NGET	5%	30%	40%	25%
SHET	25%	25%	25%	25%
SPT	25%	25%	25%	25%

- 4.123 NGET and SPT disagreed with our Draft Determinations proposal to use a flat four-year profile, stating that it does not match the expenditure profiles of projects undertaken, thus risking a shortfall between total costs and allowances year-to-year. They proposed that we set allowance profiles which more closely match cost profiles.
- 4.124 While the total costs and allowances should balance across the profile of each project, we support minimising annual discrepancies between cost and allowances where there is reasonable justification to do so. Where TOs have been able to provide evidence of cost profiles for connections projects, we have reprofiled allowances. We have applied this for NGET only.
- 4.125 NGET disagreed with profiling allowances starting from the customer connection date. It proposed using the "first stage commissioning date" as this allowance profile trigger point.⁴⁴ It stated that anchoring allowances to the customer connection date risks a misalignment between incurred costs and allowances where work may be complete a year or more in advance of connection. It stated

⁴² Where the connection date is in year t, the first year of allowances is in t-3.

⁴³ For example, if the connection year is in Year 3 of RIIO-ET3 the funding profile would be: Year 1: 50%, Year 2: 25%, Year 3: 25%.

⁴⁴ The "first stage commissioning date" is a project milestone in a connection project at which the construction of the network infrastructure is complete and undergoes testing ahead of final commissioning connection.

- that this could lead to a large degree of misalignment across multiple projects in light of connection queue reform and a focus on more anticipatory investment.
- 4.126 While we consider that a closer alignment between costs and allowances reduces risks for TOs, we need to weigh this up against the risk to customers. Enabling TOs to recover all allowances for a project ahead of an energised connection means that customers pay for the full allowances ahead of receiving benefits from the connection. We do not consider that a misalignment between expenditure and allowances should not lead to a delay in construction for connection projects as TOs will still receive funding within RIIO-ET3+2 and they are incentivised through the Connections ODI-F. Therefore, we have decided, for all TOs, to profile allowances from the contracted customer connection date for each connection project being funded through the volume driver mechanism.

Treatment of RIIO-ET3 volume driver crossover projects

4.127 We have decided to apply the volume driver mechanism for projects expected to connect up to 31 March 2033 - 'T3+2'. This provides certainty to TOs of funding in the RIIO-ET3 period for connections which extend beyond the RIIO-ET3 period and sets clear parameters and incentives for TOs to deliver these customer-driven outputs in an efficient and timely manner. All TOs supported the inclusion of the extension of the volume driver mechanism into 'T3+2'.

Treatment of RIIO-ET2 and RIIO-ET3 volume driver crossover projects

- 4.128 We have decided that all projects where construction has been sanctioned within RIIO-ET2, allowances have been provided within RIIO-ET2 and connection is expected before 31 March 2028 will be funded using RIIO-ET2 unit rates following the RIIO-ET2+2 volume driver mechanism.
- 4.129 We have decided that projects expected to connect before 31 March 2028 but have neither been sanctioned nor received allowances before 31 March 2026 will be funded using the RIIO-ET3 volume driver mechanism. Any projects expected to connect after 1 April 2028 and up to 31 March 2033 will be funded using the RIIO-ET3 volume driver mechanism.

Modelling of unit rates

4.130 We have not changed the overarching approach to setting and modelling unit rates from our Draft Determinations, but we have worked with TOs to improve the modelling by incorporating more data, improving cost mapping, applying a fixed cost element and adopting a less mechanistic method of identifying outliers.

All three TOs supported the general approach to modelling unit rates, but they disagreed with some components of the process, described below.

Input data and cost mapping

- 4.131 We have modelled volume driver unit rates based on an updated data set of connection projects for each TO, which are more representative of potential RIIO-ET3+2 connections, while capturing realised costs from RIIO-ET2 where these projects are representative of expected RIIO-ET3 projects. All direct costs are mapped correctly to each volume driver with indirect costs and risk and contingency being funded separately.
- 4.132 The volume driver unit rates are intended to represent average costs of generation and demand connection projects per unit of volume. Where unit rates are set using a non-representative sample of projects and where some costs are not captured, the unit rates will not match realised costs on average.
- 4.133 All three TOs disagreed with use of the data sets for modelling unit rates in our Draft Determinations. These data sets comprised projects reported in each TO's business plans, which was the available data at the time. TOs viewed that the data sets under-reported the number and types of connection projects in the period due to uncertainty as to which connections would have a high likelihood of connection in the RIIO-ET3+2 period because of in-progress CP2030 plans and connection queue reform uncertainty. They stated that the business plan data was not representative of connections projects expected in the RIIO-ET3+2 period.
- 4.134 All three TOs identified errors with how asset costs were matched to each volume driver. They also stated that some costs which could directly be apportioned to specific volume drivers were excluded from the unit rates. This would lead to an under-recovery of costs.
- 4.135 We engaged with TOs to increase the number of data points to use in the unit rate modelling and to correctly map asset component costs to each volume driver, ensuring that all direct costs were accounted for in the unit rate modelling. This was to enable more robust modelling and improve the representativeness of unit rates to RIIO-ET3 connection project costs.

Outlier identification and removal

4.136 Ahead of estimating the unit rates we undertook a two-step outlier identification process for each volume driver. The purpose of the outlier identification process is to exclude any projects where costs or volumes are not representative of typical

connection projects. Inclusion of these non-representative projects risks biasing estimates where the unit rates would not be reflective of costs.

- Mechanistic identification: We applied a combination of an interquartile range (IQR) method (applied to combined total cost and volume, and unit cost) and model standard error (where the outlier bounds are set at 2x model standard error).
- Assessment of identified statistical outliers: In coordination with TOs we assessed whether identified outliers should be included or excluded based on engineering rationale and whether their exclusion negatively impacts model robustness.
- 4.137 In our Draft Determinations, we proposed identifying and excluding non-representative projects through a mechanistic process of identifying outliers. We applied the IQR method of identifying outliers. This was applied at the volume driver level rather than at the project level and used a combined assessment of volume and total costs and a separate assessment of unit costs.⁴⁵
- 4.138 All TOs were supportive of identifying and excluding outliers from the modelling but disagreed with our Draft Determinations approach where we used only the IQR method. They stated that this approach is normally applied to a single variable data set, rather than multiple variables (cost and volume). They proposed following best practice to identifying outliers, such as comparing residuals to 2x standard error or using Cook's Distance. They also stated that automatically removing outliers risks excluding projects which are representative of what would be deemed a typical connection project.
- 4.139 We have decided that best practice to identifying outliers should be adopted, namely the model standard error approach. We have not considered replacing the IQR method as it is able to identify a larger set of potential outliers. Where there is a wide range of projects and project costs, the standard error approach on its own may under-identify non-representative projects. We agree with TOs that automatically excluding outliers may unintentionally exclude representative

 $^{^{45}}$ Breakdown of the combined volume and total cost assessment, which is conduct for individual volume drivers (for example substation, OHL new, cable < 1 km):

If a project is a total cost outlier but not a volume outlier it is identified as an outlier. If a project is a volume outlier but not a total cost outlier it is identified as an outlier. If a project is either an outlier across total cost and volume or not an outlier across both it is identified as not being an outlier

⁴⁶ Cook's Distance is a statistical technique for identifying outliers where it quantifies the effect on regression results from removing individual data points. An outlier data point would have a large effect on the coefficient.

connection projects. We developed the two-step approach with a qualitative assessment to mitigate this risk.

Regression models

- 4.140 We have decided to model unit rates using univariate regressions of total cost on total volume per volume driver for each TO. All TOs supported this approach but NGET proposed supporting this approach with a multivariate regression, where total project costs are regressed on separate volumes split by volume driver.
- 4.141 We explored the use of multivariate regressions to support the setting of unit rates. However, we found that in cases where observations are lower, the models were not robust, and coefficients were not statistically significant. We have only used univariate regressions in setting unit rates.

Fixed cost allowance

- 4.142 As well as setting unit rates for each volume driver, we have decided to include fixed cost allowances. This applies to each volume driver individually. Fixed allowances are set based on the value of the intercept in each volume driver regression. They are only applied where the intercept is statistically significant.
- 4.143 NGET and SPT disagreed with the exclusion of a fixed costs allowance in the volume driver in our Draft Determinations. They stated that only providing allowances through the unit rates would underfund projects with small volumes; where there is a large number of smaller projects this could lead to a large funding gap, and there was precedent of including fixed costs through the RIIO-ET2 volume driver.
- 4.144 We conducted analysis on the impact of excluding and including a fixed cost allowance for all projects and smaller projects. We found that there would be material underfunding for these projects when a fixed cost allowance is not included, which would risk aggregate under-recovery of efficient costs where the TO has a sufficiently high number of smaller projects. We have decided to include a fixed cost allowance based on the intercept of the regression models where it is statistically significant. We have included fixed costs for substation generation and cable volume drivers for both NGET and SPT where the analysis supported their inclusion. We have not included fixed cost allowances for SHET, which requested not to and which our analysis supported. This is consistent with our Draft Determinations position.

Allowances for indirect costs, risk and contingency and biodiversity net gain costs

- 4.145 We have decided that volume driver allowances are used to cover the direct capital expenditure of connection projects.
- 4.146 We have decided that CAI costs should be funded through the CAI UIOLI allowances. This has been calibrated to provide allowances for CAI associated with volume driver projects and there is a top-up mechanism to provide additional CAI allowances within the RIIO-ET3 period to ensure that there is sufficient funding. Indirect costs are shared across multiple projects. We have decided that it is not appropriate to individually allocate CAI costs directly to volume driver allowances based on the volumes of projects being funded. This is unchanged from our Draft Determinations position and follows precedent at RIIO-ET2.
- 4.147 We have decided that risk and contingency (R&C) costs will be funded through a 10% escalator to volume driver allowances (direct costs only). This is in line with the 10% escalator applied to baseline allowances.
- 4.148 BNG costs, associated with statutory requirements, have been included in unit rate allowances for SHET, where it has provided cost estimates at a project level. We have decided that equivalent BNG costs for connection projects for NGET and SPT will be recovered at RIIO-ET3 close out, given the inconsistent approaches and limited data provision from each of these TOs. NGET has included BNG connections volume driver unit rate costs only for more developed projects while SPT has not been able to estimate BNG costs for its connection projects. As such the unit rates and allowances in the volume driver mechanism for these TOs will not account for BNG costs. NGET and SPT have requested that a funding route be made available to recover these costs. Allowances for BNG costs for projects being funded through the connections volume drivers will only be provided for work to meet regional statutory biodiversity requirements. Allowances will not be issued for work beyond these requirements. This is consistent with our approach for setting allowances for BNG for other projects. This applies to both NGET and SPT.
- 4.149 NGET suggested extrapolating known BNG costs to projects in the data set where BNG requirements will need to be met, with these extrapolated costs then feeding into the unit rates. Given SPT does not have data on BNG costs for connection projects, it has not proposed a solution. We consider that, given the uncertainty

of these costs and limited data, including an additional allowance through the volume driver allowances would place too much risk on consumers.

Setting atypical thresholds

- 4.150 We have decided to set atypical thresholds using a weighted average of individual volume driver model standard error models combined with a multiplier. The thresholds are calibrated to ensure that the majority of projects are recovered through the volume drivers, while limiting risk of significant over- or underrecovery of costs. Atypical thresholds apply at the project level, rather than for individual volume drivers. The atypical thresholds are set at the same level regardless of project size.
- 4.151 All TOs agreed with the concept of atypical thresholds to mitigate against large levels of over- or under-recovery of costs for individual projects, but disagreed with both the approach to setting the atypical thresholds and their sizes.
- 4.152 Specifically, they disagreed with the use of the standard deviation of project costs, stating that this failed to account for the effect of the size of the project (volume) on costs as it only considers a single dimension (total cost). NGET proposed using the model standard error of the regression models as the basis for the atypical threshold with a multiplier to calibrate with project costs. SHET proposed setting the atypical threshold as a fixed cap and collar, informed by thresholds set at RIIO-ET2.
- 4.153 We examined several approaches to setting atypical thresholds: standard deviation of total project costs, model standard error of substation (the most prevalent volume driver) and a weighted average of model standard errors. We decided to set the basis for the atypical threshold as the weighted standard error of each regression model. We reason that it accounts for the impact of volume on costs, and that it takes into account cost variations across all volume drivers. This was supported by all TOs. We have calibrated volume drivers using a multiplier to balance net recovery with the proportion of projects expected to be funded through the volume driver mechanism compared to the Load UIOLI and Load Reopener.
- 4.154 We have decided to set tapered atypical thresholds for NGET only for projects where substation generation output is below 300MW. The multiplier component of the atypical threshold is set at 0.3 at 0MW and increases with additional MW of substation generation output up to 1.5 at 300MW, beyond which it remains constant. This applies to generation projects only.

4.155 NGET disagreed with the use of linear atypical thresholds set at a constant rate regardless of project size. It stated that it has a large number of upcoming projects below 150MW where total costs are small. Because of these low total costs, the atypical thresholds are set significantly wider than the spread of total costs for these projects. NGET has provided additional evidence showing the likelihood of both the portfolio of projects and the costs of individual projects changing, leading to a change in the spread of project costs, which may significantly differ from when the unit rates were calculated. With atypical thresholds being set too wide to offer protection against cost changes, the consequence of this could be large under- or over-recovery of costs across the portfolio of these projects. To manage this, we have decided to set a tapered threshold which increases with each additional MW unit of output until 300MW. This is tapered threshold has been calibrated to closely match the standard error of substation costs at 50MW where there is a high frequency of projects. This represents the bounds of reasonable cost variations between projects of similar size. The value of 300MW at which the atypical threshold is linear was chosen since the standard error of projects at this level is comparable to the initial linear atypical threshold. The multiplier component of the atypical threshold has been set at 0.3 at 0MW, increasing to 1.5 at 300MW.

Managing risk

- 4.156 We have decided that the TIM will apply to the volume drivers. This is unchanged from our Draft Determinations. More generally, we have decided that the TIM applies across the whole RIIO-ET3 period rather than on an annual basis. We provide more detail in the TIM section in Chapter 5.
- 4.157 All three TOs were sceptical of applying the TIM to the volume drivers. They were especially concerned with the interaction between an annual TIM and the timing of projects and allowance profiles. Costs and allowances will not align perfectly year-to-year. This is due to allowances being based on an average cost per volume while individual project costs per volume vary due to differences between how much of a project's cost occurs in a single year compared to the allowance. We have decided that the TIM will be applied across the whole RIIO-ET3 period instead of on an annual basis. As well as addressing other concerns among TOs and non-TO stakeholders, it addresses the issues raised by TOs on the volume driver interaction. By applying the TIM across the whole period, annual costallowance differences are netted out before the sharing rates are applied.
- 4.158 We have decided to include the option of a mid-period true-up of the unit rates for SHET only. This would be triggered in year three of RIIO-ET3 if the difference

between expenditure and allowances exceeds 7.5% of total allowances and where 60% of the cost difference is caused by a change in the portfolio of projects funded through the volume driver mechanism from the list of projects used to set rates. This would apply on a forward-looking basis only from year three of RIIO-ET3 (inclusive). Allowances already provided would not be adjusted. Recalibration applies both upwards and downwards, protection both customers and the TO from calibration risk.

- 4.159 This mid-period true-up is in response to SHET's concern that the small number of projects, the high project cost and cost variability and uncertainty as to which connections would be made during RIIO-ET3 could lead to large levels of underor over-recovery of costs where average costs across projects do not match allowances. It requested a recalibration of unit rates if costs and allowances differ by 5% both at mid-period and at close-out. We analysed the materiality of overor under-recovery of costs if different combinations of projects differ from the initial portfolio of projects used to set unit rates and found that there is a material risk for SHET. We considered the interaction between a recalibration of rates and the efficiency incentive. We have decided that a recalibration of all past allowances risks losing the efficiency incentive at the start of the period, and enabling a recalibration based solely on cost changes does not provide an incentive to be inefficient. We have decided therefore that recalibrated rates need to apply to future allowances and that the recalibration is triggered only where the majority of cost changes are driven by a change in portfolio.
- 4.160 In determining where to set the cost-allowance threshold, we analysed the sensitivity of different levels of this threshold to potential changes to the portfolio of projects. A high sensitivity would mean that the true-up process is triggered by only a small change in the portfolio of projects, undermining the efficiency incentive of the volume driver. We found that, based on the average difference between allowances and costs per project, a 5% threshold would be too sensitive. We analysed other threshold levels and found that a 7.5% threshold adequately balances sensitivity to changes in the portfolio of projects and materiality of risk.
- 4.161 We have decided to apply the true-up mechanism to SHET only. This reflects the increased materiality that small changes in its portfolio of connection projects would have on the difference between expenditure and allowances. The costs of individual projects are both higher and are more varied for SHET compared to the other two TOs while their portfolio of projects is smaller. This means that the impact that one project has on the overall balance between expenditure and

allowances is larger. Conversely, for NGET and SPT the materiality of the change in net allowances will be smaller from one more or one less project.

CSNP Re-opener

Purpose: To enable us to make licence changes that reflect NESO recommendations resulting from the CSNP or other centralised planning processes.

Benefits: To ensure timely funding and facilitation of CSNP projects that arise during RIIO-ET3.

Final Determinations summary

Design	Final Determination	Draft Determination
UM type	Re-opener.	Same as FD.
Scope	Projects designated as important for addressing system needs either through the CSNP or other NESO-led centralised planning processes.	Same as FD.
Authority triggered	Yes, designation of a CSNP Reopener Output is Authority-triggered only, at any time.	Same as FD except COAE can be triggered by the Authority or the TO.
	COAE and Project Assessment cannot be triggered by the Authority, only the TO.	
Network company re- opener windows	Submissions for Project Assessment Decision: First five working days of April and October each year, unless otherwise approved by us.	Same as FD except DDs did not state which days in April and October.
	COAE applications: whenever required but no later than 3 months after the delivery date.	
Materiality threshold	Materiality threshold for COAE is 10% of the project cost allowance. None for other parts of the re-opener.	Same as FD.
Delivery date and LO	P50 delivery date estimated in line with NESO-TO-Ofgem agreed methodology. LO 12 months after the	Change - NESO's ODD. LO on the delivery date.
	delivery date.	·
Minimum availability standard	MAS does not affect the delivered date of the CSNP Re-opener Output. MAS is a standalone LO, determined at Project Assessment.	Change - Requirement of 93% for 24 months post delivered date, affecting when the project is considered delivered.
Real Price Effects (RPEs)	Applied to all projects (Overview document, Chapter 6)	Change – not specified

Design	Final Determination	Draft Determination
Applied to	All TOs.	Same as FD.
Associated document	CSNP Re-opener Guidance and Submissions Requirements Document.	Same as FD.

Final Determination rationale and Draft Determination responses Scope

- 4.162 We have decided that the CSNP Re-opener⁴⁷ is for projects that arise from the CSNP or other NESO-led network plans where the NESO outputs and TO inputs are of sufficient quality to avoid a separate assessment of need and design. Following publication of any such plan by the NESO, we will provide confirmation of which projects will be designated as CSNP Re-opener Outputs. This is for the network reinforcements that the NESO is recommending enter the delivery pipeline to support delivery of its preferred "GB design".⁴⁸
- 4.163 We will designate a CSNP Re-opener Output shortly after the NESO publishes its recommendations in the CSNP. We anticipate that projects in the NESO's delivery pipeline will satisfy the requirements. For a project proposed in the CSNP to be eligible to become a CSNP Re-opener Output, we require that the projects included in the NESO publication are load related and that the recommended investment:
 - has a confirmed needs case;
 - is not expected to be delivered through onshore competitive tenders;
 - has a project design that we consider to have been developed to such an extent as to enable the TO to proceed with pre-construction activities, eg is able to proceed with the activities under NESO maturity level 3;⁴⁹
 - has a P50 delivery date which has been either estimated by the NESO or submitted by the TO and confirmed by the NESO after scrutiny to be robust and developed in accordance with the CSNP methodology; and
 - has a forecast totex determined or confirmed by the NESO.

⁴⁷ This was called CSNP-F Re-opener in Draft Determinations. A CSNP-F Output as designated by this re-opener has been re-named to a CSNP Re-opener Output.

⁴⁸ NESO | CSNP draft methodology

⁴⁹ NESO set out the maturity level timeline in: <u>Beyond2030 Report | 2024</u> p.18

- 4.164 We anticipate that projects in the NESO's delivery pipeline will satisfy these requirements.⁵⁰ If they do not then we will consider what other funding routes should be made available, if any, that further our principal objective and is consistent with our wider statutory duties.
- 4.165 SPT, SHET and a consumer group agreed with the proposed scope in focusing on projects for which the NESO has set out a clear needs case. The scope and requirements above are the same as those proposed in our Draft Determinations, with the exception that then we sought an ODD and we now require that the NESO has provided an EDD for each project before we will designate that project as a CSNP Re-opener Output. We discuss this change further in the sub-section on the delivery dates, from paragraph 4.187.
- 4.166 We will require that projects are developed to at least NESO maturity level 3 (ie completion of level 2) before we will consider them for the CSNP Re-opener. NESO maturity level 2 is where there is a confirmed needs case but optioneering is ongoing and so it is not yet clear which option will be pursued for the project, whereas NESO maturity level 3 is where a single solution has been selected. We consider that completion of NESO maturity level 2 and progression to NESO maturity level 3 accurately reflects the intent of the CSNP Re-opener and the related PCF, which are for facilitating specific projects rather than optioneering. It also aligns with our tCNSP2 decision in 2024, in which only projects at maturity level 3 or higher were eligible for the "delivery track".
- 4.167 Following designation of a CSNP Re-opener Output, the CSNP Re-opener will consist of a Project Assessment stage only. This can only be triggered by the TO, given the level of TO inputs required.
- 4.168 CSNP Re-opener Outputs will be eligible for PCF, which will be granted when the project is designated as a CSNP Re-opener Output.

Interaction with other mechanisms

4.169 SPT broadly agreed with the scope including all CSNP recommended projects but highlighted that enabling works and connections works should be funded through alternative mechanisms, ie the volume drivers, Load UIOLI or Load Re-opener. As stated in our Draft Determinations, each CSNP is developed as a coordinated plan for the network and we consider that it is important that load projects that arise from it are regulated in a similar manner to each other – this means that all CSNP

⁵⁰ The delivery pipeline is where the NESO will "provide certainty" on the needs case for projects ready to progress to detailed design. <u>NESO | CSNP draft methodology</u>

- delivery pipeline projects that meet the above requirements will be designated as CSNP Re-opener Outputs with PCDs, a LO, and subject to the Major Projects ODI-F to incentivise timely delivery. We further discuss interactions between the LO and Major Projects ODI-F from paragraph 4.194.
- 4.170 NGET said that the split from the Load Re-opener is unnecessary. We disagree. It is necessary for the Load Re-opener to have more assessment stages than the CSNP Re-opener, as projects proposed through it won't have been assessed by the CSNP, so we consider it sensible to keep the mechanisms separate.

NESO inputs to the CSNP Re-opener

- 4.171 NGET raised a concern about the way in which we will incorporate NESO outputs into the TOs' regulatory framework, ie if we are deferring our decision-making to the NESO. We consider that it is important that, given NESO has an independent role in developing the CSNP, we facilitate the delivery of the TO investments that support that plan. It is also important that we do not risk delaying projects by duplicating the NESO's work (eg by assessing a needs case for a project that the NESO has confirmed as required in its CSNP).
- 4.172 NGET also said that the ITA should support our assessment of the NESO outputs that feed into the CSNP Re-opener. We consider that this is outside the scope of the ITA, which is discussed further in the ITA section later in this chapter.

