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Appendix to the RIIO-2 Electricity Transmission Annual Report: 2023-24

Executive Summary

In July of each reporting year, each electricity transmission owner (TO) business must submit information outlining the actual costs incurred up to 31 March of that year and forecast costs to the end of the price control period.

Our annual report, published alongside this document, offers an overview of how the three onshore TO businesses are performing against the outcomes and metrics set by the RIIO (Revenue = Incentives + Innovation + Outputs) framework. It also analyses performance trends over the first three years of RIIO-2 and assesses the TOs' current performance expectations for the five-year period.

This document provides additional detail on our assessment of the TOs' performance based on the information submitted in the 2023/24 reporting year.

Structure of this document

- **Appendix One** provides background information on the design of the RIIO-2 framework.

- **Appendix Two** presents the detail of TOs' performance against the annual incentive targets in the third reporting year of RIIO-ET2.

- **Appendix Three** provides a brief explanation of the approach we have applied to establish a common view of performance across the TOs.

- **Appendix Four** presents our overview of each TO's expenditure, comparing it to the adjusted allowance per cost category over the first three years of RIIO-2. It also includes projections for anticipated performance during the remaining years of the five-year price control period for each cost category.

- **Appendix Five** summarises the currently anticipated level of delivery for the specific Price Control Deliverables (PCDs) for each TO.

- **Appendix Six** presents an update on the progress of investments being progressed through the Accelerated Strategic Transmission Investment (ASTI) framework.

Appendix One: RIIO-2 background information

1. Building blocks of totex

Three main categories of allowances were established in the RIIO-2 price control:

Ex-ante (upfront) allowance

At the outset of the price control, we set an original 'baseline' allowance, which determines the revenue that TOs can earn. This five-year allowance value, prescribed in the FD document, was based on the knowledge of projects that were reasonably certain to proceed at the time of settlement and reflects areas of work where there was an established customer-driven need or for works not linked to specific outputs due to their unique nature.

Allowances driven by uncertainty mechanisms

A range of UMs provide access to revenue during RIIO-2 as the need, cost or timing of works becomes clearer. These mechanisms ensure that RIIO-2 has flexibility to adapt as clarity on the pathways to CP30 and Net Zero becomes clearer and that consumers fund projects only when there is clear evidence of their benefit.

There are three main types of UM:[1]

- **Volume drivers** adjust allowances in line with actual volumes where the volume of work required over the price control is uncertain (but where the cost of each unit is stable). Further detail is provided in the section below.
- Where the degree of uncertainty is too great to allow for an automatic UM, and for matters could not be predicted with any certainty at the outset of RIIO-2, we set **re-openers** that allow us to robustly assess network companies' proposals. A notable example is the Medium Sized Investment Process (MSIP).
- **Use-it-or-lose-it** (UIOLI) mechanisms adjust allowances where the need for work has been identified, but the specific nature of work or costs are uncertain.

There are also other elements of the RIIO-2 framework where TOs have access to revenue during the price control period.

PCDs

These are a key component of the RIIO-2 framework where company specific funding is linked to the delivery of outputs specified in each RIIO-2 Licence.[2]

For any PCDs not delivered, the framework will protect consumers by ensuring funding is adjusted appropriately. PCDs either allow allowances to be recovered mechanistically (i.e. automatically), or evaluatively (i.e. requiring review the delivery of the PCD outputs). For Evaluative PCDs, the licence provides for the adjustment power[3].

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[1] In total, there are five types of UM which GEMA decided to use in RIIO-2. See para 7.2 for more detail: RIIO-2 - Core Document.

[2] The PCD assessment framework provides for the adjustment of the level and timing of allowances in the event the output is not delivered, not delivered to the specification required, or delivered late.

[3] Which can only be exercised should the PCD not be Fully Delivered, with the meaning of Fully Delivered and its constituent parts (output and delivery date) being specified in the licence condition.

Innovation funding

RIIO-2 contains routes by which the TOs can boost high-value innovation projects that address key challenges facing energy networks to get to grips with the energy system transition and net zero. This is facilitated through the Strategic Innovation Fund (SIF) and the Network Innovation Allowance (NIA).

Output Delivery Incentives (ODI)

We have set the ODI package to focus companies on delivering objectives that matter to existing and future consumers and to drive service improvement through incentives.

Totex Incentive Mechanism

The Totex Incentive Mechanism (TIM) is designed to encourage network companies to deliver their required outputs efficiently by providing a financial incentive for companies to outperform their allowed expenditure. If a company spends less than its allowed totex, it can keep a portion of the savings, while the rest is passed on to consumers. Conversely, if a company overspends, it bears a portion of the additional costs.

The mechanism aims to promote cost efficiency and innovation, ensuring that consumers benefit from lower costs and to encourage improvement efficiency in delivery of services. The costs of efficiently incurred overspends are also shared with consumers, providing some protection to TOs.

The incentive rate is set at 33% for NGET (67% shared with consumers), 36% for SHET (64% shared with consumers) and 49% for SPT (51% shared with consumers).

2. RIIO-2 volume-driven uncertainty mechanisms

New generation connections (All TOs)

Works needed to connect new generators to the national electricity transmission system (NETS[4]) and reinforcement of existing local infrastructure in some cases.

Output measures include:

- the amount of new generation capacity connected, in Megawatts (MW), or additional infrastructure capacity installed, measured in Megavolt ampere (MVA).
- the number of kilometres of Overhead Line (OHL) associated with new build activity (SHET and SPT only).
- the number of kilometres of OHL associated with reconductoring activity.
- the additional length of new underground cables.

New demand connections (SPT and NGET only)

Works needed to connect new demand users to the NETS and reinforcement of existing local infrastructure in some cases.

[4] The NETS is the high voltage network of overhead lines, cables and substations that transports electricity across Great Britain.

Output measures include:

- the incremental increase in the offtake capacity at grid exit points.
- the number of kilometres of OHL associated with new build activity (SPT only).
- the number of km of OHL associated with reconductoring activity.
- the additional length of new underground cables.

New incremental Wider Works (NGET only)

Works to strengthen network boundaries measured by the increase in transfer capability.

Output measures include:

- non-route projects are measured in boundary capacity increase.
- route projects (OHL or cable works required) are measured in the boundary increase multiplied by the pre-set boundary length
- length of reinforcement on OHL multiplied by a pre-set length factor, and
- length of reinforcement on cable multiplied by a pre-set length factor.

Differences between outturn costs and the calculated allowances is scaled by an "delivery adjustment factor".

For all TOs, projects whose expected costs are beyond a defined tolerance range are considered "outliers"[5] and quality for consideration under the MSIP re-opener.

Cost categories

Network company costs are broadly categorised as two types: capital expenditure (capex), and operational expenditure (opex). The main cost categories contained in this report are summarised below.

There are three main capex components:

Load related expenditure

relates to investment to expand the network capacity to accommodate changes in the level or pattern of electricity generation and demand.

Non Load related expenditure

Investment to maintain the health of the network company's existing asset base through repair, replacement and prevention maintenance (refurbishment) activities.

Non-operational capital expenditure

Associated with equipment not directly related to transmission operations. Costs in this area comprise the following four categories: Property, Small tools, equipment, plant and machinery, Vehicles and Transport, and Information Technology and Telecoms (IT&T).

[5] An upper and lower tolerance range based on the standard error resulting from our regression analysis was set for each TO.

There are two main opex components:

Network Operating Costs (NOCs)

Costs incurred in the day-to-day running of the network, for example, rectifying faults, repairs and maintenance, vegetation management, and legal and safety. They also other actions directly related to maintaining a reliable network , such as investments to improve flood defences.

- Faults: work to investigate and rectify events which cause plant to be automatically disconnected from the transmission system (or identify further action required).
- Inspections: planned activities to routinely inspect assets for safety and/or legislative purposes
- Repairs: activities that takes place on detection of a defect and return the whole asset to its normal condition. The nature of work is therefore reactive.
- Maintenance: planned activities to maintain assets for safety and/or legislative purposes.
- Vegetation Management: activities include the physical felling or trimming of vegetation to ensure the reliable performance of transmission assets.
- Legal & Safety: is work to ensure safe working and legal compliance.

Indirect opex

This category encompasses day-to-day spending on activities required to maintain and operate the transmission networks. This category consists of both Business Support Costs (BSC) and Closely Associated Indirects (CAI).

BSC are incurred supporting companies' general business activities and corporate governance, while CAI costs are those that support operational activities (i.e. back office functions closely involved in the construction and operation of network assets such network design).

There are also other one-off or bespoke costs, such as resilience work for cyber resilience (cyber OT), business IT security (cyber IT) and physical security. These costs are a mixture of capex and opex.

Load and Non-Load information (relevant to the asset health of network assets) is submitted and assessed on a direct cost basis. Direct activities are those which involve physical contact with network infrastructure assets, for example the cost of purchasing, transporting and installing an asset.

The performance information associated with NOCs and indirect activities - that do not involve physical contact with infrastructure assets and secondary systems - is reported and considered separately to the direct cost categories.

Appendix Two: Annual output targets performance

As part of RIIO-2, we set a range of outputs in the RIIO-2 electricity transmission licence which TOs have committed to deliver. If TOs meet their annual output targets they receive incentive payments, and where TOs fail to achieve their annual output targets they incur financial penalties.

Output delivery

In addition to ongoing compliance with legislative safety requirements[6], which remain fundamental to the RIIO price control framework, the incentive package comprises three financial Output Delivery Incentive (ODIs) continued from RIIO-1:

- Energy Not Supplied (ENS),
- Timely Connections (penalty-only[7]), and
- a mechanism designed to reduce Insulation and Interruption Gas (IIG) Leakage.

Three new financial ODIs were introduced via the RIIO-2 framework:

- a Quality of Connections survey,
- an optimisation incentive to encourage the TOs to identify and provide enhanced services to the NESO, and
- an Environmental Scorecard.

There is a further reputational ODI to monitor the annual business carbon footprint of each company.

Our assessment for the above ODIs is measured against expectations set out in the licence and/or detailed in the Final Determinations[8] (FDs) document.

Energy Not Supplied (ENS)

RIIO-2 supports the delivery of a high-quality and reliable service to all network users and consumers by encouraged TOs to improve network reliability in an efficient way by managing short-term operational risk.

The Energy Not Supplied (ENS) incentive improves the reliability of electricity supply and reduces the negative impacts of disruption on customers. Each ETO has a bespoke

[6] No explicit RIIO targets exist, although each TO seeks to reduce its overall injury metric for its workforce. The overall activity is regulated by the Health and Safety Executive (HSE).

[7] An efficient licensee should not expect to be penalised under this ODI. Mechanisms have been calibrated so that penalties are proportionate to the degree of deterioration in performance.

[8] https://www.ofgem.gov.uk/decision/riio-2-final-determinations-transmission-and-gas-distribution-network-companies-and-electricity-system-operator

target (also referred to as an 'incentive neutral point') for the volume of ENS each year based on historical performance.

- NGET: 147MWh
- SPT: 130MWh
- SHET: 102MWh

All TOs reported strong levels of network reliability and outperformance against their annual targets to minimise how much electricity is lost to the distribution networks and other customers because of failures to the assets on the transmission network (see below for more details).

In terms of the annual values of megawatt hours (MWh) lost on the transmission system:

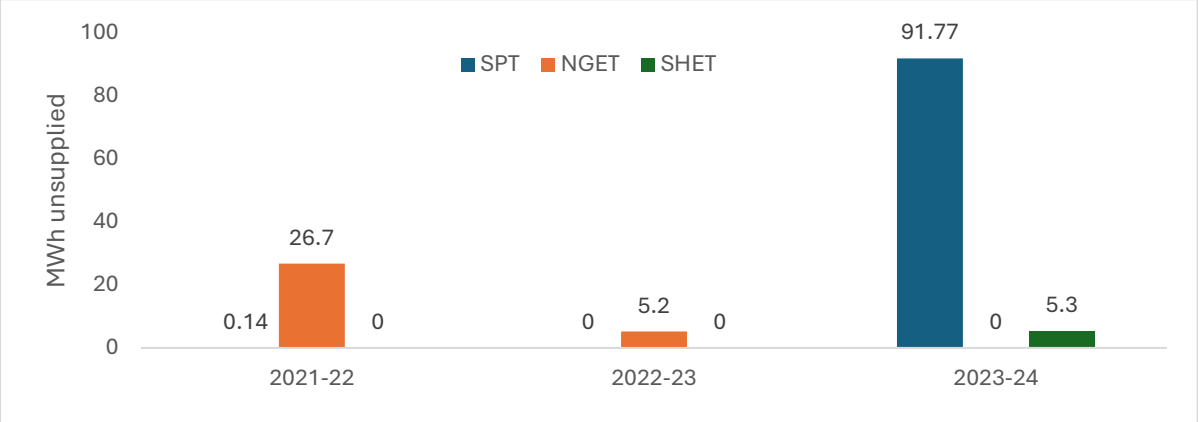
- SPT reported 91.77 MWh of unsupplied energy in 2023/24, the highest ENS total since the beginning of the price control period (but still within their target). SPT explains the recent movement as the result of an increase in system incidents, including adverse weather, from three to eight against the previous year.
- SHET reported a value of 5.31 MWh lost in 2023/24 against a target of 102 MWh, associated with one incentivised loss of supply event. continuing the low trend over first two years of the RIIO-T2 period.
- NGET reported a strong performance with 0 MWh lost in 2023/24 under this ODI against a target of 147 MWh, producing an incentive payment of £1m. NGET has consistently decreased the volume of ENS each year over RIIO-2 to date.

Table A2.1: ENS performance 2021-2024

	Year1 MWh	Year 1 % vs target	Year 2 MWh	Year 2 % vs target	Year 3 MWh	Year 3 % vs target
SPT	0.14	99.9%	0	100%	91.77	29%
NGET	26.7	82%	5.2	96%	0	100%
SHET	0	100%	0	100%	5.3	95%

Figure A2.1: ENS performance 2021-2024

MWh unsupplied, 2021 – 2024.



NGET, SHET and SPT will receive a financial reward of approximately £1.0m, £0.7m and £0.4m respectively for outperformance against the target in the third reporting year.

Quality of connection satisfaction (QoCS)

This ODI covers the customer experience throughout the connections journey and seeks to incentivise companies to improve the quality of service delivered to connections customers.

The QoCS for the period under review (2021-2024) were premised on the following scores:

- Target score – 7.7
- Reward score – 9
- Penalty score – 6.4

All TOs reported strong levels of QoCS for all customers across all customer review milestones (e.g. including pre-application engagement, offer, delivery, outage management and connected customer).

In the third regulatory year (2023/24), both SPT and SHET exceeded their target scores, each achieving a mean score of 8.3. This resulted in incentive rewards of £0.7m and £1.8m respectively. Conversely, NGET fell short of its target score of 7.7, reporting a mean score of 7.2 and incurring a penalty of £3m in reporting year 2023/24.

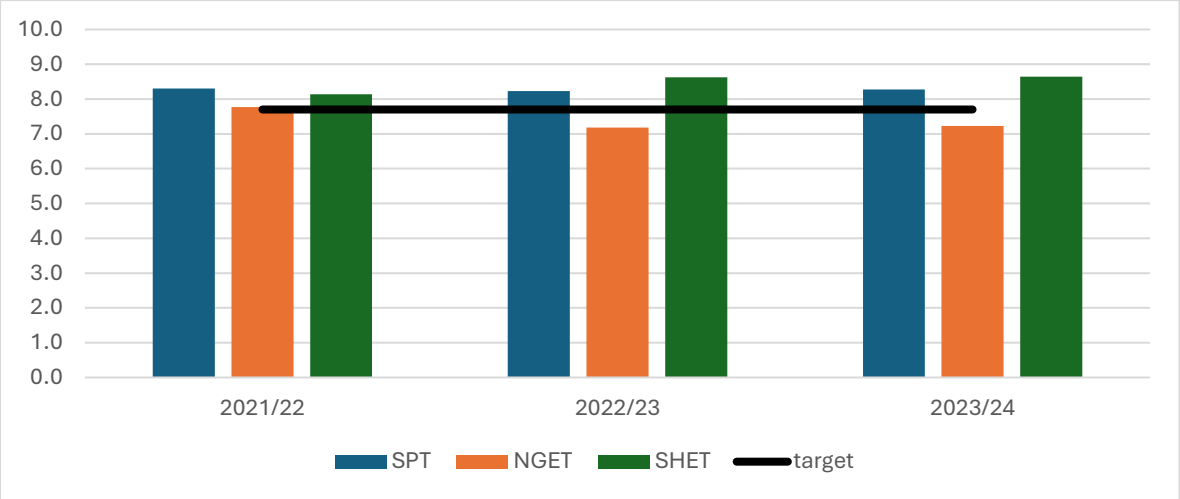
SHET consistently maintained its target score of 8.6, reflecting its steady positive performance. SPT showed significant improvement, increasing its mean score from 8.2 in 2022/23 to 8.3 in the third regulatory year. Meanwhile, NGET's performance remained unchanged, with a mean score of 7.2 for both the second and third regulatory years.

We note that an industry-wide programme of works on Connections Reform is currently underway, led by the NESO. The speed and nature of the reform process is likely to

impact the overall nature of feedback ahead of outcomes from the process being embedded.

Figure A2.2: QoCS Survey – All Customers Across all Customer Milestones

Mean score per annum against target



The Environmental Scorecard

This ODI is designed to incentivise a reduction in carbon emissions and to improve the environment. This is currently applicable to NGET only (it is an optional incentive which SHET and SPT have opted not to switch on at present).

The incentive is calculated by comparing actual percentage change in impact areas to annual reward/penalty thresholds. A reward or a penalty is triggered if the actual percentage change is above or below the relevant threshold.

NGET are financially incentivised against six[9] elements of its Environmental Action Plan (EAP) and have outperformed (exceeding the maximum incentive thresholds) on all elements in the latest reporting year. We also note that NGET have committed to delivering 10% Biodiversity Net Gain (BNG) on all capital projects, and a commitment of 15% BNG (or greater) on six projects. NGET's 2023/24 performance produced a £1m incentive reward payment (identical to the reward in 2022-23).

Business Carbon Footprint

A further element of environmental reporting in the RIIO-2 framework is the Business Carbon Footprint ODI. This seeks to ensure that the TOs take responsibility for the environmental impacts arising from their networks and are more transparent in what they are doing to mitigate these.

[9] Business travel, operational and office recycling, office waste reduction, office water, environmental value of non-operational land, and net gain on construction projects.

Although a reputational incentive only, the ODI measures the reduction in controllable scope 1 and 2[10] emissions in tons of carbon dioxide equivalent emissions (tCO_2e) against a 2018/2019 baseline position across the RIIO-2 period. The emission reduction targets are approved by the Science Based Target Initiative.

Table A2.2: BCF performance 2021-2024

Total scope 1 and 2 emissions, tonnes CO_2 equivalent (excluding losses)

	2021/22	2022/23	2023/24
SPT	14,425	9,340	18,481
NGET	250,173	241,722	248,513
SHET	8,487	9,934	8,556

In terms of the annual emissions reported:

- SPT reported a total scope 1 and 2 emission value of 18,481[11] tCO2e in the third year of RIIO-2, which is a 98% increase from the 2022/23 figure of 9,340 tCO2e. The increase in this year's emissions are largely the result of an 'exceptional' SF6 leakage event in June 2023 which accounted for 5,311tCO2e (29%) of the annual BCF. Decreases in emissions from buildings energy use and operational transport have also been offset by business travel and SF_6 emissions increases in the same period.
- NGET have committed to achieve a 34% reduction in controllable emissions by 2026 but reported a 17% reduction (against a target of 20%) during the third year of RIIO-2. Improvements are expected in the coming years on SF_6 abatement works that may bring NGET back on track to meet its end of period goal.
- For the RIIO-2 period SHET is targeting a 33% reduction in BCF against the baseline (c. 2300 tCO2e reduction). The decrease to date is 10% against the baseline emissions target and is above the flightpath necessary to achieve their reduction goal. The level of emissions reductions (against the 2018/2019 base year) is currently being frustrated by an increase in IIG and transport emissions.

Insulation and Interruption Gas emissions

This ODI incentivises a reduction in leakage of SF_6 and other harmful IIGs from assets on the transmission network, and to support the transition to low greenhouse gas alternative IIGs.

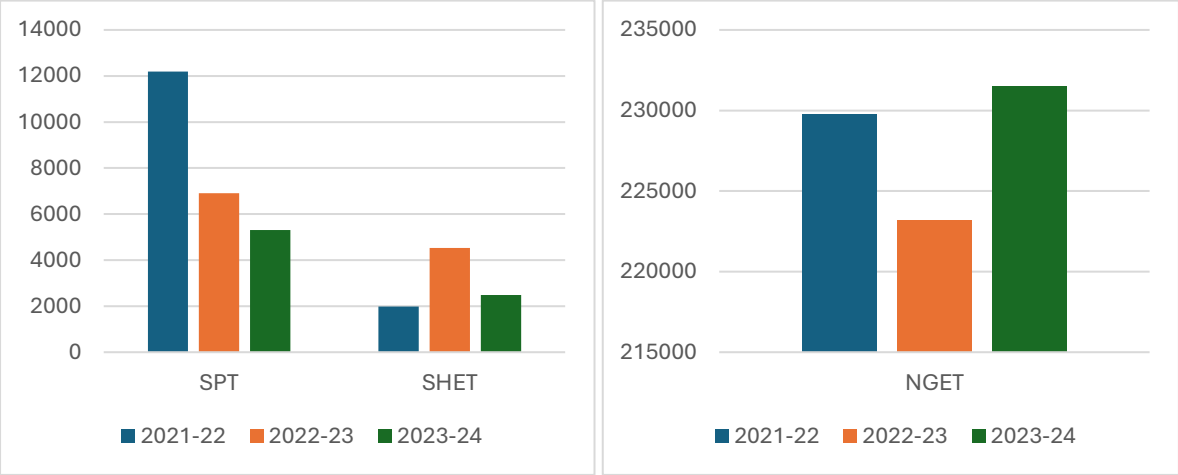
[10] Scope 1 emissions are those direct emissions owned or controlled by a TO, while scope 2 emissions are a consequence of TOs' actions but not owned or controlled by them.

[11] 2,301tCO_2e is the total emission value in the third reporting year without fugitive emissions.