Treatment of tCSNP2 Refresh and Provisional ASTI projects

- 4.173 NGET and SHET requested clarity on when and how we will consider the use of the CSNP Re-opener for tCSNP2-driven projects. We have decided that we will assess which tCSNP2 Refresh projects are eligible for the CSNP Re-opener following publication of the tCSNP2 Refresh, and to publish our decisions soon thereafter. With the tCSNP2 Refresh plan still in development, we consider that setting out criteria for the CSNP Re-opener allows us to balance the TOs' need for an understanding of how these investments will be regulated, with our need to ensure that we can make an informed decision on the portfolio.
- 4.174 The CSNP Re-opener and Load Re-opener have many similar characteristics in terms of regulatory treatment, but the CSNP Re-opener allows a fast-track where the NESO has been able to provide information that we would otherwise need the TO to submit under the Load Re-opener. For any tCSNP2 Refresh projects deemed ineligible for the CSNP Re-opener, but which are required to begin before the next CSNP publication is due, the TO would need to submit the project through another uncertainty mechanism such as the Load Re-opener. It is

- therefore possible that the CSNP-Re-opener will include only a sub-set of the recommended tCSNP2 Refresh projects. This is because we do not yet know whether tCSNP2 projects will meet the requirements set out in paragraph 4.163.
- 4.175 NGET asked whether provisional ASTI projects⁵¹ would be included in the CSNP Re-opener. These projects would be subject to the same assessment as tCSNP2 Refresh projects to consider whether they are appropriate for progression through the CSNP Re-opener, and if not then the TO will need to submit the project for assessment through the Load Re-opener.

<u>Authority triggered</u>

- 4.176 We have decided that designation of CSNP Re-opener Outputs can only be triggered by us, based on NESO recommendations for projects to proceed and the quality of the information available on the project at the time. This is in line with the proposal in our Draft Determinations and we did not receive feedback on this proposal.
- 4.177 Since our Draft Determinations we have decided to remove the ability for us to trigger a COAE assessment. Any COAE requires inputs from the TOs (eg on cost estimates), and so an Authority-triggered COAE is not needed. We did not receive any feedback on the COAE proposals in our Draft Determinations.

Network company re-opener windows

- 4.178 We have decided that the TO may trigger a CSNP Re-opener Project Assessment Decision by submitting an application in accordance with the CSNP Re-opener Guidance and Submissions Document, following submission of the relevant planning and consenting applications for the CSNP Re-opener Output. The submission window is the first seven days of April or October in each year. The CSNP Re-opener Project Assessment Decision is when we will set the TO's full cost allowance for a CSNP Re-opener Output, and also when we will set the MAS.
- 4.179 NGET raised concerns about the inflexibility of the two proposed windows and suggested rolling monthly submissions. We disagree that monthly submissions are required, as set windows allow us and TOs to plan resource appropriately. As set out in the draft condition in our initial licence consultation in July 2025, we can direct alternative submission dates if necessary and appropriate. The other two TOs welcomed these submission windows SPT also requested flexibility

⁵¹ As set out in Table 2 of: <u>Accelerated Strategic Transmission Investment Guidance And Submission Requirements Document.pdf</u>

- depending on the timing of the CSNP publications, and SHET supported our proposal to retain the ability to offer additional windows as required.
- 4.180 NGET also suggested that we commit to a two-month response time for making the CSNP Re-opener Project Assessment Decision. We do not consider that it is appropriate to set such a deadline. While we will assess all applications in a timely manner, we cannot know how many applications we will receive across all TOs in any given re-opener window, nor how complex these applications will be. We would welcome the TOs providing us with advanced notice of which CSNP Re-opener Outputs they intend to submit for Project Assessment Decision in any given re-opener window, as well as highlighting if any are particularly urgent and why. This will allow us to plan our resources in advance and prioritise applications where needed.
- 4.181 We have decided that the TOs may trigger the COAE process whenever the criteria are met ie that a certain type of event has occurred and its impact on the project is outside of the TO's control, and any cost change is at least 10% of the allowed cost. The TO may submit this whenever required, but no later than three months after the delivery date. We did not receive any feedback on the timing of COAE submission, and we discuss feedback on the 10% threshold in the materiality threshold section below.

Materiality threshold

- 4.182 We have decided not to have a materiality threshold for the designation of a CSNP Re-opener Output, ie all load-related projects in the delivery pipeline of the published CSNP that meet the requirements as set out in paragraph 4.163 will become CSNP Re-opener Outputs.
- 4.183 We consider that not having a materiality threshold is appropriate as all ET projects determined as important for the delivery of an optimised plan have been considered as a portfolio with high potential for interlinkages, and should have similar regulatory treatment to each other. A consumer group supported our proposal to not apply a materiality threshold, in addition to the respondents that supported our scope as discussed above.
- 4.184 We have decided that a TO may only make an application for a CSNP Re-opener Project Assessment Decision, ie to receive an allowance for the CSNP Re-opener Output, once the TO has submitted all required planning and consenting applications. We did not receive any responses on this proposal.

Cost and Output Adjusting Event (COAE) threshold

- 4.185 We have decided that the materiality threshold for requesting an allowance adjustment through the COAE mechanism will be where efficient outturn costs deviate from the provided CSNP Re-opener allowance by at least 10%. The TO may request an alternative COAE with its application for Project Assessment Decision. This is the same threshold as proposed in our Draft Determinations, and is lower than the 20% we used in the LOTI Re-opener in RIIO-ET2. The proposed materiality threshold is to recognise that the CSNP Re-opener may introduce many high-value projects into the TOs' delivery pipelines, increasing total TO exposure.
- 4.186 All three TOs welcomed the inclusion of COAE in the CSNP Re-opener, but requested a lower materiality threshold of 5%, as in ASTI. We disagree that it is necessary to reduce the materiality threshold for all projects further than our proposed 10% of the project allowance. There is no overall materiality threshold for inclusion in the CSNP Re-opener, and so we need an approach that is appropriate for smaller projects and larger projects alike. Lower than 10% would mean a very low threshold in absolute terms for smaller projects. SHET and SPT also said that we should allow for an alternative percentage on a project-by-project basis. As set out in the draft condition in our initial licence consultation in July 2025, we can direct an alternative percentage if necessary and appropriate.

Delivery dates

- 4.187 We have decided that the delivery date for any CSNP Re-opener Output will be set as that project's P50 delivery date. Our minimum requirements for the P50 delivery date are set out in our section on the Major Projects Re-opener ODI-F in Chapter 3.
- 4.188 Should the P50 delivery dates put forward by the NESO in its CSNP recommendations not meet these criteria, we would need to engage with the NESO and TOs and consult on an alternative P50 delivery date methodology to be used for this ODI-F.
- 4.189 This represents a change to our Draft Determinations, in which we proposed that the delivery date be aligned to the NESO's ODD. All three TOs raised a concern that the NESO may not have taken deliverability fully into account when determining this ODD or may have disagreed with the TO on the deliverability and timeline and that it would therefore be inappropriate to set a PCD and LO on the basis of the NESO's ODD. SHET's response to our Draft Determinations

- supported NESO and us leading the collaborative development of the methodology to setting the delivery date.
- 4.190 NGET said that we should not take the NESO's CSNP dates as a given and should clarify how we will review those dates and consult on the proposed dates. As discussed at paragraph 4.171 we will review the NESO's process and interim outputs in developing the CSNP and will only designate CSNP Re-opener Outputs where we have confidence that the CSNP recommendations represent sufficiently developed plans to meet our requirements and represent plans that are deliverable and in consumers' interests.

Changing a delivery date after initial designation of a CSNP Re-opener Output

- 4.191 We have decided that the delivery date in the CSNP Re-opener cannot be changed through a COAE adjustment. The only ways to change the delivery date in the CSNP Re-opener will be where there is:
 - a Delay Event under the Major Projects ODI-F which results in a Major Projects Penalty Exemption Period; or
 - a material change in scope that results in a modification to the Major Projects TDD.
- 4.192 The potential for such changes are discussed under the Major Projects ODI-F in Chapter 3. A change to either of these would be reflected in a commensurate adjustment to the CSNP Re-opener Output delivery date, which would affect the PCD and LO date.
- 4.193 We consider that it is sensible to have such date changes contained within a single process that flows in one direction (ie from the Major Projects ODI-F to the CSNP Re-opener) rather than requiring the TO to apply separately through the two mechanisms for a single project across two licence conditions. All CSNP Re-opener Outputs will be covered by this, as we have decided that all CSNP Re-opener Outputs will be subject to the Major Projects ODI-F as discussed in the section on the Major Projects ODI-F in Chapter 3.

Delivery date LO

4.194 We have decided that the LO date – the date by which the TO must deliver the specified output – will be twelve months later than the delivery date specified for the CSNP Re-opener Output. If and when we change the delivery date for a CSNP Re-opener Output under the processes set out in paragraphs 4.191 to 4.193, this will also move the LO date.

- 4.195 This is a change from our Draft Determinations, in which we stated that the LO would be on the delivery date as specified for the CSNP Re-opener Output. In response to our Draft Determination proposal a consumer group supported our proposal for inclusion of a LO on the delivery date, while NGET and SHET said we should set LO dates 24 months or more after the delivery date. We consider that our decision to set the LO date as 12 months after the target date is a balanced approach which provides alignment with the ASTI approach and provides a degree of protection to the TOs for factors that may be wholly or mainly outside of their control.
- 4.196 NGET and SPT said that it is inappropriate to have a LO alongside a delivery incentive. NGET said that if we do choose to set an LO, it should be set to be no earlier than the Major Projects ODI-F penalty cap has been reached (ie between two and five years after the start of penalties), to avoid "double jeopardy". We disagree that there would be any element of double jeopardy given that the Authority may only impose a penalty which is reasonable in all the circumstances of the case⁵² for breach of the LO. There are also other enforcement levers available via the LO which do not flow from the delivery incentive for example, the power to take steps to order⁵³ delivery where TOs have failed, or appear likely to fail, to deliver by twelve months after the delivery date.
- 4.197 NGET said that if we retain the LO it should be set as part of our Project
 Assessment Decision, not at the time of designation as a CSNP Re-opener Output,
 to allow the TO greater confidence in the target date given the greater maturity of
 the project design by the time of Project Assessment. We consider that it is
 important to facilitate the delivery of the CSNP as set out, and this includes
 entering the required outputs and dates into the TOs' licences once these
 requirements become known. We will consider adjustments to the delivery date –
 which will adjust the relevant LO date if there are specific circumstances outside
 of the TO's control, through the modifications process under the Major Projects
 ODI-F.

Minimum availability standard (MAS)

4.198 We have decided that the MAS will be a standalone LO, separate to the delivery date LO. We did not propose this as a standalone LO in our Draft Determinations, as we had proposed that the MAS would be implemented by affecting the date on which a project is considered to be delivered for both the CSNP Re-opener and

⁵² S.27A(1) Electricity Act 1989.

⁵³ S.25 Electricity Act 1989.

the Major Projects ODI-F (ie a project could not be considered as delivered unless the MAS was met). Having decided not to implement this decision (as discussed below), we consider that it remains important to place a requirement on TOs to reflect our clear expectation that a "delivered" asset has been subject to the appropriate testing and outages and can be relied upon as a part of the electricity system. SHET and NGET said that they agreed that a MAS is an important mechanism to reflect the consumer interest in encouraging the availability of newly delivered major electricity transmission infrastructure.

- 4.199 We have decided that the delivery of a project, for the purpose of assessing compliance with the PCD, will be assessed against the "Fully Delivered" definition in the TOs' licence without bringing the MAS into the definition of whether a CSNP Re-opener Output has been fully delivered. This is a change from our proposal in our Draft Determinations to have the MAS affect the date on which a project shall be considered to have been delivered.
- 4.200 All three TOs disagreed with having the MAS affect the definition of when a project can be considered to have been Fully Delivered under this re-opener, stating that the proposed approach would extend regulatory uncertainty. We have decided that a standalone LO, as discussed above, is a clearer way of setting our expectations and without complicating the definition of "Fully Delivered" both here and for the Major Projects ODI-F.
- 4.201 We have decided that the MAS will be set at the Project Assessment Decision stage. We will include in the CSNP Re-opener Guidance and Submissions Requirements Document the default MAS that will be applied to CSNP Re-opener Outputs, which we propose to differ by asset type for example to take into account the elongated commissioning and testing process required for bringing new HVDC (high-voltage direct current) assets onto the system. The TO may propose an alternative MAS as part of its submission for Project Assessment Decision, alongside any evidence to justify this proposal.
- 4.202 This is a change from our proposal in our Draft Determinations to set the MAS for all CSNP Re-opener Outputs at 93% for 24 months. All three TOs strongly disagreed with that proposed approach, and raised concerns that this does not allow for variation across projects as has been recognised within ASTI. The TOs said that a MAS needs to take into account the asset type, location, operational complexity, and wider system needs.

Treatment of T2/T3 Crossover Projects at RIIO-ET2 Close Out

Purpose: To ensure TOs recover efficient costs associated with projects that span different price control periods.

Benefits: Tos have continued funding to deliver outputs that were established in the previous price control period.

Final Determinations decision and rationale

- 4.203 We have decided to create a `ET2/ET3 Crossover' mechanism through which we may adjust RIIO-ET3 allowances and, where appropriate, create new RIIO-ET3 outputs, for ET2/ET3 Crossover items, which are outputs, deliverables or activities that are funded in full or part by a RIIO-ET2 mechanism and where the TO efficiently incurs expenditure in the RIIO-ET3 period.
- 4.204 We received five responses to our proposed approach, including one from each TO. The responses were broadly supportive of the policy intent behind our proposal but highlighted a need for greater detail to be provided. The TOs' responses identified a number of areas where our proposals had not provided sufficient information on funding routes for projects that may have begun in the RIIO-ET2 period but would only be completed in the RIIO-ET3 period. We are mindful of the need to provide greater clarity on funding routes for such projects, and we have developed our approach further, as set out below.

Definition of an ET2/ET3 Crossover item

- 4.205 We have decided that an ET2/ET3 Crossover item is an output, deliverable or activity:
 - that is funded in part or full by a mechanism in RIIO-ET2; and
 - in the delivery of which the relevant TO has, acting reasonably and efficiently, incurred or is expected to incur costs during the period from 1 April 2026 to 31 March 2031.

Purpose and scope of the ET2/ET3 Crossover mechanism

4.206 The purpose of the ET2/ET3 Crossover mechanism is to provide allowances in the RIIO-ET3 period to make up for any shortfall in funding for efficient costs associated with the delivery of an ET2/ET3 Crossover item provided at least one of the following conditions is met:

- the funding for the item provided through RIIO-ET2 was only intended to cover part of the efficient cost of the item, and there is no other mechanism in the RIIO-ET3 price control that would otherwise fund the remainder; or
- the close out of RIIO-ET2 results, or is expected to result, in a reduction in allowances for the item such that the efficient cost of delivering the item is not fully remunerated through RIIO-ET2 allowances and other RIIO-ET3.
- 4.207 In addition to providing RIIO-ET3 allowances, we may transfer PCD outputs and associated allowances relating to an ET2/ET3 Crossover item from the RIIO-ET2 licence into the RIIO-ET3 licence. In that event, we will create appropriate provisions within the RIIO-ET3 licence to protect consumers in line with the Price Control Deliverable Reporting Requirements and Methodology Document in force during the RIIO-ET3 period.
- 4.208 We may also transfer UIOLI allowances relating to an ET2/ET3 Crossover item from the RIIO-ET2 period into the RIIO-ET3 period. In that event, we will create appropriate provisions within the RIIO-ET3 licence to ensure that any part of the allowances transferred into the RIIO-ET3 period that remains unused by 31 March 2031 is returned in full to consumers.
- 4.209 In relation to RIIO-ET2 volume drivers, calculations specified in the RIIO-ET2 licence, including for volumes delivered in years one and two of the RIIO-ET3 period, will be made by us as part of the RIIO-ET2 close out. If after this process is completed, there is (or is expected to be) a shortfall in the remuneration of efficient costs associated with the relevant volume driver, we will make an adjustment to RIIO-ET3 allowances through the ET2/ET3 Crossover mechanism.

General principles for ET2/ET3 crossover adjustments

- 4.210 We have decided that decisions taken under the ET2/ET3 Crossover mechanism will be governed by the following general principles:
 - **Seamless transition**. We will aim to ensure that the transition from the RIIO-ET2 to RIIO-ET3 does not create unnecessary barriers to, or disincentives for, the efficient operation of the ET network or the efficient and timely delivery of outputs, deliverables or activities by the TO.
 - Appropriate remuneration of efficient costs. We will aim to ensure that
 any shortfalls in funding for efficient costs associated with an ET2/ET3
 Crossover item created as a consequence of the transition from the RIIOET2 to RIIO-ET3 price control is appropriately remunerated.

- No undue benefit to TOs from delaying work into RIIO-ET3. We will aim to ensure that TOs do not unduly benefit from delaying delivery of ET2/ET3 Crossover items into RIIO-ET3. This may include re-profiling past or future allowances and the transfer of allowances from the RIIO-ET2 period to the RIIO-ET3 period, to better align with actual delivery dates.
- Accountability for delivery. Unless we decide otherwise, TOs will be held accountable for meeting outputs, deliverables, targets or delivery dates associated with ET2/ET3 Crossover items that are specified in the RIIO-ET2 licence. Where necessary, we will create new outputs, deliverables, targets and delivery dates in the RIIO-ET3 licence to support this. A decision by us to make adjustments under this mechanism does not imply our endorsement of any actions taken by the relevant TO in relation to the ET2/ET3 Crossover item.
- Negative adjustments and clawback of RIIO-ET2 allowances. Where
 appropriate and in line with these principles, ET2/ET3 Crossover
 adjustments could be negative and could have the effect of clawing back
 allowances associated with the ET2/ET3 Crossover item.
- 4.211 We intend to set out the general principles for adjustments in the RIIO-ET3 licence. We also intend to include provisions in the RIIO-ET3 licence for more detailed guidance on the operation of the ET2/ET3 Crossover mechanism to be provided. This may include information on the methodology and timing of the adjustments, and what information would be required from the TOs.

Independent Technical Adviser (ITA)

Purpose: To provide assurance to us on the design, procurement, cost and overall project delivery of selected load-related projects.

Benefits: Independent scrutiny of TOs' approaches to delivering key load-related projects informing our decision-making to hold TOs to account and enable timely delivery.

Design	Final Determination	Draft Determination
UM type	Pass-through.	Same as FD.
Scope	Selected load-related projects.	Same as FD.

Design	Final Determination	Draft Determination
Organisational structure	Multiple parties as part of a framework agreement.	Change - a single party either in the form of single organisation, consortium or Joint Venture.
Term	All newly determined eligible projects will be assigned to the ITA framework during the RIIO-ET3 period, following which a new procurement exercise will be held to appoint the ITA for the next period.	Same as FD.
	We intend for the ITA to assure all projects confirmed as eligible during RIIO-ET3 until their completion, beyond the price control period.	
Eligibility	The following types of project will be eligible for ITA assurance: CSNP Reopener Outputs, tCSNP2 Refresh outputs, select ASTI outputs, select Load Re-opener outputs, projects where a COAE or Delay Event has or may have occurred.	Same as FD, except ASTI outputs were not included as an eligible type of project.
	Assessment of which subset of eligible projects will be assured by the ITA will be determined by project materiality, complexity, and strategic importance.	
Funding	Funded by the TOs through the price control.	Same as FD.
Applied to	All TOs.	Same as FD.
Associated document	ITA Guidance Document.	Same as FD.

Final Determinations decision and rationale

Role of the ITA

- 4.212 The ITA will be an independent body responsible for providing assurance to us on selected load-related projects to support regulatory decision-making. The ITA will hold no decision-making responsibility, so we will continue to exercise our full discretion in relation to decisions on specific projects and related incentives (eg Major Projects ODI-F). Where insight from the ITA is used as part of the evidence base for our decision-making, we will make clear what and how it influenced the decision in any relevant publication and/or engagement with the TOs.
- 4.213 We received three responses regarding the ITA, one from each TO. Although broadly supportive of the ITA objectives, all responses considered there was a

lack of detail on aspects of our Draft Determinations and requested further engagement on the ITA policy development before RIIO-ET3. We agree engagement with the TOs is important to ensure the ITA fulfils its objectives and will continue to collaborate to determine operational practices before its assurance begins.

- 4.214 In particular, the TOs requested more information on conflicts of interest management and data sharing practises, as well as project eligibility. In addition to our decisions outlined below, we believe the following documents are best placed to provide further detail on these matters:
 - ITA Terms of Reference will detail the full range of services required of the ITA. To be drafted and published by us.
 - ITA Guidance Document will detail the project characteristics and processes by which we determine which projects are eligible for ITA assurance and not. To be consulted on as part of the RIIO-3 licence consultation.
 - ITA contracts in the form of a framework agreement (between the appointed ITA organisation(s) and us) and call-off contracts (between the relevant ITA organisation(s), us, and the relevant TO). These will detail and oblige parties to comply with a conflict of interest policy, as well as information and data protection rules.

Scope

- 4.215 We have decided that the ITA will be able to provide assurance on the design, procurement, cost and overall project delivery of selected load projects. As part of assuring project delivery, we consider the ITA will be well placed to provide insight into change control, including COAE or Delay Events. This decision is consistent with the scope set out in our SSMD.
- 4.216 While the core scope of the ITA will not change, specific activities may vary dependent on the specific assurance requirements of an eligible project (ie optimal reporting may change based on project characteristics) and where in the development cycle the project is (ie requirements differ between planning and construction phases).
- 4.217 The full scope of the services required of the ITA will be outlined in the ITA Terms of Reference, which will be published on our website before the start of RIIO-ET3.

Organisational structure

- 4.218 We have decided that the ITA can be a framework of multiple suppliers. This is a change from the single party (ie a single organisation, consortium, or Joint Venture) organisational structure set out in our SSMD. We believe this approach will provide more operational flexibility to effectively manage the ITA's resource capacity, ensuring all projects determined eligible can be assured. For example, with multiple suppliers the risk of conflicts of interest preventing the ITA from assuring a project is reduced.
- 4.219 The primary trade-off of our new approach is the risk ITA framework suppliers have reduced cross-sector insight compared to a single party. However, we consider that, within the agreed contractual data and information sharing rules, we will be able to work with the organisations on the ITA framework to ensure best practice insights can be shared effectively throughout the price control.

Term

4.220 We have decided that the ITA framework will operate for the RIIO-ET3 price control period (ie 2026-2031). During this period, all load-related projects could be assured by one of the appointed parties that forms the ITA if we consider it necessary. Given the nature of major load projects, construction may be completed following the conclusion of RIIO-ET3. Our intent is that the ITA will provide assurance on eligible projects until construction is complete, meaning call-off contracts may exceed the duration of the ITA framework.

Project eligibility

- 4.221 We have decided the ITA will assure a subset of any possibly eligible projects. The assessment of which individual projects will be made by us from a range of cost and non-cost criteria. The principles of this approach were supported by all the TOs. We will have final ownership of the decision but will informally consult with the relevant TOs before confirming which projects are eligible.
- 4.222 We have decided the cost and non-cost criteria used to determine the subset of eligible projects will be:
 - materiality (ie whether the project has high or low costs);
 - complexity (eg design and technological novelty); and
 - strategic importance (eg constraint and carbon savings, or wider economic value).
- 4.223 As stated in our Draft Determinations, our assessment will be holistic, considering all the discussed characteristics across the portfolio of eligible projects, rather

- than reliance on any single metric or threshold. The same considerations will also be applied consistently across TOs and irrespective of the type of project.
- 4.224 We have decided the following types of projects will be eligible for ITA assurance: CSNP outputs, tCSNP2 Refresh outputs, select ASTI outputs, select Load Reopener outputs, and projects where a COAE or Delay Event occurs (either notification or decision). In principle, there was support from the TOs for our Draft Determinations position regarding the inclusion of selected non-CSNP outputs in addition to CSNP outputs.
- 4.225 The inclusion of ASTI outputs is in addition to those project types proposed in our Draft Determinations. The TOs raised concern that this, in combination with other scope changes (eg other non-CSNP projects) and a lack of clarity on eligibility decision-making, could risk the scope of the ITA becoming unclear and expanding beyond original purposes. Nonetheless, we consider it beneficial to have the flexibility to consider ASTI outputs in our eligibility assessment, given the strategic importance of these projects. For example, we consider that it may be of value to pilot delivery assurance on an ASTI project post-Project Assessment. As with other non-CSNP outputs, we consider that it will only be select ASTI outputs that may be assured by the ITA, with the primary focus of the ITA remaining on CSNP outputs.
- 4.226 NGET suggested the type of project eligible for ITA assurance should be expanded to include select non-load projects that have the same characteristics to those outlined in paragraph 4.222. We believe the ITA should be focused on load projects which are typically of higher materiality and immediate urgency. We may consider widening eligibility in the future to include non-load projects if a case to do so emerged.
- 4.227 Regarding COAE and Delay Events, SHET caveated that the ITA should not serve as an ex post investigator, instead only providing assurance in respect to current and future decisions. We agree that if a COAE or Delay Event regulatory decision has been made, the ITA will not be used to re-investigate such decisions. However, inherently, if a project is facing challenges, the ITA will have to understand background events to effectively inform its understanding of future occurrences and provide assurance to Ofgem.
- 4.228 NGET and SPT considered there a lack of detail regarding project eligibility characteristics in our Draft Determinations, notably regarding strategic importance. Further detail on the eligibility process and project characteristics, in

alignment with the above principles, will be set out in the ITA Guidance

Document. This will be consulted on as part of the RIIO-3 licence consultation.

<u>Funding</u>

- 4.229 The ITA will be funded by the TOs through the price control. We will be responsible for the procurement, and the ITA will owe its duty of care to us. This is in alignment with our SSMD position.
- 4.230 We aim to complete procurement of the ITA for the start of RIIO-ET3 (ie April 2026). As such, the process will run in parallel to the publication of our Final Determinations and the RIIO-3 licence consultation (including the ITA Guidance Document). We will continue our ongoing engagement with the TOs regarding the contractual framework and operational practices.

Community Benefit Funding Pass-through

Purpose: To provide TOs with funding to enact the government's Community Benefit Funding policy.

Benefits: Improved community buy-in to the construction of new ET infrastructure, reducing build times.

Final Determinations summary

Design	Final Determination	Draft Determination
UM type	Pass-through.	Same as FD.
Scope	Cost related to community benefit funds in line with government's community benefit guidance.	Same as FD.
Applied to	All TOs.	Same as FD.
Associated document	Community Funds for Electricity Transmission Infrastructure Pass-Through: Guidance	Same as FD.

Final Determination rationale and Draft Determination responses <u>UM type</u>

4.231 We have decided to introduce a pass-through mechanism for community benefit funding and associated delivery costs, maintaining our Draft Determinations position. Seven consultation responses, including two from network companies, supported this approach; highlighting that it provides funding certainty for communities and a clear, transparent route for recovery through network charges. This aligns with our view that, since funding levels are set by government on a per-asset basis, using a pass-through mechanism protects

- consumers while enabling efficient delivery through portfolio management and economies of scale. However, we will keep these arrangements under review and retain the right to consider whether in future Community Benefit funding should be included within project costs, rather than treated as a pass-through cost.
- 4.232 The three TOs and one other stakeholder argued that the 10% of community funds delivery cost limit was too rigid and that feasibility and capacity-building activities may exceed it. SPT and SSEN proposed that feasibility costs be excluded from the definition of delivery costs, with SPT further suggesting that both feasibility and capacity-building should be removed from the 10% delivery cost cap entirely. We disagree that the limit is rigid, since government has confirmed that flexibility may be applied in exceptional cases. Our regulatory design allows developers to plan delivery costs at a portfolio-level, allowing flexibility at the project level. The 10% is an upper limit. We expect TOs to deliver efficiently and typically remain below this threshold on average across the portfolio, with project-specific variances permitted. This approach to delivery costs balances flexibility with discipline and value for money for consumers. Government guidance includes feasibility and capacity-building within allowable delivery costs, and we are confident that TOs will be able to achieve this through efficiencies at the portfolio-level.
- 4.233 We will require annual reporting of delivery costs through RRPs and with targeted ex post review at portfolio level where costs are higher than 10%, unclear, or outside permitted activities. Community groups raised concerns about delays in accessing funds; we agree timely delivery is important and believe portfolio flexibility and annual reporting strike the right balance between speed and assurance without adding unnecessary burden.

Scope

4.234 We have decided to align the scope of the Community Benefit Funding Pass-through with government guidance, maintaining our Draft Determination position. Four respondents addressed the scope, with most supporting alignment for clarity and consistency. Government guidance is that funding applies on a standardised per-asset basis of £200,000 per km of overhead line and £530,000 per substation, converter station or switching station for new onshore ET infrastructure and voltage upratings that trigger an environmental impact assessment. Our view is that it is important to apply the government-set scope within RIIO-ET3 to ensure transparency for consumers and predictable planning for companies and communities.

- 4.235 NGET suggested extending the scope to projects outside the government guidance to avoid inequity. We disagree, as the government-defined scope maintains consistency and avoids unnecessary consumer costs.
- 4.236 SPT and SHET raised concerns about cross-period projects and indexation. We agree this needs clarity. Through annual forecasts and reporting of the pass-through mechanism, we will ensure costs are transparently profiled and reconciled both within and across price controls. As stated in the government guidance, this issue will be kept under review, and the evidence we have gathered will be able to inform any reconsideration by government.
- 4.237 Community stakeholders proposed delivering benefits in parallel with asset delivery, rather than only at construction. We agree with government's assessment that community funds are to be provided once projects begin construction. This approach ensures that funding is tied to a committed and deliverable project, reducing the risk of premature allocation and aligning community benefits with tangible progress.

Carbon Compensation UIOLI (NGET and SPT)

Purpose: To fund compensation of unavoidable GHG emissions, typically associated with capital construction, through carbon offsetting.

Benefits: Meets stakeholder expectations to mitigate or compensate for environmental impact and ensures consumers only pay for delivered output.

Final Determinations summary

Design	Final Determination	Draft Determination
UM type	UIOLI.	Same as FD.
Scope	To fund TOs with EAP commitments for carbon offsetting whilst ensuring consumers only pay for delivered output. SBTi guidelines on offsetting used as reference to determine overall scope of offsetting and ensure primary action remains emissions reduction.	Same as FD.
Funding level	NGET: £16.17m.	Change - NGET: £9.8m.
	SPT: £3.6m.	SPT: Same as FD.

Design	Final Determination	Draft Determination
Funding level methodology	Individual carbon offsetting unit rates for NGET (£74.12 tCO ₂ e) and SPT (£44.88 tCO ₂ e) based on bespoke proposals, with common cap of 6% of BCF emissions used to calculate offsetting requirement.	Change - common benchmark for carbon offsetting unit rate used to calculate funding level for both TOs. Common cap same as FD.
Measurement	Offsetting achieved in tCO ₂ e.	Same as FD.
Reporting	RRP reporting and AER.	Same as FD.
Applied to	NGET & SPT.	Same as FD.

Final Determination rationale and Draft Determination responses Scope

- 4.238 We have decided to fund carbon compensation activities of SPT and NGET through a UIOLI allowance. We received three consultation responses, all in support of the policy. We consider this policy is justified due to the parallel actions of SPT and NGET to reduce their emissions through direct action and the alignment to SBTi guidance which is used to help inform the TOs' broader BCF reduction activities.
- 4.239 SHET is not included within the scope of this policy as it did not request any equivalent allowance.

Funding level and methodology

- 4.240 We have decided to use bespoke unit rates for SPT and NGET. SPT agreed with our use of its proposed unit rate. NGET proposed that the SPT unit rate (£44.77 tCO₂e) that we applied in our Draft Determinations is not appropriate for its activities. NGET justified this based on the research and stakeholder engagement it has carried out as part of delivering Net Zero Carbon Capital Construction UIOLI in RIIO-ET2. We agree that if offsetting is to be carried out, it should be delivered to a high-quality, and that NGET has provided sufficient evidence to justify its own approach.
- 4.241 We have decided that 6% of TOs' submitted BCF tCO₂e will determine the UIOLI funding level in addition to the unit rate. SPT agreed with the methodology, noting alignment to its business plan. NGET proposed that 10% of its embodied carbon emissions should be used as a benchmark instead, resulting in a revised funding request of £38.53m. We disagree with NGET as we are seeking alignment across TOs where possible and consider the SBTi guidance of "up to" 10%

justifies a more limited approach. We also believe that given wider cost impact of our Final Determinations on energy consumers, it is appropriate to keep funding relatively low in this policy area.

Measurement

4.242 We have decided the output measured will be emissions offset. NGET proposed that funding used and quality of the offset should be the measure of success. We do not agree that these are appropriate measure as it may not drive cost efficiency.

Secure and resilient supplies

Non-Load Re-opener

Purpose: To enable TOs to request adjustments to their baseline allowances for non-load projects that face uncertainties relating to needs case, optioneering or costs.

Benefits: Provide flexibility for TOs to deliver at pace, whilst protecting the consumer from unnecessary costs, for those projects where the needs case, optioneering or costs are subject to uncertainty.

Final Determinations summary

Design	Final Determination	Draft Determination
UM type	Re-opener.	Re-opener.
Scope	Covers former shared-driver projects, type-fault interventions, legislation-driven works, NARM crossover projects, and GT Pipe Corrosion Mitigation.	Change - former shared-driver projects.
Authority triggered	Yes.	Same as FD.
Network company re-opener windows	2–6 October 2028 for NARM crossover. 2–6 October 2028 and 1–5 October 2029 for other areas in scope. No re-opener window for GT Pipe Corrosion Mitigation. Authority triggered only.	April 2028 and April 2030.
Materiality threshold	Default materiality threshold (see Chapter 6 of the Overview Document). For GT Pipe Corrosion Mitigation there is no lower threshold.	Same as FD.

Design	Final Determination	Draft Determination
RPEs	Applied to all projects (see Chapter 6 of the Overview document).	Change – not specified.
Applied to	All TOs.	Same as FD.

Final Determination rationale and Draft Determination responses <u>UM type</u>

4.243 We have decided to introduce the Non-Load Re-opener into RIIO-ET3 to adjust allowances when new non-load needs cases emerge during the price control period in areas that are too uncertain to agree now. Respondents supported having a targeted Non-Load Re-opener mechanism recognising it as necessary to address potential funding gaps for justified non-load interventions that may arise during the price control period.

Scope

- 4.244 Respondents supported the inclusion of former shared-driver projects⁵⁴ where the load driver has fallen away, but highlighted that limiting the mechanism to this category would leave gaps for other non-load needs likely to arise during RIIO-ET3. They identified areas such as Type-Fault⁵⁵ interventions, compliance with new legislation, and NARM projects crossing over from RIIO-ET2 as requiring a route for funding to maintain secure and resilient supplies. We consider expanding the scope to these areas provides a proportionate, evidence-based route for funding while maintaining strong consumer protections through fixed windows and materiality thresholds.
- 4.245 Since our Draft Determinations we have received concerns regarding the accelerated corrosion of GT pipelines operating in parallel with ET OHL, which may require interventions on both electrical and gas assets. We are unclear at the time of our Final Determinations as to the prevalence of these issues and potential corrective actions which could be taken. Given the requirements for whole system working, we consider that it may be more suitable to fund TOs to undertake these works rather than National Gas. To that effect we have included GT pipe corrosion mitigation within the scope of this re-opener. We have also decided to expand the authority-only trigger to cover fault or failure restoration, ensuring it addresses

⁵⁴ These are projects that initially had both load and non-load drivers, where the load-related driver no longer applies but a non-load driver still does.

⁵⁵ Defects or failure modes common to a specific asset type that may require coordinated intervention to prevent harm or damage, excluding assets under warranty.

exceptional fault or failure events that fall outside planned works. Please see the 'Authority triggered' section below for details.

- 4.246 We have thus decided that the scope of the Non-Load Re-opener will now include:
 - Type-fault interventions: These must relate to defects affecting a specific asset type or batch which emerge in-period, requiring coordinated action to prevent widespread failures and maintain network resilience.
 - Legislation-driven works: To address obligations arising from new or amended legislation or regulations that materially impact required non-load interventions, ensuring compliance and avoiding service disruption.
 - NARM crossover projects: Projects that transition from RIIO-ET2 to RIIO-ET3 and have been assessed by us, following RIIO-ET2 NARM closeout, as justified for delivery in RIIO-ET3.
 - Shared-driver projects: Where the load driver falls away but the asset health need persists.
 - GT Pipe Corrosion Mitigation: Where ET OHLs are causing accelerated corrosion on gas pipelines that are laid in proximity and parallel to the ET OHLs.

<u>Authority triggered</u>

- 4.247 We have decided to retain our Draft Determinations position to have the Authority-only trigger as it can enable timely adjustments where planning outputs change and provides flexibility to address unforeseen developments.
- 4.248 We have decided to extend the scope of the Authority-only trigger proposed in our Draft Determinations to cover two additional areas relating to unforeseen events, namely:
 - for GT Pipe Corrosion Mitigation, as set out above, we are unclear as to when instances of corrosion may arise and this will enable us to respond quickly if it does; and
 - instances where a TO experiences either a series of failures or faults of assets on its network in close succession, or a major failure of assets on its network. For If such faults or failures occur during the price control period, we expect TOs to inform us so that we can consider whether to trigger this reopener to fund restoration. We will continue discussions with TOs on how

 $^{^{56}}$ Please refer to SpC3.10 Non-Load Re-opener, which sets out the types of faults and failures covered under this re-opener

faults and failures are classified and to ensure consistency in reporting in this category.

- 4.249 We consider these additional areas only suitable for an Authority trigger as it allows for timely intervention to address developing risks on the non-load network, while ensuring that action is taken only where we have sufficient evidence and clarity from TOs to justify triggering the re-opener.
- 4.250 Respondents did not directly comment on the Authority's ability to trigger the Non-Load Re-opener, but emphasised that it should not be Authority-only. There are two windows, in October 2028 and October 2029, where the TOs may apply.

Network company re-opener windows

- 4.251 We have decided to retain the two fixed windows. The first window will apply to all the areas under this re-opener. We believe having two windows provides sufficient opportunity to address any emerging issues in these areas and enough contingency to avoid any risk of delaying critical interventions into RIIO-ET4.
- 4.252 We do not consider that NARM crossover projects should extend beyond the first window, whereas all other areas can do. As these are RIIO-ET2 projects, we consider that allowing up to two years beyond their original delivery date provides sufficient protection against unforeseen delays. Setting one window also supports regulatory stability and ensuring timely closure of funding decisions related to these crossover activities.
- 4.253 We have decided to have the first re-opener window in October 2028 instead of April 2028 (as proposed in our Draft Determinations). This is in response to feedback from TOs that an October re-opener window better aligns with outage planning cycles, improving the feasibility of submitting robust proposals and ensures alignment with operational constraints.
- 4.254 We have decided to have the second re-opener window in October 2029 instead of April 2030. We consider that October 2029 provides a more suitable interval after the first window, allowing time for new issues to emerge and mature, while still enabling implementation of any changes before the end of the RIIO-ET3 period. Together, these changes ensure that the re-opener remains responsive to genuine need while being deliverable within the operational constraints of the sector.
- 4.255 NGET raised concerns that by 2028 only one to two years of outturn data would be available, that many pipeline projects may not have progressed sufficiently to justify an application at that stage and it is too early to capture material need.

However, we consider that this re-opener is intended to address specific challenges within its defined scope. Most of NGET's pipeline projects fall outside of this scope, and the timing of the 2028 window remains appropriate for the non-load interventions the re-opener is designed to cover. Further detail on NGET's non-load related expenditure (NLRE) PCDs and our decision on pipeline projects is set out in the next section and the NGET Annex.

- 4.256 SHET and SPT did not comment directly on the proposed re-opener windows but emphasised the need for flexibility and clear governance to ensure emerging non-load needs can be addressed effectively, which we consider our decision provides.
- 4.257 For the GT Pipe Corrosion Mitigation there is no re-opener window as this is Authority triggered only.

Materiality threshold

- 4.258 We have decided to retain our Draft Determination position of applying the default materiality threshold. This means that re-opener applications that adjust allowed revenue will only be considered if the proposed adjustment, when multiplied by the TIM rate, exceeds 0.5% of annual average ex ante base revenue. The consider this level strikes the right balance between providing a route for material, unforeseen costs and protecting consumers from unnecessary risk, while ensuring there is a route to funding for applications that meet the materiality threshold.
- 4.259 All three TOs stated that the proposed materiality threshold was too high and would make the re-opener difficult to access. They argued that many non-load projects, especially smaller or asset-health-driven schemes, would fall below the threshold, leaving funding gaps. They called for a lower and more proportionate threshold, or flexibility to aggregate projects, to ensure the mechanism works as intended. We disagree with this view. The Non-Load Re-opener is intended for material, unforeseen needs within its defined scope, not for routine or low-cost interventions. TOs should manage smaller, unplanned works through their baseline allowances.
- 4.260 For GT Pipe Corrosion Mitigation there is no lower threshold. Costs will be considered along with the National Gas costs on a whole system basis.

⁵⁷ Chapter 6 of the Overview Document explains the rationale for the design of the default materiality threshold.

NGET Bespoke NLRE Re-openers

- 4.261 NGET had a range of NLRE projects in its business plan which had not been developed to a sufficient level for funding through baseline allowances, but which may require in-period funding through bespoke re-openers. We are restricting the scope of these re-openers to those works which were known about ahead of the business plan submission. These are as follows:
 - Major Projects (as defined in the NGET annex);
 - Reactive Compensation;
 - V-String Busbar Interventions; and
 - Property.
- 4.262 In each of these re-openers, we expect NGET to submit for only those works covered in the scope descriptions. Any additional works will not be considered as part of the re-opener review. Furthermore, we expect NGET to provide sufficient detail to address any concerns we have raised as part of both our Draft Determinations and Final Determinations. Further detail can be found in the NGET Annex.

5. Cost of service

- 5.1 A key part of RIIO-ET3 is setting baseline allowances for the three TOs. The objective of cost assessment is to ensure that these allowances reflect an efficient level of costs that enables TOs to carry out their activities and deliver an appropriate level of outputs for consumers.
- 5.2 Building on RIIO-ET2 and following the principles for cost assessment set out in our Framework Decision and Sector Specific Methodology Consultation (SSMC), in our Draft Determinations we proposed to use a toolkit of methodologies to assess the different categories of costs that make up totex. Our approach resulted in a proposed 26% reduction to submitted baseline totex for the sector.⁵⁸
- 5.3 Following our Draft Determinations, we continued to engage with the TOs through Cost Assessment Working Groups (CAWGs) and bilateral meetings, and raised Supplementary Questions (SQs) to update the data used in our analysis and request further evidence. This engagement, together with the consultation responses, helped us to further develop our models and refine the cost assessment methodologies for our Final Determinations. As a result, we have decided to apply a 14% reduction to submitted baseline totex for the sector, corresponding to an increase in allowances of around 17% compared to our Draft Determinations. Table 12 compares baseline allowances from our Draft and Final Determinations and shows the difference between our Final Determinations allowances and TOs' submitted costs (after exclusions).

⁵⁸ See Table 10 in RIIO-3 Draft Determinations – Electricity Transmission.

 $^{^{\}rm 59}$ Since SSMC we held 25 CAWGs (four of which were after Draft Determinations) and several other workshops.

 $^{^{60}}$ We note submitted costs after exclusions were £12,039m in our Draft Determinations, against £11,955m in our Final Determinations. The difference is due to error corrections and further adjustments to the data.

⁶¹ Sums in the tables presented in this chapter might not reconcile due to rounding.

Table 12: Submitted costs (after exclusions) and baseline allowances (DD vs. FD) (£m, 2023/24 prices)

то	Submitted after exclusions	Ofgem DD ⁶²	Ofgem FD ⁶³	Difference	Difference (%)
NGET	5,705.7	4,155.0	4,884.3	-821.4	-14.4%
SHET	4,025.5	3,096.2	3,416.1	-609.4	-15.1%
SPT	2,224.2	1,558.4	1,996.6	-227.5	-10.2%
ET Sector	11,955.3	8,809.6	10,297.0	-1,658.3	-13.9%

- Part of the increase in baseline allowances was driven by a higher reliance on forecast data, and more broadly by the recognition that more weight needed to be given to TOs' individual conditions and challenges in a period of transformation for the sector. This is in line with recommendations made in the recent Cunliffe review. This approach also impacted our assessment of Stage B of the BPI where, in a change to the approach we took in our Draft Determinations, we mostly relied on a bespoke assessment of the merits of the individual business plans, rather than making direct comparisons. Overall, we consider our Final Determinations position strikes a balance between incentivising cost efficiency and ensuring TOs have timely access to funding to deliver an unprecedentedly large programme of work, with clawback mechanisms in place to ensure unspent allowances are returned to consumers.
- 5.5 Going into more detail, Table 13 and Table 14 show the adjustments we made to submitted costs to exclude costs out of the scope of our assessment. The three TOs submitted £15.8bn of baseline totex, from which we removed costs not subject to the RIIO-ET3 cost assessment process; they are referred to as excluded costs and include costs that will be assessed through routes other than RIIO-ET3 (eg ASTI and part of RIIO-ET2 carry-over). We also added in some costs reported under the RIIO-ET2 period which pertained to RIIO-ET3.65 This resulted in an overall downward adjustment to submitted costs of £2.2bn, bringing baseline submitted costs from £15.8bn to £13.6bn.66 Moreover, we moved some baseline costs to UMs (eg property re-openers) where we considered that allowances for certain activities are better made closer to the time costs are

⁶² After corrections we made following the publication of our Draft Determinations.

⁶³ Core baseline totex.

⁶⁴ Independent Water Commission: review of the water sector - GOV.UK

⁶⁵ See load and non-load section of this chapter for more detail.

⁶⁶ The list of exclusions has been provided to each TO separately.

- incurred. The exclusions of these costs further reduced TOs' submitted baseline requests to around £12bn, which was the basis of our assessment.
- Our cost assessment process resulted in baseline allowances of £10.3bn, a reduction of around £1.7bn (14%, against 26% or £3.1m of reductions proposed in our Draft Determinations) from submitted costs after exclusions (£12bn). This reduction is the result of:
 - needs case assessment (£0.4bn): the further evidence received through the consultation process resulted in the needs case approval of around £0.9bn for projects rejected in our Draft Determinations;
 - cost efficiency adjustments (£0.7bn), reflecting our efficiency assessment of each cost area using quantitative and qualitative tools; and
 - our ongoing efficiency (OE) challenge of 1% per annum (£0.5bn).
- 5.7 Submitted and allowed totex presented in this chapter are exclusive of RPEs, and the allowed totex of £10.3bn does not include PCF, UIOLI allowance or other allowances immediately available to the TOs such as the NIA, pass-throughs and volume drivers.⁶⁷ Once these allowances are taken into account, the overall ex ante funding for the TOs increases by £7.4bn to £17.7bn.⁶⁸

Table 13: Summary of impact of exclusions on submitted totex (£m, 2023/24 prices)

то	Submitted	Costs not subject to RIIO-ET3 cost assessment process ⁶⁹	Baseline costs moved to re- openers ⁷⁰	Submitted after exclusions
NGET	9,177.3	2,467.4	1,004.2	5,705.7
SHET	4,593.6	-67.3	635.4	4,025.5
SPT	2,043.2	-172.6	-8.4	2,224.2
ET Sector	15,814.1	2,227.6	1,631.2	11,955.3

⁶⁷ As in our Draft Determinations, we excluded UIOLI allowances because the two most material ones (ie Load and CAI UIOLIs) were calibrated on costs submitted via UMs.

⁶⁸ This figure is exclusive of re-openers.

⁶⁹ Changes from our Draft Determinations include additions of load and non-load schemes in baseline allowances, exclusion of double-counted R&C for NGET, data resubmission for non-operational capex and network operating costs (NOCs), as well as removal of indirect costs from this adjustment.

⁷⁰ Changes from our Draft Determinations include more costs moved to the Property re-openers and Cyber UIOLI, as well as movements in indirect costs as result of data resubmission.

Table 14: Totex breakdown of our cost assessment approach by TO and total ex ante funding (£m, 2023/24 prices)

то	Submitted after exclusions	Needs case assess.	Cost efficiency adjust.	Ongoing efficiency	Ofgem FD	PCF, UIOLI and other ex ante allowance	Total ex ante funding
NGET	5,705.7	204.5	371.4	245.5	4,884.3	3,745.0	8,629.3
SHET	4,025.5	194.5	244.6	170.3	3,416.1	1,962.1	5,378.2
SPT	2,224.2	1.7	128.3	97.5	1,996.6	1,733.5	3,730.2
ET Sector	11,955.3	400.8	744.2	513.3	10,297.0	7,440.6	17,737.6

5.8 This chapter sets out the specific approach we have taken to the assessment of the cost categories that make up totex, namely load and non-load capex, non-operational capex, network operating costs (NOCs), indirect costs and other costs. This chapter also covers aspects of the engineering assessment, as well as the TIM and our approach to assessing Stage B of the BPI for RIIO-ET3. For our Final Determinations approach to RPEs and OE, see the Overview Document.