Overall, all TOs have beaten their target emissions and achieved a reward in every year of RIIO-2 including 2023/24. Performance (excluding exceptional events) does however vary between the TOs and across the price control period so far.

Figure A2.1: IIG performance 2021-2024

Annual emissions, tonnes per CO_2 equivalent



Supporting data

tCO_2e	**2021/22**	**2022/23**	**2023/24**
SPT	12,196	6,839	5,306
NGET	229,782	223,157	231,520
SHET	1,979	4,531	2,490

SPT

SPT's performance has improved.

In 2023/24, SPT applied for, and were successful in claiming, an exceptional event at Hunterston HVDC convertor station, which amounted to 225.8 Kg of gas lost during a cable sealing end failure. Repairs have also continued to be carried out at a 400kV substation, which is the single largest leaking asset, along with other asset interventions with the aim of reducing the overall leakage on the installed SPT asset base.

Forecasts future performance is expected to improve due to the nature of solutions being planned (wholly or largely SF_6 free), or work being rescheduled to next price control period.

NGET

NGET's performance improved across the first two reporting years of RIIO-2 but emissions have risen in the third reporting year. Emissions continue to be on track to achieve the 33% reduction in annual emissions by 2026.

NGET states that improvements have been made at numerous sites, but major leaks on a few assets have affected the overall results. The planned programme of repairs and changes are expected to bring benefits over the next year from the actions taken, including 13 of the 20 worst-leaking assets that were repaired during the year.

Two further financial incentive mechanisms are also applied under RIIO-2. The performance for each is briefly summarised below.

SHET

SHET's performance worsened in the first two years of RIIO-2 reporting. However, a decrease was reported in the third year of reporting.

In relative terms, accounting for the increase in IIG mass on the network, SHET achieved an SF6 leakage rate of approximately half of their target – their lowest leakage rate since 2018.

The recent movement is explained to be the result of changes around the process and treatment of SF_6 leaks driven by an internal SF_6 forum, meaning that the operational process to identify and address leaks has improved. T2 funded interventions to address the most problematic assets are also contributing to bringing IIG leakage down.

We note that SHET has its own strategic ambition to achieve a one third reduction in its overall Scope 1 & 2 greenhouse gas emissions by the end of the RIIO-2 period against a 2018/19 base year. While SHET continues to make positive progress on its emissions performance, the ambition goal set is proving challenging and is currently unlikely to be realised in the intended timeframe. We will continue to monitor progress in this area.

SO:TO Optimisation

This incentive is designed to encourage collaboration with the NESO to identify and provide additional solutions beyond business-as-usual activities to help reduce constraint costs for consumers. It is supported by a SO:TO Code process (11-4) that enables the NESO to buy a service from the TOs, where this service has been identified as having a positive impact in assisting in minimising costs on the GB Transmission network.

Ofgem assess the extent of benefits that the SO:TO Optimisation ODI has delivered to consumers through reducing constraint costs and the value for money of the incentive, taking into account uncertainty around assessment of forecast and ex-post constraint costs savings.

The SO:TO incentive was trialled in the first two years of the RIIO-2 price control and the following annual caps (£million) were applied:

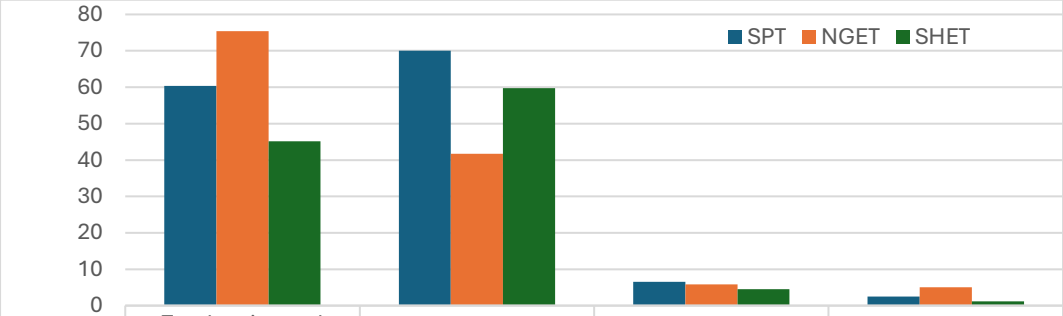
- SHET: 1.2
- SPT: 2.5
- NGET: 5

In 2023 we consulted[12] on the trial scheme and decided to keep operating the SO:TO incentive for the remaining three years in RIIO-2 (2024 to 2026). The decision also removed the annual financial cap on incentive rewards for years 3 to 5 for all the TOs.[13]

For the third regulatory year as shown in Figure A2.1 below, all the TOs made actual constraint savings. In addition, they all exceeded the ODI annual cap (because the cap was removed).

- NGET delivered 25 enhanced service solutions successfully which resulted in over £41.7m 'actual' constraints savings.
- SPT delivered six solutions in 2023/24 which provided outturn constraint cost savings of £70m for the end consumer against a forecast of £60.3m.
- For SHET, consumer benefits were still evident in 2023/24 from two existing schemes (first delivered in 2021/22, a second in 2022/23), amounting to an 'actual' constraint saving of c. £60m.

Figure A2.1: SO:TO Optimisation 2023/24



	Total estimated constraint savings (£m)	Actual constraint savings (£m)	Total Output Incentive	ODI Annual Cap (£m)
SPT	60.34939	69.9976	6.5173495	2.5
NGET	75.414606	41.69797142	5.855628871	5
SHET	45.18	59.76	4.518	1.2

Timely connections

The Timely Connections ODI is designed to be "penalty-only", penalising failure to provide offers within the mandated timescales. The company specific performance for the third reporting year of the RIIO-2 period is as follows:

- SHET: 154 connection offers were issued to NESO. For the third regulatory year all offers have been issued in line with license obligations.

[12] https://www.ofgem.gov.uk/decision/decision-system-operator-transmission-owner-optimisation-output-delivery-incentive-riio-2

[13] Changes to the incentive calculation for the remaining years of RIIO-2 were introduced in January 2024: https://www.ofgem.gov.uk/decision/decision-modify-special-conditions-47-and-11-electricity-transmission-licence

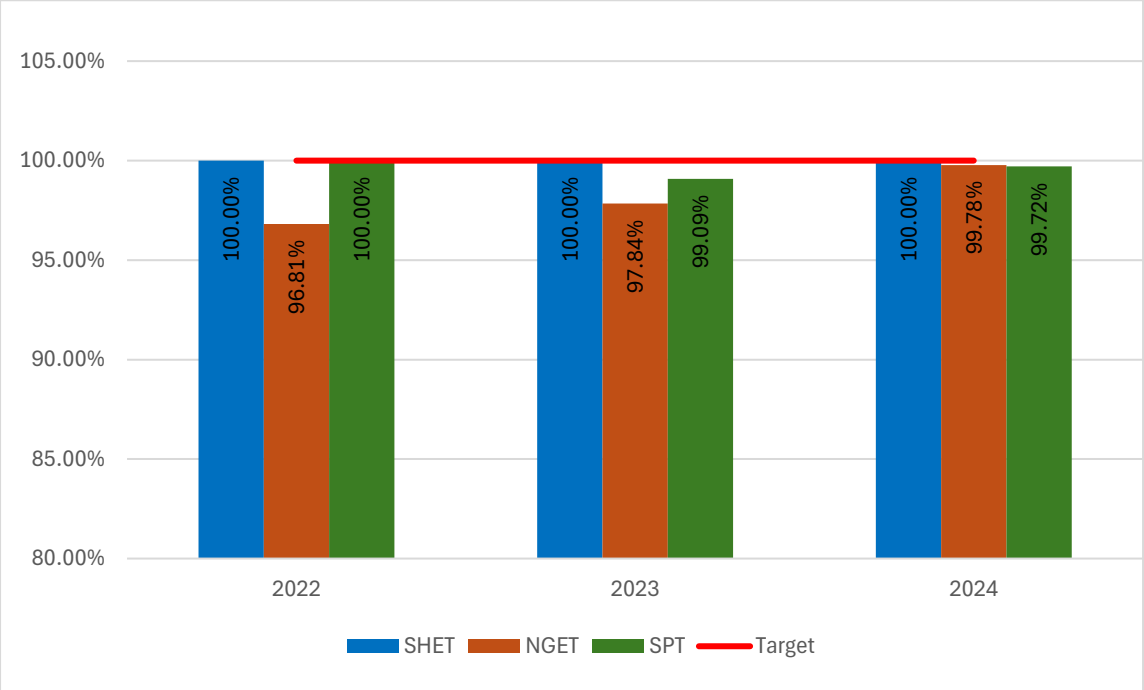
- SPT: 352 relevant offers were issued during this period, representing a 60% increase on the 219 offered in the previous period. 351 were issued on time and 1 was issued late. The resultant penalty position for 2023/24 is minimal (£5k).
- NGET: delivered 1,372 of 1,375 (99.78%) of connection offers to the NESO within the mandated timescales and three offers were issued late. NGET's penalty position for 2023/24 is £0.02m. We note, however, that the volume of applications saw a significant increase on last year's total applications (726) and a reduction in late offers.

We are encouraged that TOs have maintained performance (particularly in the case of SHET with zero untimely offers reported) and have continued to evolve their processes to tackle increased offer volumes (in the case of SPT and NGET) in the area of timely connections.

When comparing this year's performance to the first year of the price control we see positive improvement from NGET in particular, but note that there is still further scope for improvement. We do see a slight reduction in SPTs performance in the second regulatory year, but this performance has improved in this year.

The overall trend of reducing numbers of untimely offers (for SPT and NGET) throughout the price control period indicates that both our incentive mechanisms and the strategies of the licensees are having a positive impact in improving timely connections to the transmission network.

Figure A2.2: Timely connections



Delivery performance under the applicable volume driver mechanisms

The RIIO-2 framework contains revenue drivers where the parameters of the mechanism include a provision to fund TO's for works required for delivery in T2+2 timescales (reporting years 2026/27 and 2027/28).

An overview of the TO's current forecast of output delivery beyond the RIIO-2 period is set out below.

Background

TOs are incurring (or are projecting to incur) costs on customer-driven projects that are forecast to complete within the T2+2 period.

These projects are expected to deliver outputs (e.g. new connection capacity) and would, if completed during T2+2 timescales, result in an adjustment via the applicable mechanisms to take account for this additional spend.

We have isolated the TOs current expectations on the output delivery across the T2+2 period. An overview is provided below for each applicable mechanism.

NGET: Generation

Table A2.3 below presents NGET's current delivery expectations for its generation portfolio across the T2+2 period.

Table A2.3: NGET generation volume driver overview

£million, 2018-19 prices	**TOTAL**
Delivery expectations within the T2+2 period	
Number of connected projects (#)	**18**
Output capacity (MW)	**5,044**

NGET is currently anticipating delivery of a further 18 projects and an additional 5.04GW of generation capacity between the April 2026 and March 2028 (T2+2 period), bringing the connected capacity to 20.7GW across the seven-year period.

NGET: Demand

Table A2.4 below outlines NGET's current delivery expectations for its demand portfolio across the T2+2 period.

Table A2.4: NGET demand volume driver overview

£million, 2018-19 prices	**TOTAL**
Delivery expectations within the T2+2 period	
Number of connected projects (#)	**4**
Output capacity (MVa)	**1,680**

A further four projects are currently expected to deliver an additional 1.68 GVa of demand capacity in the T2+2 period, and resulting in an expected total of 6 GVa across the seven-year period.

NGET: Wider Works

Table A2.5 below shows NGET's current delivery expectations for its incremental wider works portfolio across the T2+2 period.

Table A2.5: NGET IWW volume driver overview

£million, 2018-19 prices	**TOTAL**
Delivery expectations within the T2+2 period	
Number of connected projects (#)	**10**
Boundary capacity (MW)	**2,977**

A further ten projects are currently expected to deliver close to an additional 3 GW of boundary capacity in the T2+2 period, of which three are bridging projects (anticipated to deliver 1.4 GW of boundary uplift capacity).

SPT: Generation

Table A2.6 below presents SPT's current delivery expectations for its generation portfolio across the T2+2 period.

Table A2.6: SPT generation volume driver overview

	TOTAL
Delivery expectations within the T2+2 period	
Number of connected projects (#)	**26**
Output capacity (MW)	**3,692**

SPT is currently anticipating delivery of a further 26 projects and close to an additional 3.7 GW of generation capacity by March 2028 (10.2 GW in total).

SPT: Demand

Table A2.7 below outlines SPT's current delivery expectations for its demand portfolio across the T2+2 period.

Table A2.7: SPT demand volume driver overview

	TOTAL
Delivery expectations within the T2+2 period	
Number of connected projects (#)	**1**
Output capacity (MVa)	**412**

One project, Kendoon to Glenlee Reinforcement[14], is currently expected to connect and deliver an additional 412 MVa of demand capacity in the T2+2 period (bringing the total capacity across the seven-year period to 694 MVa).

SHET: Generation

Table A2.8 below shows SHET's current delivery expectations for its generation portfolio across the T2+2 period.

Table A2.8: SHET generation volume driver overview

	TOTAL
Delivery expectations within the T2+2 period	
Number of connected projects (#)	**14**
Output capacity (MW)	**1,862**

SHET is currently anticipating delivery of a further 14 projects and an additional 1.86 GW of generation capacity within the T2+2 period (2.2 GW in total across the seven-year period).

[14] This work is subject to delay due to a Public Inquiry which was initiated in 2022. A decision has not yet been reached. SPT forecast that expenditure will carry over into the next price control period.

Appendix Three: A common approach to assessing TO cost performance

While the data templates provide a consistent form in which each TO categorises and presents financial and output information, we note that the manner in which each of the TOs have collated and explained the drivers of their performance differs through the data and narrative explanations received (reflecting different business models and the different challenges and opportunities experienced in implementing the RIIO-2 settlement).

This report aims to provide a consistent assessment and view of each TO's regulatory performance[15] under the RIIO-T2 framework. To achieve this, we first outline the key elements that informed the derivation of the original baseline allowances set out in the FD for each TO.

NGET

Two types of adjustment were applied to NGET's request for RIIO-2 funding provision when setting the original baseline totex allowance: a cost efficiency adjustment to the value of the requested capex costs and an ongoing efficiency (OE) challenge across all categories.

- The cost efficiency adjustment was made to reflect the proportion and prevalence of lower confidence capex costs contained in NGET's business plan submission. We decided to impose an overall 5% reduction across all lower-confidence capex elements of NGET's submission informing our view of the appropriate level of efficient LR and Non-Load (NLR) related costs.[16]
- We also included an OE challenge as part of setting the final allowance across each cost area. The challenge reflects the productivity improvements that we consider even the most efficient company can achieve throughout RIIO-2 as they are largely within a company's control (e.g. through effective management of capital, effective investment in innovation etc). We applied the OE challenge as a compounding annual reduction throughout the RIIO-2 period.[17]

There are two further adjustments detailed in the FD that were applied in the derivation of NGET's original baseline totex allowance: a provisional positive adjustment to acknowledge a shortfall in allowances for load-related capex work expected to straddle

[15] Company reports for 2023/24 are available directly from the respective TO websites: SHET, SPT and NGET

[16] More detail can be found in: RIIO-2 Final Determinations. No adjustment was made to the funding requests of SPT or SHET.

[17] The OE challenge for all TOs was originally set to apply 1.15% to all capex costs (excluding those subject to UIOLI conditions) and 1.25% to all opex costs. SPT's values were updated following the 2021 CMA Decision.

the RIIO-1 and RIIO-2[18] periods, and a negative adjustment for excess allowance in RIIO-1 for non-load related capex work that straddled RIIO-1 and RIIO-2.

A provisional value was included within the original baseline allowance by 'netting off' these adjustments and the offset value was captured in Special Licence Condition (SpC) 3.38 of NGET's RIIO-2 licence.

The combination of the above adjustments is summarised in the table below. The value of £5,377m represents the updated totex baseline for NGET including the provisional allowance adjustment (column D in the table below).

The original baseline value was then the subject of further update to reflect the impact of the 'close-out' adjustments for the previous price control.

Table A3.1: Evolution of NGET's five-year baseline allowed totex

Note 1: This includes 'Replacement', 'Refurbishment Major' and 'Minor' cost categories.
Note 2: This includes allowances provided for Physical Security and Cyber Security activities.
Note 3: The costs associated with 'contractor indirects' have not been removed from direct capex categories and reallocated to CAI/BSC.

£million, 2018-2019 prices	**(A) Final cost assessment position[19]**	**(B) Cost efficiency adjustment**	**(C) OE adjustment**	**(D) Net Provisional adjustment**	**(E) Impact of RIIO-1 closeout included**
		-172.6	-316.9[20]	-78.4	
1. Original Totex	**5,945**	**5,772**	**5,456**	**5,377**	
Load related					1,454
Non Load related [Note 1]					1,630
Spares					33
Non-op capex					259
NOCs (excluding Visual amenity)					617
Indirect (CAI & BSC)					1,288
Other [Note 2]					165
2. Total					5,446
3. Revised Totex					**5,460**[21]

The value of £5,460m represents the updated totex baseline for NGET, including the revised adjustment under SpC 3.38 of the RIIO-2 transmission licence (column E in the table above). This value does not include the impact of any reconciling adjustments

[18] More detail on these adjustments can be found in paragraphs 3.35-6 and paragraph 3.72-4 of the FD annex, respectively.

[19] This is not the number submitted in NGET's December 2019 business plan. It is the value resulting from our cost assessment process reflecting modifications received to NGET requests (up or down) in a number of areas.

[20] See table 1: https://www.ofgem.gov.uk/sites/default/files/docs/2021/02/final_determination_nget_annex_revised.pdf

[21] This includes the direct cost baseline value attributable to visual amenity works (£14m).

separately agreed with NGET (e.g. transfer of pension administration costs), end-of-period PCD adjustments or the impact of re-opener or volume driven adjustments.

SHET

An ongoing efficiency challenge was applied to SHET's request for RIIO-2 funding provision when setting the original baseline totex allowance. Unlike NGET, a cost efficiency adjustment was not applied to SHET's requested RIIO-2 capex costs.

Table A3.2: Evolution of SHET's five-year baseline allowed totex

The costs associated with 'contractor indirects' have not been removed from direct capex categories and reallocated to CAI/BSC.

£million, 2018-19 prices	**(A) Final cost assessment position[22]**	**(B) Cost efficiency adjustment**	**(C) OE adjustment**
		n/a	-126.7[23]
1. Original Totex	**2,285**	**n/a**	**2,158**
Load related			774
Non Load related			685
Pre-con, Op Measures & Op IT			74
Spares and Black Start			55
Injurious affection			30
Non-op capex			99
NOCs (excluding Visual Amenity)			90
Indirect (CAI and BSC)			336
Other			15
2. Revised Totex			**2,158**

The value of £2,158m represents the updated totex baseline for SHET including the impact of the OE challenge across all cost categories (column C in the table above).

SPT

An ongoing efficiency adjustment was made to SPT's request for RIIO-2 funding provision, across all cost categories, when setting the original baseline totex allowance. Similar to SHET, a cost efficiency adjustment was not applied to SPT's requested RIIO-2 capex costs.

SPT's RIIO-2 baseline value was not the subject of further update to reflect the impact of the closeout adjustments in the previous price control period. This is due to differences in the mechanisms and the framework design of SPT's RIIO-1 price control.

The decision set out in the FD was subject to an appeal and the impact of the resultant CMA decision was to implement a remedy which changed the OE values to 0.95% per

[22] This is not the number submitted in SHET's December 2019 business plan. It is the value resulting from our cost assessment process reflecting modifications received to SPT requests (up or down) in a number of areas.

[23] See table 1: https://www.ofgem.gov.uk/sites/default/files/docs/2021/02/final_determinations_-_shet_annex_revised.pdf

year for capex and 1.05% for opex. The impact of this decision is shown between column C and column D in the next table (Table A3.3).

Table A3.3: Evolution of SPT's five-year baseline allowed totex

£million, 2018-19 prices	**(A) Final cost assessment position[24]**	**(B) Cost efficiency adjustment**	**(C) OE adjustment pre CMA**	**(D) OE adjustment post CMA**
		n/a	-69.9[25]	-58.2
1. Original Totex	**1,296**	**n/a**	**1,226**	**n/a**
Load related			411	417
Non Load related (including 'spares')			433	437
Non-op capex			9.5	9.6
NOCs			104	105
Indirect			246	247
Other			22	22
2. Revised Totex				**1,238**

The value of £1,238m represents the updated totex baseline position for SPT (column D in the table above). The allowance value breakdown in Column D are calculated by applying a proportional share of the adjusted OE challenge (-£58.2m) across each cost category.

Our baseline approach

Our review of the performance across all costs categories represents the totex baseline position including the impact of:

- the cost efficiency adjustment (NGET only)
- the OE challenge (all TOs), and
- CMA decision to revise the ongoing efficiency rates (SPT only).

It is important to note that our decision to present our overview in this way is not an indication that the company values submitted as part of the reporting pack are not an accurate forecast of the required activities or suggest that the activities they are associated with are inefficient.

Our presentational adjustments have been made only to assist and provide an additional level of transparency and understanding of drivers of the current forecast of under- and over-spend across the RIIO-2 period. Our presentational approach also serves to further highlight and reflect the ongoing uncertain nature of certain costs and the associated assessments that have yet to take place or not yet concluded.

[24] This is not the number submitted in SPT's December 2019 business plan. It is the value resulting from our cost assessment process reflecting modifications received to SPT requests (up or down) in a number of areas.

[25] See table 6: RIIO-2 Final Determinations – SPT Annex (REVISED)

Appendix Four: cost category performance

This appendix examines TO's total expenditure (totex) in comparison to the adjusted totex allowance for the first three years of the RIIO-2 price control period (2021-2024) and evaluates TO's anticipated performance for the five-year price control period (2021-2026). It then presents a further breakdown of each component of TO's expected performance.

We conclude the chapter with a summary of the drivers identified by the TOs of the differential between their forecast totex and their allowances over the RIIO-2 period.

Points to note:

- Minor rounding discrepancies may be present in the values shown in the tables within this appendix.
- Expenditure values in this appendix are not adjusted for the impact of actual/forecast customer contributions.
- Allowance values in this appendix exclude funding for Real Price Effects (RPEs).
- Expenditure values include costs associated with schemes that have delivered an output (via a T1 mechanism) but are continuing to incur costs in RIIO-2. These 'carry-over' schemes have no allowance provision in the RIIO-2 settlement.
- The five-year performance position includes the estimated impact of allowance adjustments forecast by the TOs, where relevant. The three year position does not reflect the TO's estimated adjustments.