Load and non-load capex

Background

- 5.9 Load capex relates to investment to expand current network capacity or to connect with new generation or demand sources. Non-load capex relates to investment to maintain the health of the existing asset base.
- 5.10 In our Draft Determinations, we proposed to continue using a toolkit approach for the cost assessment of load and non-load capex, including retaining engineering reviews and unit cost benchmarking. Firstly, an engineering review undertook a needs cases assessment for the justification of the investment, followed by considerations around the justification of optioneering, scope of costs and volumes. Where data robustness allowed, we then created unit cost benchmarks using asset level data rolled up into scheme-level benchmarks. We did this by aggregating the benchmarks for a given scheme and comparing them to the requested TO costs. After a qualitative assessment of costs, considering information supplied by both engineering and TOs, this information was subsequently put through the Project Assessment Model (PAM) to combine

- engineering views on schemes and volumes with our view on costs, producing a scheme-level output for each scheme.⁷¹
- 5.11 When projecting their load and non-load capex, TOs typically include costs for R&C. These costs account for additional expenditure which may be incurred due to events outside of the TOs' control, such as adverse weather conditions.
- 5.12 In our Draft Determinations we proposed that R&C requests up to and including £100k be accepted in full. For requests that exceeded this threshold, an allowance of 5% of a scheme's direct costs would be provided.

Final Determinations summary and rationale

Final Determinations summary

Design	Final Determination	Draft Determination
Load and non-load capex	Needs case assessment followed by a combination of unit cost benchmarking and engineering review. Roll-up of benchmarks to scheme level.	Same as FD.
R&C	Requested costs of £100k and below allowed in full. Allowance of 10% of a scheme's allowed direct costs if requested cost exceeds the £100k threshold.	Same as FD. Change - allowance of 5% of a scheme's allowed direct costs if requested cost exceeds the £100k threshold.

Final Determination rationale and Draft Determination responses

Load and non-load capex

5.13 We have decided to retain our Draft Determinations approach of using an engineering review of the EJPs along with unit cost benchmarking and the PAM to combine engineering views on needs case and volumes with the assessment of unit costs and risk. Where TOs submitted further evidence challenging our proposed benchmarks, needs cases assessment or volumes, we have adjusted our outputs where we considered the evidence justified. This assessment included costs incurred during the RIIO-ET2 period. Where this has been incurred for baseline projects, we integrated efficiently incurred costs into the allowance for the first year of RIIO-ET3 to make sure TOs are fully funded for these baseline projects. Regarding our overall approach, we received three consultation

⁷¹ For a schematic, see Figure 6 in our Draft Determinations ET Annex: <u>RIIO-3 Draft</u> Determinations – Electricity Transmission.

⁷² For approved schemes that cross into the next price control, this funding has also been approved as part of the assessment. Though we consider its inclusion at the start of the RIIO-ET4 through the price control setting appropriate, we may consider alternatives based on lessons learned from the T2/T3 crossover process.

- responses from the TOs, with NGET broadly disagreeing with our approach. NGET cited concerns of the unit cost benchmarking approach and engineering review that needed improvement. NGET also noted modelling errors and data inconsistencies that we have corrected. While the other two TOs were broadly supportive of our approach, they echoed similar concerns in these areas.
- 5.14 Regarding unit cost benchmarking, NGET disagreed with our approach to roll-up benchmarks to the scheme level. While it acknowledged the improvement from RIIO-ET2, NGET proposed a further aggregation to the portfolio level, arguing it would provide a more accurate basis to inform our efficiency assessment. We do not agree that the portfolio level provides the right aggregation to do our cost assessment. Our view is the scheme level, which is a discrete unit of delivery that can account for the whole activity, provides a meaningful unit of measurement and aggregation. As per our Draft Determinations, we remain concerned that a roll-up of benchmarks to the portfolio level does not provide a robust, accurate view of efficient costs.
- 5.15 As part of unit cost benchmarking, SPT suggested we consider a 'symmetrical adjustment' which would see TOs that beat the benchmark receive an upwards adjustment in line with the benchmark, to reward efficient plans. We disagree with SPT's proposal on the basis this unnecessarily lowers the level of cost efficiency, to the detriment of consumers as well as already being sufficiently rewarded through the BPI.
- 5.16 SPT and NGET raised concerns on the use of RIIO-ET2 data within the benchmarking. Both TOs considered there to be structural breaks between RIIO-ET2 and RIIO-ET3, making past unit costs unreliable predictors of future costs. NGET provided evidence within its consultation response of instances where it believed this break to exist. In our Draft Determinations, 11% of non-risk costs were benchmarked against RIIO-3 benchmarks, 31% were benchmarked against RIIO-ET2 and RIIO-ET3 benchmarks and 58% were qualitatively assessed. Using both the consultation responses and continuous engagement with TOs, we have considered TO evidence of structural breaks, and adjusted our assessment where the evidence justified this, moving either to RIIO-ET3-only benchmarking, or to qualitative assessment where RIIO-ET3 benchmarking was not feasible, either due to data availability or not meeting other robustness criteria. Overall, 13% of non-risk costs were benchmarked against RIIO-ET3 benchmarks, 20% against combined RIIO-ET2 and RIIO-ET3 benchmarks, with 67% qualitatively assessed. We do not agree that RIIO-ET2 data should be excluded entirely from the assessment. We believe that when combined with RIIO-ET3 data and robustness

- checks for volatility and structural breaks, it is still appropriate to use RIIO-ET2 data for benchmarking as these provide us with confidence of their validity for use in assessment.
- 5.17 We have expanded the scope of our qualitative review of benchmarked costs, from 26 in our Draft Determinations to 84 in our Final Determinations, a further 58 permutations subject to a deep dive review on the robustness of and the feasibility for a benchmark. This was spurred by stakeholder feedback (in consultation responses, CAWGs and bilateral engagement), adjustments to data, and looking to further review highly material costs, as well as those covered by PCDs.
- 5.18 NGET raised concerns about aspects of the unit cost benchmarking approach where project outliers were included in the assessment. NGET suggested a more qualitative approach would be better, accounting for project-specific information. This was also a concern highlighted by SHET. Through their consultation responses and follow-up engagement, both TOs have provided us with schemes and assets they believed to be outliers. Where relevant, we took on board NGET's and SHET's feedback to expand the scope of the expert review to assess the rationale for the outlier claim and the resulting high variance in costs. As part of the qualitative assessment, we considered unique design requirements, sitespecific challenges, or variances in the technology used. Where this specific project information was considered justified, we have changed the assessment from a quantitative to a qualitative assessment approach for certain parts of the scheme. We considered an extra four schemes for SHET and six schemes for NGET to be justified for more extensive qualitative assessment in combination with quantitative assessment.
- 5.19 NGET disagreed with our approach to use the close year of an asset as the indicator of whether a project falls into the RIIO-ET2, RIIO-ET3, or beyond the RIIO-ET3 price control for calculating the benchmarks for each period. NGET argued that this did not factor in the start year or the delivery period and was therefore not an accurate reference. NGET added this could lead to misclassification of data points, pushing certain data points into RIIO-ET3 inaccurately and artificially lowering benchmarks and modelled costs. As part of its response and follow-up engagement, NGET provided examples where significant differences in start years and delivery timelines were influencing benchmarks. We acknowledge that NGET's hypothesis had merit. When performing robustness checks, NGET's alternative proposal however did not result in materially different outcomes versus our proposed approach. In the two

scenarios tested for the three TOs, across both load and non-load, we looked at the impact across ten PAMs. Only in two of ten PAMs did we see an increase above 1%. This was for load only however, and when accounting for non-load, in neither scenario was the TOs overall allowance increase above 1%. The proposals led to decreases, as opposed to increases, in modelled costs in three of the ten scenarios in the PAMs. These decreases compared to our Draft Determinations proposal were sustained for a TO when accounting for both load and non-load models. All the other five scenarios led to increases of less than 1%. These checks did not justify a systematic change to the approach and instead provided evidence our approach was robust. We do acknowledge however the potential impact on a more granular level, and have incorporated scrutiny of start year and delivery phasing into our deep-dive benchmarking review to calculate more accurate benchmarks and to ensure at a more granular level there is not an artificial lowering of benchmarks.

- 5.20 NGET disagreed with our continued use of the PAM. NGET and SPT were concerned with the use of highly granular benchmarks and their application to highly volatile cost areas. All three TOs voiced concerns of the PAM being overly complex and lacking transparency. Nonetheless, two TOs acknowledged the steps taken to enhance the PAM have made it simpler, more transparent and have addressed previous issues in the model. We disagree the granular benchmarks do not provide robustness, given we have created checks to make sure these are workable and rolled up benchmarks to reduce the risk of incomparability within groupings. Nonetheless, we consider maintaining the current granularity of reporting is important to build a robust evidence base through supporting data availability and providing flexibility for future assessment. We will continue to work with TOs to improve and simplify the PAM functionality.
- 5.21 All TOs also provided further schemes for inclusion in their consultation responses and as part of follow-up engagement. Though most of these were flagged by TOs as 'T2/T3 crossover' items, we do not believe these ultimately meet the principles we have set out for crossover in Chapter 4, and therefore require different treatment. We do however acknowledge the requirement for efficient funding through RIIO-ET3 for these activities. For NGET, this included RIIO-ET3 allowances for the London Power Tunnels 2 (LPT2) project, continuing from RIIO-ET2, and easements. We have provided LPT2 funding for RIIO-ET3 as part of NGET's baseline allowance. For easements, we will continue with the RIIO-ET2

methodology,⁷³ and provide the requested amount in full, subject to an ex post true-up of efficiently incurred expenditure (including contractor indirects) at RIIO-ET3 close out. SHET noted the lack of clarity of treatment for its uncertain costs which was classified as carryover in our Draft Determinations. After consulting with SHET, we have now included these costs in the PAM, and as with easements, provided the requested amount in full, subject to an ex post true-up of incurred efficient expenditure at RIIO-ET3 close out. SPT requested its delayed Glenlee to Tongland schemes be moved to RIIO-ET3; we will look to clawback funding given at RIIO-ET2 at close out and have provided RIIO-ET3 allowances through the PAM.

Risk and Contingency (R&C)

- 5.22 We have decided to increase the allowed percentage of risk from 5% to 10% of a scheme's allowed direct costs where the associated risk costs are above £100k, and to retain our proposed approach of allowing risk requests in full where the associated risk is £100k or below.
- 5.23 All TOs disagreed with the proposed approach in our Draft Determinations. They expressed concerns that the TIM was an inappropriate factor to consider in the R&C approach and that its level should not be a justification for lowering the R&C allowance due to its intended purpose of incentivising efficient use of totex allowances. They further stated that the TIM should not be used as a proxy for incorrectly set allowances. We agree that the TIM should not be used as a proxy, and indeed we did not use it to set R&C allowances. However, we disagree with the TIM being an inappropriate consideration when developing an R&C approach. Due to the high uncertainty environment present for RIIO-ET3, we consider that incentivising totex should be balanced with adequate risk management and that the stepped TIM is an appropriate evolution that remains fit for its original purpose while maintaining an element of protection against uncertain events with large unforeseen cost implications. More detail on our decision on the TIM is outlined later in this chapter.
- 5.24 SPT expressed a concern that the approach taken was overly simplistic, with the £100k pass-through not being supported by any robust evidence or modelling. As explained in our Draft Determinations, using this threshold supports the notion that even late-stage projects in terms of cost and project maturity are susceptible to incur small unanticipated costs from unforeseen events which do not have

⁷³ RIIO-2 Final Determinations - NGET Annex (REVISED), paragraph 3.17.

readily identifiable and comparable cost drivers. When implemented within our project assessment process, this resulted in passing through roughly 67% of the requested risk requests, comprising only 4.4% of the total risk requested for schemes that had otherwise passed our engineering review. Moreover, neither of the other TOs provided views on amending or removing the pass-through. On balance, we consider it reasonable to maintain the threshold at the level proposed in our Draft Determinations.

- 5.25 All TOs challenged our proposed allowance of 5% of a scheme's costs, noting their risk quantification methodologies determining TO-specific outputs which ranged between 9.2% and 14.4%. NGET also queried the R&C allowance being lower than that provided in GT, which receives an R&C allowance capped at 10%, despite its view that both sectors face similar risks and both are subject to the TIM. After carefully considering the consultation responses and reviewing the additional evidence provided, we considered it appropriate to revisit the allowance level on the basis that a higher level would better reflect the unforeseen costs of TOs. Due to the lack of comparability in TOs reported R&C requests and variance in inputs, we sought to use a proxy established within existing industry guidelines. In doing so, we reviewed existing literature while accounting for the nature of projects that are funded ex ante, and the existence of the TIM in our framework to provide protection in cases of severe risk events.
- 5.26 Specifically, we reviewed guidance published in HM Treasury's Green Book,⁷⁴ two independent reports on ET costings published by the Institution of Engineering and Technology (IET),⁷⁵ ⁷⁶ and cost estimating guidance published by the National Infrastructure and Service Transformation (NIST) Authority.⁷⁷ We aimed to use a proxy on the lower end of various ranges due to:
 - projects funded ex ante being typically late-stage with relatively advanced business cases and relatively lower site-specific uncertainties stemming from higher data maturity (ie site designs have been established, early preconstruction works may have been carried out, geotechnical considerations factored in prior to project commencement); and
 - the Stepped TIM providing protection from increasing costs stemming from risk events. Functionally, while this would not impact the operation and

⁷⁴ HM Treasury's Green Book - The Green Book (2022) - GOV.UK

⁷⁵ The IET: A Comparison of Electricity Transmission Technologies: Costs and Characteristics - 100110238 001-rev-j-electricity-transmission-costs-and-characteristics final-full.pdf

⁷⁶ The IET: Electricity Transmission Costing Study - <u>electricity-transmission-costing-study.pdf</u>

⁷⁷ Infrastructure and Projects Authority - IPA Cost Estimating Guidance.pdf

management of project-owned contingency cost estimates, most materially large unforeseen costs would likely be funded for the TOs.

- 5.27 We have therefore decided to increase the R&C allowance to 10% of a scheme's allowed direct costs, in line with the target range for late-stage projects within the NIST Authority's cost estimating guidance and as used in the IET reports where authors noted a range of contingency costs between 8-10% and 10-15% (sourced from supply chain and TO data, public domain, derived from either of the former or otherwise estimated) for a range of electricity transmission schemes types that are similar or equivalent to those present in RIIO-ET3. As a consequence, this increases R&C allowances beyond the established standards in RIIO-ET2 and the MSIP regime, while now being in line with the GT sector. We acknowledge that there may be ex ante projects that are not strictly considered late-stage but consider the overall R&C allowances for load and non-load capex would balance out against those schemes that do not experience unforeseen risk events but are still provided an R&C allowance.
- 5.28 SHET raised concerns that the reduced risk allowance was inconsistent with the higher risk environment the sector is currently subject to, given market volatility. SPT similarly stated that a higher risk allowance was required due to the extension of delivery incentives to a broader range of load capex schemes. Increased cost uncertainty has factored into our development of the Stepped TIM in conjunction with our R&C approach. We do not consider delivery incentives to have a direct impact on uncontrollable risk costs as these would be implied to have been incurred as a consequence of TOs' delivery activity.
- 5.29 SPT raised concerns that a uniform risk ratio assumes uniform risk profiles across schemes, which it argued was not often the case. We note that in principle, while each scheme will have specificities that make it unique at a granular level, the sources of high-level risk costs are likely to be broadly similar across large capex projects. Adopting a uniform risk threshold also retains an equitable risk allowance for each TO, combatting where TOs have factored in risk sources which they indirectly have control over and yet included in their methodology for determining R&C costs. We have relied on engineering assessment of scheme EJPs to determine when certain projects with potentially increased costs, stemming from risk events or otherwise, would be better suited for a UM.

⁷⁸ R&C allowances in RIIO-ET2 and MSIP were 8.2% and 7.5% of scheme direct costs respectively.

- 5.30 Nevertheless, we intend to work with TOs to enhance future reporting on R&C, as for future analysis we see value in a more structured data collection on the risk sources that are factored into each TO's R&C methodology. We will look for TOs' input to move away from a flat risk allocation in favour of a scheme-specific approach that adequately factors in scheme characteristics such as size, complexity, maturity, and intervention type. This will allow us to better determine to what extent these costs might be in direct control of the TOs, and whether these may be better compensated elsewhere within the price control.
- 5.31 NGET proposed allowing full R&C requests for late-stage projects, and a 13.8% allowance on other projects. We have outlined our primary concerns with assessing and allowing R&C within our Draft Determinations and our rationale to amend the threshold above. We note that this approach is only applicable to those projects for which we have decided to provide baseline allowances. For projects that will be covered under the various re-opener mechanisms in RIIO-ET3, any R&C allowances will be determined as part of the individual project assessment process based on the established re-opener guidance and with more applicable and timely cost inputs from TOs.
- 5.32 SHET proposed an annual re-opener be used to provide a route for cost adjustments once final contracts are agreed, with this only applying on a project basis where costs have changed by more than 5%. We disagree with this option on three grounds. Primarily, this could weaken TOs' incentive to engage and negotiate ambitiously with market participants and may disproportionately favour some business operating models over others. Secondly, it would create a large regulatory burden for projects where costs are considered generally stable, hence being funded through an ex ante allowance. Lastly, we consider that the scope of such a re-opener would likely cross over cost adjustments that would have been addressed through other price control mechanisms such as RPEs.

Modelled costs

5.33 Table 15 and Table 16 show our modelled costs for load and non-load capex against TOs' submissions and our Draft Determinations. The columns showing the differences compare our modelled costs in our Final Determinations with TOs' submitted costs.

Table 15: Load capex modelled costs (£m, 2023/24 prices)

то	RIIO-ET3 submitted	Ofgem DD	Ofgem FD	Difference	Difference (%)
NGET	425.9	240.0	353.5	-72.4	-17.0%
SHET ⁷⁹	-	-	-	-	0%
SPT	84.3	29.2	78.6	-5.7	-6.8%
Total	510.3	269.3	432.1	-78.2	-15.3%

Table 16: Non-load capex modelled costs (£m, 2023/24 prices)

то	RIIO-ET3 submitted	Ofgem DD	Ofgem FD	Difference	Difference (%)
NGET	1,430.9	1,009.1	1,204.3	-226.6	-15.8%
SHET	1,445.7	1,177.9	1,248.1	-197.5	-13.7%
SPT	561.9	459.4	531.9	-30.0	-5.3%
Total	3,438.4	2,646.4	2,984.3	-454.1	-13.2%

- 5.34 Submitted costs for NGET have decreased due to double counting of R&C costs in our Draft Determinations. SPT and SHET submissions have increased due to an increase in schemes included into baseline. Though NGET have had schemes included, this however did not offset the double count of R&C costs.⁸⁰
- 5.35 All TOs have seen increases in allowances compared to our Draft Determinations, due to the inclusions of more schemes, but also improvements against benchmarks and as a result of our qualitative assessment. NGET's higher allowances for non-load capex can also be attributed to an increasing number of schemes with needs case approved following our engineering review.

Non-operational capex

Background

5.36 Non-operational capex relates to assets not directly connected to the network but which support the general functioning of the business. These costs comprise the following three categories: Vehicles and Transport, Non-Operational Property, and Information Technology and Telecoms (IT&T).

⁷⁹ SHET did not include any load capex in its baseline submission.

⁸⁰ The double count of R&C costs amounted to around £287m.

5.37 In our Draft Determinations we proposed to base the assessment of Vehicles and Transport and Non-operational Property solely on our review of the associated EJPs and Cost Benefit Analyses (CBAs). In assessing IT&T costs, we were assisted by an expert review from the external consultants Grant Thornton and Atkins with expertise in this subject area.⁸¹ This built on the RIIO-ET2 assessment approach which we carefully considered and analysed before coming to our decision.

Final Determinations summary and rationale

Final Determinations summary

Design	Final Determination	Draft Determination
Vehicles and Transport and Non- operational Property	Qualitative assessment based on review of associated EJPs and CBAs. See Chapter 4 of the Overview Document for our methodology for the NGET Electric Vehicle (EV) costs subject to the Operational Transport Emissions Reduction PCD. See the relevant company annexes for the Property re-openers for NGET and SHET.	Same as FD.
IT&T	Expert review of 88% of submitted ET EJPs. 82 94% of ET requested funding is subject to the expert review. For projects not subject to the expert review, 83 apply same average percentage of allowed expenditure as for a TO's projects subject to expert review. For BSC IT&T, assessed against best-view Full Time Equivalent (FTEs) using trend analysis for each TO.	Same as FD, except for BSC IT&T where we applied the same average percentage of allowed expenditure as for a TO's projects subject to expert review.
Data & Digitalisation	See Chapter 12 of the Overview Document.	Same as FD.

Final Determination rationale and Draft Determination responses

Vehicles and Transport and Non-operational Property

5.38 We have decided to broadly retain our Draft Determinations approach and base the majority of our assessment of Vehicles and Transport and Non-operational Property on our review of the associated EJPs and CBAs. NGET's EV costs will be subject to the Operational Transport Emissions Reduction PCD, with its charging infrastructure costs not subject to the PCD and funded in full.⁸⁴

⁸² Non-Data & Digitalisation IT&T projects with a materiality of more than £1m.

 $^{^{83}}$ 11% of non-Data & Digitalisation IT&T projects with a materiality of more than £1m.

⁸⁴ Chapter 4 of the Overview Document.

- 5.39 All TOs agreed with using qualitative assessment of associated EJPs and CBAs for both Vehicles and Transport and Non-Operational Property costs. NGET proposed that we should provide baseline funding in the first three years of RIIO-ET3 for critical asset replacement and early preliminary works of two of their projects subject to the Property re-openers. This would ensure works could continue without hiatus prior to a re-opener decision. SHET suggested that less material amounts should be automatically approved and that we should give baseline funding to the development costs for each of their three projects subject to the Property re-opener. SPT had no additional comments.
- 5.40 We have decided to provide baseline allowances for the costs outlined in NGET's and SHET's responses. Following engineering review, we are satisfied that both TOs have evidenced how the asset health and development costs associated with the projects subject to the re-openers will support immediate and necessary works in the near term. Therefore, we consider that they should be funded prior to the re-opener window.
- 5.41 All construction costs submitted in baseline for the projects in scope of the reopeners are now subject to the re-openers. We have engaged closely with both TOs on the respective Property re-openers. As a result of this engagement, we have recognised more costs as associated with construction and therefore moved more costs from baseline to these re-openers than had been in the re-openers in our Draft Determinations. For more details on these re-openers, see the company annexes. We have decided to retain our Draft Determinations position for all Non-operational Property projects not subject to the re-openers⁸⁵ and allow in full these baseline costs. All these costs have been subject to engineering review and we consider them justified.