NGET's totex performance

Based on the information provided to us, NGET currently expects to receive £7.8 billion over the entire five-year price control period and currently anticipates an underspend of £0.2 billion (3%). This is before the operation of the Totex Incentive Mechanism, which would return 67% of this to consumers.

The expected total allowance value represents baseline allowance (£5.7bn) updated to reflect:

- movements including re-openers submitted and other project specific additional allowance decisions[26] (£1.5bn)
- the operation of uncertainty mechanisms (£0.6bn)
- NGETs view of anticipated end of price control adjustments via PCD mechanisms (£0.4bn), and
- NGETs view of assumed Pipeline Log allowances (£0.2bn).

[26] Visual Improvement Projects and Hinkley Seabank.

Our adjusted presentation shows that NGET currently expects to receive £7.5 billion over the entire five-year price control period and currently anticipates an underspend of £0.1 billion (2%). Our assessment does not include the value of the assumed pipeline log allowances and the value of total expenditure does not include the impact of customer contributions.

Table A4.1: Our current view of totex and adjusted totex allowance

£ billion, 2018-19 prices	Five-year total
Current forecast of expenditure	7.4
Current forecast of adjusted allowance	7.5
Performance	- 0.1
Performance, %	1.6

The next sections set out more detail on the performance across each cost category: load, non-load, non-operational capital expenditure, Network Operating Costs (NOCs), visual amenity projects, indirects and a category capturing 'other' activity.

NGET's load related (LR) performance

NGET is currently forecasting to spend close to £2.02 billion[27] by the end of RIIO-2 on load related activity; 17% below the expected allowance of £2.44 billion[28].

To explain NGET's LR performance we have used the same five "investment category" groupings used by NGET in their stakeholder publication. These are:

1. **Generation**: This combines the cost categories that represent expenditure triggered by individual generation connection projects that provides assets or reinforcements which are shared by users of the transmission network ('Local Enabling entry') or expenditure on infrastructure assets that are covered by connection charges (assigned to the 'Local Enabling entry sole use' category).
2. **Demand:** This combines the cost categories that represent expenditure triggered by individual demand connection projects that provides assets or reinforcements which are shared by users of the transmission network ('Local Enabling exit') or expenditure on infrastructure assets that are covered by connection charges (assigned to the cost category 'Local Enabling exit sole use').
3. **Wider Works:** This represents expenditure required for customer driven reinforcement of the transmission system to meet security standards and to fulfil licence obligations.

[27] The total expenditure value incorporates the impact of one-off contributions across the period (£128m). Without this adjustment, the totel expenditure is £2.15bn.

[28] The total allowance value incorporates adjustments associated with the operation of the UMs (£96m 'DAF' adjustment) and via the PCD mechanisms (£150m) plus the estimated impact of edge effects (£108m) and reconciliation of bridging projects (£203m).

- ***Baseline PCD projects.*** These are projects where our assessment of the technical needs case and associated high-confidence costs and delivery timeline enabled a specific funding decision to be made.

- ***Baseline "Bridging" projects.*** Allowances were set to fund only the efficient costs of the T2 portion of these Infrastructure projects; creating a "bridge" for projects spanning RIIO-2 and RIIO-3 price control periods.

- ***Wider Works.*** Projects eligible for funding through the volume driver.

4. **General Wider Works (GWW):** This category covers LR investments that do not fall into any of the categories above (e.g. Permanent Easements[29]). This category also includes investment carried out by the TOs driven by NESO requirements.
5. **Pre-construction:** funding the cost of pre-construction works incurred.

Tables A4.2 and A4.3 below present an overview of NGET's assessment of LR performance across (i) the three-year period, and (ii) the five-year RIIO-2 period comparing expenditure level to the adjusted allowance for each LR grouping.

Table A4.2: NGET LR performance (three-year actual expenditure vs allowance)

Note 1: Baseline value includes the Hinkley connection project.
Note 2: This includes LOTI & MSIP funding associated with Wider Works activity.

Expenditure

£million, 2018/19 prices	Baseline	UM	Re-opener	T1 carry-over	Total
Generation [Note 1]	101	84	2	7	**195**
Demand	92	58	55	2	**207**
Wider Works	61	81	306 [Note 2]	3	**450**
General WW	32	2	0	3	**37**
Pre-con	102	0	6	0	**108**
Sub total					**997**
"One-off" contributions					**-57**
Total 1					**940**

[29] This is activity related to access and legal agreements where both parties agree to remove the easement, or if the easement is no longer needed due to changes in property ownership or layout.

Adjusted allowance

	Baseline	UM	Re-opener	T1 carry-over	Total
Generation	110	111	7	n/a	**228**
Demand	96	64	58	n/a	**219**
Wider Works	338	276	325	n/a	**938**
General WW	122	0	0	n/a	**122**
Pre-con	299	0	9	n/a	**308**
Total 2					**1,815**
Performance (1-2)					**-875**

Over the three-year period, total spending on the LR portfolio reached £940m. This is £875 m (48%) less than the LR allowances of £1,815 m.

We note that factoring in a pro-rata value of NGET's expected end-of-period adjustments will further reduce allowance and result in a smaller underspend.

The key points of note from the first three years of RIIO-2 are:

- the baseline plan has undergone significant changes, and is a major factor in the observed LR underspend to date. NGET notes that customer-driven activities have caused the connection landscape to evolve differently than anticipated, leading to adjustments in the investment portfolio and associated allowances
- underspend is particularly evident in Wider Works (£489m) and Pre-con activity (£200m), which is linked to the above changes in customer driven activity and the annual updates to the NOA process (led by the NESO).
- spending under Re-opener mechanisms has delivered modest savings (£30m).

Table A4.3 presents an overview of NGET's assessment across the five-year RIIO-2 period. The assessment therefore includes NGET's forecast expenditure and allowances across the 2024-2026 period and incorporates NGET's current estimate of end-of-period allowance adjustments (denoted as 'LR adjustments').

Table A4.3: Expenditure and adjusted allowance by LR grouping (five year)

Note 1: Generation baseline value includes the Hinkley connection project
Note 2: This represents LOTI projects (Hinkley Seabank and Harker)
Note 3: The allowance values include adjustments from the operation of UMs and via PCDs.

A. Five-year Expenditure

£million, 2018/19 prices	Baseline	UMs	Re-op	Other T2 capital costs	(A) Total
Generation	156 [Note 1]	257	4	7	**424**
Demand	148	152	186	2	**489**
WW	179	192	523	3	**897**
GWW	104	5	0	4	**112**
Pre-con	218	0	10	0	**228**
Total					**2,150**[30]

B. Five-year Adjusted Allowance

	Baseline	UMs	Re-op	(B) Total	A – B
Generation	219	226	10	**455**	**-31**
Demand	113	176	148	**436**	**+53**
WW	326	467	505 [Note 2]	**1,298**	**-401**
GWW	166	0	0	**166**	**-54**
Pre-con	384	0	11	**395**	**-167**
Total 1				**2,750**[31]	**-600**

Over the five-year period total spending on the LR portfolio, including one-off contributions, is expected to reach £2,022 m. This is £418 m (17%) less than the LR allowances of £2,440 m after including the impact of NGET's expected end-of-period adjustments.

We note that this performance is also expected in a challenging period of economic conditions, with several upward cost pressures (e.g. rising commodity prices and

[30] The total expenditure value incorporating the impact of one-off contributions across the period is £2,022m.

[31] Including NGET's adjustments for Edge effects and Bridging projects (£311m), the total adjusted allowance is £2,440m

additional development costs) that are likely to continue to impact across the RIIO-2 period.

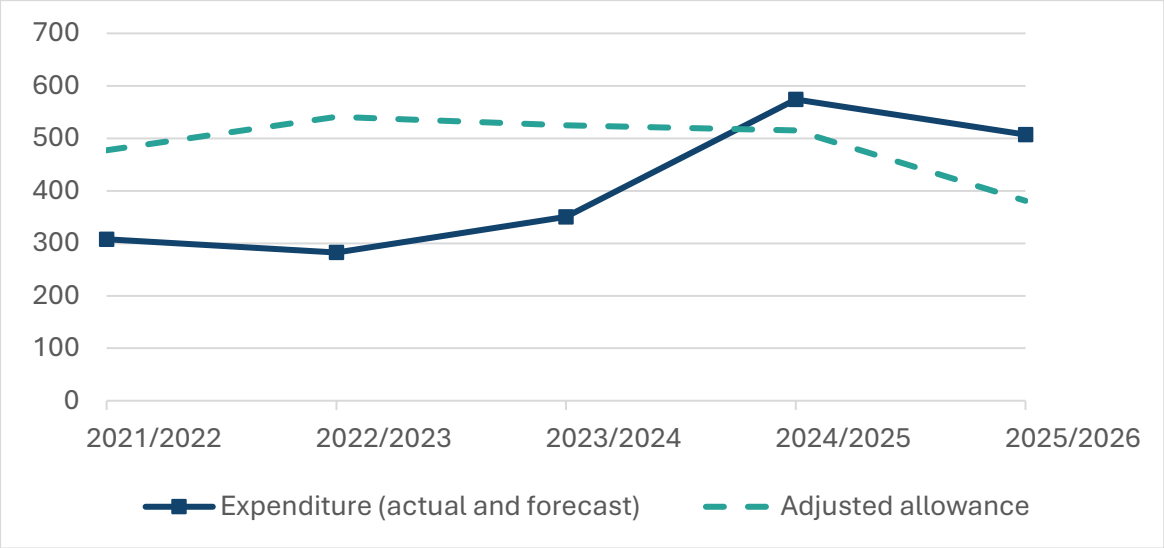
The key points of LR performance, based on incorporating NGET's delivery expectations for the LR portfolio over the next two years, are:

- The difference between costs and allowances varies by investment portfolio. As we progress further into the T2 period, various volume driver mechanisms will automatically adjust allowances to match the required output levels. An increase in activity and delivery is anticipated before the end of March 2026, leading to a rise in both compared to the levels anticipated when the RIIO-2 settlement was reached.
- LR spending is expected to increase significantly over the next two years, more than doubling from £0.94bn to £2.02bn in the period leading to the end of the five-year price control period.
- While Generation and Demand performance is expected to largely offset each other, the performance of the wider works and pre-construction categories are expected to remain a major source of underspend, the former driven by projects being delivered at lower costs than either Baseline or UM allowances (e.g. using power control devices instead of the original solution anticipated when the RIIO-2 settlement was set).
- Despite the potential for some projects to benefit more than others with unit costs set on an average basis, the T2 volume drivers for generation and demand remain broadly cost-reflective, as evidenced by the relatively low number of 'atypical schemes' triggering MSIPs. Given the extent of the change in outputs, the volume drivers have worked well at adjusting allowances.
- Re-opener mechanisms are expected to remain a significant source of additional allowance across the five-year period. However, the currently expectations are that spend will exceed the expected funding by ~7%.
- The current value of NGET's adjustments at the end of the period are expected to reduce the level of LR underspend by approximately 50%.

The figure below compares the actual LR spent to date and NGET's current expectations of the spend to be incurred across the remainder of RIIO-2 against the anticipated allowance across the period.[32] It confirms the underspend in the first three years of RIIO-2, and the shift to total spending exceeding allowance over this period.

[32] The allowance profile incorporates an annual adjustment component, calculated on a pro-rata basis from the total adjustment value estimated by NGET, which is -£557 million (see table A4.4 above).

Figure A4.1: Comparison of LR costs vs adjusted allowance



Supporting data (including the impact of one-off contributions and NGET adjustments)

	2021/22	2022/23	2023/24	2024/25	2025/26
actual / forecast	307	282	351	574	507
Adjusted allowance	477	541	525	515	381

LR performance drivers

The reporting framework requires each TO to identify and present insights at this point in the price control period.

It is not possible to unpick multiple drivers for every project; there can be multiple interacting drivers that can lead to a difference between cost and allowance that are hard to isolate and identify.

The reporting framework seeks to tackle this by requiring each TO to identify and present clear strategic insights on their performance. This includes an explanation of the proportion of performance that it determines to be attributable to three strategic performance factors.

- **Efficiency/Inefficiency:** Instances of reductions in costs as a direct result of TO's action (or cost increases). For example, more efficient working practices.
- **External:** performance gains/losses achieved by factors outside of the control of the TOs. For example, the impact of changes due to changing customer or NESO requirements.
- **Changes in assumptions** made within the RIIO-2 settlement that have varied against the actual position.

To provide a level of consistency, NGET have adopted a high-level approach to allocate work to the performance categories across each of the LR groupings (where a positive number is an underspend and a negative number is an overspend).

Table A4.5: Performance drivers summary (NGET view)

Note: values are based on NGET's forecast across the seven year period and include the impact of the proposed end-of period adjustments noted earlier.

£million, 2018/19 prices	Efficiency	External	Change	Total
Demand	5.3	34.2	19.0	**58.4**
Generation	0.0	-48.4	47.3	**-1.1**
GWW	0.0	52.0	3.0	**55.0**
Wider Works	5.7	231.2	12.8	**249.6**
Pre-con	59.8	1.0	3.1	**63.9**
HINK-SEAB	0.0	-17.3	0.0	**-17.3**

NGET explains that most efficiency initiatives come from pre-construction activities for new transmission routes, with significant savings achieved through a revised consenting process and from combining development activity. Examples cited by NGET include the Eastern Green Link project (c£30 million cost saving driven by simultaneous survey work and differences in consenting regime compared to onshore projects).

Other cost efficiencies have been realised as a result of bundling activities (to remove duplication of activities between projects) and enhancements to procurement strategies and customer liaison arrangements. For example, NGET have identified a reduction in overall delivery costs by assigning the works to the same contractor (Hinkley C and Hinkley Bridgewater projects). On the demand connection side, NGET identifies a bespoke procurement process and scope changes with customer approval has realised savings (Amey Keolis-Transport for Wales project).

External factors are driven by economic conditions, and the broader commercial framework, which influence customer decisions to connect to the transmission network. Due to the systematic nature of the methodology applied, NGET do not provide project-level detail in the 'External' and 'Change' categories. However, NGET identify that:

- alterations in the scale and scope of demand activity through the volume driver is estimated to drive £34m of performance benefit, linked to changes in the demand customer base. The growth in the IT sector has resulted in requests for the connection of large datacentres and gigafactories.
- activity through the wider works volume driver is estimated to drive a significant proportion of the expected performance benefit. This is a combined effect of projects being delivered at lower costs and a high proportion of new projects added to the plan delivering boundary capacity via solutions at a lower cost than allowances provided by the UM (e.g. power control devices).
- the main reason for the expected LR underspend over the five-year period in the GWW category is reduced spending on Permanent Easements. This is due to fewer development loss claims than initially forecasted based on historical data.

Additionally, NGET's decision to re-phase projects (e.g. site separation and shunt reactor schemes) has also contributed to the expected underspend.

- that work to construct a new transmission route to facilitate the connection of the new nuclear power station has been more expensive than anticipated. Costs are exceeding allowances because of programme delays to the required cable delivery, coupled with the costs associated with the movement of outages.

NGET's Non-Load Related (NLR) performance

Non-load activity mainly involves capital investment on replacement and prevention maintenance (refurbishment) to keep existing assets in good condition. The activities are summarised below.

- Replacement. This relates to TO action to replace an existing asset due to it being at its end of life or uneconomic to repair.
- Refurbishment major. This relates to major planned activities that change asset condition (e.g. major overhaul of a circuit breaker).
- Refurbishment minor. This relates to minor planned activities that change asset condition (e.g. tower steelwork recovery).

To explain NGET's NLR performance more clearly, our overview uses the above categorisation. We set out NGET's view of adjusted NLR performance in the tables below, starting with the performance across the first three year period of RIIO-2.

Table A4.6: NGET NLR performance (three-year actual expenditure vs allowance)

Expenditure

£million, 2018/19 prices	Baseline	UM	Re-opener	T1 carry-over	Total
Replacement	939	0	80	-8	**1,011**
Refurb Major	43	0	0	3	**46**
Refurb Minor	7	0	0	0	**8**
Total 1					**1,065**

Adjusted allowance

	Baseline	UM	Re-opener	T1 carry-over	Total
Replacement	1,036	0	62	n/a	**1,098**
Refurb Major	160	0	2	n/a	**162**
Refurb Minor	50	0	1	n/a	**51**
Total 2					**1,311**
Performance (1-2)					**-246**

Over the three-year period, total spending on the NLR portfolio reached £1,065m. This is £246m (19%) less than the unadjusted NLR allowance of £1,311m.

NGET explains that the performance reflects the considerable change to the baseline delivery plan relative to what was originally anticipated when the RIIO-2 settlement was reached. The change has impacted the timing and internal processes to monitor, maintain and replace existing assets.

Much of this has been caused by changes in external circumstances which has driven reductions in replacement/refurbishment activity and associated spend in the first three years of RIIO-2. These circumstances include:

- difficulties with contractor availability and equipment supply delays due to increasing lead-times in a globally constrained market.
- the evolving nature of customer projects impacting on system access for asset health interventions.
- some planned asset health replacement activities being superseded by LR investments and therefore removed from NGET's asset health plan.

We set out NGET's view of adjusted NLR performance across the five-year period below.

Table A4.7: NGET NLR performance (five-year expenditure vs adjusted allowance)

Expenditure

£million, 2018/19 prices	Baseline	UM	Re-opener	T1 carry-over	Total
Replacement	1,578	0	148	20	**1,746**
Refurb Major	101	0	0	4	**105**
Refurb Minor	23	0	10	0	**33**
Total 1					**1,884**

Adjusted allowance

	Baseline	UM	Re-opener	T1 carry-over	Total
Replacement	1,441	0	135	n/a	**1,576**
Refurb Major	273	0	17	n/a	**290**
Refurb Minor	83	0	3	n/a	**86**
Sub total					**1,952**
NLR adjustments					**-149**[33]
Total 2					**1,804**
Performance (1-2)					**+80**

As noted above, NGET considers that to provide an accurate performance measure, end-of-period adjustments have been incorporated into their RIIO-2 allowance. The

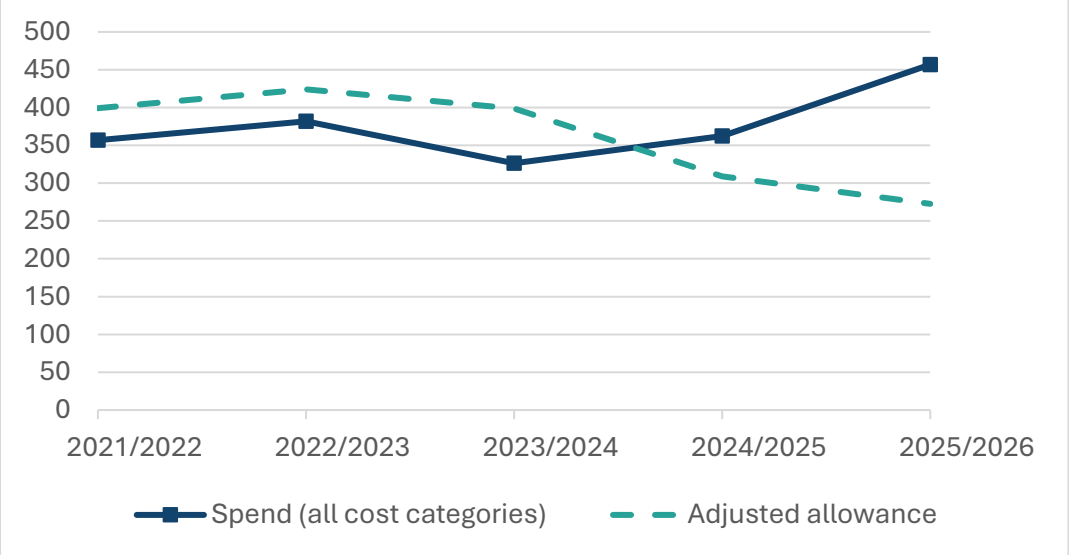
[33] This reflects NGET's anticipated adjustments through the mechanistic PCD process and the Use-It-Or-Lose-It mechanism.

result is an adjusted allowance of £1,804m (a net uplift against the unadjusted value of £1,797m[34]).

Consequently, NGET forecasts total spending on the NLR portfolio is expected to reach £1,884 m. This is £68 m less than the expected NLR allowance value of £1,952 m. After including the impact of NGET's expected end-of-period PCD / UIOLI adjustments, the allowance is further reduced to £1,804 m, resulting in an overspend of £80 m (4%).

The figure below compares the actual spend to date on asset health activity and NGET's current expectations of the expenditure across the remainder of RIIO-2 against the adjusted allowance for this period. It confirms the underspend observed to date and the expected uplift in activity expected across NGET's network over the next two years.

Figure A4.2: Asset Health five-year cost vs adjusted allowance performance



Supporting data

	2021/22	2022/23	2023/24	2024/25	2025/26
actual / forecast	357	382	326	362	457
Adjusted allowance	399	424	399	309	273

The variance between NGET's current view of NLR spend and allowance across the full RIIO-2 period, after incorporating NGET's delivery expectations for the next two years, is due to the following factors.

- Activity Basis: NGET is projecting an overspend of £170m (pre-adjustment) for its replacement program over the five-year price control period, driven by increased baseline activity and associated costs in the remaining two years of the RIIO-2

[34] This is the value of baseline allowances, including the impact of ongoing efficiency, across the cost categories of Replacement and Refurbishment only. It does not include baseline funding provision for spares nor does it incorporate the impact of the NLR offset value captured in SpC 3.38 of NGET's Licence.

period. This is partially offset by a c.£230m (pre-adjustment) underspend in the refurbishment portfolio due to lower-than-expected baseline activity.

- NARM: A modest net overspend of £20m[35] is anticipated for the delivery of NARM works, primarily due to delays in major site-based schemes for circuit breakers, which are increasing costs by approximately £70m. This is offset by a reduction in total activity and associated spend across other NARM categories due to delivery challenges.
- London Power Tunnels 2 (LPT2): This ring-fenced NARM project is showing a £36m[36] increase in spend compared to RIIO-T2 allowances, mainly due to the decision to bring forward decommissioning works into the RIIO-2 period.
- NLR PCD Categories: An underspend is expected, partly because allowances are not fully adjusted and due to delivery efficiencies achieved by NGET. More details are provided in appendix three.
- Efficiency has played a role too in the delivery of work progressed through the re-opener mechanism, but the estimated levels are small and difficult to independently verify.
- Other: The main factors contributing to NGET's forecast under-performance (spend exceeding allowance) in RIIO-2 are activities without RIIO-2 baseline allowances. This includes spending in RIIO-2 for outputs expected in RIIO-3 and a category called 'Costs outside submission' (CoS), which is discussed further below.

NLR performance drivers

The factors influencing NGET's asset health activities are primarily customer-driven changes to NGET's LR programme, which in turn affect the assets needing replacement through NLR work programmes. The key elements contributing to this aspect of non-load investment include:

- Decisions to re-profile investment due to the evolving landscape of connections and the ongoing challenges in obtaining necessary consents and access requirements.
- Changes in the scope of work. In some instances, replacement activities have been deferred or issues with securing system outages have reduced the scope of replacement works.
- Spend on delivery of outputs outside the RIIO-T2 submission.

As noted above, NGET have adopted a high-level approach to allocate work to the performance categories across elements the expected NLR performance. A positive

[35] Five-year spend of £292m is currently expected to be below the allowance value of £311m.

[36] Five-year spend of £553m is currently expected to be above the allowance value of £517m. Separately, the T2 portion of the LPT2 works project is forecast to spend £8m lower than allowance of £121m.

number indicates costs lower than allowances and a negative number indicates costs in excess of allowances.

Table A4.9: performance driver summary (NGET view)

£million, 2018/19 prices	Efficiency	External	Change	Total
Baseline & NARM	5	8	-47	**-34**
Ring-Fenced NARM	0	0	-36	**-36**
Re-Opener	0	0	-22	**-22**
Costs Outside Submission	0	0	-174	**-174**

Under the efficiency/inefficiency category, the differences are due to a combination of small inefficiencies across multiple asset types in the baseline plan, higher than anticipated costs for transformers (NARM) and updated costs associated with circuit breakers and underground cable replacement (NARM). The result is an expected net cost saving.

In relation to external drivers, the differences are due to overhead line (OHL) fittings replacements associated with approximately 144 circuit kilometres of fittings being superseded by LR schemes in the next price control period, leading to a cost saving as a result of no activity.

The value of the final category is comprised of the following factors:

- Two replacement projects have changed scope from replacement to disposal, reducing the associated spend on this work by £7 million.
- This reduction is offset by an overspend of £22 million due to increased spending within RIIO-2 on projects expected to be delivered in RIIO-3.
- Delivery challenges have reduced activity below anticipated levels, lowering associated spending in transformer and reactor categories by £39 million. However, this underspend is offset by larger than anticipated spending in RIIO-2 driven by delays to major site-based schemes for circuit breakers and scope changes for larger projects, resulting in an overspend of £70 million.
- Additionally, spend on activities that have no baseline allowances appear as overspend. These costs are discussed in the next section.

The expected performance under the PCD and UIOLI mechanisms are considered to partially offset the expected underspends identified by NGET in the table above.

Costs outside submission (CoS)

In RIIO-1 NGET had additional work it needed to complete or carry out to ensure a safe and reliable network. This work included the completion of interventions on OHL, some transformers and circuit breakers, plus replacement or refurbishment of instrument transformers and bay assets. These works are condition-driven interventions, except for instrument transformers which have environmental drivers.

Allowances under the RIIO-T1 framework were set at an asset category level (cables, switchgear, etc.) and were not allocated against specific, named asset interventions. TOs had an element of autonomy to re-prioritise and optimise replacement and

refurbishment plans in the delivery of efficient network as the intelligence used for decision making evolved.

Changes in the delivery plan after the RIIO-2 submission resulted in a delay to these interventions. These changes were primarily driven by a mix of system access considerations, and resource constraints (internal NGET staff and external contractor availability).

This work is not part of the RIIO-2 regulatory outputs and NGET is delivering this work without any baseline allowances in RIIO-2. The current allocation is summarised below.

Table A4.10: NGET's current view of five-year CoS actual and forecast expenditure

£ million, 2018/19 prices	**Baseline**	**UMs**	**Re-op**	**T1 carry over**	**Total**
Replacement	162	0	0	n/a	162
Refurb Major	15	0	0	n/a	15
Refurb Minor	2	0	0	n/a	2
Total					178
Percentage %					9%

Total spending of £178m is expected to deliver the asset-health work outstanding from RIIO-1. NGET notes that a portion of the unfunded work has already been completed (£122m) in the first three years of RIIO-2. The vast majority of these costs are driven by replacement activity.

NGET's intention remains to complete the remainder of the CoS work across the rest of the RIIO-2 period and to minimise the impact on delivering RIIO-2 outputs. To complete the outstanding work within the RIIO-2 period, NGET plans to increase the activity rate and associated expenditure across the final two years of this period.

Excluding the impact of CoS across all costs categories, total spending on work across the asset-health portfolio that is in receipt of funding through the RIIO-2 settlement is expected to reach £1,706m[37] across the RIIO-2 period. This is £98m (5%) below the adjusted allowance of £1,804 m (value includes the impact of NGET's estimated end-of-period adjustments).

We will continue to closely monitor progress in the delivery of NGET's asset health program of works and the ongoing interaction with the CoS work.

Spares

Strategic spares has a critical role to play in maintaining the reliability and efficiency of the electricity transmission network.

A baseline allowance of £34m was allocated to the provision of strategic spares activity across the RIIO-2 period. This relates to the purchase, storage, management and

[37] Five-year expenditure of £1,884m minus five-year CoS expenditure £178m.

utilisation of whole assets only that are strategic in nature (and differentiate from sub-component parts of assets which are considered to be stock items).

This item is reported separately to the asset health activities described in the previous section.

Over the three-year period, total spending on strategic spares activity reached £1.1m, reflecting the use of 11 whole asset strategic spares and the acquisition of 14 strategic spares. This is below the allowance for this three-year period of £21m. No forecast spend is included because of the lead times for replenishment (i.e. the costs of replacing spares used in the current reporting year will largely be reflected in next year's submission).

The reported spend reflects the "whole asset" strategic spares approach and is a subset of what NGET considers to be strategic spares (i.e. includes component parts).

NGET notes that the majority of the utilised spares were asset subcomponents (e.g., bushings, circuit breaker mechanisms), not whole assets. Applying NGET's view of strategic spares, it reports:

- utilisation of 757 spares on the network to date, including 167 meters of conductor and 134 meters of underground cable.
- replenishment of 968 spares during the same period.
- stock replenishment costs of £4.58 million over the past two regulatory years.

NGET's non-operational capex performance

Overall, the non-operational capex of £319m represents an underspend of £74m against the total five-year allowances (including re-openers) of £393m.

Table A4.11: NGET's non-op capex spend compared to allowance

£million 2018/ 2019 prices	**Three-year actual spend vs adjusted allowance**	**Two-year spend forecast vs adjusted allowance**	**Five-year total**
Expenditure			
Baseline	164	93	**256**
Re-Opener/UM	33	30	**63**
1. Total Spend	197	123	**319**
Adjusted allowance			
Baseline	182	77	**259**
Re-opener/UM	78	57	**135**
2. Total Allowance	259	134	**394**
Performance (1-2)	-62	-12	**-74**

Based on the information provided:

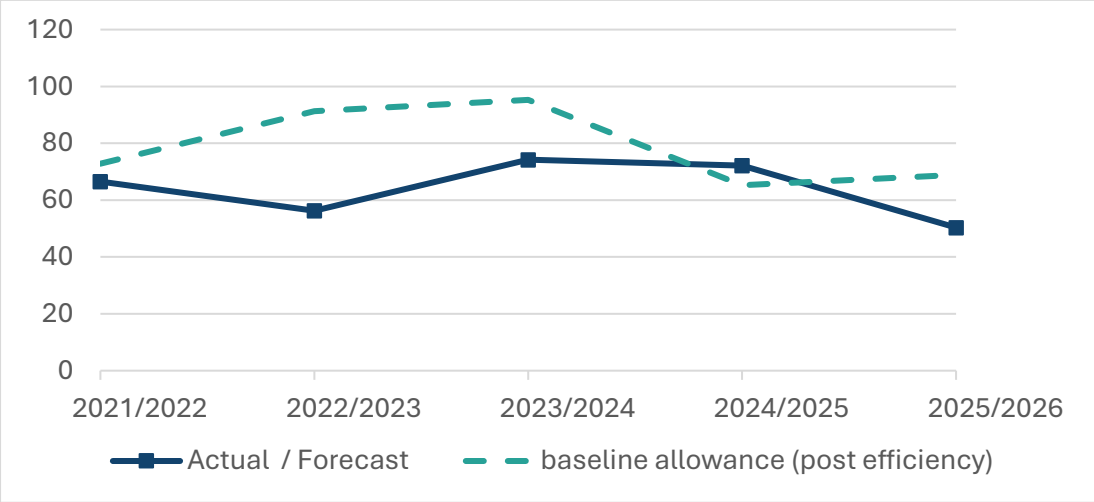
- The total anticipated expenditure on baseline activity is £256m is comparable with the total level of allowance across the RIIO-2 period (£259m).
- The total anticipated expenditure through the re-opener mechanism is £135m, which is £72m below the funding provision across the RIIO-2 period. The SCADA programme forms the bulk of the savings.

Other points from the submitted information across the RIIO-2 period.

- Spending of £13m is currently expected to be incurred by NGET on property across RIIO-2, representing an overspend of approximately £4m, with almost £2m of this relating to 'return to office' costs.
- The cost of EV charging infrastructure across RIIO-2 is £12.5m, which is £2.2m above the allowance. NGET note that a higher count of charger installations and additional ground work requirements have been undertaken than originally anticipated. The programme is part of the broader Productive Work Environment (PWE) initiative, which has seen minimal investment to date, with £0.3m spent so far.

As shown in the figure below, the trend in underspend reported across the first three reporting years (£62m) is currently expected to be replaced by a forecast overspend (£7m) in 2025/26 before reverting to an underspend (£12m) in the final year of RIIO-2.

Figure A4.3: Non-operational capex cost vs adjusted allowance performance



Supporting data

	2021/22	2022/23	2023/24	2024/25	2025/26
actual / forecast	66	56	74	72	50
Adjusted allowance	73	91	95	65	69

Incorporating NGET's estimate of the re-basing exercise to capture SCADAs new delivery profile results in an increase in the total forecast RIIO-2 period spend from £319m to £372m. This reduces the anticipated total underspend to £21m. However, the impact of the SCADA rebasing exercise is not reflected in the performance overview of this report.

NGET's NOCs performance

These are activities which reflect day-to-day running of the network and other actions directly related to maintaining a reliable network.

Total spend across this portfolio of activity is forecast to be £742m, which is £86m (13%) higher than the adjusted allowance position of £656m for the RIIO-2 period.

The main drivers for this difference between spend and allowance are anticipated overspends in legal and safety (L&S) activity, repairs and the impact of an increase in electricity costs for 'own use' at substations. This position is only partially offset by an expected underspend across the Inspections portfolio (£38m) and the costs associated with vegetation management (£2m).

Below we set out NGET's view of NOCs performance across the five-year RIIO-2 period.

Table A4.12: NGET NOC performance (five-year expenditure vs allowance)

£million, 2018/19 prices	**Baseline**	**UM**	**Re-opener**	**Total**
Faults	1	0	0	**1**
Inspections	64	0	0	**64**
Repairs	343	0	2	**345**
Maintenance	80	0	0	**80**
Vegetation management	26	0	0	**26**
Legal & Safety	147	0	3	**150**
Electricity costs only	76	0	0	**76**
Total 1				**742**

Adjusted allowance

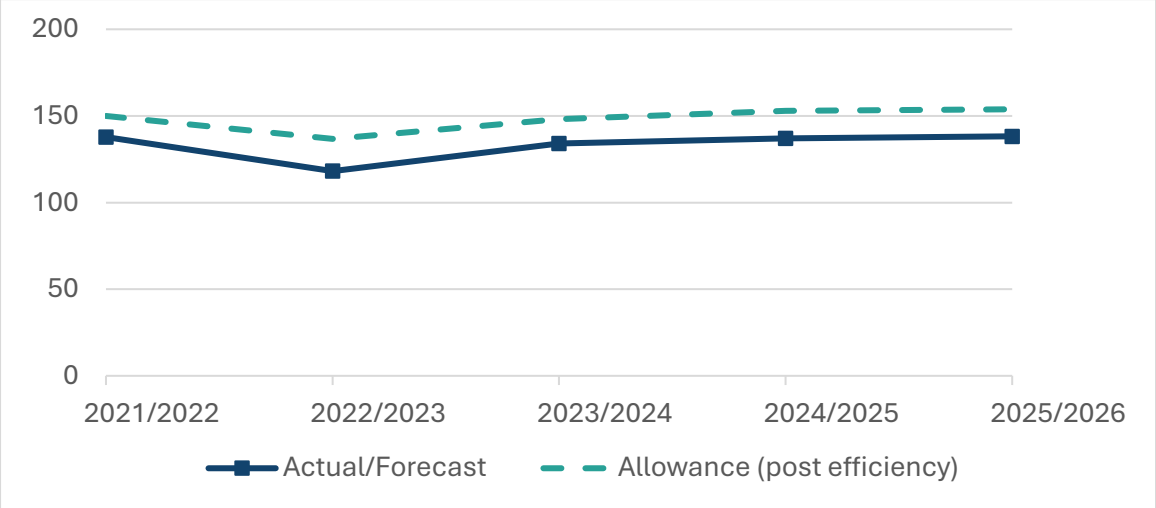
	Baseline	UM	Re-opener	Total
Faults	1	0	0	**1**
Inspections	91	0	11	**102**
Repairs	293	0	24	**317**
Maintenance	75	0	0	**75**
Vegetation management	28	0	0	**28**
Legal & Safety	95	0	3	**98**
Electricity costs only	34	0	0	**34**
Total 2				**656**
Performance (1-2)				**+86**

NGET's own-use electricity across its substations is expected to be overspent by approximately £44m (against an allowance of £76 m) across RIIO-2, reflecting an increase in usage and above inflationary increases in wholesale electricity costs observed since the start of RIIO-2.

The figure below show the comparison between spend versus the allowance across the RIIO-2 period. The values include the impact of the spend and allowance attributable to NGET's own-use substation electricity costs.

Figure A4.4: Comparison of NOCs spend vs adjusted allowance

The NOC values include own-use electricity costs



Supporting data

	2021/22	2022/23	2023/24	2024/25	2025/26
actual / forecast	138	118	134	137	138
Adjusted allowance	150	137	148	153	154

The profile indicates that the current underspend observed across first two years is expected to endure through to the end of the price control period.

The variance between NGET's current view of NOC spend and allowance across each category is further broken out below.

- **Faults:** spending is expected to be broadly in line across the RIIO-2 period. This is also reflected in volumes, with a forecast volume of 683 compared to an assumed volume of 735.
- **Inspections:** an overall underspend is forecast across RIIO-2 baseline activities (opex underspend of £36m offset by a capex overspend of £9m). The anticipated underspend is increased by a further £11m as a result of NGET's allocation of the opex element of the Opex Escalator allowance adjustment to Inspections.

An over delivery of volumes is currently anticipated (74,602 vs 30,935) due to the impact of a definitional change rather than the restatement activity work.[38] This is highlighted in Table A4.13 below.

In terms of site inspection progress, we note:

  - NGET estimates that 60% of NGET owned sites had been inspected within the first three reporting years, with 40% of sites still to be inspected.
  - 34% of Third Party Owned Sites had been inspected to date, with 66% of sites still to be inspected.

- **Maintenance:** NGET is currently forecasting an overspend of £5m for the RIIO-T2 period. The overspend reflects above-inflationary cost increases on parts and equipment required for maintenance activities, and bought-in services.
- **Repair:** spend on major repairs which receive a capex accounting treatment is expected to exceed the allowance across the full the price control period (£132m compared to £118m), predominantly driven by an emergency event at Highbury where two of three transformer units failed. NGET anticipates that spend on opex repairs will reach £211m, which is marginally above allowance (£199m). Over the RIIO-2 period, an overspend of approximately £26m is currently forecast across the repair portfolio of work.

NGET is expecting a marginally higher volume of capex repairs than anticipated when the FD was set (8,178 vs 7,778) and spend to be comparable with allowance after adjustment for the Highbury event[39].

Opex repair volumes are expected to be higher than originally anticipated (103,360 vs 60,150). The activities involved are explained by NGET to be predominantly driven by an increase in SF_6 leakage management and Operational & Engineering Safety Bulletin work not known about at the time of the RIIO-T2 submission (all associated spend is therefore classed as an overspend).

[38] Reported as the total number of interventions on assets, rather than the total number of assets inspected.

[39] Excluding the Highbury event, an underspend of £2m is anticipated by NGET across RIIO-2.

- **Vegetation management:** Spend is currently anticipated to reach £26m, which is marginally (£2m) below allowance for the period. This is driven by a new approach that has increased the cost per span but overall drives a more efficient annual spend.
- **Legal & Safety:** across RIIO-2, NGET forecasts that spending will exceed allowances (approximately by £90m), with close to £40m associated to electricity own-use. The remaining anticipated overspend (approximately £50m) is attributable to a change in the profile of work producing a greater volume of simpler jobs than anticipated at the time of FD and the impact of several cost drivers, including:
    - a £30m overspend for completing flood defence work initiated in the RIIO-T1 period where is no RIIO-T2 allowance (classed as overspend).
    - a £10m overspend due to reallocating management and overhead costs for all sites to the 'site care' portfolio, covering building repairs not linked to site security and general upkeep.
    - rent increases since the original submission, contributing an additional £9m overspend across the RIIO-2 period.
    - general site security costs, accounting for around £6m of the overspend (e.g., temporary security fencing, operation, and maintenance of CCTV)

Table A4.13: NGET NOC volumes by category (five-year total)[40]

	2022	2023	2024	2025	2026	TOTAL	FD
Faults	147	122	141	137	137	**683**	**735**
Inspections	13,432	15,663	15,666	14,920	14,920	**74,602**	**30,935**
Repairs	21,634	23,547	21,966	22,165	22,226	**111,538**	**67,928**
Maintenance	12,403	17,847	18,976	16,409	16,409	**82,043**	**47,745**
Veg M'ngment	997	1,083	1,108	1,063	1,063	**5,313**	**7,258**
Legal & Safety	249	385	399	409	421	**1,862**	**680**
L&S re-opener sites	-	-	-	-	-	**33**	**n/a**

Visual Amenity and the Landscape Enhancement Initiative (LEI)

These are activities which seek to reduce the visual impact of transmission investments and to provide better outcomes for communities potentially affected by major construction projects.

NGET is progressing five projects: Eryri (Snowdonia) National Park, North Wessex Downs, Cotswolds National Landscape, Dorset, Peak District National Park.

[40] Source: NGET response to "SQ16" and narrative table entitled "NOC Totex 5-Year Performance".

NGET currently forecasts to spend close to £313m by the end of RIIO-2; 2% below the expected allowance of £319m. This underspend is driven by a re-profiling of spend within the Snowdonia project. Delivery of the overall project is on-track.

Table A4.14: NGET's current view of five-year expenditure and adjusted allowance

£million 2018/ 2019 prices	**Five-year total**
Baseline Spend	2.6
UM spend	0
Re-Opener Spend	310.4
1. Total Spend	**313.0**
Baseline Allowance	14.3
UM allowance	0
Re-opener allowance	304.9
2. Adjusted Allowance	**319.2**
Performance (1-2)	**-6.2**

A further provision of £12m was made to fund visual amenity works through the Landscape Enhancement Initiative (LEI) during RIIO-T2. This work includes improving fencing, woodland restoration, and grassland management (37 of the 57 projects awarded funding have been completed). NGET reports that it expects total spend on associated projects to reach £5.2m in RIIO-T2, an underspend of almost £7m.

NGET's indirect performance

This includes spending on day-to-day activities required to maintain and operate the transmission networks. These include Closely Associated Indirect (CAI) and Business Support Costs (BSC).

CAI costs support operational activities and the internal resource needed to facilitate the delivery of a company's capital delivery programme of works (i.e. back office functions closely involved in the construction and operation of network assets, such network design). Lower indirect costs will therefore be driven by developing or delivering lower levels of capital investment (and vice versa).

BSC costs are incurred supporting companies' general business activities and corporate governance. The scale of BSC is a consequence of the TO business changing in size relative to other business areas (e.g. growth may require additional IT business support functions).

NGET total expenditure on indirect baseline activity (CAI and BSC) for RIIO-2 is forecast to be £1.64 billion, which is 2% higher than the total adjusted baseline allowance of £1.32 bn.

Incorporating the additional funding through the applicable re-opener mechanisms - the opex escalator and indirect costs relating to two LOTI projects (£277m) – total spend is expected to be 2% higher than the total adjusted allowances of £1.6 billion.

The forecast total overspend of almost £40m (2%) is driven by an anticipated overspend on Business Support. This has been driven by two main factors:

- higher spend reflecting higher than anticipated cost escalations.
- higher costs in a number of support function areas driven by building a workforce to deliver the levels of project work required to achieve the decarbonisation commitment set out by government targets. There is also a general increase in the level of activity as NGET seeks to mobilise and deliver activity to meet the RIIO-2 settlement goals and the ASTI programme.

NGET explains that to remain consistent with the basis of the RIIO-2 submission, and the treatment of contractor 'indirect' activities in allowance setting, delivery contractor costs have been included in direct capex numbers. This is a matter of ongoing discussion with NGET.

Below we set out NGET's view of CAI and BSC performance across the entire five-year RIIO-2 period (i.e. includes NGET's current expectations of forecast expenditure and allowance between 2024-2026).

Table A4.15: NGET indirect performance (five-year expenditure vs allowance)

Note 1: These allowances are based on calculating the impact of the Opex Escalator (licence term CAIAt) excluding projects in the Pipeline Log.
Note 2: CAI associated with LOTI decisions for the Hinkley and Harker projects (£59m and £34m, respectively).