IT&T

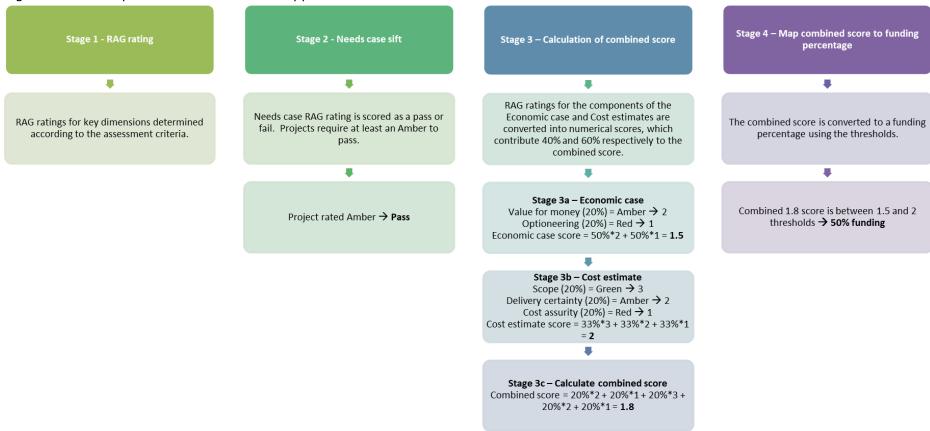
- 5.42 We have decided to broadly retain the assessment framework for the IT&T technical review proposed in our Draft Determinations. However, we re-assessed network companies' submissions and re-calculated the allowances considering information provided in consultation responses and in subsequent SQs.
- 5.43 In our Draft Determinations we outlined our proposed assessment framework for the technical review of IT&T expenditure, which built on the approach taken in RIIO-2. The assessment framework focused on the validity of the needs case, the strength and robustness of the economic case and the appropriateness of cost

⁸⁵ Three projects for NGET, three for SHET, one for SPT.

levels associated with the proposed work plans. Our review of the needs case considered IT strategy, linkage to technology architecture, appropriateness of proposals as well as potential complementarities or trade-offs with other costs. We broke the economic case dimension down into 'value for money' and 'optioneering' components and the cost estimate dimension into 'scope definition', 'delivery certainty' and 'cost assurity' components. There were four stages to the assessment. In the first stage, Red-Amber-Green (RAG) ratings were determined for the components of the needs case, economic case and cost estimate, based on the assessment criteria. In the second stage, projects with a green or amber needs case rating moved onto the next stage (with those rated red receiving no funding and projects within the assessment scope which had a value of less than £0.5m received full funding if the needs case was Green or Amber). In the third stage, a combined average score was calculated from the five economic case and cost estimate component ratings. RAG ratings corresponded to a numeric score of, respectively, 1, 2 and 3. The combined average score was calculated by giving equal weight to each of the five component ratings. In the fourth stage, the combined average score was mapped to a funding percentage allowance based on set thresholds. The combined score thresholds were 1, 1.5, 2 and 2.5 and the respective funding percentages 25%, 50%, 75% and 100%.

5.44 Figure 5 illustrates the approach.

Figure 5: IT&T expert review assessment approach



- 5.45 All TOs recognised the intent of the expert review but disagreed with aspects of the approach.
- 5.46 TOs raised concerns around the clarity of the approach. SHET requested further engagement to support understanding of some projects and noted that the interaction with our engineering assessment was unclear. It sought clarity on the process for obtaining funding for projects with an approved needs case but where full allowances were not provided. SPT and NGET noted that the methodology lacked transparency and requested clarification on the criteria applied. They also asked for a single model covering all IT&T investments. NGED saw it as beneficial for interested parties to see a redacted version of the consultants' report underlying our Draft Determinations outcome. Following our Draft Determinations, we engaged with the TOs to explain and clarify the assessment framework in more detail, as well as to outline what kind of further evidence we were looking for from each of the network companies against each of the dimensions. All TOs provided submitted analysis and evidence which provided greater assurance on their proposed spending, resulting in significant increases in allowances compared to our Draft Determinations.
- 5.47 On the validity of the needs case, SPT proposed that we review the operational rationale component used in the assessment, as it did not accurately reflect the value of its Operational Technology investments. SHET suggested the operational rationale and risk mitigation components of the needs case assessment be included in the third stage calculation of the score and allowed funding. NGET argued that the needs case and efficiency assessments were conflated, leading to underfunding. NGED noted that more emphasis should be given to the needs case. In the assessment, the needs case was used as a binary assessment about whether the proposed investment was justified at a strategic level or not. The subsequent parts of the assessment determined whether the level of submitted costs was appropriate. We consider that sufficient weighting was given to the needs case given that projects could only move to the next assessment stage with a green or amber needs case. We consider that the operational rationale component within the needs case component does account for the value of Operational Technology investments and that operational rationale and risk mitigation best sit within needs case. We disagree with NGET that the framework conflates the needs case and efficiency assessments, as we designed a framework where the needs case was reviewed separately from the other components.
- 5.48 Turning to the other two dimensions of the framework, SPT argued that the nature of many Operational Technology investments meant value for money was

not best demonstrated by a CBA. It agreed with the intent of the cost dimension but considered it unreasonable to reduce the score based on criteria not requested in the Business Plan Guidance (BPG), a point also made by SHET. SHET proposed that the criteria for costs to be validated against external benchmarking be removed from the assessment due to the bespoke costs associated with each project. To score well on value for money, network companies were expected to provide evidence demonstrating the scale of benefits relative to costs to justify the proposed investment over alternatives. While this could take the form of a CBA, other approaches were also acceptable. As part of the economic assessment, the expert review framework also considered a range of other factors, including the nature of the investment, expected benefits, and the risk of harm from non-investment.

- 5.49 On the percentage thresholds, SHET suggested that they should be 50%, 75%, 95% and 100% and that there should be a rounding-up mechanism for scores near a threshold. NGET proposed that the thresholds should be in 5% increments. NGED noted that the percentages should be reconsidered to allow for more of the requested funding under some circumstances, while SPT argued that the calculation of the score thresholds and funding adjustment lacked justification based on efficiency or risk analysis. We consider that our approach to thresholds is proportionate, compared to a project-specific allowance or a greater number of threshold steps, and strikes the right balance between complexity of the approach and effort efficiency in setting the price control.
- 5.50 On projects not covered by the assessment, SPT argued that the justification for substantial reductions was inadequate. NGET suggested that we were conflating two different types of costs and proposed that we undertake separate assessment for IT Run-the-Business costs, ⁸⁶ combining quantitative and qualitative review considering historic run rates, and identifying changes and benchmarking evidence. SHET considered that only projects above £5m should be included in the assessment, in line with our Investment Decision Pack (IDP) guidance. Noting NGET's response on IT Run-the-Business costs, we have decided to model all IT Business Support Costs (BSC) not included in the expert review via a trend analysis, using best view⁸⁷ FTE as a driver. We consider FTEs across RIIO-ET2 and RIIO-ET3 explain these costs well, and agree with NGET that these costs are different to IT investment costs. BSCs are ongoing operational costs, whereas IT

 $^{^{86}}$ A subset of NGET's Business Support costs accounting for the run the business cost for maintenance and operation costs.

⁸⁷ See Indirects section in this chapter.

investment costs are one-off mostly capital expenditure. However, where BSCs have been submitted alongside investment costs in an assessed project, we consider that these costs have been afforded sufficient scrutiny to be included in the expert review. We still think it is appropriate to apply the average percentage of allowed expenditure for the projects reviewed for a given TO to the remaining Non-operational IT&T and Operational Technology projects proposed by that TO, given the similar nature of these costs.

- 5.51 TOs raised further points. SHET suggested that Red RAG projects should be mitigated by the implementation of a PCD and that we should conduct an internal cross-review. NGET proposed that all projects below £1m should be given full funding and 'end of life' investments should be awarded Green RAGs by default. It suggested that we apply tailored assessment criteria to Supervisory Control and Data Acquisition (SCADA) and Operational Telecommunications investments.⁸⁸ SPT proposed that we should provide clearer definitions of Data & Digitalisation, IT&T and Operational Technology. Due to the cross-sector nature of the review, with the scale different across sectors, we have decided not to apply monetary materiality thresholds to projects considered in the scope of the assessment. We have continued to provide full funding to projects within the assessment scope which had a value of less than £0.5m if the needs case was rated Green or Amber. There are no longer any Red RAG projects. We will engage further with network companies to improve definitions for each IT&T cost category and the future framework for IT&T assessment.
- 5.52 We have decided to make minor changes to our Draft Determinations methodology. We agree with SHET that the 25% threshold may not be sufficient to support the funding of projects. In response, we have raised this minimum threshold to 40%, ensuring that allocations more appropriately reflect the level of investment required. This is broadly in line with our lower threshold at RIIO-2 (35%). We consider that 50% and 75% are proportionate as the top two thresholds so the third threshold should be below 50%. This change reflects that projects passing the needs case assessment (with a Green or Amber rating) have demonstrated a strategic and operational rationale for the proposed expenditure.
- 5.53 We have decided not to make any further amendments to the methodology. As we have previously stated, the expert review framework employed was built on an approach taken previously in RIIO-2. The expert review framework was then further developed to ensure a pragmatic and proportionate method of assessing

⁸⁸ For Final Determinations NGET's SCADA costs were no longer subject to the expert review.

- this type of expenditure. We also consider that the assessment approach is in line with our EJP framework, a robust methodology focusing on review of needs case, optioneering and scope and cost confidence.
- 5.54 Overall, we considered the evidence submitted throughout the consultation process satisfied our criteria for a high number of projects. Modelled costs for projects subject to the expert review have increased by 33% from our Draft Determinations across the ET sector.⁸⁹

Modelled costs

5.55 Table 17 shows our modelled costs for non-operational capex against TOs' submissions and our Draft Determinations modelled costs. The columns showing the differences compare our modelled costs in our Final Determinations with TOs' submitted costs.

Table 17: Non-operational Capex modelled costs (£m, 23/24 prices)

то	RIIO-ET3 submitted	Ofgem DD	Ofgem FD	Difference	Difference (%)
NGET	626.4	530.0	567.8	-58.6	-9.4%
SHET	422.9	503.7	388.5	-34.4	-8.1%
SPT	116.8	104.7	107.2	-9.6	-8.2%
Total	1,166.1	1,138.4	1,063.4	-102.6	-8.8%

5.56 Submitted costs have reduced since Draft Determinations as more costs have moved from Non-operational Property baseline to the Property re-openers for NGET and SHET.⁹⁰ Modelled costs have increased, mainly as a result of the further evidence TOs provided for projects subject to the IT&T expert review.⁹¹

Network operating costs (NOCs)

Background

5.57 NOCs relate to expenditure that is primarily for the day-to-day maintenance of the network to ensure it remains safe and in good condition. NOCs comprise expenditure on faults, inspections, maintenance, repairs, service agreements,

 $^{^{89}}$ Some of NGET's costs were included in the assessment in error in our Draft Determinations so these have been removed from this comparison.

^{90 £451}m has moved to the re-openers.

⁹¹ SPT's assessed IT&T costs are all seen within NOCs, all its Non-operational IT&T costs with submitted EJPs are Data & Digitalisation related. NGET and SHET have assessed IT&T costs in both non-operational capex and NOCs.

vegetation management, flood mitigation, operational technology, visual amenity and NOCs other.

5.58 In our Draft Determinations, we proposed to largely retain the RIIO-ET2 approach, using the lower of RIIO-ET2 and RIIO-ET3 unit costs for each asset. For assets where RIIO-ET3 submitted costs were much higher than modelled costs derived by the RIIO-ET2 approach, an annual average cost method was used, allowing costs in full if justified. We relied on engineering reviews where EJPs were submitted, and we calculated thresholds on submitted data after any engineering exclusions on account of insufficient needs case, to allow for a more representative comparison between efficient costs derived from our assessment and submitted costs.

Final Determinations summary and rationale

Final Determinations summary

Design	Final Determination	Draft Determination
Faults, Inspections, Repairs, Vegetation management and some NOCs other costs (Site security, Asbestos management, Safety climbing fixtures, Fire protection, Earthing upgrade):	Retain the RIIO-ET2 approach and apply the lower between RIIO-ET2 and RIIO-ET3 unit costs. For assets where the RIIO-ET3 submitted costs are significantly greater than modelled costs derived by the RIIO-ET2 approach (at least 25% higher), employ an annual average unit cost approach.	Change - retain the RIIO-ET2 approach and apply the lower between RIIO-ET2 and RIIO-ET3 unit costs. For assets where the RIIO-ET3 submitted costs are significantly greater than modelled costs derived by the RIIO-ET2 approach (at least 25% and £1m higher), employ an annual average cost approach.
NOCs other (Vegetation management non-OHL, Ongoing environmental costs, Small Tools, Equipment, Plants and Machinery (STEPM), company bespoke NOCs other costs) and Flood mitigation	Qualitative assessment.	Same as FD.
Operational Technology	Expert review of the vast majority of submitted EJPs. For projects with no EJPs associated, apply the same average percentage of allowed expenditure as for the projects subject to expert review for a given TO.	Same as FD.
Service Agreements	Engineering qualitative assessment.	Same as FD.

Design		Final Determination	Draft Determination	
	Visual amenity	No baseline allowances.	Same as FD.	

Final Determination rationale and Draft Determination responses

Quantitative assessment

- 5.59 We have decided to retain our quantitative assessment approach, with some changes made to the methodology. NGET, SPT and NGED disagreed with several aspects of the proposed approach, while SHET broadly agreed.
- In our Draft Determinations we employed an annual average cost approach where taking the lower between RIIO-ET2 and RIIO-ET3 unit costs resulted in modelled costs at least 25% and £1m lower than the submitted costs. NGET argued that the use of an annual average cost calculation did not appropriately account for the step change seen in some NOCs categories. It suggested we should instead calculate the RIIO-ET2 and RIIO-ET3 average of the annual unit costs. SPT considered that the annual average cost approach fails to account for increases in workload between RIIO-ET2 and RIIO-ET3 and proposed that we uplift costs by the ratio of RIIO-ET2 to RIIO-ET3 volumes. It also stressed that the annual average cost approach should not award lower allowances than those resulting from the unit cost assessment. SHET suggested that we increase the weighting of any cost assessment towards the RIIO-ET3 submission figures to allow for genuine increases in scope and complexity of the work being undertaken.
- 5.61 We tested NGET's and SPT's proposed annual average approaches. We think that both consider efficiency more than the average annual cost but, on balance, find NGET's approach simpler and consider an average of annual unit costs a more accurate measure of efficiency across the NOCs categories assessed quantitatively. We do not agree that all costs merit a RIIO-ET2 to RIIO-ET3 workload uplift. The intent was that we would only move from the unit cost approach for certain assets where it resulted in modelled costs significantly below those proposed by TOs, so we have made changes to our modelling such that we would revert to the unit cost approach if the annual average unit cost approach resulted in lower modelled costs for any TO. As a result, we have revised our annual average cost approach to an annual average unit cost approach. This enables us to better account for cost and workload increases in RIIO-ET3, providing a more robust set of allowances and addressing some of the concerns raised by TOs. The differing annual average approaches can be seen in Table 18.

Table 18: Annual average approaches considered

Approach	Calculation	Costs	Volumes	Unit costs
DD approach – annual average costs	(RIIO-ET2 + RIIO-ET3 costs)/10	10-year average	N/A	N/A
RIIO-ET3 workload uplift approach	((RIIO-ET2 total unit cost x RIIO-ET3 volumes) + (RIIO-ET3 total unit cost x RIIO-ET3 volumes))/10	N/A	RIIO-ET3 total volumes	RIIO-ET2 total unit costs and RIIO-ET3 unit costs, separately multiplied by RIIO- ET3 volumes, then divided by 10
FD approach - annual average unit cost approach	((RIIO-ET2 + RIIO- ET3 unit costs)/10) x ((RIIO-ET3 volumes)/5)	N/A	5-year average	10-year average

- In our Draft Determinations we only used the annual average cost approach when costs modelled by the unit cost approach were at least 25% and £1m less than RIIO-ET3 submitted costs. NGET and SHET agreed with these thresholds. SPT considered the thresholds arbitrary and that the approach as a whole does not disentangle genuine efficient cost increases from efficiency. It suggested that we should remove the £1m threshold and amend cases where unit costs are set to zero in the absence of volumes. Given our move to an annual average unit cost approach, we considered it appropriate to retest the thresholds employed. Following testing, we have decided to remove the £1m threshold but retain the 25% threshold. We consider there is weight in SPT's point that the £1m threshold places an arbitrary restriction on small unit cost areas. We have also amended cases where unit costs had been set to zero. We have retained the 25% as, when testing different thresholds, 25% produced modelled costs roughly in the middle of the range of potential results for all TOs.
- 5.63 SPT raised concerns around the unit cost approach. It argued that it ignores changes to the cost environment or cost pressures facing TOs, for example changes in market tested costs, contract costs, maintenance volumes and increased size of the network. It proposed that we replace it with an approach more aligned with the load and non-load capex assessment, where we accounted for potential high volatility between price control periods. While we recognise that for 18% of assets the unit cost approach derives allowances at least 25% less than RIIO-ET3 submitted costs, we have decided to retain it. For these assets, on balance we consider the introduction of, and subsequent amendments to, the annual average cost approach leads to an appropriate, efficient level of funding.

- 5.64 Respondents considered that more weight should be given to qualitative assessment. All TOs and NGED asked that we make full use of the evidence provided by TOs to consider volume and unit cost changes in addition to quantitative assessment. NGET proposed introducing a step change check to identify material differences between RIIO-ET2 and RIIO-ET3, while SPT suggested a reasonableness check that our model is truly testing efficiency and is free from irrational outcomes. It argued that a qualitative approach should be considered alongside quantitative assessment for all NOCs.
- 5.65 SHET agreed with our application of quantitative assessment, except for its proposal that Operational Technology should be qualitatively assessed and Long-Term Service Agreements (LTSAs) should be excluded from the application of OE on account of being fixed price or indexed contracts. NGET suggested that civils should be solely quantitatively assessed, given that they have no single defined unit.
- 5.66 We have decided not to expand the qualitative assessment scope. The revisions implemented, specifically the adoption of the average annual unit cost approach and the removal of the monetary threshold for the quantitative assessment described in paragraph 5.62, have reduced by 51% the number of assets where modelled costs are at least 25% less than RIIO-ET3 submitted costs. Of these, we did not determine any assets where the step change in RIIO-ET2 to RIIO-ET3 unit costs were sufficiently well explained in the evidence provided as part of the business plan submissions and consultation responses to merit full funding. These assets were missing an explanation for the reason for the increase in unit costs.
- 5.67 In response to points raised on specific cost areas, some of NGET's Civils costs for Inspections and Repairs have been subject to engineering review. We do not agree with SHET that Service Agreements should be exempt from the application of an OE challenge given that they are typically fixed price or indexed contracts. As detailed in Chapter 8 of the Overview Document, the OE challenge is a totex challenge, covering all areas of network companies' totex allowances. This ensures that companies are incentivised to seek efficiencies where they arise.
- 5.68 Finally, for Operational Technology see the IT&T expert review discussed in the Non-operational capex section.

Qualitative assessment

5.69 We have decided to retain the qualitative assessment approach consulted on in our Draft Determinations.

- 5.70 All TOs and NGED welcomed the qualitative assessment framework. NGED agreed with our low total cost automatic approval threshold, noting that qualitative assessment should only be undertaken after quantitative and engineering assessment. SHET suggested that we raise the materiality threshold from £1m for the low total cost automatic approval process to ensure immaterial but high-value costs such as STEPM are captured. SPT proposed that Substation Electricity be qualitatively assessed, as well as Faults, Inspections, Maintenance, Repairs and Vegetation Management. NGET noted the further evidence submitted in support of Service Agreements and NOCs other.
- 5.71 Following our qualitative assessment, we have allowed STEPM in full. We consider that the comprehensive volumes submitted for Substation Electricity make quantitative assessment appropriate, as is the case for Faults, Inspections, Maintenance, Repairs and Vegetation Management. We reviewed the further evidence provided by NGET in support of its Service Agreements costs and have decided to provide full funding. We have made no other changes to our Draft Determinations position on Service Agreements or on Visual Amenity. In a change from our Draft Determinations, all SHET's Flood Mitigation costs will be subject to an evaluative PCD.⁹²

Modelled costs

5.72 Table 19 shows our modelled costs for NOCs against TOs' submissions and Draft Determinations modelled costs. The columns showing the differences compare our modelled costs in our Final Determinations with TOs' submitted costs.

Table 19: Network Operating Costs modelled costs (£m, 23/24 prices)

то	RIIO-ET3 submitted	Ofgem DD	Ofgem FD	Difference	Difference (%)
NGET	1,568.3	967.3	1,234.2	-334.1	-21.3%
SHET	379.3	282.7	342.0	-37.3	-9.8%
SPT	353.4	265.2	299.0	-54.4	-15.4%
Total	2,301.1	1,515.2	1,875.2	-425.8	-18.5%

5.73 Submitted costs have reduced slightly since our Draft Determinations, mainly due to a small number of corrections to the BPDTs submitted by TOs. Modelled costs have increased due to the changes we have made to our quantitative assessment

⁹² See the SHET Annex.

approach and as a result of the better quality evidence TOs provided for Operational Technology projects subject to the IT&T expert review.⁹³

Indirect costs

Background

- 5.74 Indirect costs refer to internal support and overhead costs that are necessary to operate a transmission business, that could not, on their own, be classed as a direct network activity. These costs are grouped into two main categories: BSCs and Closely Associated Indirects (CAI).
- 5.75 BSCs cover key organisational activities that support the broader functioning of the business. This includes corporate support functions such as IT, finance, legal, human resources, property management, and procurement.
- 5.76 CAIs are more directly tied to construction and operation of network assets such as project management and network design. This also includes control centre operations, covering costs related to real time system operation and outage planning, as well as operational training and premises costs, such as office facilities.
- 5.77 In our Draft Determinations, indirect costs were assessed using a combination of econometric and non-econometric approaches. For both CAIs and BSCs, we supplemented historical regression models with TO-specific assessments based on forecast data to account for the anticipated growth in RIIO-ET3. The historical regression models and TO-specific assessments were equally weighted to strike a balance between protecting consumers and meeting the scale and complexity of TOs' significant challenges expected in RIIO-ET3.
- 5.78 We also introduced a CAI UIOLI allowance and a BSC Re-opener, two new regulatory mechanisms to balance TOs' needs to scale up in line with CP2030, and the subsequent accelerated transition to net zero, while still protecting consumers from undue risks.
- 5.79 The BSC items IT&T, insurance and the pension scheme admin and Pension Protection Fund (PPF) levy were deemed unsuitable for regression analysis and thus were separately assessed. Similarly, within CAIs, operational training and wayleaves were excluded from the regression analysis and subject to separate assessment.

⁹³ See the Non-operational capex section for details on this assessment.

Final Determinations summary and rationale

Final Determinations summary

Design	Final Determination	Draft Determination
Blending analyses	30:70 weighting on the historical regression and forward-looking analyses.	Change - 50:50 weighting on the historical regression and forward-looking analyses.
Econometric benchmarking	CAI: Historical Pooled Ordinary Least Squares (POLS) regression (2014-24) against capex and Modern Equivalent Asset Value (MEAV) cost drivers with exclusion of outlier data points. BSC: Historical POLS regression (2014-24) with adjusted Composite Scale Variable (CSV) weightings and ET sector wide.	Change – CAI: Historical POLS regression (2014-24) against capex and MEAV cost drivers and a time trend variable. BSC: Historical POLS regression (2014-24) transmission cross-sector with GT dummy.
CAI ratio analysis	TO-specific ratio using the RIIO-ET3 median of the CAI to capex and CAI to MEAV ratio modelled costs and applying an equal weighting. Capex driver uses reprofiled schemes as of August 2025 to align with CAI submissions.	Change - TO-specific ratio using the RIIO-ET3 median of the CAI to capex and CAI to MEAV ratio modelled costs and applying an equal weighting.
BSC trend analysis	FTE trend analysis applied to BSC from end of RIIO-ET2 (2026) to forecast costs.	Same as FD.
CAI UIOLI	10% initial funding for load projects <£150m applicable to Load Re-opener, Generation and Demand Connections Volume Driver and Load UIOLI projects. Top-up mechanism to be triggered once a TO reaches 80% expenditure of the initial pot.	Change - 10% initial funding for load projects <£150m applicable to Load Re-opener and Generation and Demand Connections Volume Driver projects. This was not applicable to Load UIOLI projects.
BSC Re- opener	Trigger: A threshold of 10% over-spend on BSC baseline allowances in any year. Timing: Once triggered, an application can be made once and at any point during RIIO-ET3.	Change - Trigger: A dual threshold of 15% overspend on both BSC baseline and non-variant totex allowances. Timing: Single mid-period application window.
Separate assessments	Contractor Indirects: Baseline allowances in-line with load and non-load capex assessment. Operational Training, Wayleaves and Pension Scheme admin and PPF levy: Allowed in full. EV leasing costs: Separately assessed for SPT.	Change - Contractor Indirects, Operational Training, Wayleaves, Pension Scheme admin and PPF levy, Community Benefit Funding: Same as FD.

Design	Final Determination	Draft Determination
	Insurance: Benchmarking of onshore costs only using network length as a driver. Bespoke assessment of offshore costs.	EV leasing costs: Were not separately assessed.
	Community Benefit Funding: Excluded and funded through pass-through mechanisms described in Chapter 4.	Insurance: Benchmarking of full costs using network length as a driver.