A. Five-year Expenditure

£million, 2018/19 prices	**Baseline**	**UMs**	**Re-opener**	**(A) Total**
CAI	1,157	0	0	**1,157**
BSC	480	0	0	**480**
Total				**1,637**

B. Five-year Baseline allowance only

	Baseline	UMs	Re-opener	(B) Total
CAI	783	0	0	**783**
BSC	431	0	0	**431**
NGET movements	109[41]	0	0	**109**
Total				**1,322**

C. Five-year Adjusted Allowance

	Baseline	UMs	Re-opener	(C) Total	A – C
CAI	880	184 [Note 1]	93 [Note 2]	**1,157**	0
BSC	441	0	0	**441**	+39
Total				**1,599**	+39

CAI: NGET explains that despite facing unexpected challenges like rising costs and the need to hire and train more staff for RIIO-3, overall spending is expected to stay within the anticipated levels for the RIIO-2 period. This is mainly because of the timing of development and delivery of NGET's capital projects, with work being phased over longer a period than originally anticipated.

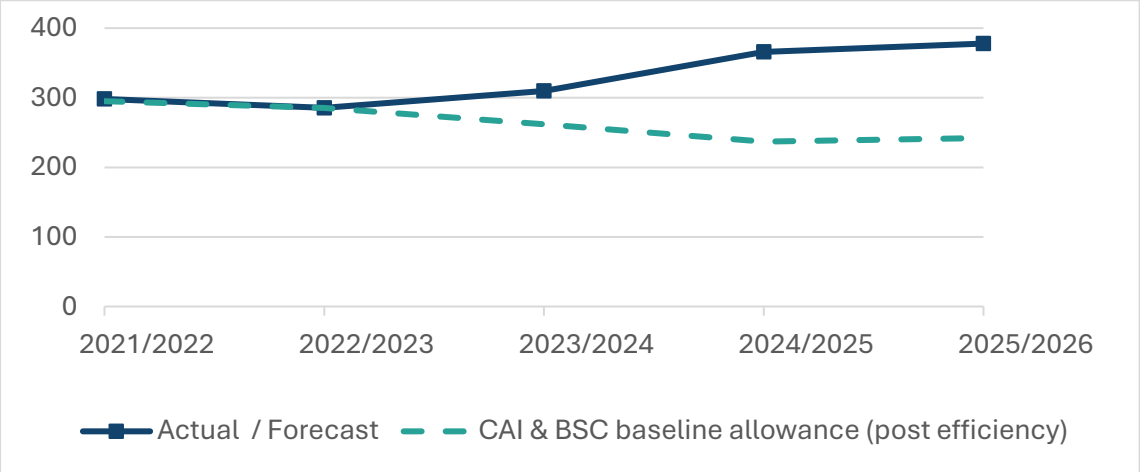
Overall, the revised delivery plan is expected to result in CAI spend being aligned with CAI funding provision across the RIIO-2 period.

BSC: Across RIIO-2, BSC spend is projects to be above the adjusted allowance (£39m overspend). This position is partly the result of rising costs and also work linked to supporting the increased level of activity across ASTI which is driving higher costs in a number of support function areas.

The figure below illustrates the trend in the baseline spend compared to the adjusted baseline allowance across the RIIO-2, combining CAI and BSC.

41 Cumulative adjustment includes a transfer of £10.5m to the BSC category, a transfer of £63.3m from Op IT & Telecoms funding to the CAI category, and an uplift of £34.5m to CAI related to the delivery of schemes within the first two years of the RIIO-2 period.

Figure A4.5: Comparison of Indirect baseline spend vs adjusted baseline allowance



Supporting data

	2021/22	2022/23	2023/24	2024/25	2025/26
actual / forecast	298	285	310	366	378
Adjusted allowance	295	285	262	237	242

NGET's Other performance

This includes spending across activities to strengthen critical network sites (physical security) and to improve and upgrade communication and operational systems to make them more resilient (cyber security).

An overview of the performance is provided in table A2.16 below, confirming NGET's expectation of broadly comparable spend compared to allowance across period. Due to the sensitive nature of these activities NGET's performance is not discussed further.

Table A4.16: NGET's current view of five-year other expenditure and adjusted allowance

£million 2018/19 prices	**Five-year total**
Baseline Spend	132
UM Spend	0
Re-Opener Spend	200
1. Total Spend	**332**
Baseline Allowance	164
UM allowance	0
Re-opener allowance	158
2. Adjusted Allowance	**322**
Performance (1-2)	+10

SHET's totex performance

Based on the information provided to us through the 2023/24 submission, SHET currently expects to receive £4,15m over RIIO-2 and currently anticipates a marginal underspend (0.3%). This is before the operation of the TIM, which would return 64% of this to consumers.

Table A4.17: SHET's current view of totex and adjusted totex allowance

£ billion, 2018-19 prices	Five-year total
Current forecast of expenditure	**4.15**
Current forecast of adjusted allowance	**4.15**
Performance	- 0.01

The totex detailed within SHET's RRP is derived from its Likely Outturn Assessment (LOA) methodology. The methodology is used by SHET, alongside the underlying energy background, to identify which schemes are likely (or unlikely and considered not to sit within the LOA) to connect to its network, thereby providing a more accurate forecast of SHET's expenditure.

SHET's LR performance

SHET is currently forecasting to spend close to £2.23 billion by the end of RIIO-2 on load related activity; 12% below the expected allowance of £2.52 billion.

Table A4.18: SHET's current view of five-year LR expenditure and adjusted LR allowance

A. LR expenditure

£million, 2018-2019 prices	SHET
Baseline	**553**
Uncertainty Mechanisms	**61**
Re-openers	**1,499**
Other[42]	**114**
1. Total	**2,227**

[42] LR schemes that SHET deems not to sit within its LOA but are still incurring costs. For example, schemes subject to the T2 connection volume driver (not considered LOA) and schemes subject to the MSIP and LOTI re-opener (not considered LOA). The value includes T1 carry-over of £9m and costs identified as 'other' of £105m.

B. LR allowance

Baseline	**761**
Uncertainty Mechanisms	**117**
Re-openers	**1,636**
Other[43]	**7**
2. Total	**2,521**
Total expenditure less total adjusted allowance (1-2)	-294

To explain SHET's LR performance more clearly, we've used the same "investment category" groupings used for NGET, where applicable.

Note that the "General Wider Works" category is not utilised as there is no comparable activity in SHET's RIIO-2 settlement.

Tables A4.19 and A4.20 below provide an overview of SHET's assessment of LR performance across (i) the three-year period from April 2021 to March 2024, and (ii) the five-year RIIO-2 period, including forecast expenditure and allowances for 2024-2026, reported against each LR grouping.

Table A4.19: SHET LR performance (three-year actual expenditure vs allowance)

A. LR expenditure

£million, 2018/19 prices	Baseline	UM	Re-opener	Other	T1 carry-over	Total
Generation	239	7	6	38	1	**291**
Demand	0	0	52	0	7	**59**
Wider Works	134	0	379	0	0	**513**
Pre-con	54	0	6	0	0	**60**
1. TOTAL						**922**

[43] In the case of generation and demand connections schemes, all 'sole use' transmission connection asset (TCA) expenditure is charged back to customer. All TCA is subject to 'true-up'.

B. LR Adjusted allowance

£million, 2018/19 prices	Baseline	UM	Re-opener	Other	T1 carry-over	Total
Generation	355	31	10	0	Not applicable	**396**
Demand	0	0	45	0	Not applicable	**45**
Wider Works	177	0	462	0	Not applicable	**639**
Pre-con	46	0	6	0	Not applicable	**52**
2. TOTAL						**1,132**
Performance (1-2)						-210

Over the three-year period, total spending on the LR portfolio reached £922 m. This is £210 m (19%) less than the cumulative LR allowances of £1,132 m.

The key points of note from the first three years of RIIO-2 are:

- Customer-driven activities have caused the energy landscape to evolve differently than expected, and changes to SHET's outputs are driving changes to SHET's LR investment portfolio and the associated allowances, and this is a major driver of LR underspend.
- Underspend is particularly evident in generation connection activity, which is marginally offset by an overspend against demand connection activities.

Table A4.20: SHET LR performance (five-year expenditure vs adjusted allowance)

A. LR expenditure

£million,2018/19 prices	Baseline	UM	Re-opener	Other	T1 carry over	Five-year total
Generation	252	61	98	106	1	**518**
Demand	0	0	124	0	7	**131**
Wider Works	234	0	1,271	0	0	**1,505**
Pre-con	67	0	6		0	**73**
1. TOTAL						**2,227**

B. LR Adjusted allowance

	Baseline	UM	Re-opener	Other	T1 carry over	Five-year total
Generation	347	117	69	7	0	**540**
Demand	0	0	99	0	0	**99**
Wider Works	335	0	1,446	0	0	**1,781**
Pre-con	79		22		0	**101**
2. TOTAL						**2,521**
Performance (1-2)						-294

Over the five-year period, total spending on the LR portfolio is expected to reach £2,227 m. This is £294 m (12%) less than the LR allowances of £2,521 m.

The key points of LR performance (direct cost only), based on incorporating SHET's delivery expectations for the LR portfolio over the next two years, are:

- A material increase in activity and delivery is anticipated before the end of March 2026 through the generation connection volume driver mechanism. This will automatically adjust allowances to match the required output levels, leading to a rise in allowance. An underspend is currently expected due largely to the impact of savings driven by a revised contracting strategy efficiency savings.

- We also note that projects subject to the volume driver are subject to movement and further performance swings are to be expected as projects mature and cost updates are made.
- While Generation and Demand performance is expected to largely offset each other, the performance of the wider works and pre-construction categories are expected to remain a major source of underspend.

For example, SHET anticipates large underspends against the following Wider Works projects:

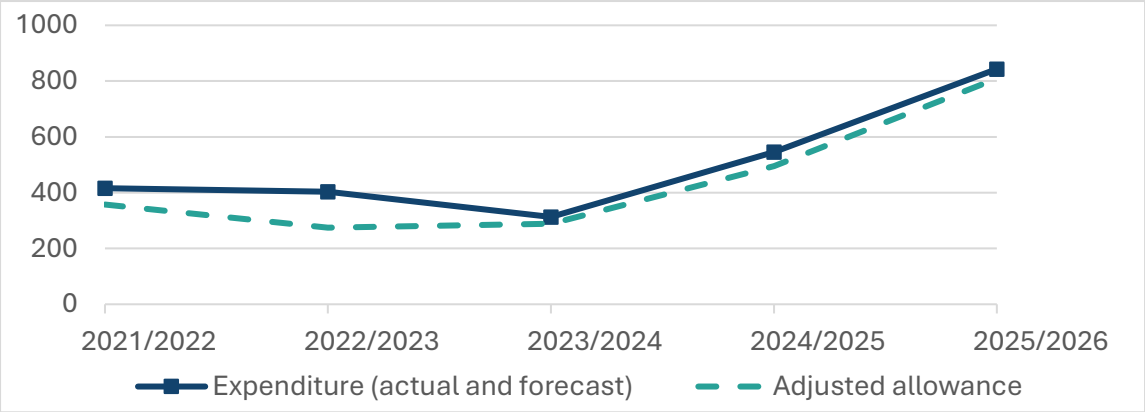
- **East Coast 275kV (ECU2):** over the five-year period, total spending is expected to reach £84m, which is £59m below the allowance across the same period. This underspend is explained to be the result of 'bundled' works combing the Alyth 275kV substation and Tummel Bridge schemes.
- **East Coast 400kV Upgrade (ECUP):** £43m underspend is anticipated across the five-year period driven by delays caused by supply chain constraints, and the phasing of spend into RIIO-3 (£44m currently expected to be incurred in the T2+2 period).

Underspend is also anticipated against the following 'shared-use' projects:

- **North East 400kV upgrade:** over the five-year period, total spending is expected to reach £130m, which is £39m below the allowance across the period. The underspend is explained to be the result of the contract tendering process, early ordering of materials and a change in scope to the Rothienorman substation (4 SGTs to 2 SGTs).
- **Tummel Bridge SVC**: £27m underspend is anticipated across the five-year period driven by the bundling works noted above.
- Re-opener mechanisms are expected to remain a significant source of additional allowance across the five-year period. However, the currently expectations are that spend will exceed the expected funding by ~8%, driven predominantly by the work on the Shetland HVDC project which was completed in August 2024 (SHET currently anticipates a capex outperformance of £56m for the project).

The figure below compares the actual LR spent to date and SHET's current expectations of the spend across the remainder of the RIIO-2 period against the anticipated allowance for the period. It confirms the underspend observed during the first three years of RIIO-2 and SHET's expectation of a shift towards a closer alignment between spending and allowances by the end of the RIIO-2 period, thereby reducing the overall underspend for the entire period.

Figure A4.6: Comparison of LR costs vs adjusted allowance



Supporting data

	2021/22	2022/23	2023/24	2024/25	2025/26
actual / forecast	416	403	313	546	843
Adjusted allowance	357	275	288	495	809

LR performance drivers

SHET explains that most of the expected outperformance is the result of cost-saving initiatives, with significant savings achieved through a revised contracting strategy. Other cost efficiencies have been realised as a result of bundling activities (to remove duplication of activities) and enhancements to procurement strategies. For example,

SHET have identified forecasted benefits from fixed-price contracts for some 'Certain View' works, which limit commodity exposure in the capital programs.

Table A4.21 shows a breakdown of the proportions of total LR performance that SHET have categorised against our strategic performance factors: efficiency, external, and change. A positive number indicates costs lower than allowances.

Table A4.21: Performance drivers summary (SHET view)

£million, 2018/19 prices	Efficiency	External	Change	Total
Demand	7.5	0	0	**7.5**
Generation	131	0	0	**131**
Wider Works	170	0	86	**256**

Generation savings are largely attributable to Tummel bridge SVC, Tealing Busbar, North-East 400kv projects, and multiple volume driver schemes. We note that an element of the cost saving is also attributable to the removal and re-allocation of CAI.

The values identified against Wider Works projects are attributable to the East Coast 400kV, Shetland HVDC and Alyth substation and reactive compensation projects, plus removal of CAI on unapproved LOTI projects.

SHET's NLR performance

SHET is forecasting to outperform against allowance over the five-year RIIO-2 period. Total spending on the NLR portfolio is expected to reach £685m, which is £159 m (19%) less than the value of NLR allowance across the RIIO-2 period.

Table A4.22: SHET NLR performance (five-year expenditure vs adjusted allowance)

A. NLR expenditure

£million, 2018/19 prices	SHET
Baseline	**662**
Uncertainty Mechanisms	**0**
Re-openers	**0**
T1 carry over	**23**
Total 1	**685**

B. NLR allowance

Baseline	**844**
Uncertainty Mechanisms	**0**
Re-openers	**0**
Total 2	**844**
Performance (1-2)	**- 159**

To explain SHET's NLR performance more clearly, our overview applies the same categories used in chapter three (Replacement, Refurb Major and Refurb Minor). However, the category "NLR Other" differs as it includes activity categories of "Spares", "Black Start"[44] and Landowner Compensation (i.e. "Injurious Affection").[45]

We set out SHET's view of adjusted NLR performance across two different timescales: a comparison of the three year actual costs incurred against allowance (2021-2024), and a comparison across the full five-year RIIO-2 period for each NLR cost category.

Table A4.23: SHET NLR performance (three-year actual expenditure vs allowance)

£million, 2018/19 prices	**Baseline**	**Re-opener and UM**	**T1 carry-over**	**Total**
NLR Expenditure				
Replacement	209	0	13	**222**
Refurb Major	0	0	0	**0**
Refurb Minor	0	0	0	**0**
NLR Other	26	0	0	**26**
1. TOTAL				**248**
NLR Adjusted allowance				
Replacement	423	0	n/a	**423**
Refurb Major	0	0	n/a	**0**
Refurb Minor	0	0	n/a	**0**
NLR Other	59	0	n/a	**59**
2. TOTAL				**482**
Performance (1-2)				-234

Over the three-year period, total spending on the NLR portfolio reached £248m. This is £234m (49%) less than the NLR allowance of £480m.

SHET explains that the performance reflects the considerable change to the baseline delivery plan relative to what was originally anticipated when the RIIO-2 settlement was

[44] Black start is the process of restoring part of the grid to operation without relying on the external transmission network.

[45] This refers to the reduction in the value of land or property due to the TOs actions, such as the construction of infrastructure.

reached. The change has impacted the timing and internal processes to monitor, maintain and replace existing assets.

Much of this has been caused by changes in external circumstances which has driven reductions in replacement/refurb activity and associated spend.

Table A4.24: SHET NLR performance (five-year expenditure vs adjusted allowance)

NLR expenditure

£million, 2018/19 prices	**Baseline**	**Re-opener and UM**	**T1 carry over**	**Five-year total**
Replacement	589	0	23	**612**
Refurb Major	0	0	0	**0**
Refurb Minor	0	0	0	**0**
NLR Other	73	0	0	**73**
1. Total				**685**

NLR Adjusted allowance

	Baseline	**Re-opener and UM**	**T1 carry over**	**Five-year total**
Replacement	756	0	n/a	**756**
Refurb Major	0	0	n/a	**0**
Refurb Minor	3	0	n/a	**3**
NLR Other	85	0	n/a	**85**
2. Total				**844**
Performance (1-2)				-159

Over the five-year period, total spending on the NLR portfolio is expected to reach £685m. This is £159m (19%) less than the NLR allowances of £844m.

An underspend of £182m is currently anticipated across all baseline activities. This is driven by a ranger of factors including:

- a reduced non-load program and fewer replacements than anticipated when the RIIO-2 settlement was reached, partially driven by improvements in asset condition information deferring the need for intervention, supply chain issues and the ability to secure system access outages with the NESO.

- the impact of 'trailing costs' for T1 workplan which do not have allowances (c.£31m).
- initiatives on specific baseline schemes that have driven lower levels of spend than originally anticipated. For example:
    - Port Ann – Crossaig 132kV OHL: over the five-year period, total spending is expected to reach £87m, which is £39m[46] below the allowance across the same period (c. £31m savings after reallocation of contractor indirects). This project is complete and the underspend is attributed to savings on innovative wiring methods (use of heavy-duty pilot bonds) to improve wiring productivity and the retention of temporary access tracks by the landowner.
    - Beauly 132kv reinforcement and Kintore Substation Works: spend across both projects is anticipated to be £24m below allowances (c.£18m after reallocation of contractor indirects) across the five-year period. SHET notes that delivery milestones have been affected by issues with supply chain and system access outages.
- Sloy Substation: c£28m outperformance is attributable to an agreed change in scope and improved information about the site. Costs have now been phased into T3 (it is currently included in SHET's RIIO-3 business plan).
- no current forecast spend for refurbishment activity across RIIO-2 (£3m underspend). Works will not be progressing due to a recent application which may alter the scope of works.

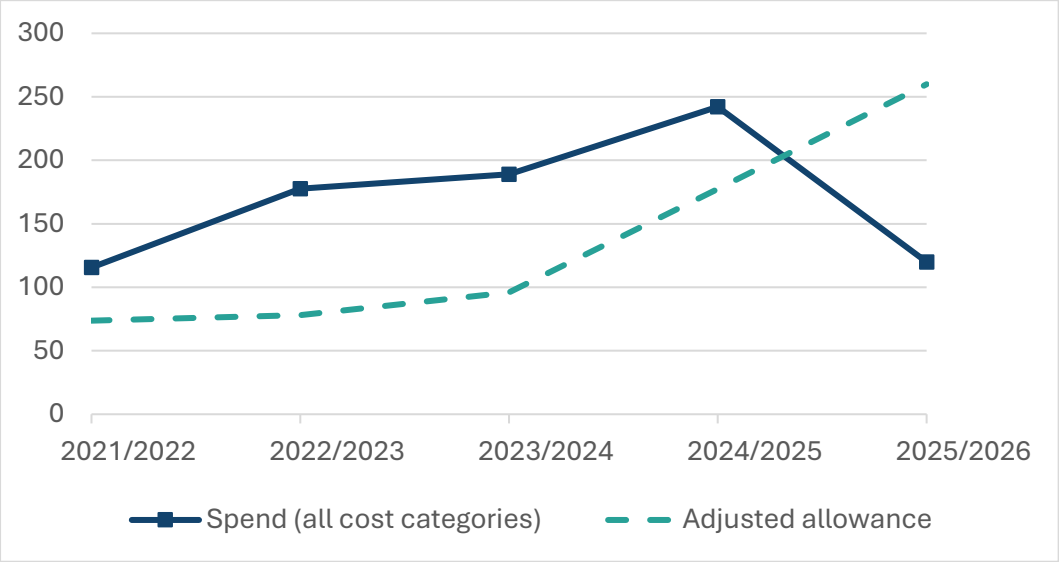
Within the "other" category, the expected outperformance is driven by:

- 41% (£5m) underspend against the allowance for managing spares.
- 7% (£3m) underspend against the allowance for Black Start activities, driven by cost-saving initiatives.
- 14% (£4m) underspend against anticipated injurious affection, due to fewer and lower-value claims than anticipated when the RIIO-2 settlement was reached.

The figure below compares the actual spend to date on asset health activity and SHET's current expectations of the expenditure across the remainder of RIIO-2 against the adjusted allowance for this period. It confirms the underspend observed to date and the expected uplift in activity expected across SHET's network over the next two years.

[46] This excludes the costs and allowance associated with the Inverary to Crossaig scheme and Tree cutting.

Figure A4.7: Asset Health five-year cost vs adjusted allowance performance



Supporting data

	2021/22	2022/23	2023/24	2024/25	2025/26
actual / forecast	116	178	189	242	120
Adjusted allowance	74	78	96	177	260

NLR performance drivers

The factors influencing SHET's asset health activities are primarily customer-driven changes to SHET's LR programme, which in turn affect the assets needing replacement through NLR work programmes. The key elements contributing to this aspect of non-load investment include:

- Decisions to re-profile investment due to the evolving landscape of connections and the ongoing challenges in obtaining necessary consents and access requirements.
- Changes in the scope of work. In some instances, replacement activities have been deferred or issues with securing system outages have reduced the scope of replacement works.

SHET have adopted a high-level approach to allocate work to the performance categories across elements the expected NLR performance

Table A4.25: Performance driver summary (SHET view)

£million, 2018/19 prices	Efficiency	External	Change	Total
Replacement	47	31	66	**144**
Refurbishment	0	3.2	0	**3.2**
Other				**12.1**

Replacement activity is driven by savings from the delivery of the Port Ann – Crossaig 132kV OHL works, Beauly 132kV reinforcement, and the Sloy Substation project. However, this project has been identified as delayed and is being considered as part of the T3 business plan (we note SHET's proposal to hand-back the T2 allowances in full). Additionally, there are elements attributable to CAI re-allocation and RIIO-1 trailing costs, which do not have allowances.