Final Determination rationale and Draft Determination responses

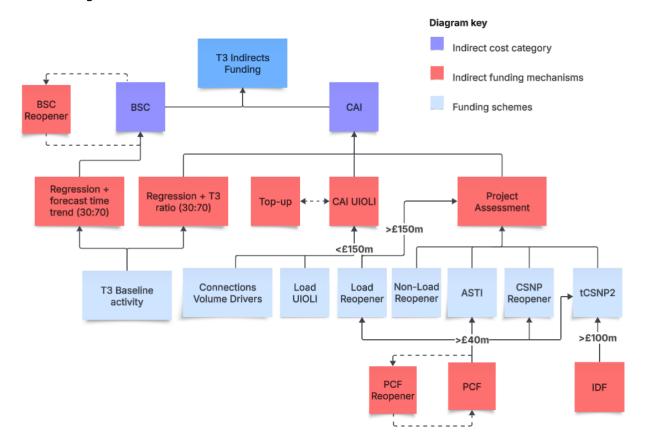
Common approaches across CAIs and BSCs

Overall approach

- 5.80 We have assessed indirect costs using a broadly similar approach to that set out in our Draft Determinations, with amendments to address its limitations in capturing RIIO-ET3 specific challenges and responding to concerns raised by stakeholders. All TOs requested that BSCs be fully funded ex ante to support the growth anticipated in RIIO-ET3, and CAIs linked to expenditure due to come forward through UMs, to be provided upfront to varying degrees. We maintain the view that providing full upfront funding for indirect costs linked to schemes that TOs have proposed for UMs, or that are still in the delivery pipeline, is not appropriate as it exposes consumers to undue risk for costs that are uncertain.
- 5.81 However, we recognise that RIIO-ET3 presents unprecedented challenges for TOs, with significant growth expected over the period. TOs will require financial certainty to commit the indirect costs necessary to deliver an unprecedented programme of work. We also acknowledge that TOs are at different stages of development and face varying scaling requirements, which makes comparability between them more complex. In response, we have amended our approach to setting baseline allowances. These changes aim to better reflect the unique challenges TOs face, ensuring they have timely access to the funding needed to deliver their investment plans, while also continuing to protect consumers from the risks of both underfunding and overfunding.
- 5.82 We have decided to retain the CAI UIOLI allowance and BSC Re-opener mechanisms with some amendments since our Draft Determinations to increase the scope and flexibility of the CAI funding and to ease access to the BSC Re-opener. These mechanisms will complement the baseline allowances by providing in-period funding for indirect costs associated with more uncertain activities, thereby offering protection for consumers.

5.83 Our RIIO-ET3 funding framework for indirects is outlined in Figure 6 below. This shows the various routes to funding across schemes and ensures timely access to funding to support delivery. For CAIs, several mechanisms are in place, including baseline allowances, the CAI UIOLI, project assessment and development funding (PCF and Initial Development Funding (IDF)). While the scope of CAI funding differs between schemes, we do not identify any significant gaps especially considering the addition of the CAI UIOLI and top-up mechanism can flex allowances when delivery becomes more certain. BSC costs are funded at the portfolio-level through baseline allowances and the inclusion of a BSC Re-opener provides flexibility to address material increases in BSC expenditure. This accommodates instances of high growth in-period.

Figure 6: Overview of the indirect costs funding framework and assessment methodologies



Blending analyses

5.84 We have revised our Draft Determinations approach of assigning equal weighting (50:50) between the historical regression analysis and forward-looking ratio and trend analyses. The three TOs all expressed broad disagreement with the approach proposed in our Draft Determinations. They argued that the 50:50 weighting did not sufficiently account for the level of growth required to deliver

- CP2030 and advocated for greater emphasis on forecast data. NGED agreed with using a blended approach and did not comment on the 50:50 weighting but stated that forecasts should be included in the regression which will be addressed later in this document.
- 5.85 We recognise the need for greater emphasis on forward-looking analysis to better reflect the expected step change in activity under RIIO-ET3 so have adopted a revised weighting of 30:70 in favour of the forward-looking analysis. The historical regression provides valuable insight into the efficiencies that TOs have achieved over time. These remain a reliable indicator of the efficiencies that could be realised in the future. As such, we consider it appropriate to use a historical regression as a basis for setting efficient costs. However, we recognise that for our assessment to better reflect the specific circumstances of RIIO-ET3 and accommodate TO-specific circumstances, it is appropriate to assign more weight to the forward-looking analysis. We consider this to be a pragmatic response to forward-looking cost pressures, while still maintaining a measure of efficiency. Equally, this approach better addresses any potential inconsistency in TOs' forecast submissions.
- 5.86 To determine the revised weighting, we analysed the relationship between historical and forecast cost data across all TOs, covering CAI, BSC, total indirect costs, totex, and capex, over multiple time periods. These periods included comparisons of five years of forecasts to actuals, seven years of forecasts to actuals, and RIIO-ET3 forecasts against RIIO-ET2 allowances. Most results, including the average outcomes, supported a 30:70 weighting.
- 5.87 We also tested alternative 40:60 and 25:75 weightings but deemed them less appropriate as they did not align with the predominant analysis outcomes. Using a 40:60 weighting would risk overemphasising historical data and not accounting for enough of the expected step up in costs in RIIO-ET3. Conversely, a 25:75 weighting would risk placing too much reliance on forecast data, limiting the recognition of historical efficiencies. We believe the 30:70 weighting strikes the optimal balance, recognising historical efficiencies while appropriately reflecting forward-looking pressures, consistent with the predominant analysis outcomes.
- 5.88 SPT proposed a sequential modelling approach, whereby the historical regression would be used to derive a starting point for the forecast, with allowances determined by rolling forward the 'base year' based on a measure of growth (ie FTE growth) derived using TOs' forecasts. In essence, we consider that using the historical analysis to only determine a starting point would be equivalent to fully relying on forecast data to set allowances. Modelled costs would be determined by

- TOs' own growth assumptions for the RIIO-ET3 period, with limited consideration of historical improvements. We do not support this approach. As we stated in our Draft Determinations, and reinforced above, this method does not sufficiently recognise the historical efficiencies that TOs have achieved over time, and therefore it should not be used in isolation.
- 5.89 Where the modelled cost calculated after applying the 30:70 weighting exceeds a TO's submitted cost, we cap the allowance at the level of the TO's submission. This capping mechanism only impacts NGET, as both SHET and SPT's submitted costs exceed their modelled costs.
- 5.90 Given the lower weighting on the historical regression, and the context in which a comparative assessment may be less applicable given the varying baseline submissions, we have considered adjustments to our approach to BPI Stage B assessment for indirect costs, as set out later in this chapter.

Econometric benchmarking approach

5.91 We have decided to retain the econometric benchmarking approach set out in our Draft Determinations for separate CAI and BSC cost models, with amendments to address errors and issues identified during the consultation period. We are using a POLS estimator and a Cobb-Douglas cost function with a log transformation. Table 20 summarises the key features of the CAI and BSC models. Our key modelling choices are discussed later in the section, and details on MEAV and statistical outputs are in Appendix 2.

Table 20: Summary of main modelling choices

Modelling choices	CAI	BSC
Estimator	Pooled OLS	Pooled OLS
Functional form	Cobb Douglas (log log)	Cobb Douglas (log log)
Time period	2014-24	2014-24
Cost drivers	Capex, MEAV	CSV

5.92 The three TOs and NGED disagreed with this approach, stating that the regression models should incorporate forecast years and use portfolio-wide data for the RIIO-ET3 period. We have chosen to reflect forecast data through revised weightings between the historical regression and forward-looking analysis. We consider this to be a more appropriate method of incorporating forecast information as it allows for TO-specific growth requirements to be better captured and avoids over-reliance on comparative assessments in a context where TOs made different forecast submissions.

- 5.93 The outcome of the comparative assessments using forecast data might be overly affected by the significantly different workload trajectories in RIIO-ET3 between TOs. This is confirmed by the fact that the models are particularly sensitive to a single TO's inclusion or exclusion. Given these limitations with the comparative assessments, there is an increased risk of the regression models being incapable of accurately capturing the variance between TOs when including forecast data.
- 5.94 SHET and SPT proposed combining the CAI and BSC regressions and incorporating RIIO-ET3 best view forecast data. 94 They raised concerns about the credibility of the separate indirect cost models, citing the wide dispersion of efficiency scores as a potential indicator of data inconsistencies or omitted variables. The two TOs suggested that using the best view forecast data and combining the models could improve data comparability and better capture anticipated growth. SHET and SPT also supported a combined approach due to concerns around data inconsistencies where TOs may have attributed a portion of BSCs to CAI cost categories. 95
- 5.95 We have compared the use of a combined regression against separate regressions for BSC and CAI and have decided that there is insufficient justification to use a combined regression. First, we checked that the misallocated costs between BSC and CAI were of a low materiality and that re-categorising these costs for the separate regressions had a minimal impact on modelled costs. 96 Almost all of the cost misallocation occurs in forecast costs rather than historical, having a very minor impact on the outputs of the historical regression, which we use in the blended analysis. Due to its insignificant impact on modelled costs, we think this is insufficient justification for a combined regression.
- 5.96 Second, CAIs and BSCs are different costs with well-defined categories in the RIGs and are affected by different cost drivers. CAI costs are associated with capital expenditure on network projects, while BSCs are less sensitive to an increase in expenditure on new projects and are more closely linked to the size and complexity of the organisation.

⁹⁴ The TOs' business plan indirect cost submissions differed in approach. SHET and SPT included indirect costs related to schemes of higher uncertainty such as those in the delivery pipeline and termed this as their 'best view' of indirect costs for RIIO-ET3. NGET tended to limit its indirect baseline submission to more certain schemes, although still included indirect costs related to UMs. In the past, baseline indirect cost requests typically related to schemes with high certainty and funded through baseline capex.

⁹⁵ NGET allocated a small portion of its BSC to CAI between 2024-2031 as a result of a different delivery model for ASTI projects. Any applicable costs will be assessed through the ASTI route, not via RIIO-ET3.

 $^{^{96}}$ The reallocation of these costs would lead to a 0.8% reduction in CAI predicted costs and a 1.6% increase in BSC predicted costs per TO on average.

- 5.97 Third, the CSV is harder to calibrate when applied to combined costs compared to only being applied to BSC. The inclusion of capex as a driver in the CSV by SHET and SPT and the re-weighting of the four drivers (FTE, MEAV, totex, and capex) introduces more complexity and additional risks. A miscalibration of the CSV, for example, can lead to a systematic under-recovery of one indirect cost category and over-recovery of another.
- 5.98 Finally, we have tested the efficacy of the outputs of the combined regression using both SHET and SPT proposed CSV weightings. While the results are statistically significant in both cases, we are concerned that modelled costs for two of the three TOs are materially higher than submitted, suggesting the combined model could be overfitted, indicating it may be a poorer predictor of efficient costs. When comparing the efficiency scores for both historical period and for the RIIO-ET3 period we have found that the combined regression has a wider spread of scores than both the 30:70 blended approach between historical regressions. This indicates that the combined regression models are less efficient in terms of predicting costs compared to the approaches. We provide the results of this analysis in more detail in Appendix 2.
- 5.99 We acknowledge that separate regression models with best view forecast data reduced the spread of efficiency scores relative to the historical regression models. However, the robustness checks we performed highlight reliability and variability concerns with best view data. We again see that adjusting the weighting between the historical regression and forward-looking analyses is a more effective way to reflect forecast data, for the same reasons stated prior, and addresses concerns around data comparability and model sensitivity.

Closely Associated Indirects (CAI)

5.100 In this section we discuss CAI-specific aspects of our assessment methodology. Historical regression

5.101 We have decided to retain the use of a blended approach using regression modelling and forward-looking ratio analysis.

⁹⁷ The highest and lowest efficiency scores for the combined regression (using SPT's CSV weightings with the TOs' best view of expenditure up to 2031) are 1.41 and 0.57, respectively, for RIIO-ET3 costs. By comparison the highest and lowest combined efficiency scores for the separate CAI and BSC regressions using the best view of expenditure are 1.19 and 0.81, respectively, showing a tighter spread. This pattern is consistent across different regressions and time periods.

- 5.102 We have decided to retain the POLS multi-variate regression using historical data (2014-24) to assess CAI across the three TOs using capex and MEAV drivers. We have implemented amendments to the modelling approach following stakeholder feedback including the removal of the time trend variable and exclusion of outlier data points.
- 5.103 All three TOs expressed concerns with the regression model validity. SPT and SHET argued the negative time trend was statistically insignificant, did not improve model robustness and lacked supporting economic or engineering rationale. We agree and have decided to remove the time trend on the basis that it is statistically insignificant and unclear what unobserved time effects are being captured. SHET identified an outlier data point and suggested its removal, to improve both the model statistics and robustness. In response, we further tested our model by looking for outliers and influential observations. We inspected the data to identify observations with an 'unusual' value of capex or MEAV. We also relied upon regression plots and statistical measures of influence to identify data points with large residuals. Following the identification of one or more potential outliers, we applied a process of elimination to observe the change in model output resulting from excluding the selected data points. This was to ensure model results were not over-representative of a single or few data points. Our investigation identified three additional observations that introduced a significant amount of uncertainty (ie noise) in the estimation of the regression coefficients, without explaining much of the relationship between costs and drivers. We have removed these four data points to improve the robustness of the model.
- 5.104 We have decided to retain the use of RIIO-ET2 cost drivers (capex and MEAV) as we consider the rationale set out in our Draft Determinations remains valid. 98 SPT proposed reducing the weight given to MEAV and giving a higher weighting to capex and FTE drivers, arguing MEAV reflects historical investment rather than future investment requirements and that FTEs better capture anticipated growth. We consider capex and MEAV as economically sound and complementary drivers for CAIs, each capturing costs closely linked to the delivery of capital projects and related to the scale of the network. Although FTEs relate to all activities carried out by a company, it also includes those which are not closely linked to project delivery. However, as a robustness check, we still tested the CAI model using capex and FTEs as cost drivers. The specification did not improve model performance. On the contrary, the capex variable becomes statistically

⁹⁸ Draft Determinations ET Annex, paragraph 5.111

insignificant, and the RESET test strongly indicates misspecification of the model, suggesting omitted variables or non-linearities. Further, high correlation between capex and FTEs inflates the standard errors, reducing significance and indicating multicollinearity between these drivers. We consider MEAV is an important driver of costs which can be evidenced through its highly significant coefficient across various model specifications. Based on these results, we do not consider there to be a strong case to include FTEs in the CAI model or to reduce the weight given to MEAV.

Ratio analysis

- 5.105 We have decided to retain the TO-specific ratio analysis, using the median CAI to capex and CAI to MEAV ratios on the RIIO-ET3 period. All three TOs expressed concerns with the approach, with SPT and SHET arguing the chosen 50:50 weighting with the historical regression was insufficient to capture their required growth. To address this concern, we have changed from our Draft Determinations position and decided to increase the weighting of the ratio analysis from 50% to 70% for the reasons described in the earlier section 'Blending analyses'.
- 5.106 We have decided to retain the use of the median for the ratio analysis. SHET was concerned the use of the median ratio would 'flatten' the expenditure profile. It argued this approach penalises companies who have forecast year-on-year CAI costs with higher peaks and troughs and suggested the mean would better preserve the submitted profile. We disagree and consider that the median remains appropriate given a small sample size of 5 data points, which would be disproportionately affected by outlier years. For example, SHET has forecasted unusually low capex in the last year of RIIO-ET3, around 60% lower than the average of the first four years. When testing alternative benchmarks, we found that using the mean would make the ratio over-representative of the investment in this year, which could be atypical or capture a measurement error. The median supports a more stable and consistent approach to establishing the CAI to capex and CAI to MEAV ratios across TOs.
- 5.107 We have revised the capex driver used to calculate the CAI to capex ratio. This adjustment seeks to more closely align with the list of baseline schemes at the point of the baseline CAI resubmission requested through SQs in July. In the SQ request, TOs were asked to provide CAI based on the schemes considered baseline at the time. Since the resubmission of baseline CAI, further reprofiling of schemes has occurred and the final view of baseline schemes has been used for the capex driver used to model allowances. We consider it more robust to derive

- the CAI to capex ratio on costs which were constructed on a more comparable set of baseline schemes per the reprofiling at the time of resubmission.
- 5.108 We have decided to retain the TO-specific nature of the ratio analysis. NGET welcomed the inclusion of forecast data in the ratio analysis, as a shift away from the RIIO-ET2 approach which relied solely on a historical regression. However, it was concerned the TO-specific design lacks cross-TO benchmarking and therefore weakens efficiency incentives and potentially rewards less efficient TOs with higher allowances than more efficient peers. It was also concerned that data inconsistencies could result in TOs being funded on different bases, complicating the expectations on what pipeline indirect costs should cover. We disagree that the ratio-derived allowances will result in inconsistent treatment of CAI funding for pipeline schemes. Following our Draft Determinations, we requested updated baseline CAI submissions and, through SQs and other engagement, all TOs confirmed their forecasts were inclusive of fixed growth costs associated with their expected volume of work in RIIO-ET3. We acknowledge TOs took different approaches to providing baseline CAI forecasts and as such the chosen model does not include a comparative assessment on RIIO-ET3 costs. Although, their approach may have varied in how they apportioned CAIs related to growth, ie non-project specific costs, were included, there remains an opportunity to recover these costs through the CAI UIOLI and the ASTI funding framework. Regarding efficiency incentives, the ratio analysis is a recognition of the unique circumstances in terms of scale for RIIO-ET3, and a more explicit efficiency assessment is addressed through the regression analysis accounting for 30% of final modelled allowances. This approach is consistent with the Cunliffe review recommendation to give greater consideration to company-specific conditions and challenges.99

Disaggregation

5.109 We have decided to retain our Draft Determinations position that disaggregating CAIs into 'very' and 'other' CAIs and combining BSCs with 'other' CAIs is not preferable, and the rationale set out in our Draft Determinations remains valid. 100 In its response, SPT maintained that a combined regression remains the most

⁹⁹ Independent Water Commission: review of the water sector - GOV.UK https://www.gov.uk/government/publications/independent-water-commission-review-of-the-water-sector

¹⁰⁰ 'Very' CAI activities are those which are very closely associated with the capex program and the physical delivery of infrastructure (includes Project Management, Network Design and Engineering). 'Other' CAI activities include the remaining CAI sub-activities which are more generalist and reflective of the broader portfolio and network scale (eg logistics and transport).

¹⁰¹ Draft Determinations, ET annex paragraphs 5.117 to 5.119

robust method and warranted investigation, nonetheless it suggested alternative improvements to the modelling approach set out in our Draft Determinations. NGET considered 'very' and 'other' cost categories unsuitable since projectspecific costs remain classified as 'other' and would be more appropriately evaluated using a capex workload driver. It argued a capex/opex split following accounting definitions would better align with cost drivers and ensure consistency. Though it recognised that, due to time and data constraints, this type of disaggregation could be explored for future price controls rather than for RIIO-ET3. As highlighted in our Draft Determinations, and noted in NGET's response, the disaggregation of CAI cost categories into 'very' and 'other' is not straightforward. This was corroborated by high correlational strength with capex for some 'other' cost categories indicating these could be considered 'very' closely associated with workload. Additionally, as highlighted in our Draft Determinations, the practical issues remain where funding 'other' CAIs on a portfolio basis with BSCs would misalign with existing frameworks, as very and other CAI costs are both recovered through strategic investments such as ASTI or re-openers. Therefore, combining BSCs and other CAIs would mean a reworking of the funding framework across various mechanisms.

Contractor indirects

5.110 We have decided to retain our Draft Determinations approach to the assessment of baseline contractor indirect allowances. NGET commented on the assessment, and it agreed with the decision to separately assess these costs and for this to be aligned with the outputs of the PAM.¹⁰² In its response, SHET was concerned on how efficient funding of contractor indirects for pipeline schemes would be provided. Contractor indirects for UMs can be recovered through either the CAI UIOLI or PCF allowances, depending on what category the costs fall under. TOs are to allocate funding according to the RIGs.

CAI UIOLI allowance

5.111 We have decided to retain the level of funding for the initial CAI UIOLI allowance at 10% of capital expenditure for applicable load projects. The initial 10% allowance is based on 5-year forecast capital expenditure of load projects below £150m, and applies to schemes under the Load Re-opener, Generation and

¹⁰² We have applied the scheme-level benchmarking approach discussed in the load and non-load capex section of this chapter. Under this approach, if a project's total capex cost is below the benchmark, the contractor indirects submitted for the project will be allowed in full. If the cost exceeds the benchmark, the indirect costs will be reduced proportionally based on the difference between the benchmark and the submitted project capex.

Demand Connections Volume Driver and Load UIOLI. While SHET and SPT supported the flexibility provided by the CAI UIOLI, all three TOs expressed concerns that the funding level was insufficient. They requested greater clarity on how efficient indirect costs would be funded and noted reliance on a top-up mechanism could introduce complexity, regulatory burden and delay access to funding unless the top-up process is mechanistic. We have designed a top-up process which will be set out in the licence and RIGs where TOs will be able to apply for further CAI UIOLI allowances once 80% of the initial pot has been used. The ongoing reporting requirements of CAI UIOLI expenditure and accompanying data required from TOs when applying for a top-up will help to streamline the process and minimise regulatory burden, thereby decreasing the risk of delays to further CAI allowances. We consider this approach remains appropriate in protecting consumers given the uncertainty around volume delivery. The inperiod flexibility ensures funding is provided when delivery is more certain and costs are justified.

- 5.112 For Load Re-opener schemes, the CAI UIOLI will be provided in addition to PCF allowances, resulting in a total indirect funding provision of 18.2% upfront for projects under the materiality threshold, with the flexibility to allocate more or less funding from the CAI UIOLI allowance. We consider this level of upfront funding sufficient to support delivery and growth in RIIO-ET3 while protecting consumers from the risk of overfunding. It promotes cost discipline and accountability through enhanced reporting requirements, including separate reporting of contractor indirect costs, which have previously lacked granularity. This will be supported in the assessment of top-up applications, and when delivery volumes become clearer. Any unused funding will be returned to consumers, ensuring they only pay for what is delivered.
- 5.113 We have decided to keep the CAI UIOLI funding for pipeline schemes, as a distinct allowance separate from PCF allowances. SHET proposed combining PCF, CAI and contractor indirects funding into a single UIOLI pot with an additional uplift for 'other' CAI to reflect wider business growth, as it felt this would be simpler in implementation. NGET suggested replacing the CAI UIOLI with either a gross capex assessment or an indirect scalar like the RIIO-ET2 opex escalator. We do not agree with either proposal. Combining the PCF and CAI allowances would introduce complexity around clawback arrangements, particularly given the differing scope of UMs covered by PCF and CAI funding. RIGs clearly distinguish the activities covered by each pot, and TOs are expected to follow this framework when allocating spend. We will be enhancing future reporting requirements for

- both PCF and CAI expenditure. Additionally, the alternatives proposed by NGET would not provide the upfront flexibility TOs have requested to support growth. We consider the CAI UIOLI mechanism to remain the most appropriate and flexible route for funding efficient indirect costs on pipeline schemes falling under the materiality threshold.
- 5.114 We have changed our position from our Draft Determinations to include Load UIOLI within the scope of the CAI UIOLI. All three TOs expressed concerns that load projects below £25m would not have a route to indirects funding as although these projects are lower materiality, in summation they present a material funding gap. We have acknowledged stakeholders' feedback around concerns of a funding gap and, considering the policy change to increase the materiality threshold of Load UIOLI projects to below £40m would have further increased the potential funding gap, we have included this within the scope of the CAI UIOLI. This means 10% of the capex provided for the Load UIOLI has been included in the initial CAI UIOLI allowance, and TOs can utilise the CAI UIOLI flexibility to support delivery of Load UIOLI projects as required.
- 5.115 We have decided to retain the materiality threshold of £150m for determining load projects in scope for the CAI UIOLI. Load projects exceeding this threshold and all non-load projects of any materiality will continue to receive indirects funding through project assessment. SPT questioned whether the threshold was set too low and suggested only bespoke projects should be excluded from the CAI UIOLI scope. It also sought greater clarity on how indirect costs would be assessed through the project assessment process. We do not consider the identification of bespoke projects to be a practical or consistent basis for defining scope, as this would be difficult to apply across a wide range of scheme types. Instead, we view the materiality threshold as a clear and effective proxy for identifying projects where there is greater uncertainty around indirect cost requirements. Larger, more complex schemes are more likely to require tailored assessment, and the threshold helps ensure that funding is aligned with the scale and nature of delivery risk.
- 5.116 We have decided to retain our Draft Determinations position and remove the RIIO-ET2 opex escalator for RIIO-ET3. Of four responses related to ET, SHET and NPg were broadly supportive of the opex escalator removal for RIIO-ET3, with SHET noting this is contingent on clear guidance for funding routes across the CAI UIOLI, PCF allowances and project assessment. SPT had a neutral position. It was concerned that the CAI UIOLI could increase the risk of underfunding, however if this was addressed then it saw justification in removing the opex escalator. NGET

maintained a gross capex assessment of pipeline schemes would be simpler and could involve a light-touch assessment to speed up approvals. It suggested an alternative would be a well-calibrated indirect scalar that could provide certainty to TOs on funding and reduce regulatory burden. Ahead of our Draft Determinations, we engaged with TOs on re-calibrating the opex escalator, however all rejected our proposal to adjust historical data for contractor indirects using their estimates. NGET and SHET expressed concerns on data quality more generally, and SPT added CAI costs are incurred early in the project process and a lack of upfront funding could constrain delivery. We consider these arguments, which informed our Draft Determinations position, as still valid. Taking these points into account, we consider the replacement of the opex escalator with the CAI UIOLI to be a more suitable approach for funding CAIs for UMs and provides flexibility where volumes of work are uncertain.

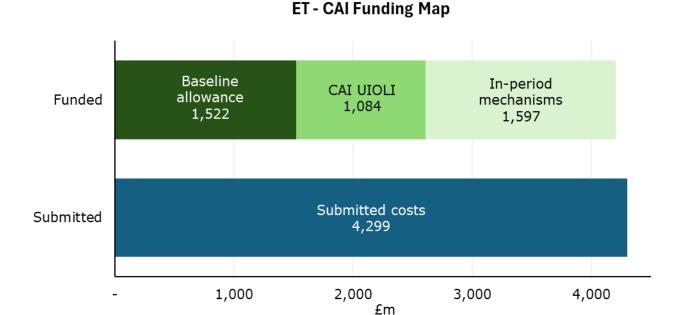
- 5.117 We have decided to retain the RIIO-ET2 opex escalator only for existing RIIO-T2 schemes seeking additional funding through RIIO-ET3. Legacy RIIO-ET2 UMs which fall under the opex escalator licence condition will continue to receive CAI funding, delivered automatically via the new RIIO-ET3 licence term, Legacy Opex Escalator (LOEt). We have amended our position from Draft Determinations and decided the LOEt will not include a NOCs uplift. While we remain committed to providing CAIs on a consistent basis for these T2 schemes, we are mindful that a NOCs uplift could introduce a risk of double funding.¹⁰³
- 5.118 The size of the CAI UIOLI is £468m for NGET, £399m for SHET and £217m for SPT. The indirects allowances presented in this chapter are exclusive of the CAI UIOLI amount.

CAI funding map

5.119 Figure 7 illustrates the submitted costs (on a best view basis) across all three TOs and the mechanisms through which these submissions will be funded. It excludes separately assessed costs and costs funded through mechanisms outside of CAI. The gap between total submitted costs and funded amounts reflects ongoing efficiencies or specific exclusions. The in-period mechanisms to flex CAI allowances will include the CAI UIOLI top-up mechanism and project assessments.

¹⁰³ The RIIO-ET2 opex escalator includes a NOCs uplift for load UMs which is provided after asset energisation. The removal of the NOCs uplift is not expected to lead to material underfunding as most network expansion occurs at the end of RIIO-ET3. This means that TOs will primarily begin maintenance in the next price control period, with NOCs for these assets captured in RIIO-ET4 baseline allowances and interventions in RIIO-ET3 likely covered under warranty.

Figure 7: CAI funding map



Business Support Costs (BSC)

5.120 In this section we discuss BSC-specific aspects of our assessment methodology. Historical regression

- 5.121 We have decided to retain the use of a POLS multivariate regression using historical data (2014-24) to assess BSC across the three TOs, using a CSV as a driver. Following stakeholder feedback, we have implemented several amendments to the model, including adjusting the CSV, updating the FTE data used and removing the GT sector from the sample.
- 5.122 Two TOs suggested increasing the weighting of FTE data in the calculation of the CSV. To achieve this, SPT suggested reallocating the CEO office and property management costs to FTEs. We believe the reallocation is appropriate as headcount is an important driver of these costs. The adjustment results in revised weighting between totex, FTEs and MEAV that place greater emphasis on FTEs. 104 We agree with the two TOs that this adjustment better reflects the relationship between BSC costs and its underlying cost drivers.
- 5.123 All TOs raised concerns about data inconsistencies in the submitted cost and driver data. Additionally, SHET and SPT disagreed with the rescaling we applied to FTEs to determine values to use in the regression. In response, we requested updated data from all TOs to ensure consistency across submissions. The updated

¹⁰⁴ The updated weights are as follows: 9% for totex, 55.7% for FTEs, and 35.3% for MEAV.

- data has also enabled us to calculate modelled costs more accurately without the need to rescale FTEs.
- 5.124 In our Draft Determinations we had a cross-sector approach to BSC for ET and GT and included a GT dummy in the regression. The TOs stated that there are significant sectoral differences which made the inclusion of GT in the regression inappropriate. Additionally, NGET highlighted concerns regarding complexities and confidentiality risks from cross-sector data sharing. We agree with TOs and consider this an appropriate change given the increasing divergence in size and scale between sectors under RIIO-ET3. We have revised our cross-sector approach to BSC benchmarking by removing GT from the historical regression.¹⁰⁵

Trend analysis

- 5.125 We have decided to retain the approach set out in our Draft Determinations, using TO-specific trend analysis to capture expected growth in RIIO-ET3. In the trend analysis we use BSC cost data at the end of RIIO-ET2 (2026) and calculate TO-specific modelled costs by applying the trend of FTE growth to BSC forecast costs.¹⁰⁶
- 5.126 SPT and SHET raised concerns about the sensitivity of the trend analysis to the choice of starting year, with one suggesting the use of a five-year average rather than a single year's data. We have maintained our approach of using 2026 as the starting point as we believe this best accounts for the position the TOs consider that they will be in at the end of RIIO-ET2 for the step change into the next period. We have also conducted robustness checks using alternative time trends and checking for outlier years to validate this approach.¹⁰⁷
- 5.127 NGET noted that data inconsistencies had resulted in it not receiving an uplift from the trend analysis due to the application of the capping mechanism. In response, we have used updated data from all TOs to ensure that the capping mechanism is applied consistently across TOs.
- 5.128 NGET expressed concern that the BSC trend analysis lacks a comparative assessment and places too much weight on forecast data, potentially rewarding inefficiency. As discussed in previous sections, we apply a blend of the historical

 $^{^{105}}$ The impact on unadjusted BSC modelled costs for the RIIO-ET3 period from removing GT is an 8% increase for NGET, 3% for SHET and 0% for SPT.

¹⁰⁶ For NGET we have removed ASTI-related FTEs from the trend analysis as these overheads will be funded through ASTI. This does not apply to SHET and SPT as they will not have these overheads funded through ASTI.

¹⁰⁷ We tested using 2024, 2025, and a five-year average as starting points, and confirmed that 2026 costs align with previous cost trends and is not an outlier year.

regression and trend analysis to strike a balance between the comparative assessment and forecast data given the RIIO-ET3 circumstances. Furthermore, as also outlined in previous sections, we acknowledge that TOs have submitted projections that reflect the bespoke requirements and pace at which they need to scale their organisations. Therefore, given these circumstances, we consider our trend analysis to be appropriate. We are also of the view that our approach does not reward inefficiency. Our assessment methods ought to be considered in the context of the whole framework, not in isolation, as implied by NGET. We consider the balance of our efficiency assessment of indirect costs (ie combination of benchmarking and TO-specific analysis) and the wider cost assessment framework for RIIO-ET3 to be adequate in striking the balance between controlling costs while supporting TOs' growth.

BSC Re-opener

- 5.129 We have decided to retain our approach from Draft Determinations to include a BSC Re-opener in addition to ex ante allowances. This mechanism is intended to provide a route for TOs to seek additional funding where growth materially exceeds what is already accounted for in the ex ante allowances. The three TOs and NGED were opposed to the BSC Re-opener, instead advocating for an automatic, proportional adjustment mechanism. We do not consider an automatic adjustment to be appropriate in this context. Salaries can be volatile, as demonstrated by the shocks that hit the economy in recent years, like the COVID-19 pandemic and 2022 energy crisis, and consumers could be paying too much or too little as a result. 108 We would also expect TOs to achieve economies of scale as they expand their operations. We are concerned that automatic adjustments could prevent these benefits from being passed on to consumers, in part or in full. This is not in the best interest of consumers and therefore it cannot be accepted. However, the consultation responses also raised other concerns regarding the BSC Re-opener, which we have addressed through targeted amendments.
- 5.130 All four respondents expressed concern that the 15% materiality threshold applied to both non-variant totex and BSC outturn costs was too high. Following our analysis, which also considered RIIO-ET2 spend to date, we agree with stakeholders that it would have been difficult to trigger the BSC Re-opener. We have revised the threshold to a single trigger, which will apply if BSC outturn costs exceed 10% of its allowance. This 10% is aligned with the middle threshold

¹⁰⁸ Average weekly earnings in Great Britain - Office for National Statistics.

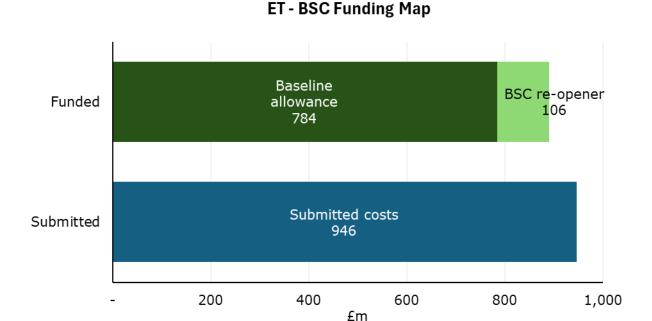
- of the TIM. We consider the 10% materiality threshold to be balanced and pragmatic. This level ensures that the threshold is achievable for TOs, allowing access to additional BSC funding when needed and in a timely manner, particularly given the expected growth and delivery challenges in RIIO-ET3. However, it also requires a material level of overspend to trigger the mechanism as setting the threshold too low could reduce TOs' cost efficiency incentives and lead to re-opener applications for minor cost increases that TOs could reasonably absorb through efficiencies.
- 5.131 The 10% materiality threshold will be assessed annually. We considered, but rejected, a cumulative threshold approach. A cumulative threshold would delay TOs accessing the BSC Re-opener where underspend occurred in earlier years, forcing them to absorb material cost increases through efficiency measures in the interim. This goes against the intent of the mechanism to provide additional BSC funding when needed and in a timely manner for material cost increases.

 Moreover, a cumulative approach could create perverse incentives for inefficiency, as TOs might avoid efficiencies that result in underspending to ensure future eligibility for the re-opener.
- 5.132 The three TOs also raised concerns about the single mid-period application window for the BSC Re-opener. Respondents had conflicting views. SPT and SHET argued that the application window should be brought forward to ensure they can size their organisation ahead of delivering the CP2030 commitments. NGET, on the other hand, argued that the majority of CP2030 upgrades would be at an early stage of development in year 3, implying the re-opener window is too soon. We agree with the three TOs that the differing needs and investment timelines require greater flexibility, and have decided to revise the approach to allow each TO to submit a single application at any point during RIIO-ET3. In line with our overall approach to the assessment of indirects, this change ensures the mechanism is responsive to the varying circumstances of each TO.

BSC funding map

5.133 Figure 8 illustrates the submitted costs (on a best view basis) across all three TOs and the mechanisms through which these submissions will be funded. It excludes separately assessed costs and costs funded through mechanisms outside of BSC. The gap between submitted costs and funded amounts reflect ongoing efficiencies or specific exclusions.

Figure 8: BSC funding map



Separately assessed costs

- 5.134 For operational training and wayleaves costs, we are maintaining our position from our Draft Determinations to separately assess these costs and retain the decision to allow these costs in full for the reasons outlined in that document.

 All four respondents agreed with the use of a separate assessment for operational training. NGED added it agreed with the separate assessment of wayleaves also, where these costs do not have the same drivers as core CAIs and would welcome a similar approach for the ED price control.
- 5.135 Different to our Draft Determinations, we have decided to separately assess SPT's EV leasing costs. NGET has a purchasing approach to EV procurement, and therefore these costs do not fall under CAI but are considered non-operational capex. The funding for EV leasing and purchasing for SPT and NGET will be provided through the Operational Transport Emissions Reduction PCD, please see Chapter 4 of the Overview Document for more information. SHET's EV leasing costs are not subject to the PCD due to a lack of applicable outputs, described further in the Overview Document. SHET's vehicle and transport costs are included in the baseline modelling approach, and it will have the opportunity to recover additional costs beyond the baseline allowance through either the CAI UIOLI or project assessment for load projects in scope. The accompanying

 $^{^{109}}$ Draft Determinations, ET annex paragraphs 5.144 and 5.145

- reporting on CAI UIOLI expenditure will require detail of EV leasing costs and we expect network companies to apply the efficient PCD unit costs.
- 5.136 For insurance, we have decided to amend our approach from Draft
 Determinations which benchmarked onshore and offshore costs together using
 RIIO-ET3 forecasts and network length as a driver. The three TOs and NGED
 disagreed with the approach from our Draft Determinations and NPg had no
 comments on the approach. All three TOs and NGED argued that insurance should
 be assessed qualitatively. SPT specifically proposed that subsea insurance should
 be bespoke, while NGET suggested separating onshore and offshore costs. All
 three TOs and NPg argued that network length was not an appropriate driver and
 proposed additional drivers to include alongside network length if benchmarking
 was to be undertaken.
- 5.137 We agree with stakeholders that onshore and offshore insurance costs differ enough that we should treat them differently, so we have amended our approach from Draft Determinations. We have qualitatively assessed TOs' submissions for offshore insurance and have decided to allow the submitted costs in full. We separately benchmark onshore costs using RIIO-ET2 and RIIO-ET3 forecasts. We have updated the benchmark to use data across RIIO-ET2 and RIIO-ET3, whereas we only used RIIO-ET3 forecasts in our Draft Determinations. We consider this is appropriate for an onshore-only benchmark as our data confirms that onshore costs are more stable across price control periods than offshore costs, making RIIO-ET2 a useful comparator when looking at onshore costs alone. We think that it is appropriate to use network length when benchmarking onshore costs alone, as the feedback from TOs and our data suggest that it is specifically offshore insurance that had a weak correlation with the network length driver.
- 5.138 For the cost of the pension scheme admin and PPF levy we have decided to maintain our position from Draft Determinations to separately assess these costs due to the costs not being consistent between TOs. Given that these costs are consistent with historical trends, we are allowing them in full. All four respondents agreed with our approach.
- 5.139 We have excluded Community Benefit Funding from assessment, consistent with our approach at Draft Determinations. For more on Community Benefit Funding, see Chapter 4. We have also excluded any cost adjustments for government's update to the Employers' National Insurance for consistency across TOs.

Modelled costs

5.140 Table 21 and Table 22 show our modelled costs for indirects against TOs' submissions and our Draft Determinations modelled costs. The columns showing the differences compare our modelled costs in our Final Determinations with TOs' submitted costs.

Table 21: CAI modelled costs (£m, 2023/24 prices)

то	RIIO-ET3 submitted	Ofgem DD	Ofgem FD	Difference	Difference (%)
NGET	766.4	652.6	725.7	-40.8	-5.3%
SHET	639.6	484.0	609.5	-30.1	-4.7%
SPT	619.7	395.5	566.2	-53.5	-8.6%
Total	2,025.7	1,532.1	1,901.4	-124.4	-6.1%

Table 22: BSC modelled costs (£m, 2023/24 prices)

то	RIIO-ET3 submitted	Ofgem DD	Ofgem FD	Difference	Difference (%)
NGET	599.7	517.0	539.8	-59.8	-10.0%
SHET	802.7	526.4	700.5	-102.2	-12.7%
SPT	385.4	236.9	319.8	-65.6	-17.0%
Total	1,787.7	1,280.3	1,560.0	-227.7	-12.7%

5.141 Modelled costs for CAI and BSC have increased for all TOs from our Draft Determinations. This is reflective of the 30:70 weighting approach we have adopted, and all other changes discussed in this section, to better reflect the step up in investment needs for TOs in RIIO-ET3. The CAI modelled costs are exclusive of the CAI UIOLI.

Other costs

Background

5.142 Other costs consist of physical security and cyber security. Physical security costs are costs associated with responding to government mandated security changes, for new sites and to replace IT and Technical assets during the price control. 110

¹¹⁰ RIIO-T2 Regulatory Instructions and Guidance https://www.ofgem.gov.uk/sites/default/files/2025-04/2024-25-RIGs-V1.9-RIIO-T2-ETclean-Published.pdf

This does not include any BAU physical resilience costs, which are categorised as asset 'Physical Site Security' under non-load related capex.

5.143 In our Draft Determinations, we proposed a high level quantitative assessment for total Physical Security Capex and Physical Security Opex costs using the lower of RIIO-ET2 and RIIO-ET3 unit costs, combined with engineering qualitative assessment. We proposed that ex ante allowances for Physical Security Capex and Physical Security Opex would be subject to the Physical Security PCD. Unlike at RIIO-ET2, no new sites were submitted in baseline, therefore we introduced a Non-Load Re-opener for any new sites that are identified through government mandated security changes during RIIO-ET3.

Final Determinations summary and rationale

Final Determinations summary

Design	Final Determination	Draft Determination
Physical Security	High level quantitative assessment for total Physical Security Capex and Physical Security Opex costs using the lower of RIIO-ET2 and RIIO-ET3 unit costs, combined with engineering qualitative assessment. Modelled baseline allowances subject to the Physical Security PCD. Introduction of a Non-Load Re-opener for any new sites responding to government mandated security changes during RIIO-ET3.	Same as FD.
Cyber Security	See Chapter 12 of the Overview Document.	Same as FD.

<u>Final Determination rationale and Draft Determination responses</u>

- 5.144 We have decided to retain our Draft Determinations approach for Physical Security costs.
- 5.145 SHET largely agreed with the assessment approach but encouraged the use of qualitative assessment where costs are not benchmarkable. It suggested that we revisit the materiality thresholds for qualitative assessment so fewer material projects are automatically approved. SPT agreed with the quantitative assessment and the level of aggregation but noted that we should allow RIIO-ET2 costs submitted after the re-opener window in the first year of RIIO-ET3.
- 5.146 NGET did not agree with considering the lower of RIIO-ET2 and RIIO-ET3 unit costs but acknowledged a quantitative approach could be appropriate. It proposed that we adopt an assessment approach that considers the forecast costs rather

¹¹¹ Draft Determinations ET Annex, paragraphs 5.158-5.159

- than relying on historical unit costs. NGED considered the assessment too simplistic, noting that there should be more consideration of why RIIO-ET3 unit costs may be higher. It argued that a qualitative approach would better account for company-specific factors and the evolving security landscape.
- 5.147 Unlike at RIIO-ET2, no sites were submitted in baseline under the New Sites category. Should government approve the needs case for any during RIIO-ET3, these will be subject to the Resilience Re-opener, described in Chapter 5 of the Overview Document. We agree with SPT that RIIO-ET2 costs submitted after the RIIO-ET2 re-opener window should be included in the first year of RIIO-ET3 so have amended our modelling to reflect this. These are RIIO-ET2 costs associated with two new sites identified by the Department for Energy Security and Net Zero (DESNZ). The notification came after the RIIO-ET2 re-opener window so we agree these costs require a funding route. We disagree with NGET that RIIO-ET2 unit costs are not reflective of RIIO-ET3 unit costs. We have not seen any evidence to suggest that RIIO-ET2 total unit costs for the IT Asset Refresh, Technical Asset Refresh and Owned Sites categories of Physical Security costs are not reflective of RIIO-ET3 total unit costs. Therefore, we still consider it appropriate to undertake a quantitative assessment on these costs at a total level, taking the lower of RIIO-ET2 and RIIO-ET3 unit costs for consistency with our quantitative assessment approach for NOCs. Ex ante allowances for Physical Security Capex and Physical Security Opex will be subject to the Physical Security PCD. 112 Our modelled costs for Physical Security are set out in the company annexes.
- 5.148 In line with our Draft Determinations, we have decided not to allow SHET's submitted costs to protect from cost escalations in the contracting stage. For the assessment of cyber security costs, see Chapter 12 of the Overview Document.

ET Engineering Assessment Overview

Our Assessment

<u>Overview</u>

- 5.149 In our Draft Determinations we set out our review findings. This was detailed in each company annex. This included all EJPs which were partially or not justified, along with detail on the types of information we required through consultation responses to update our analysis to Justified.
- 5.150 All TOs with partially or not justified EJPs took opportunities to provide additional detail to their original EJP proposals, and in NGET's case additional submissions to

¹¹² Chapter 4 of the Overview document.

- its original business plan. These NGET changes were not anticipated and caused some data issues and reconciliation concerns between the EJPs and the BPDTs.
- 5.151 We have reviewed the resubmitted information, and engaged in TO bilateral discussions and site visits to ensure we have considered as much evidence, both written and physical, as possible. We selected the site visit locations based on a range of justified and unjustified EJPs. This supported not only the investments related to those specific sites, but the wider portfolio of investments.

<u>Interaction with NESO Network Service Procurement Tenders</u>

- 5.152 Some of our Draft Determination proposals were based on our understanding of the NESO's position regarding a range of pathfinder reactive tender requirements (Network Service Procurement Tenders). Our Draft Determination position was that TOs were best placed to deliver these works, but further discussions with the NESO has suggested that there may be instances where TOs are not best placed.
- 5.153 As we have approved a range of investments contained within the APM related to these projects, we are not proposing to change our position at this time. This is on the basis that while the TOs may not be best placed to deliver these works in all instances, the interventions proposed will minimise future consumer detriment. TOs should continue to engage with NESO regarding substation bay capacity in line with whole systems licence conditions with respect to Network Service Procurement Tenders.
- 5.154 We understand that in areas such as voltage and stability control there is some uncertainty around SQSS requirements which could lead to significant potential consumer detriment through a lack of a coordinated approach. We expect TOs and the NESO to work together to establish a common framework to manage and trade off this uncertainty, to support our assessment of Load Re-opener submissions until there is an industry led code modification for SQSS. We note that the NESO made a RIIO-ET2 commitment to review the SQSS, which continues as a part of its third business plan (BP3). We set out our expectation¹¹³ that this review of the SQSS is relevant in NESO's establishing of the foundations needed to deliver strategic energy plans, and that NESO should have progressed this by the end of BP3/RIIO-ET2.

https://www.ofgem.gov.uk/sites/default/files/2025-05/Business-Plan-3-Final-Determinations-National-Energy-System-Operator.pdf, paragraph 3.14

NLRE Assessment

Data Provision & NLRE Expenditure

- 5.155 SHET and SPT broadly agreed with our engineering assessment of their NLRE plans. NGET did not agree with our engineering assessment in a range of areas. We had very limited responses from other stakeholders for NLRE assessments.
- 5.156 We have used a range of data points from EJPs to establish the NLRE recommendations for the sector. For SPT and SHET we used NARM data as our primary source of information. We consider this information has a close correlation to the assets that are proposed for intervention.
- 5.157 For NGET there are multiple risk categories and as such using NARM scores as the primary data point was challenging for us to analyse because we had correlation issues between the NARM score, NGETs other risk categories, and what was presented in its EJPs. We therefore used the End of Life (EoL) scores provided by NGET. NGET has also raised concerns regarding our use of EoL scores as it considers this does not address a sufficiently wide range of risk factors and so we have decided to use a different approach for the majority of NGET's NLRE plan. Please see the NGET Annex for further information.
- 5.158 We expect all TOs to work with us and each other on NARM revisions for RIIO-ET4.