There is currently no forecast spend for refurbishment. The T2 business plan included £3.2m allowances for two schemes; Tummel Bridge Substation is not progressing within the RIIO-2 period and Redmoss Substation works are currently on hold due to recent generation application which may alter the scope of works.

SHET's non-operational capex performance

Overall, the non-operational capex of £97m represents an underspend of £13m against the total five-year allowances (including re-openers) of £110m.

Table A4.26: SHET's non-op capex spend compared to allowance

£million 2018/2019 prices	**Three-year actual spend vs adjusted allowance**	**Two-year spend forecast vs adjusted allowance**	**Five-year total**
Expenditure			
Baseline	32	53	**85**
Re-Opener	2	9	**12**
1. Total	35	62	**97**
Adjusted allowance			
Baseline	80	18	**98**
Re-opener	2	9	**12**
2. Total	82	27	**110**
Performance (1-2)	-47	+35	**-13**

Based on the information provided:

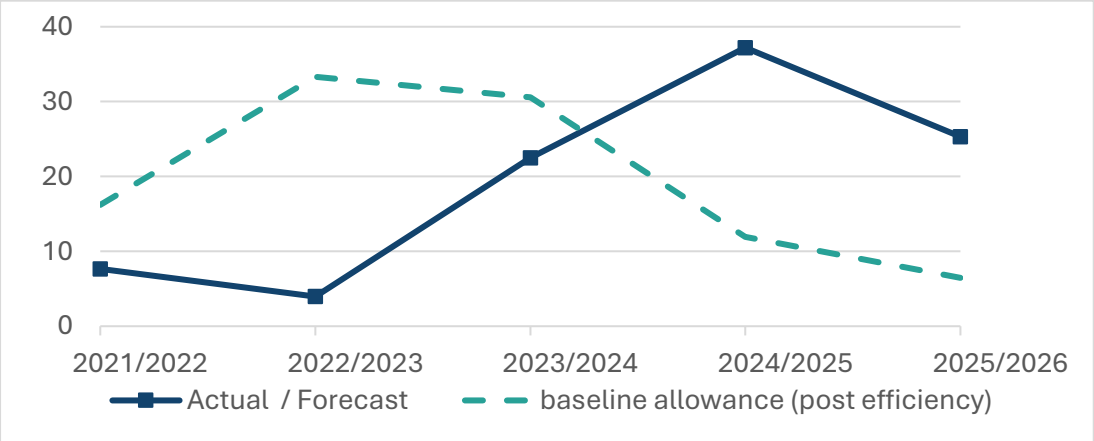
- The total anticipated expenditure on baseline activity (£85m) is 13% below the total level of allowance expected across the RIIO-2 period (£98m).
- The total anticipated expenditure through the re-opener mechanism is in line with the funding provision across the RIIO-2 period.

Other points from the submitted information across the RIIO-2 period include:

- SHET expect to incur £53m on property across the period, representing an underspend of approximately £9m. This is mainly due to a reduced spend (c.£13m) on an interim control room solution, partially offset by higher costs (c.£4m) for the construction of two warehouses and other property upgrades.
- The cost of IT projects is expected to reach around £42m, exceeding the anticipated allowance due to above-inflationary cost increases. SHET confirms that all IT outcomes are on track to be delivered by the end of the RIIO-2 period.
- SHET has incurred £1.5m in leasehold property improvements for a new Dyce depot/workshop and a new office space in the Aberdeen area to accommodate staff growth required for the Net Zero business plan and ASTI projects.
- SHET reports no expenditure or allowance for purchased vehicles, noting that its vehicle fleet is leased and expenditure is included within CAI's.

As shown in the figure below, the trend in underspend reported across the first three reporting years (£47m) is currently expected to be replaced by a forecast overspend (£35m) over the remaining two years of the price control period. This is driven by an expected increase in costs associated with the delivery of IT projects and in property upgrades compared with a reducing profile of allowances over the same period.

Figure A4.8: Non-operational capex cost vs adjusted allowance performance



Supporting data

	2021/22	2022/23	2023/24	2024/25	2025/26
actual / forecast	8	4	22	37	25
Adjusted allowance	16	33	31	12	6

SHET's NOCs performance

Total spend across this portfolio of activity is forecast to be £106m[47], which is £4m (4%) higher than the adjusted allowance position of £102m for the RIIO-2 period.

[47] This includes £90m Baseline Allowance (excluding own-use electricity costs) plus additional allowances from LOTI/MSIP projects.

The main drivers for this difference between spend and allowance are anticipated overspend in vegetation management activities, predominantly driven by compensatory tree planting costs.[48] This position is only partially offset by an expected underspend across the Inspections portfolio (£3m) and reduced costs associated with repairs and maintenance (£8m).

Below we set out SHET's view of NOCs performance across the five-year RIIO-2 period.

Table A4.27: SHET NOC performance (five-year expenditure vs allowance)

Note 1: Legal & Safety costs exclude the value of own use electricity

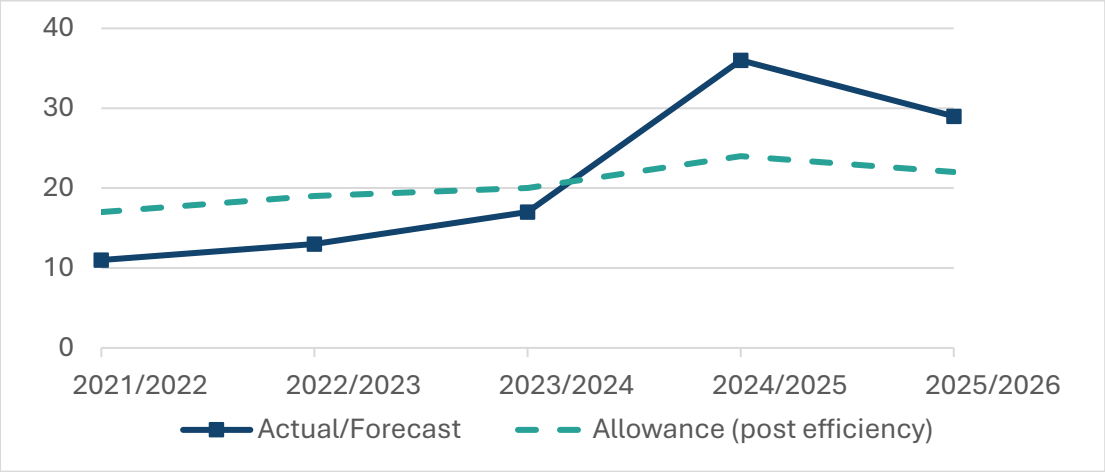
£million, 2018/19 prices	Baseline	UM	Re-opener	Total
Expenditure				
Faults	2	0	0	**2**
Inspections	10	0	1	**11**
Repairs and Maintenance	33	0	14	**47**
Veg management	26	0	0	**26**
Legal & Safety	18	0	0	**18**
Electricity costs only	2	0	0	**2**
1. Total				**106**
Adjusted allowance				
Faults	3	0	0	**3**
Inspections	11	0	3	**14**
Repairs and Maintenance	47	0	8	**55**
Veg management	9	0	0	**9**
Legal & Safety	17	0	0.4	**17**
Electricity costs only	4	0	0	**4**
2. Total				**102**
Performance (1-2)				**+4**

The figure below show the comparison between spend versus the allowance across RIIO-2.

[48] Part of obligatory planning condition costs imposed by the Scottish Government.

Figure A4.9: Comparison of NOCs spend vs adjusted allowance

Note 1: Legal & Safety values include own use electricity



Supporting data

	2021/22	2022/23	2023/24	2024/25	2025/26
actual / forecast	11	13	17	36	29
Adjusted allowance	17	19	20	24	22

The cumulative underspend reported to date is anticipated to be offset and exceeded by forecast overspends in future years across the NOCs category.

The variance between SHET's current view of NOC spend and allowance across each category is further broken out below.

- **Faults:** spending is expected to be broadly in line across the RIIO-2 period. The forecast costs are expected to increase over the RIIO-2 period due to the growth in the volume of assets which were delivered in late T1, now becoming out of their warranty period. The costs in 2025 and 2026 are a forecast at this stage.
- **Inspections:** an overall underspend is forecast across RIIO-2 activities. The anticipated underspend is offset in the final two years of RIIO-2 as a result of expected cost increases relating to differing subsea cable surveys including the new subsea cable

from the mainland to Shetland (agreed and assessed through the LOTI process).

- **Repair & Maintenance:** SHET is currently forecasting an underspend for the RIIO-T2 period. Spend on SHET's HVDC assets from Caithness Moray and Shetland account for more than half the forecast spend in this category (c.£25m). The other major driver of cost is the energisation of the Shetland link (i.e. cost to maintain the new convertor site at Kergord) and the new DC switching station. SHET also explains that it anticipates further cost reductions as a result of bringing in-house certain civil repair and maintenance activities (drainage etc).

- **Vegetation management:** Spend is currently anticipated to reach £26m, which is above (£9m) allowance for the period. Once the tree planning costs are isolated, SHET is expecting to outperform allowance as a result of reducing reliance on contractors.
- **Legal & Safety:** across RIIO-2, SHET forecasts that spending will be broadly comparable with allowances. Own use electricity costs are forecast to be under allowance.

Visual Amenity

SHET is progressing five projects: Glen Falloch and Sloy mitigation projects, Loch Lomond and the Trossachs National Park, Loch Tummel National Scenic Area Mitigation Project, Boat of Garten / Nethybridge and Killin. SHET currently forecasts to spend close to £69m by the end of RIIO-2; 5% below the expected allowance of £66m.

Table A2.28: SHET's current view of five-year expenditure and adjusted allowance

£million, 2018-2019 prices	SHET
Expenditure	
Baseline	13
Uncertainty Mechanisms	0
Re-openers	57
1. Total	69
Adjusted allowance	
Revised baseline	8
Uncertainty Mechanisms	0
Re-openers	58
2. Total	66
Performance (1-2)	+3

SHET's indirect performance

SHET explains that, in accordance with the reporting requirements, costs associated with 'contractor indirects' (CI)[49] have been separated from its direct capex numbers and reallocated to CAI/BSC. Table A4.29 below summarises the impact of SHET's reallocation.

[49] Costs incurred on activities performed by external third parties on behalf of the TO and/or agents engaged to provide distinct CAI services under instruction from a TO.

Table A4.29: SHET's current view of five-year capex and opex

SHET's estimated value of CI subject to reallocation is £269m.

£million, 2018-2019 prices	CI reallocated	CI not reallocated
Capital expenditure		
Load	2,227	2,426
Non Load	685	747
Non-operational	97	105
1. Total	3,009	3,278
Operational expenditure		
NOCs & Visual Amenity excluding own use electricity	176	176
Indirects	907	638
Other	59	59
2. Total	1,142	873
Forecast T2 totex (1+2)	4,150	4,150

SHET total expenditure on indirect baseline activity (CAI and BSC) for RIIO-2 is forecast to be £907m, which is approximately double the total adjusted baseline allowance of £448m. The expected overspend is predominantly driven by the removal and re-allocation of CI costs.

Below we set out SHET's view of CAI and BSC performance across the entire five-year RIIO-2 period (i.e. includes NGET's current expectations of forecast expenditure and allowance between 2024-2026) after reallocation in CI costs.

Table A4.30: SHET indirect performance (five-year expenditure vs allowance)

Expenditure

£million, 2018/19 prices	Baseline	UM	Re-opener	Total
CAI	698	0	0	**698**
BSC	222	0	0	**222**
CAI Cust contribution	0	-14	0	**-14**
1. TOTAL				**907**

Adjusted Allowance

	Baseline	UM	Re-opener	Total
CAI	238	104	0	**342**
BSC	98	0	8	**106**
2. TOTAL	336	104	8	**448**
Performance (1-2)				**+459**

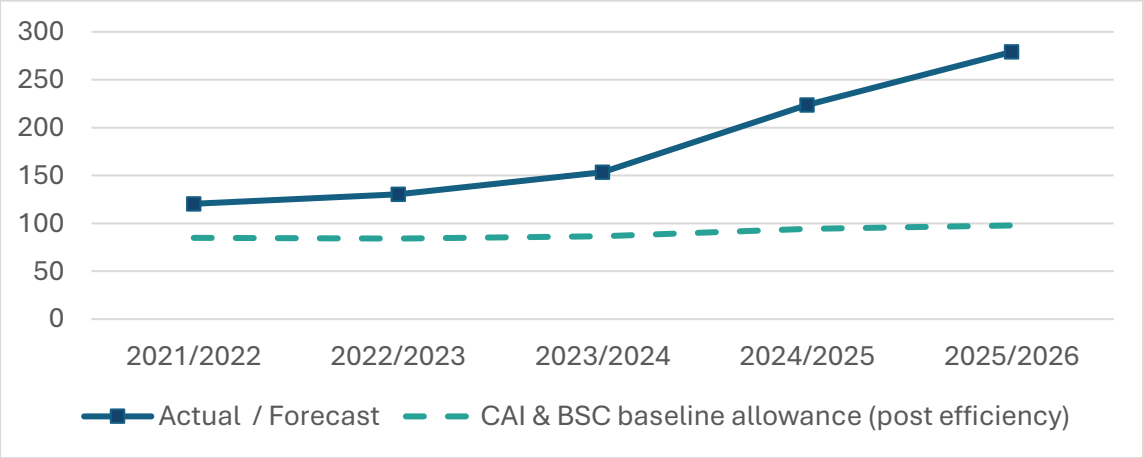
CAI: RIIO-2 costs are currently forecast to be £342m over allowances (including the impact of recovering £14m in CAI contributions directly from users of SHET's network). SHET explains that this overspend is largely due to CI costs now reported through CAI (c.£270m). Of the £74m remaining overspend, this can be attributed to CAI's required to deliver Pathway to 2030 commitments and associated with organisational growth driving increased staff overheads.

BSC: Across RIIO-2, BSC spend is forecast to reach £222m which is above the adjusted allowance of £106m (48% variance). This overspend is linked to supporting the increased level of activity across ASTI is driving higher costs in a number of support function areas.

SHET have indicated that further work is underway to split underlying Non-Contractor Indirects within the BSC/CAI categories and associated with delivery of RIIO-2 baseline commitments and activity unforeseen when the RIIO-2 settlement was reached. We welcome the additional transparency that this will provide in framing SHET's performance narrative.

The figure below illustrates the trend in the expected spend compared to the adjusted baseline allowance across the RIIO-2, combining CAI and BSC. It shows an increasing divergence between expected spend and allowance across the RIIO-2 period. The total position is forecast to be an overspend.

Figure A4.10: Comparison of Indirect baseline spend vs adjusted baseline allowance



Supporting data

	2021/22	2022/23	2023/24	2024/25	2025/26
actual / forecast	120	130	153	224	279
Adjusted allowance	85	84	87	94	98

SHET's Other performance

This includes spending across activities to strengthen critical network sites (physical security) and to improve and upgrade communication and operational systems to make them more resilient (cyber security).

An overview of the performance is provided in table below, confirming SHET's expectation of broadly comparable spend compared to allowance across the five-year RIIO-2 period. Due to the sensitive nature of these activities SHET's performance is not discussed further

Table A4.31: SHET's current view of five-year expenditure and adjusted allowance

Expenditure

£million, 2018-2019 prices	**SHET**
Baseline	13
Uncertainty Mechanisms	0
Re-openers	46
1. Total	**59**
Other allowance	
Baseline	15
Uncertainty Mechanisms	0
Re-openers	46
2. Total	**61**
Performance (1-2)	**-2**

SPT

In the case of SPT, we note that its presentation of totex values does not include the impact of the ongoing efficiency adjustment (where applicable). Our overview includes the impact of the agreed efficiency adjustment against the applicable allowance values.

SPT's view of totex performance

Based on the information provided to us through the 2023/24 submission, SPT currently expects spend to reach approximately £2.65 billion over the price control period and currently anticipates a marginal underspend of approximately 1%. This is before the operation of the Totex Incentive Mechanism, which would return 51% of this to consumers.

The expected performance position is predominantly driven by a material underspend across the load related investment portfolio being offset by the combination of overspends anticipated across the non-load related program of works and the indirects cost category.

Table A4.32: SPT's current view of totex and adjusted totex allowance (five-year period)

£ billion, 2018-19 prices	Five-year total
Current forecast of expenditure	2.65
Current forecast of adjusted allowance	2.68
Performance	-0.04
Performance, %	1.3%

The next sections set out more detail on the performance across each cost category: load, non-load, non-op capex, NOCs, visual amenity, indirects and a category capturing 'other' activity.

SPT's LR performance

SPT is currently forecasting to spend close to £ 1.56 billion by the end of RIIO-2 on load related activity; 2% below the expected allowance of £ 1.58 billion.

Table A4.33: SPT's current view of five-year LR expenditure and adjusted LR allowance

£million, 2018-19 prices	SPT
Expenditure	
Baseline	374
Uncertainty Mechanisms	454
Re-openers	728
T1 carry over	2[50]
Total 1	1,558
Adjusted allowance (post capex efficiency)	
Baseline	417
Uncertainty Mechanisms	418
Re-openers	747
Total 2	1,582
Performance (1-2)	-24 (2%)

To explain SPT's LR performance more clearly, we've used the same "investment category" groupings used for SHET and NGET, where applicable.

Note: the "General Wider Works" category is not utilised as there is no comparable activity in SPT's RIIO-2 settlement.

The tables below provide an overview of SPT's assessment of LR performance across (i) the three-year period from April 2021 to March 2024, and (ii) the five-year RIIO-2 period, including forecast expenditure and allowances for 2024-2026, reported against each LR grouping.

[50] This value includes the impact of customer contributions.

Table A4.34: SPT LR performance (three-year actual expenditure vs allowance)

£million, 2018/19 prices	Baseline	UM	Re-opener	T1 carry-over	Total
Generation	63	80	24	-4	**163**
Demand	32	10	0	0	**42**
Wider Works	94	7	89	5	**196**
Pre-con	0	0	0	0	**0**
1. TOTAL					**402**[51]
Adjusted allowance (post capex efficiency)					
Generation	90	82	41	n/a	**214**
Demand	71	-35	0	n/a	**36**
Wider Works	169	7	89	n/a	**265**
Pre-con	5	0	0	n/a	**5**
2. TOTAL					**521**
Performance (1-2)					-119

Over the three-year period, total spending on the LR portfolio reached £402m. This is £119m (23%) less than the cumulative LR allowances of £521m.

The key points of note from the first three years of RIIO-2 are:

- Underspend is particularly evident in generation connection activity, which is the direct result of the energy landscape evolving differently than expected. A number of load related schemes which were justified on the basis of customer connections have evolved to reflect the latest contracted generation position. This has led to changes in the overall cost and profile of SPT's baseline spend compared to allowance.
- Profiling of baseline project spend has changed to align investments with customer connections and corresponding delays arising from changes in customer works. This has affected projects such as Dalquhandy, Gretna-Ewe Hill Overhead Line Replacement, and Newarthill Fault Level Mitigation.
- SPT have also seen a change in the scope of a number of load related schemes as a result of the Holistic Network Design (HND) process and the HND Follow Up Exercise (HNDFUE). SPT estimates that these changes account for

[51] There is an additional £1m attributed to transmission system services, activities that relate to system operation.

approximately 25% of the expected underspend across the regulatory period. This impacts the delivery of major Wider Works projects (East Coast Onshore 400kV and Denny to Wishaw 400kV Reinforcement).

Table A4.35: SPT LR performance (five-year expenditure vs adjusted allowance)

£million, 2018/19 prices	Baseline	UM	Re-opener	T1 carry-over	Total
Expenditure					
Generation	115	371	88	-3	**571**
Demand	51	34	0	1	**86**
Wider Works	208	49	639	5	**900**
Pre-con	0	0	0	0	**0**
1. TOTAL					**1,558**
Adjusted allowance (post capex efficiency)					
Generation	90	392	107	n/a	**589**
Demand	99	-22	0	n/a	**79**
Wider Works	222	49	639	n/a	**910**
Pre-con	5	0	0	n/a	**5**
2. TOTAL					**1,582**
Performance (1-2)					-24

Over the five-year period, total spending on the LR portfolio is expected to reach £1,558m. This is £24m (2%) less than the LR allowances of £1,582m.

The key points of LR performance, based on incorporating SPT's delivery expectations for the LR portfolio over the next two years, are:

- A significant increase in activity and delivery is anticipated before the end of March 2026 through the generation connection volume driver mechanism. This will automatically adjust allowances to match the required output levels, leading to a rise in allowance. An underspend is currently expected due largely to the impact of in-house cost saving measures and contracting strategy efficiency savings.
- SPT notes that lower efficiencies are being observed due to external conditions. SPT remain confident it can make up for delays from early T2 as the majority of contracts are fixed and in progress.

- While SPT currently forecasts c.£50m of baseline projects will no longer progress over the full T2 period, it anticipates that the underspend position across the period for baseline projects will be significantly reduced by the end of the RIIO-2 period.

- Generation and Demand performance is expected to largely offset each other. This performance position is expected to be partly driven by the connection process reform and the bearing it has on the connection projects that are funded by Volume Driver or MSIP.
- Due to changes in design and cost profile of HND baseline projects, SPT now forecasts that a portion of LR expenditure, originally expected to be incurred during the progression of baseline projects in RIIO-2, will carry over into the T3 period. This is most notable for the KTR project[52] which has been delayed due to a Public Inquiry which was initiated in 2022 but has not yet confirmed a decision on this project progressing.
- Re-opener mechanisms are expected to remain a significant source of additional allowance across the five-year period. The current expectations are that spend will closely align to the expected funding.

The following projects are expected to underperform against allowances across the RIIO-2 period:

- **Harmonic Filter equipment**: spend over the five year period is expected to exceed allowance by £8m. SPT explains that this was the first time using this technology, and the initial cost estimates were too low.
- **Gretna-Ewe Hill Overhead Line Replacement**: spend is expected to be £9m above allowance due to needing a higher capacity conductor for new connections in the area.
- **Eccles Shunt Compensation**: over the five-year period, total spending is expected to be c.£9m above the allowance across the same period. This is due to market prices being higher than initially forecast. This project will continue into the next period, with total costs expected to be £16m over the allowance.

The following projects are expected to outperform against allowances across the RIIO-2 period:

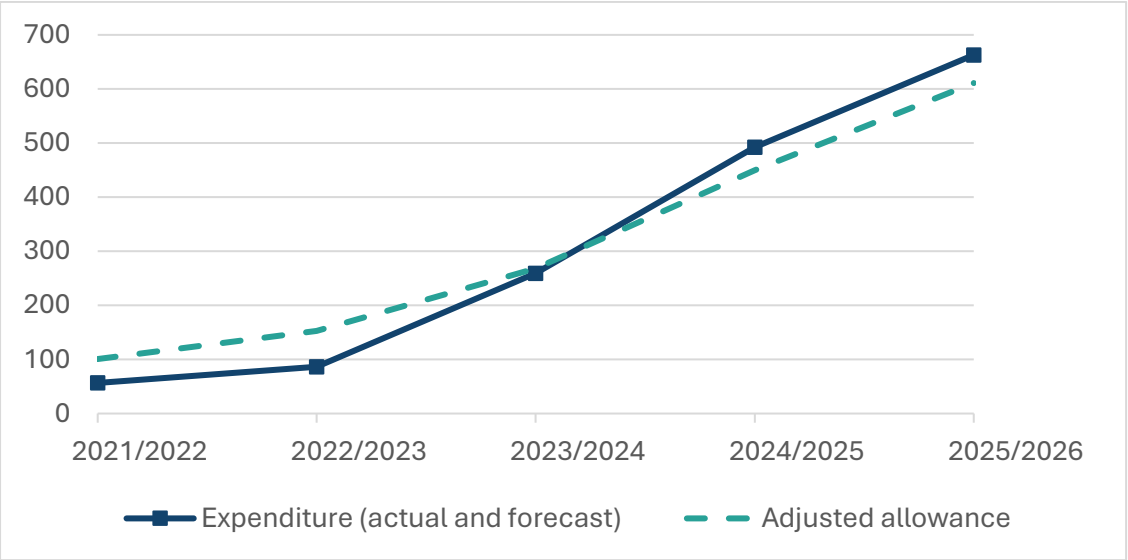
- **Denny to Wishaw 400kV Reinforcement:** spend across the RIIO-2 period is expected to be £15m below allowances due to changes in the project scope and design.
- **East Coast Onshore 400kV**: an underspend of £21m is anticipated due to a change in the project timeline (completion expected in 2025).

[52] The Kendoon to Tongland Reinforcement (KTR) project, is an initiative by SPT to replace the 132kV network in Dumfries & Galloway. This project aims to upgrade the existing infrastructure to ensure a more reliable and efficient supply in the region.

- **Spirebush Renewable Energy**: is expected to underspend by £11m due to changes in the customer's contract.

The figure below compares the actual LR spent to date and SPT's current expectations of the spend to be incurred across the remainder of RIIO-2 against the anticipated allowance across the period. It confirms the underspend observed during the first three years of RIIO-2 and the anticipated shift towards a closer alignment between spending and allowances by the end of the RIIO-2 period, thereby reducing the overall underspend for the entire period.

Figure A4.11: Comparison of LR costs vs adjusted allowance



Supporting data

	2021/22	2022/23	2023/24	2024/25	2025/26
actual / forecast	57	87	259	493	663
Adjusted allowance	101	153	268	450	611

LR performance drivers

Table A4.36 shows a breakdown of the proportions of total LR performance that SPT have categorised against our strategic performance factors: efficiency, external, and change.

SPT have adopted an approach that allocates work to the performance categories across LR category as a whole. A positive number indicates costs lower than allowances.

Table A4.36: Performance drivers summary (SPT view)

£million, 2018/19 prices	Efficiency	External	Change	Total
Load	2	97	53	**152**

SPT explains that the primary performance driver is due to factors beyond its control. These include supply chain issues (e.g., Eccles Shunt project) and customer delays (e.g., Dalquhandy, Gretna-Ewe Hill OHL works, and Newarthill Fault Level Mitigation), which have led to associated reductions in spend. Additionally, outage delays and consent/landowner impacts, particularly for KTR, are expected to affect the remainder of the RIIO-2 period.

Reductions applicable to the 'Change' category include a proportion attributable to schemes no longer required to date due to customer cancellations (e.g. U and AT Route Uprating and GSP Lesmahagow). Design/scope changes also fall within this category.

SPT's NLR performance

In the non-load related area SPT is forecasting to underperform against allowance over the five-year RIIO-2 period. Total spending on the NLR portfolio is expected to reach £468m, which is £33 m (8%) above the value of NLR allowance across the RIIO-2 period.

Table A4.37: SPT's current view of five-year expenditure and adjusted allowance

£million, 2018-19 prices	**SPT**
Expenditure	
Baseline	447
Uncertainty Mechanisms	2
Re-openers	0
Other T2 capital costs	19
Total 1	468
Adjusted allowance (post capex efficiency)	
Baseline	435
Uncertainty Mechanisms	0
Re-openers	0
Total 2	435
Performance (1-2)	+ 33

To explain SPT's NLR performance more clearly, our overview is presented through the following categories.

- Replacement.
- Refurbishment major.
- Refurbishment minor.
- NLR Other. This includes activity categories of "Spares".

We set out SPT's view of adjusted NLR performance across two different timescales: a comparison of the three year actual costs incurred against allowance from April 2021 to

March 2024, and a comparison across the full five-year RIIO-2 period (i.e. includes SPT's current expectations between 2024-2026) for each NLR cost category.

Table A4.38: SPT NLR performance (three-year actual expenditure vs allowance)

£million, 2018/19 prices	Baseline	UM	Re-opener	T1 carry-over	Total
Replacement	213	1	0	16	**230**
Refurb Major	19	0	0	1	**20**
Refurb Minor	0	0	0	0	**0**
NLR Other	3	0	0	1	**4**
1. TOTAL					**254**
Adjusted allowance (post capex efficiency)					
Replacement	239	0	0	n/a	**239**
Refurb Major	39	0	0	n/a	**39**
Refurb Minor	4	0	0	n/a	**4**
NLR Other	0	0	0	n/a	**0**
2. TOTAL					**282**
Performance (1-2)					-28

Over the three-year period, total spending on the NLR portfolio reached £254m. This is £28m (10%) less than the NLR allowance of £282m.

SPT explains that the performance reflects the considerable change to the baseline delivery plan relative to what was originally anticipated when the RIIO-2 settlement was reached. The change has impacted the timing and internal processes to monitor, maintain and replace existing assets.

Table A4.39: SPT NLR performance (five-year expenditure vs adjusted allowance)

£million, 2018/19 prices	Baseline	UM	Re-opener	T1 carry-over	Total
Replacement	396	1	0	17	**415**
Refurb Major	50	0	0	1	**51**
Refurb Minor	1	0	0	0	**1**
NLR Other	3	0	0	1	**4**
1. TOTAL					**471**

Adjusted allowance (post capex efficiency)

Replacement	377	0	0	**377**
Refurb Major	52	0	0	**52**
Refurb Minor	6	0	0	**6**
NLR Other	0	0	0	**0**
2. TOTAL				**435**
Performance (1-2)				+36

Over the five-year period, total spending on the NLR portfolio is expected to reach £471m. This is £36 m (8%) above the anticipated NLR allowances of £435m. SPT explains that the driver of the expected overspend is due to increases in supply chain costs for both equipment and from service providers.

We note that in the current financial climate, suppliers and contractors are signalling that their costs are likely to increase, therefore the forecasts for all deliverable programs will be subject to change and will be closely monitored through RRP submissions going forward when the financial situation becomes clearer.

The key points of NLR performance, based on incorporating SPT's re-profiling of NLR work over the remaining regulatory period, are:

- Delays in contract placement at start of RIIO-2 and ongoing challenges surrounding the availability of resources are both contributing factors to the expected overspend across the RIIO-2 period.
- Extended lead times for materials have become common. SPT has adjusted its procurement strategy to address this by awarding bundled works to key suppliers early. Longer term delivery risk is being tackled via longer term strategic frameworks and increased participation in the supply chain.
- Cost increases in materials and contract prices, which exceed the rates anticipated during the RIIO-2 settlement, are adding additional pressure on performance.
- SPT's re-profiling of NLR work is expected to result in costs carrying over into T3, amounting to approximately £30m.

The following projects are expected to underperform against allowances across the RIIO-2 period:

- **ZO, ZR, and XF 400kV Major Refurbishment:** over the five-year period, spend is expected to exceed allowance by c.£17m. We understand that this project needed several major outages in Central Scotland. Due to prioritising another project, the outages were rescheduled, leading to extra costs for stopping and restarting work. Additionally, SPT note that is it working in collaboration with supply chain to adjust outages where possible to align with resource availability.

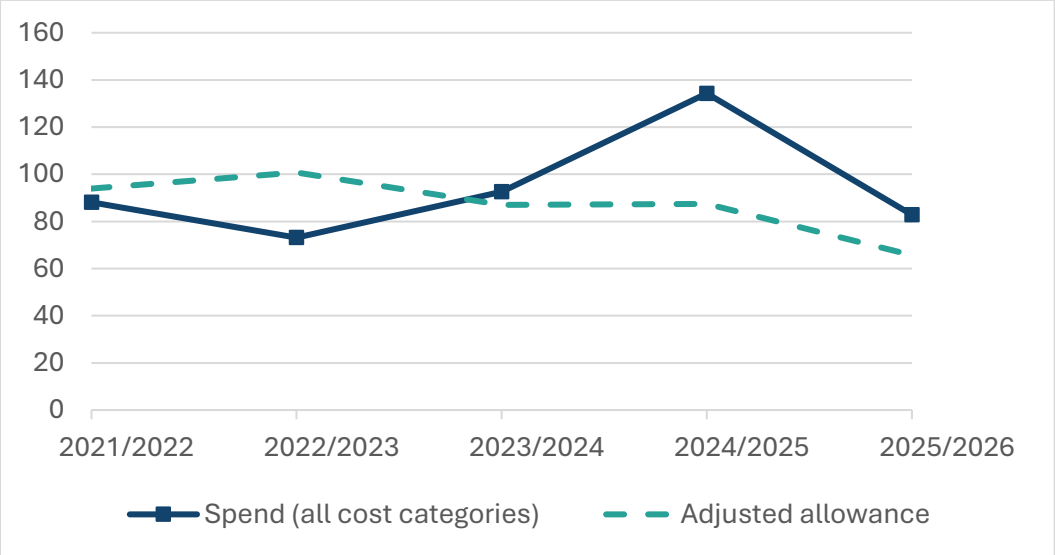
- **Gorgie to Telford Road 132kV Cable Replacement:** the expected overspend is £9m. SPT explains that the project faced difficulties routing the cable through central Edinburgh, requiring extra work and higher costs due to city conditions.
- **AL 132kV Major Refurbishment:** this project has completed and is overspent by £6m. SPT explains that costs were higher than expected due to competitive tendering. Similar projects also faced overspending.

The following projects are expected to outperform against allowances across the RIIO-2 period:

- **ZA 400kV Major Refurbishment:** the project has reported an underspend of £7m. SPT explains that this project benefited from low demand and surplus resources, leading to competitive prices.
- **Windyhill 275kV Switchgear Replacement**: over the five-year period, spend is expected to be below allowance by c.£6m due to changes in the timing of the work and some costs being phased to the next period.
- **Protection Modernisation:** a change in the delivery model for these works is driving an expected underspend of c.£5m.

The figure below compares the actual spend to date on asset health activity and SPT's current expectations of the expenditure across the remainder of RIIO-2 against the adjusted allowance for this period. It confirms the underspend observed to date and the expected uplift in activity expected across SPT's network over the next two years.

Figure A4.12: Asset Health five-year cost vs adjusted allowance performance



Supporting data

	2021/22	2022/23	2023/24	2024/25	2025/26
actual / forecast	88	73	93	134	83
Adjusted allowance	94	101	87	87	66

NLR performance drivers

Table A4.40 shows a breakdown of the proportions of total NLR performance that SPT have categorised against our strategic performance factors: efficiency, external, and change.

SPT have adopted an approach that allocates work to the performance categories across NLR category as a whole. A positive number indicates costs lower than allowances.

Table A4.40: Performance drivers summary (SPT view)

£million, 2018/19 prices	**Efficiency**	**External**	**Change**	**Total**
Non Load	12	22	8	**43**

SPT explains that efficiency and savings are attributable to specific activities, such as the ZA route and the refurbishment of oil bunding and drainage systems.

External factors are identified as the primary performance driver. These category includes the re-phasing of costs into the T3 period due to the timing of works (e.g., final circuit transfer of Windyhill 275kV switchgear replacement is currently expected in early RIIO-3). Supply chain issues have also contributed to reductions in spend (e.g., Hunterston 400kV).

The 'Change' category includes cost savings associated with a change in SPT's delivery model (e.g., Protection Modernisation).

SPT's non-operational capex performance

Overall, the non-operational capex of c.£15m represents an underspend of c.£5m against the total five-year allowances of c.£10m.

Table A4.41: SPT's non-op capex spend compared to allowance

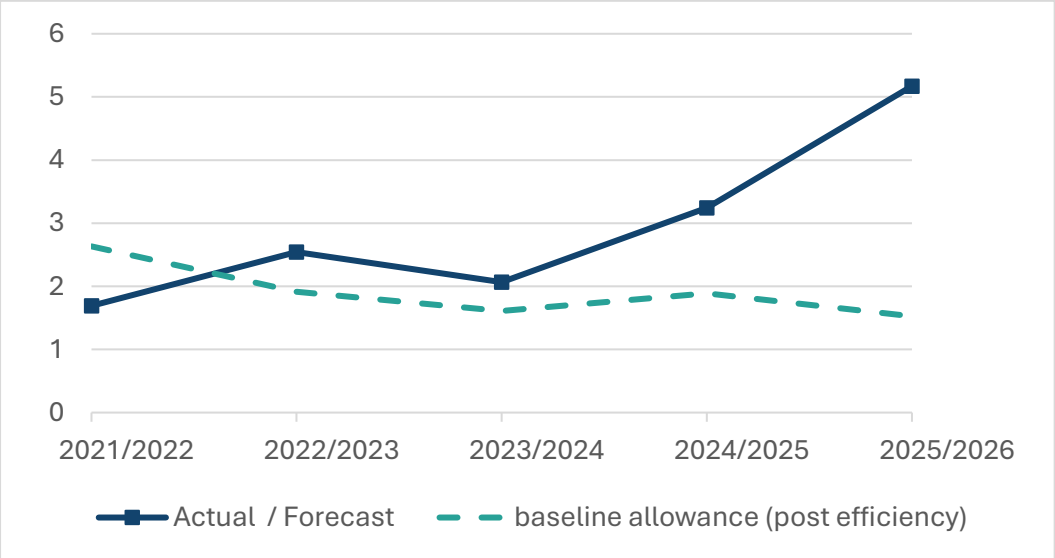
£million, 2018/19 prices	**Three-year actual vs adjusted allowance**	**Two-year spend forecast vs adjusted allowance**	**Five-year total**
Expenditure			
Baseline	6.3	8.4	**14.7**
Re-Opener	0	0	**0**
1. Total	6.3	8.4	**14.7**

Adjusted allowance (post capex efficiency)			
Baseline	6.2	3.4	**9.6**
Re-opener	0	0	**0**
2. Total	6.2	3.4	**9.6**
Performance (1-2)	+0.1	+5.0	**5.1**

Based on the information provided:

- The cumulative expenditure for the regulatory period to date is currently in-line with allowance.
- No re-opener allowance is forecasted at this time.
- The total anticipated overspend position across the five-year period is the result of an increased view of expenditure for Non-operational Property over the remaining regulatory period. This increase is aligned to SPT's trajectory of strategic business growth and the need for office space and additional resource requirements.

Figure A4.12: Non-operational capex cost vs adjusted allowance performance



Supporting data

	2021/22	**2022/23**	**2023/24**	**2024/25**	**2025/26**
actual / forecast	2	3	2	3	5
Adjusted allowance	3	2	2	2	2

SPT's NOCs performance

Total spend across this portfolio of activity is forecast to be £96m, which is £14m (13%) less than the adjusted allowance position of £110m for the RIIO-2 period.

The main drivers for this difference between spend and allowance are an anticipated underspend in repair and maintenance activities and lower than expected spend associated with flood mitigation and fire & security work at SPT's substations. This position is only partially offset by an expected overspend in the category of own-use electricity costs, which is associated with a change in reporting relating to converter stations (a material cost for operating the HVDC convertor station is associated with electricity costs).

Below we set out SPT's current view of NOCs performance across the five-year RIIO-2 period.

Table A4.42: SPT NOC performance (five-year expenditure vs allowance)

Note 1: Legal & Safety costs exclude the value of own use electricity

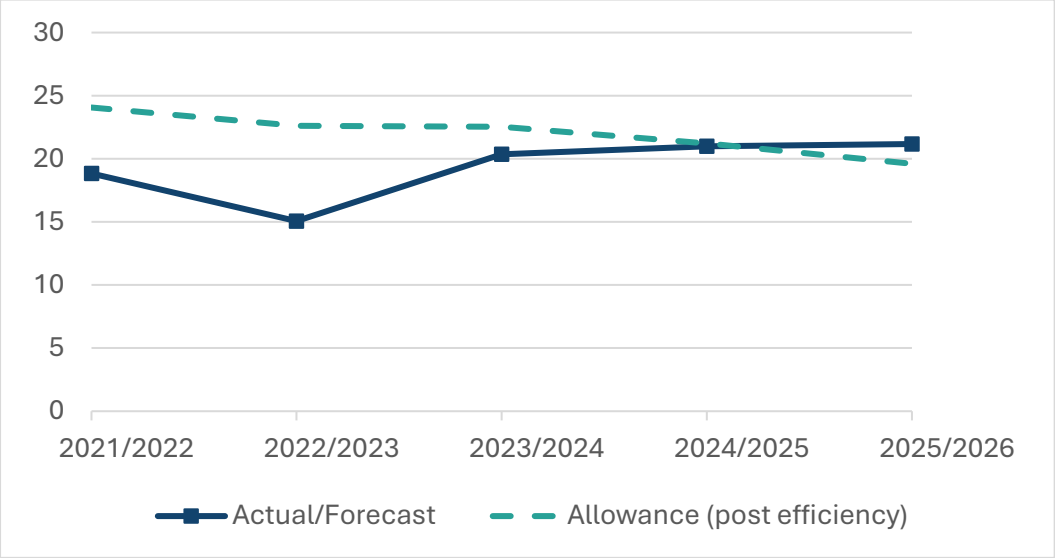
£million, 2018/19 prices	Baseline	UM	Re-opener	Total
Expenditure				
Faults	18	0	0	**18**
Inspections	7	0	0	**7**
Repairs and Maintenance	41	0	0	**41**
Veg management	2	0	0	**2**
L&S	13	0	0	**13**
Electricity costs	4	0	0	**4**
Op Measures & Op IT Capex	12	0	0	**12**
1. Total				**96**

Adjusted allowance

Faults	20	0	0	**20**
Inspections	7	0	0	**7**
Repairs and Maintenance	49	0	0	**49**
Veg management	2	0	0	**2**
L&S	21	0	0	**21**
Electricity costs	0	0	0	**0**
Op Measures & Op IT Capex	12	0	0	**12**
2. Total				**110**
Performance (1-2)				**-14**

The figure below show the comparison between spend versus the allowance across RIIO-2.

Figure A4.13: Comparison of NOCs spend vs adjusted allowance (incl. own-use electricity costs)



Supporting data

	2021/22	2022/23	2023/24	2024/25	2025/26
actual / forecast	19	15	20	21	21
Adjusted allowance	24	23	23	21	20

The cumulative underspend reported to date is anticipated to be reduced through the remaining regulatory period across the NOCs categories.

The variance between SPT's current view of NOC spend and allowance across each category is further broken out below.

- **Faults:** spending is expected to be marginally above allowance across the RIIO-2 period. This is mainly driven by a larger than expected increase in civil spend due to numerous faults requiring environmental remediation and attempted refurbishments that have been unsuccessful.
- **Inspections:** an overall underspend is forecast across RIIO-2 activities. SPT explains that the largest area of underspend is against OHL Inspections (c£1m) due largely to a timing issue - delays to inspections surveys have resulted in fewer being completed and reduced costs.
- **Repair & Maintenance:** SPT is currently forecasting an underspend for the RIIO-T2 period in both repairs and maintenance activities (approximately £2m and £6m, respectively).

SPT notes that there is a projected under-utilisation in repairs, due in part to internal resources being focused on fault rectification. SPT also explains that activities have been affected by system access issues and a contractual problem with an external party, impacting the delivery of allocated maintenance and repair work. Additionally, maintenance performance is influenced by how the costs for operating the HVDC converter station are now reported.[53]

- **Vegetation management:** Spend is currently anticipated to be marginally below allowance (£0.3m) for the period. SPT explains that this is due to land owner access and a proportion of resilience cutting work to 'catch-up' on. SPT expect the activities planned in this area to increase the level of spend over the remaining regulatory period.
- **Legal & Safety:** across RIIO-2, SPT forecasts that spending will be below allowance for the RIIO-2 period. SPT explains that this is predominantly due to a re-profiling in flood prevention works to later in the regulatory period (initially anticipated for 10 sites, but only four identified as required after full survey work). SPT notes that the fire protection & security strategy is currently under review and it expects spend to track back to the allowance by the end of RIIO-2.

Visual Amenity

SPT is currently reviewing its visual amenity policy ('Changing the View'). A nil return has been provided within SPTs 2023/24 regulatory submission.

[53] The cost of operating the HVDC convertor station are included in the L&S table (C2.22) which includes the electricity costs for operating the link. The allowance for this activity is c.£16m and the overspend (c.£7m) for the electricity costs is offset by the reduction in the Maintenance costs by the same value for HVDC.

SPT's indirect performance

The annual reporting requirements require TOs to distinguish specified elements of CAIs (the elements in a contractor's invoice that relate to project management and network design costs) from the direct costs of a project.

To meet this requirement, SPT has developed a statistical estimate of the value associated with 'contractor indirects' (CI) for the 2023/24 regulatory year. It has used this methodology to provide a forecast of the likely contractor indirect (CI) values for the 2023/24 reporting year and the remaining regulatory period. Thee approach has its limitations, however, and results are anticipated to be subject to further refinement.