LRE Assessment

Overview of changes

- 5.159 Our Draft Determination proposals were broadly consistent for SPT and SHET for projects included within baseline. SHET has had the optioneering position altered from not justified to partially justified for one major CP2030 project. SHET also provided additional information on projects contained within its Load UIOLI.
- 5.160 NGET had a number of baseline investment proposals which we had concerns within our Draft Determinations. In some cases, we have altered our view based on the information that NGET has provided. NGET has updated its choice of OHL conductors for a large portion of LRE and those investment costs are no longer certain. As a result, we have decided to move these projects from baseline to within the scope of the Load Re-opener.

Future Optionality and Pre Approval of Solutions by Engineering (PASE)

5.161 In our Draft Determinations we proposed the use of PASE to ensure that works could progress through the Load Re-opener Track 2 process. We retain the view

- that the options which PASE prioritises will generally result in future optionality as a by-product.
- 5.162 We received a range of responses on this from TOs, who all questioned the contents of PASE in three broad ways. Firstly, that PASE did not include a wide enough range of solutions, ranging from voltages to asset types. Secondly, that as the range of solutions considered was narrow this may drive excessively expensive actions for limited consumer benefit. Finally, there was a lack of clarity on how PASE integrated with NESO's ETDP.
- 5.163 In addition, TOs raised concerns that PASE will prevent them from undertaking certain types of projects, which we do not agree with. PASE does not define the optioneering a TO should undertake, but sets some of the criteria for projects to use Track 2 of the Load Re-opener. This will help to reduce the regulatory burden and clarify where we consider it is appropriate to accelerate our assessments. TOs can express a preference for Track 2 or Track 3 under the Load Re-opener, and PASE compliance can be one of the factors impacting their decision making when they do so, but it should not be the only factor. Projects that are not PASE compliant will be treated on their own merits.
- 5.164 In response to the points raised, we have proposed the inclusion of a wider group of PASE compliant solutions to ensure that the outcomes driven are not uneconomic or driving poor outcomes. This will be through a staged process so that the principles of PASE are maintained. We intend to retain the use of the lowest whole life cost options as initial positions, such as AIS and OHLs. Where possible we have also aligned with the consulted position of ETDP, but note that this document will be finalised after our Final Determinations are published.
- 5.165 TOs have signalled a range of potential capital cost increases that may be observed in the move towards PASE compliance. We recognise that this may be an outcome, but consider that generally PASE compliant projects should have a lower whole-life cost. We recognise the potential trade off these impacts have on consumers. We believe where a risk of cost increases exist this is offset by a reduction in future regret, especially in areas such as future extendibility and operational flexibility.
- 5.166 All TOs suggested that we engage with other regulators, planning bodies and stakeholders to ensure that our proposals are considered as we consult on our Load Re-opener and PASE guidance documentation. We intend to do this to ensure they have visibility of our proposals, and can influence them.

Totex Incentive Mechanism (TIM)

Purpose: To ensure that TOs and consumers appropriately share the risk of overspending and share any cost efficiencies that can be achieved.

Benefits: Provides TOs with an incentive to keep costs as low as possible, without being unreasonably exposed to potential cost overruns.

Final Determinations summary

Design	Final Determination	Draft Determination	
ODI type	Financial – penalty and reward	Same as FD.	
Measurement	Over or under-spend against all totex across the price control period.	Change - Over or under-spend against all totex on an annual basis (including where totex is adjusted during the price control period).	
Incentive	Band 1: 25% sharing up to 5%	Change -	
value	of over/under-spend.	Band 1: 25% sharing up to 5% of over/under-spend. Band 2: 5% sharing at 5%-15% over/under-spend.	
	Band 2: 10% sharing at 5%-		
	20% over/under-spend.		
	Band 3: 5% sharing beyond		
	20% over/under-spend.	Band 3: No sharing (ie cost passthrough) beyond 15% over/under-spend.	
Applied to	All TOs.	Same as FD.	

Final Determination rationale and Draft Determination responses

ODI type, measurement and incentive value

5.167 We have decided to set a Stepped TIM for RIIO-ET3, which works as follows:

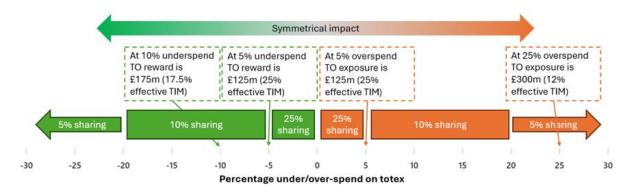
- Band 1: On the first 5% of any overspend or underspend TOs would pay 25% of any overspend on that first 5%, and similarly receive 25% of any underspend on that first 5%.
- Band 2: In addition to Band 1 which will continue to apply for the first 5% of spend variance, under Band 2 when totex spending falls between 5% and 20% (up or down) of agreed price control allowances TOs would pay 10% of any overspend over 5% and up to 20%, and receive 10% of any underspend below 5% and up to 20%.
- Band 3: In addition to Band 1 which will continue to apply for the first 5% of spend variance, and Band 2 which will continue to apply for the next 15% of spend variance, Band 3 will apply when totex spending exceeds 20% (up or

- down) of agreed price control allowances. Under Band 3, TOs would pay 5% of any overspend above 20%, and receive 5% of any underspend below 20%.
- 5.168 We received seven responses in relation to our Stepped TIM proposal. Three of these, including SPT, were broadly supportive of the approach proposed in our Draft Determinations, agreeing that it was a pragmatic means of managing risk and cost efficiency. Four responses disagreed with our proposal, focusing on themes around diminishing cost efficiency incentives and not using the TIM to manage risk. We still consider that the stepped approach provides an effective means of managing the tension between managing TO exposure to risk on RIIO-ET3's unprecedentedly high capital investment portfolios and maintaining a strong efficiency incentive where costs are close to target.
- 5.169 A theme that emerged across multiple responses including from NGET and SHET that both opposed the approach and two stakeholders that broadly supported it was that we had gone too far in proposing to use the TIM to manage TO risk, dampening any cost efficiency incentive. Specifically, a consumer group expressed concern that the full cost pass-through proposed at 15% of overspend left consumers bearing the risk of poor planning from TOs, or inefficient procurement. In response to those concerns we have revisited the parameters proposed in our Draft Determinations.
- 5.170 In arriving at our decision on the width of the bands and on the TIM rates to apply to each band, we have sought to compare the risk exposure for TOs expected to arise from the RIIO-ET3 TIM with the risk exposure arising from cost sharing mechanisms in recent price control reviews for regulated companies used as comparators in setting the allowed cost of equity (see the Finance Annex) specifically NGET in RIIO-ET1 and RIIO-ET2, and the listed water companies in PR14 and PR19. We used RoRE ranges under plausible upside and downside scenarios as the relevant metric to assess risk exposure. Our analysis suggested that an effective TIM rate of 20%-30% (across all bands) would lead to risk exposure for TOs that is broadly comparable with the risk exposure for the comparator companies in recent price controls. We recognise that, while RoRE is a commonly used metric of risk, it cannot perfectly capture all risk exposure. We have therefore decided to target a lower risk exposure by using a stepped approach. Under the stepped approach, the effective TIM rates set out in Figure 9 for large under- or overspends would be significantly lower than the 20%-30% range derived from our comparative analysis. In our regulatory judgment, we consider that the below approach strikes the right balance between the need to

manage TOs' risk exposure (with a view to financeability) and maintaining sufficient incentives for cost efficiency:

- Band 1 is unchanged, because we still consider that 25% TO sharing on up to 5% of cost variance is a sufficient efficiency incentive to drive positive behaviours.
- The scope of Band 2 has increased, capturing an additional 5% of variance, and we have also increased its strength by 5%. Having considered the Draft Determination responses, we saw this band as a key means of addressing stakeholder concerns.
- We have also increased the strength of Band 3 from 0% (ie no cost sharing) to 5%, because we have decided that applying no efficiency incentive to TO over- or underspends could result in very negative consumer outcomes. We are persuaded by stakeholder feedback and have sought to rebalance the risk by giving greater weight to the risk of cost inefficiency compared to the position in our Draft Determinations. We consider 5% to be an appropriate figure because it is a level at which TOs will continue to have a stake in the benefits of securing cost efficiencies in the event of significant cost overspend while being low enough not to affect financeability.

Figure 9: RIIO-ET3 Stepped TIM worked example, using example of £10bn totex



5.171 NGET proposed that we should have different cost sharing approaches for areas of the price control where the impact of cost variance is greater (where TO exposure should reduce) and areas where costs are more controllable (where TO exposure should be higher). NPg gave a similar response. We disagree because, as described in our Draft Determinations, we consider such an approach would create a significant gaming risk that would be difficult for us to manage, ie TOs may artificially move costs to an area where they are less exposed to overspends, in order to profit on the area where they receive most from underspends. We have ruled this option out for that reason.

5.172 NGET also stated that our proposed approach of applying the TIM annually could result in TO over- or under-recovery across the period, depending on TO spend against expected expenditure profiles. We agree, so have decided to change our approach so that the TIM will apply across the whole RIIO-ET3 period. In effect this will mean that a 25% sharing factor will apply by default during the period. The Stepped TIM will be used during RIIO-ET3 close out to calculate the accurate 'effective TIM' for the period if overall cost variance has exceeded 5%.

Application to ASTI

- 5.173 Similarly, we have decided that the Stepped TIM should include ASTI projects so that TO totex is treated consistently across the price control. NGET and SHET both expressed concerns with this position stating that it would expose TOs to too much risk, whereas two stakeholders supported it as matching the holistic Stepped TIM approach we had proposed. We do not agree with NGET and SHET that the Stepped TIM, even with the adjusted levels set out in this decision, materially increases TO risk exposure relative to ASTI arrangements.
- 5.174 In September 2024 we consulted on modifications to ASTI licence conditions and guidance¹¹⁴ to apply the TIM to overspends and underspends within +/-5% of project allowances for ASTI projects. Under our proposed modification, any underspend in excess of this amount would be either returned to consumers in full, and any overspends in excess of this amount would be funded by consumers in full. Our assumption when taking that decision was that the TIM in RIIO-ET3 would be similar to the TIM at RIIO-ET2, ie 33%-49%, but as that is no longer the case we do not see a need for a differing treatment. Our rationale is that:
 - our proposed Stepped TIM is substantially lower than the RIIO-ET2 TIM that applied when taking our ASTI decisions and provides protection for TOs in the form of minimal exposure to the most severe cost overruns; and
 - differing TIM treatments in different parts of the price control, unless carefully separated out, would allow TOs to artificially move costs to an area where they are less exposed to overspends, in order to profit on the area where they receive most from underspends.
- 5.175 The RIIO-ET3 package has a series of controls to protect against cost risk, including those linked to the scale and nature of the ASTI projects. Within this we consider that the existing COAE definition applicable to ASTI provides sufficient protection for TOs from events outside of their control which may impact the

¹¹⁴ Consultation SpC 9.3 PCD Guidance Final.pdf, paragraph 3.15.

costs (or delivery date or output) of an ASTI project. We will work with TOs through the licence drafting process to ensure that these protections perform as intended and ensure sufficient coverage for circumstances where cost escalation is genuinely outside of TO control.

Business Plan Incentive (BPI) - Stage B

5.176 This section sets out the results and detail on how the companies were assessed for the ET sector for Stage B of the BPI. Further details on the TOs' performance against Stage B of the BPI are set out in the company annexes.

Stage B assessment results

Table 23: Results for the ET sector for Stage B of the BPI

	Stage B - Comparative	Stage B - Bespoke	Total (bps of RoRE)
NGET	-0.2	1.6	1.4
SHET	0.0	0.4	0.4
SPT	0.1	6.4	6.5

Assessment methodology

- 5.177 In our Draft Determinations, most CAIs and BSCs were assessed on a comparative basis. We have decided that a bespoke assessment is more appropriate, and that only onshore Insurance costs remain assessed on a comparative basis. As set out in the SSMD, the decision over whether costs should be assessed comparatively or on their own merits is based on the extent to which efficiency assessments rely on information from other companies in the sector. A bespoke assessment allows for TO-specific circumstances to be captured within the BPI stage B assessment as the costs will be assessed on their own merit. In line with the BPG, this is consistent with our updated approach for allowance setting where we reduced the weight of the comparative element from 50% to 30% and applied a 70% weighting to the TO-specific analyses. For more information see the 'Indirect costs' section in this chapter.
- 5.178 We have updated the comparative assessment on Insurance costs to apply to onshore insurance only, and not offshore, as we assessed TOs' relative efficiency using ratio benchmarking on network length. For further information on the indirects assessment approach and our rationale, including the separation of onshore and offshore insurance, see the 'Indirect costs' section in this chapter.

¹¹⁵ RIIO-3 Sector Specific Methodology Decision – Overview Document https://www.ofgem.gov.uk/sites/default/files/2024-07/RIIO 3 SSMD Overview.pdf

- 5.179 The remaining costs were assessed on their own merit within the bespoke assessment where a like-for-like comparison between TOs was not possible. This assessment used three criteria: quality of cost evidence, justification of unit cost efficiency and justification of volume efficiency. ¹¹⁶ The scores for each criterion were equally weighted except for cases where unit costs or volumes were not applicable.
- 5.180 There were no changes to criteria scores for the remaining cost categories compared to our Draft Determinations as the bespoke assessment was based on information submitted in business plans. The variation in overall scores compared with our Draft Determinations is due to adjustments to the cost weights which could be due to several factors such as reprofiling of schemes, changes to exclusions or adjustments to needs case approvals. The comparative and bespoke scoring for each TO is set out at a cost category level within the company annexes.

¹¹⁶ RIIO-3 Business Plan Guidance, paragraphs 9.30-9.38.

Appendices

Appendix 1 NISES Survey

Question 1: What type of stakeholder of new transmission infrastructure best describes you?

- Local resident
- Local business owner
- Landowner
- Local authority
- Community groups
- Environmental NGO
- Academic interest
- Connections customer
- Other (please specify)

Question 2: Thinking about how proactive and prompt NGET/SHET/SPT is with its engagement...

- a) On a scale of 1-10, where 1 is extremely dissatisfied, and 10 is extremely satisfied, how would you rate your satisfaction with the promptness of engagement from NGET/SHET/SPT?
- b) Which statement below would you mostly agree with about NGET/SHET/SPT promptness of engagement?
- TO engagement is too early.
- TO engagement is early.
- TO engagement is right on time.
- TO engagement is late.
- TO engagement is far too late.
- c) Please provide additional details on what led you to pick these scores, and how could NGET/SHET/SPT improve their scores?

Question 3: Thinking about how regular and often NGET/SHET/SPT engages with you...

- a) On a scale of 1-10, where 1 is extremely dissatisfied, and 10 is extremely satisfied, how would you rate your satisfaction with how often NGET/SHET/SPT engages with you?
- b) Which statement below do you mostly agree with about NGET/SHET/SPT frequency of engagement?
- Engagement could be a lot less often.
- Engagement could be less often.
- The frequency of engagement is just right.
- Engagement could be more often.
- Engagement could be a lot more often.
- c) Please provide additional details on what led you to pick these scores, and how could NGET/SHET/SPT improve their scores?

Question 4: Thinking about the methods in which NGET/SHET/SPT engages with you...

- a) On a scale of 1-10, where 1 is extremely dissatisfied, and 10 is extremely satisfied, how would you rate your satisfaction with the methods of engagement provided by NGET/SHET/SPT?
- b) Please provide additional details on what led you to pick this score, and how could NGET/SHET/SPT improve their score?
- c) What are your preferred methods of engagement from NGET/SHET/SPT? Please select all that apply.
- In person consultation
- Virtual consultation
- Individual meetings
- Surveys
- Letters
- Newsletters
- Phone calls
- · Social media
- Local press
- NGET/SHET/SPT website
- Other (please specify)

Question 5: Thinking about the quality of information provided by NGET/SHET/SPT...

- a) On a scale of 1-10, where 1 is extremely dissatisfied, and 10 is extremely satisfied, how would you rate your satisfaction with the quality of information about current and upcoming projects provided by NGET/SHET/SPT?
- b) How could NGET/SHET/SPT improve the quality of information about current and upcoming new transmission infrastructure project? Please select all that apply.
- The information provided could be more detailed.
- The information provided could be clearer.
- The information provided could be more relevant to me.
- The information provided could be easier to find.
- The information provided could be in a more accessible format.
- Other (please specify).
- c) Please provide additional details on what led you to pick these scores, and how could NGET/SHET/SPT improve their scores?

Question 6: Thinking about how NGET/SHET/SPT responds to stakeholder feedback...

- a) On a scale of 1-10, where 1 is extremely dissatisfied, and 10 is extremely satisfied, how would you rate your satisfaction with the responsiveness of stakeholder feedback by NGET/SHET/SPT?
- b) Please provide additional details on what led you to pick this score, and how could NGET/SHET/SPT improve their score?

Appendix 2 Econometric benchmarking of Indirect costs

A2.1 This appendix details our changes to MEAV from our Draft Determinations and the results of the CAI and BSC regression models.

Modern Equivalent Asset Value (MEAV)

- A2.2 MEAV is a measure for the size and complexity of a TO's network, by providing the cost of replacing every operational asset on the TO's asset register. We have used MEAV as a driver in our regression analysis for both CAI and BSC.
- A2.3 In our Draft Determinations, we consulted on improvements to MEAV by creating a standardised unit cost for each asset and using BPDT data to calculate volumes. Our calculations looked to exclude schemes in the RIIO-ET3 baseline that were not part of the RIIO-ET3 funding request and to not lag the MEAV due to the pragmatic issues this had in modelling.
- A2.4 We have decided to retain our Draft Determinations approach regarding standardised unit costs and BPDT volumes. However, we have looked to adjust our approach regarding assets and schemes included.
- A2.5 SHET suggested that not utilising the full list of assets had a large impact on MEAV and made it inaccurate. Working with TOs, we have looked to include further asset categories such as FACTs (flexible alternating current transmission system) equipment and High Voltage Direct Current (HVDC) convertor stations into the MEAV. We consider this results in a MEAV variable that represents TOs' networks more accurately while also providing a more holistic view of the work they plan to conduct in RIIO-ET3.
- A2.6 SHET and NGET criticised the exclusion of assets related to crossover and UMs work, suggesting this reduced the validity of the measure. On the one hand, we consider there is a real concern of potential double or overfunding through the inclusion of schemes that are either uncertain or being funded in parallel. On the other hand, we do agree with TOs there is also rationale that the increase in size and complexity of the network results in increased costs, regardless of the funding route. To test this, we performed some robustness checks and have found the inclusion of these schemes had a negligible impact on allowances. To improve the accuracy of MEAV, we have therefore included these schemes in its calculation, with the exception of ASTI projects. We have excluded ASTI projects due to both the size of the schemes that make them outliers compared to other work, as well as the presence of a different funding route for these projects.

A2.7 SPT attested that any model with MEAV should include the variable in its lagged form, and not doing so would provide an inaccurate allowance. SPT expressed concerns on the emphasis we put on model fit as a criterion for lagging MEAV as opposed to the economic and engineering rationale supporting it. As in our Draft Determinations, we acknowledge the rationale. However, extensive testing of MEAV as a lagging variable and further engagement with TOs has not yielded a pragmatic solution backed by engineering rationale to the issues we set out in our Draft Determinations. We have therefore retained our Draft Determinations position to not lag the MEAV in our models.

Regression results

- A2.8 We used these results to compute modelled costs and, as in our Draft Determinations, with the efficiency frontier set at the average.
- A2.9 Table 24 summarises the estimation results for the CAI and BSC model specifications, derived using POLS. Both models show statistically significant coefficients for the main drivers, a strong model fit and good performance for most post-estimation tests.
- A2.10 We used these results to compute modelled costs and, as in our Draft Determinations, with the efficiency frontier set at the average.

Table 24: Summary of CAI and BSC regression results

	CAI	BSC
Constant	-5.64***	3.25***
CSV	-	0.85**
Capex	0.16**	-
MEAV	0.97***	-
RESET	0.181	0.604
Heteroskedasticity	0.595	0.23
Normality	0.048	0.108
Adjusted R squared	0.9	0.91

Combined indirect costs regressions analysis

- A2.11 This section includes supplementary analysis to paragraphs 5.94-5.98 on the use of combined indirect costs regression models.
- A2.12 We have compared the efficiency scores of the combined regression models for indirect costs against the efficiency scores of the individual CAI and BSC regression models. For the combined regression models, we regressed the log of

total indirect costs on a combined indirect costs CSV using SPT proposed weightings. To the individual CAI and BSC models we use the models selected in our Final Determinations. The CAI regression uses log CAI regressed on the logged variables of capex and MEAV and outliers are excluded. For BSC, the log of BSC costs is regressed on the CSV with updated weightings from our Draft Determinations. All models are pooled OLS regression models using TO data only and spanning years 2014-2031, including forecasts for both baseline expenditure and the best view of expenditure. We have performed this analysis as it is the most like-for-like comparison between the combined and individual models, where the difference in efficiency scores only captures the difference in how indirect costs are aggregated. The difference in efficiency scores does not capture using different time series, network companies or model specifications. 118

- A2.13 For simplicity we used only SPT's CSV weightings for the combined model. SHET also provided weightings for the CSV, but the modelled costs do not sufficiently vary between the two weightings that would lead to different outcome in this analysis.¹¹⁹
- A2.14 The efficiency score is calculated as the total submitted cost divided by the total modelled cost. For the individual CAI and BSC models, we combined the costs across CAI and BSC to get modelled and submitted total indirect costs. Table 25 shows the spread of efficiency scores between the highest and lowest for the combined regression models against the combined efficiency scores of the individual CAI and BSC regression models.
- A2.15 The spread is wider for the combined models compared to the individual models in all cases. This shows that the individual models are more efficient at predicting costs than the combined models. They are a more accurate representation of efficient indirect costs.
- A2.16 The individual CAI and BSC regressions used in this analysis have not been combined with the TO-specific forward-looking analysis as part of the blended approach which we have decided to use when setting allowances at Final Determinations. We have found in separate analysis that the efficiency score of

 $^{^{117}}$ SPT CSV weightings: FTE 57% / MEAV 4% / Totex 4% / Capex 34%

¹¹⁸ For completeness, we have also conducted comparisons against individual regressions using historical data only. The resulting spread of efficiency scores is 0.12 on historical data, 0.13 on all years and 0.52 on RIIO-ET3 data only. We do not consider the first figure to be comparable with a combined regression that includes forecasts.

 $^{^{119}}$ SHET CSV weightings: FTE 73% / MEAV 1% / Totex 13% / Capex 13%.

the blended approach is better than that of the individual regressions. The spread of efficiency scores for baseline expenditure using the blended 30:70 approach is 0.24 (between a highest score of 0.94 and a lowest of 0.71). As a comparison, the spreads from the combined regression and sum of CAI and BSC regression modelled costs using baseline expenditure are 1.68 and 1.26, respectively.

A2.17 We have supplemented this analysis with a comparison of the distribution of efficiency score deltas (difference between efficiency scores and 1 – where 1 represents a perfect match to submitted costs). The distribution is shown as the standard deviation of efficiency score deltas. This analysis is an alternative view showing the efficiency of the models in predicting costs. The results are shown in Table 26.

Table 25: Comparison of efficiency score spreads between combined indirect costs regression models and separate CAI and BSC regression models

		Combined regression baseline	Combined regression best view	Separate regressions baseline	Separate regressions best view
All years (2014-2031)	Highest	1.96	1.22	1.80	0.98
All years (2014-2031)	Lowest	1.10	0.62	1.22	0.80
All years (2014-2031)	Spread	0.86	0.60	0.58	0.17
RIIO-ET3 (2027-2031)	Highest	3.58	1.41	3.44	1.19
RIIO-ET3 (2027-2031)	Lowest	1.90	0.57	2.18	0.81
RIIO-ET3 (2027-2031)	Spread	1.68	0.84	1.26	0.38

Table 26: Comparison of efficiency score distributions between combined regression and separate CAI/BSC regressions

	Combined regression baseline	Combined regression best view	Separate regressions baseline	Separate regressions best view
All years (2014-2031)	0.38	0.27	0.24	0.07
RIIO-ET3 (2027-2031)	0.78	0.38	0.55	0.16