We will continue to engage with SPT throughout the rest of the RRP process in regard to further development and understanding of their reporting of CI costs to ensure consistency in approach between TOs. Table A4.43 below summarises the impact of SPT's reallocation.

Table A4.43: SPT's current view of CI costs (five-year period)

£million, 2018-2019 prices	**SPT**
Load	**97**
Non Load	**22**
Other	**2**
Total	**121**

Below we set out SPT's view of CAI and BSC performance across the entire five-year RIIO-2 period. This is before reallocation in CI costs.

SPT anticipates an overspend in the indirect cost category, primarily due to organisational growth leading to increased staff overheads, including activities necessary for delivering ASTI projects.

We will continue to monitor SPT's progress in this area, with a particular emphasis on the ability of SPT's current workforce to effectively mobilise and meet the expected increase in activity and project delivery for the remainder of RIIO-2.

Table A4.44: SPT indirect performance (five-year expenditure vs allowance)

Baseline expenditure

£million, 2018/19 prices	**Baseline (CI not reallocated)**
Baseline expenditure	
CAI	155
BSC	119
1. TOTAL	274

Baseline allowance

	Baseline (CI not reallocated)
CAI	164
BSC	94
2. TOTAL	258
Total 1 less Total 2	+16

CAI: RIIO-2 baseline costs are currently forecast to be £9m below the baseline allowance value across the five-year period (prior to reallocation of CI costs). This may be expected to shift to an overspend position once CI's are more accurately allocated, driven by increased staff overheads and workforce renewal costs.

BSC: Across RIIO-2, BSC baseline spend is forecast to reach £119m which is above the baseline allowance of £94m (prior to re-allocation of CI costs). The level of overspend is linked to increased level of activity in a number of function areas to support increased project delivery over the remaining regulatory period and beyond.

SPT have indicated that further work is underway to split underlying Non-Contractor Indirects within the BSC/CAI categories. We welcome the additional transparency that this will provide in framing SPT's performance and we will continue engagement with SPT on this.

Additionally, SPT reports a marginal underspend against CAI activities that are subject to UM. This is highlighted in Table A4.45 below.

Table A4.45: SPT CAI UM performance (five-year expenditure vs allowance)

£million, 2018/19 prices	**SPT**
Total CAI UM expenditure	116
Total CAI UM allowance	112
Performance	+4

SPT's Other performance

An overview of the performance is provided in Table 52 below, confirming SPT's expectation of a forecast underspend (£46m) compared to allowance across the five-year period.

The main driver of this anticipated underspend is associated with activity under two UIOLI mechanisms (Enhanced environmental requirements and Net Zero Biodiversity). The remaining underspend is the result of lower than expected spend across a range of activities. The spend and allowance position across re-openers and UMs is broadly

comparable. Due to the sensitive nature of these activities SPT's performance is not discussed further.

Table A4.46: SPT's current view of five-year "other" expenditure and adjusted allowance

Expenditure

£million, 2018-19 prices	**SPT**
Baseline	10
Uncertainty Mechanisms	37
Re-openers	36
Total 1	83
Allowance	
Baseline	98
Uncertainty Mechanisms	37
Re-openers	44
Total 2	179
Performance (1-2)	- 96

Appendix Five: PCD performance tracker

NGET

This section presents an overview of the current performance against each of the PCDs set within NGET's RIIO-2 settlement.

Table A5.1: Direct cost vs allowance across the RIIO-2 period: NLR mechanistic PCDs

	Baseline allowance	Five-year Spend	Spend less allowance	NGET's estimated adjustment	Revised performance
Instrument Transformer	37	33	-4	-4	**0**
Bay Assets	57	43	-14	-14	**0**
P&C	312	122	-190	-100	**-91**
OHL	297	251	-46	-30	**-16**
TOTAL	703	449	-254	-149	**-107 (19%)**

Source: NGET response to "SQ7".

Spend across the mechanistic PCDs is currently expected to be below allowance, specifically PCD categories for Protection & Control and OHL Conductor, where fewer interventions are now planned than initially expected. The underspend is also partly due to agreed movements for OHL conductor asset replacement, combined with updated delivery costs achieved to date.

The table below illustrates the expected volume delivery across the RIIO-2 period angst the target levels established when the mechanisms were set.

Table A5.2: Volume delivery expectations: NLR mechanistic PCDs

#	Target	Current five-year delivery expectation	Variance
Instrument Transformer	1,145	1,155	**+10**
Bay Assets	2,161	1,633	**-528**
P&C	839	600	**-239**
OHL	893	795	**-8**
TOTAL	5,038	4,183	**- 855 (17%)**

NGET anticipate delivering a volume of Instrument Transformer replacements above the target. In all other areas NGET is expecting volume delivery to fall short of the target levels.

NGET explain that the volume reduction in Bay Assets has been the result of further inspections and a better understanding of condition which has fed into NGET's Asset Health Review process. On P&C, reduced volume expectations are the impact of ongoing system access constraints. In addition, work is being delivered as part of wider site strategies, therefore removing the requirement for standalone replacement, and there are instances where protection has already been replaced with a numerical relay replacement (Fault Recorders).

NGET are planning to deliver lower volumes of OHL conductor asset replacements due to interventions being superseded by load-related drivers for the 4YM and ZBC routes.

Table A5.3: Evaluative PCD (SF_6 Intervention)

No allowance adjustment for late delivery of evaluative PCDs has been assumed in the analysis.

£ million, 2018/19 prices	**Allowance**	**Spend**	**Spend less Allowance**
SF6 Interventions	81	22	**-59**
SF6 re-opener (sites)	25	10	**-15**
SF6 re-opener (CTs)	24	9	**-15**
TOTAL	130	41	**-89**

NGET currently expect to underspend by £30m against the re-opener allowance (sites and Current Transformers, CTs). This is mainly because of reductions in the number of SF_6-filled CT replacements by 144 due to delivery issues, saving £5m. There are two years to complete the remaining work.

NGET also note a £7m saving as a result of delaying work at a substation (West Ham) to align with planned replacements in RIIO-3. Bundling procurement across the portfolio is also expected by NGET to drive an element of cost saving across RIIO-2.

An underspend is currently estimated against the baseline PCD allowance for SF_6 interventions (£59m). While we note that no allowance adjustment has been estimated for this PCD, the net reduction in forecast spend is due to the combined impact of:

- customer-driven delay at the Sizewell C connection project. The planned substation rebuild has moved into RIIO-3, and the net result is a £46m reduction in forecast spend.

- a site rebuild (at the Littlebrook site) which involves accelerated delivery of a new site and staged removal of SF_6 from the existing site, thus SF_6 repairs have been descoped (£6m spend reduction).
- adverse impact of system access constraints, reducing the planned programme of work and the associated level of spend.

Table A5.4: SpC 3.9 Wider Works evaluative PCDs, spend vs allowance

£ million, 2018/19 prices	**SpC 3.9**
A. Baseline allowance	384
B. Five-year Spend	133
C. >March 2026 spend	72
D. (B+C) less A	-179
E. NGET estimated 'clawback'	-150
F. Performance (D+E)	-29

NGET report the view that eight PCD projects have been delivered in accordance with the licence description and timeline. A further seven are expected to be delivered on or before 31 March 2026), and two projects will be delivered in the next control period (Wymondley Turn-in and Sundon-Elstree in line with updated NESO requirements).

The actual and expected delivery profile of the wider works PCD portfolio is summarised below, and shows that NGET expects to deliver c.10GW of boundary capacity improvement in total by the end of the five-year price control period (11GW by March 2028). For comparison, the schemes subject to the Wider Works volume driver are presented. NGET expects to add almost 9GW of boundary capacity to its network by March 2026 (11GW by March 2028).

Table A5.5: Project delivery profile

	2022	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**TOTAL**
PCD: MW boundary	4,189	3,490	546	950	700	500	646	11,021
Projects #	4	4	0	2	2	2	3	17
Vol Driver: MW boundary	-	130	716	6,736	1,232	1,556	1,421	11,791
Projects #	-	1	2	7	2	5	5	22

The table below shows performance against pre-construction funding (PCF) allowances relevant to the RIIO-2 period. Underspend is expected across several projects. NGET explains that the projected underspend is the result of bundling initiatives (e.g. simultaneous survey tendering) and also reflects a difference in consenting regime compared to onshore projects.

We also note that several of the projects are impacted by ASTI projects that received baseline PCF funding under LOTI, and which are forecasting a potential underspend against allowance within the RIIO-2 period.

Table A5.6: SpC 3.15 spend vs allowance PCFt

£ million, 2018/19 prices	**Pre-con**
A. Baseline allowance	384[54]
B. Five -year Spend	221
C. >March 2026 spend	40
D. (B+C) less A	-123
E. NGET's estimated adjustment	108
F. Performance (D+E)	-15

The table below provides a brief overview of the Bengeworth Road project[55]. NGET currently expects this to be delivered within the PCD date at a lower cost than the allowance provision due to alterations in the scope of works relative to what was originally anticipated.

[54] Excluding the PTNO project.

[55] https://www.ofgem.gov.uk/decision/national-grid-electricity-transmission-nget-bengeworth-road-grid-supply-point-gsp-project

Table A5.7: SpC 3.35 Bengeworth Road, spend vs allowance

Expenditure includes amounts associated with both the BRGt licence term and EECEt licence term.

£ million, 2018/19 prices	**BRGt**
A. Baseline allowance	80.8
B. Five -year Spend	65.3
C. >March 2026 spend	2.0
D. (B+C) less A	-13.5
E. NGET's estimated adjustment	0
E. Performance (D+E)	-13.5

The following table (A5.8) provides a tracker of each PCD associated with the following SpC's: 3.9, 3.15, 3.35 and 3.21.

The table includes a comparison of NGET's current total cost expectations across the RIIO-2 price control period with the adjusted allowance. The final column notes the performance after the impact of NGET's estimated end-of-period adjustments are applied.

The delivery status across the range of PCDs is currently:

- 12 are currently considered by NGET to be 'on-track'
- 7 have been removed
- 10 are currently subject to delay
- 8 are noted to have been completed
- 1 project is currently funded through the LOTI mechanism, and
- 1 project is currently funded through volume driver mechanism.

Table A5.8: NGET PCD tracker

Cyber Resilience and NARM reported separately from the RRP information used in this report.

A. LOAD PCDs

	SpC	NOA code	Five-year spend	Spend >March 2026	Baseline allowance	Variance	Status
1	3.9	BMM2	8.7	0	22.1	-13.4	DELAYED[56] Scope unchanged.
2	3.9	CBEU			1.15		REMOVED
3	3.9	SER1			9.19		REMOVED
4	3.9	HBUP	8.3	0	15.9	-7.5	ON TRACK Reduced MW[57].
5	3.9	THS1			21.5		REMOVED
6	3.9	RTRE	0.8	0	0.4	+0.4	COMPLETE
7	3.9	WHT1	4.3	0	83.5	-79.2[58]	COMPLETE
8	3.9	WYT1	0	22.4	14.5	+7.9	DELAYED beyond T2+2
9	3.9	NEP1	12.2	0	9.6	+2.6	DELAYED[59] Significant change in scope.
10	3.9	NTP1	1.0	35.9	10.0	+26.9	DELAYED Scope unchanged. Altered MW.
11	3.9	CTRE	0.2	0	0.3	-0.1	COMPLETE
12	3.9	NBRE			36.3	Project funded through the UM	
13	3.9	NEPC	12.1	0	19.7	-7.6	DELAYED[91] Significant change in scope.
14	3.9	PEM1 & PEM2	5.5	8.4	15.8	-1.9	DELAYED[60] Scope unchanged.
15	3.9						

[56] Final commissioning of the second MSC will occur once an agreed date for the outage is confirmed.

[57] An earlier delivery date in a later NOA study has resulted in a change in incremental capacity.

[58] Subject to the RIIO-1 UM. This project provides capacity at a cost below the average unit rate.

[59] NEPC and NEP1 have been bundled together as one project to improve the efficiency of delivery.

[60] Forecast spend profile has moved from RIIO-2 to RIIO-3 due to a change in the output delivery date from 31 March to 31 July 2028.

16	3.9	RHM1 & RHM2	10.3	4.9	15.8	-0.6	DELAYED Scope unchanged. Altered MW.
17	3.9	SER2	0	0	20.8	-20.8	DELAYED beyond T2+2
18	3.9	TDH2			1.7		REMOVED
19	3.9	HSP1	2.30	0	17.3	-15.0	COMPLETE
20	3.9	MRP2	2.70	0	9.4	-6.7	COMPLETE
21	3.9	TDR2	1.9	0	9.8	-7.9	COMPLETE
22	3.9	TDR1	1.9	0	5.8	-3.9	COMPLETE
23	3.9	MRPC	12.9	0	43.3	-30.4	COMPLETE
	3.9	BRRE NOR2 SEEU					Removed as a result of T1 closeout
24	3.20	Power station	28.9	0.02	21.6	+7.3	DELAYED Unchanged scope.
25	3.15	E2DC	12.8	0	23.9	-11.1	ON TRACK
26	3.15	E4D3	20.3	0	34.2	-13.9	ON TRACK
27	3.15	E4L5	16.5	0	28.0	-11.5	ON TRACK
28	3.15	CGNC	40.9	0	56.3	-15.36	ON TRACK
29	3.15	GWNC	40.4	0	68.3	-27.9	ON TRACK
30	3.15	TKRE	5.2	0	7.7	-2.5	ON TRACK
31	3.15	TLNO	0	0	68.2	-68.2	REMOVED
32	3.15	OPN2	14.6	0	20.3	-5.7	ON TRACK
33	3.15	SCD1	28.9	0	29.0	-0.1	ON TRACK
34	3.15	AENC	33.1	0	46.3	-13.2	ON TRACK
35	3.15	Harker	0.01	0	1.7	-1.7	REMOVED
36	3.15	PTNO					Funded through LOTI
37	3.35	BGRt	56.3	2	80.8	-13.5	DELAYED

	OTHER PCDs						
38	3.21	Electric vehicles	13.11	0	14.52	-1.41	On Track.
39	3.21	Install standard direct current charge-points	9.98	0	10.26	-0.28	On track

Source: NGET response to “SQ25”.

SPT

The following table (A5.9) provides a tracker of each PCD associated with the following SpC's: 3.9, 3.17 and 3.38. The table includes a comparison of SPT's current total cost expectations across the RIIO-2 price control period with the adjusted allowance.

The delivery status across the range of PCDs is currently:

- 16 are currently considered by SPT to be 'on-track'
- 3 are noted to have been completed
- 2 are noted to have been subject to delay
- 2 have been removed and 1 replaced
- 1 is now ASTI

Table A5.9: SPT PCD tracker

Cyber Resilience and NARM reported separately from the RRP information used in this report.

#	SpC	Licence term	Description	Five-year spend	Five-year allowance	Variance	Status
1	3.9	WWt	ECU2	15.5	10.1	5.40	ON TRACK (delayed in T2)
2	3.9	WWt	HNNO	25.1	16.9	8.20	COMPLETE
3	3.9	WWt	Windyhill-Lambhill turn in	91.6	79.5	12.10	COMPLETE
4	3.9	WWt	Eccles shunt comp	4.0	3.2	0.80	ON TRACK
5	3.9	WWt	Denny Wishaw 400kV Reinforcement	0	14.4	-14.40	ON TRACK (now ASTI)
6	3.9	WWt	ECUP	8.9	28.2	-19.30	ON TRACK
7	3.17	SSt	U and AT route uprating	0	5.7	-5.70	REMOVED (OHL rebuild solution)
8	3.17	SSt	Gretna Ewe Hill OHL replacement	0	4.4	-4.40	Scheme replaced
9	3.18	ROt	Shunt Reactors and Statcom: Gretna	2.4	1.7	0.70	ON TRACK
10	3.18	ROt	Shunt Reactors and Statcom: Strathaven	2.0	1.7	0.30	ON TRACK

#	SpC	Licence term	Description	Five-year spend	Five-year allowance	Variance	Status
11	3.18	ROt	Shunt Reactors and Statcom: Hunterston	8.3	7.6	0.70	ON TRACK
12	3.18	ROt	Shunt Reactors and Statcom: Coalburn	1.9	1.7	0.20	COMPLETE
13	3.18	ROt	Shunt Reactors and Statcom: Kilmarnock South	2.1	1.7	0.40	ON TRACK
14	3.18	ROt	Shunt Reactors and Statcom: MArkhill	7.9	9.2	-1.30	Delayed – not on track
15	3.18	ROt	Harmonic filters - Blackhill	4.8	3.3	1.50	ON TRACK
16	3.18	ROt	Harmonic filters – New Cumnock	4.8	3.3	1.50	ON TRACK
17	3.18	ROt	Harmonic filters – Newton Stewart	4.8	3.3	1.50	ON TRACK
18	3.18	ROt	Harmonic filters – Margree	4.8	3.3	1.50	REMOVED
19	3.18	ROt	Harmonic filters – Moffat	4.8	3.3	1.50	ON TRACK
20	3.18	ROt	Harmonic filters – Linmill	4.8	3.3	1.50	ON TRACK
21	3.18	ROt	GEMS	0.5	6.7	-6.20	Delayed - with alternative specification
22	3.18	ROt	Blackstart	8.6	9.4	-0.80	ON TRACK
23	3.18	ROt	CRMS	0	3.9	-3.90	ON TRACK
24	3.18	ROt	Torness	11.0	6.5	4.50	ON TRACK
25	3.18	ROt	CB replacement for SF6 leakage (x6)	3.8	0.6	3.20	ON TRACK

SHET

The following table (A5.10) provides a tracker of each PCD associated with the following SpC's: 3.9, 3.15, 3.17 and 3.18. The table includes a comparison of SHET's current total cost expectations across the RIIO-2 price control period with the adjusted allowance.

The delivery status across the range of PCDs reported in the 2024 submission:

- 12 are currently considered by SHET to be on-track
- 4 have been completed
- 6 currently not on-track
- 3 projects have no substantive status as they were approved on 28 May 2024.[61]

Table A5.10 SHET PCD tracker

NOTE1: Cyber Resilience and NARM reported separately.

#	SpC	Licence term	Description	Five-year spend	Five-year allowance	Variance	Status
1	3.17	SSt	Tealing 275kV Busbar	7.3	16.5	-9.2	COMPLETE
2	3.17	SSt	North East 400kV Upgrade	130.3	169.0	-38.7	COMPLETE
3	3.15	PCFt	Pre-construction - E4D3	20.4	27.5	-7.1	COMPLETE
4	3.17	SSt	Kinardochy Reactive Compensation	56.6	84.0	-27.4	ON TRACK
5	3.15	PCFt	Pre-construction – Skye	17.6	15.0	+2.6	ON TRACK
6	3.15	PCFt	Pre-construction - Annual Costs	0	1.1	-1.1	ON TRACK
7	3.15	PCFt	Pre-construction - Regional Development Plans	0	1.4	-1.4	ON TRACK
8	3.15	PCFt	Pre-construction – Argyll	8.8	19.3	-10.3	ON TRACK
9	3.9	WWt	East Coast 275kV Upgrade	84.0	142.9	-58.9	NOT ON TRACK

[61] https://www.ofgem.gov.uk/sites/default/files/2024 05/Non_Operational_IT_Capex_Final_Determinations_and_Directions.pdf

#	SpC	Licence term	Description	Five-year spend	Five-year allowance	Variance	Status
10	3.9	WWt	East Coast 400kV Incremental Upgrade	149.8	192.5	-42.7	NOT ON TRACK
11	3.17	SSt	Moray West Offshore Windfarm	5.3	5.5	-0.15	NOT ON TRACK
12	3.15	PCFt	Pre-construction - E4L5	13.7	18.4	-4.7	NOT ON TRACK
13	3.18	ROt	Operations Centre	1.3	14.2	-12.9	NOT ON TRACK
14	3.18	ROt	Protection Modernisation	21.3	25.6	-4.3	NOT ON TRACK
15	3.18	ROt	Physical Security (Beauly Security Upgrade)				COMPLETE
16	3.18	ROt	Response and Recovery: Substation Resilience	40.5	43.7	-3.2	ON TRACK
17	3.18	ROt	Warehousing	37.8	32.5	+5.3	ON TRACK
18	3.18	ROt	Resilience: Physical Security	6.7	8.3	-1.6	ON TRACK
19	3.18	ROt	Communications Upgrade	14.9	22.0	-7.1	ON TRACK
20	3.18	ROt	Smart Monitoring	10.7	14.7	-3.0	ON TRACK
21	3.7	NOITREt	Project TReNDS	1.3	2.2	-0.9	ON TRACK
22	3.7	NOITREt	System and Network Planning	2.4	3.7	-1.3	ON TRACK
23	3.7	NOITREt	Integrated Project Management	6.3	10.1	-3.8	
24	3.7	NOITREt	Control Centre Disaster Recovery	3.2	3.6	-0.4	
25	3.7	NOITREt	Acceleration of digitisation	1.0	1.0	-	

Appendix Six: Accelerated Strategic Transmission Investment (ASTI)

Separate to the work to establish our Final Determination (FD) on the RIIO-2 investment package, work was also progressed on a package of potential changes to our regulatory approvals framework which culminated in the introduction of a new Accelerated Strategic Transmission Investment (ASTI) framework.

Our ASTI framework[62] – introduced in 2022 – was a further important step towards accelerating network investment and reinforcing the onshore electricity transmission network. It incentivises companies to ensure that new, large transmission investment projects identified in the Centralised Network Strategic Plan[63] can flow quickly through the regulatory approvals process.

Please note that the ASTI framework and its associated projects are not currently part of the annual reporting submission (cost and volume information). Consequently, the RRP submissions do not provide any details on the performance expectations or output delivery progress of any ASTI investments.

The following section has been prepared in collaboration with the licensees to provide an overview of the progress of large network investments regulated through the ASTI regime in 2023/24.

The ASTI regime

In December 2024 DESNZ published its Clean Power Action Plan[64]. This sets out the Government's pathway towards a clean energy system by 2030. It is informed by the NESO's clean power 2030 advice[65], which included NESO's view on the required electricity transmission network upgrades required to meet the 2030 Clean Power objective.

Central to the required network upgrade are the projects that qualify under the ASTI regime. This regime was implemented into TO licences in August 2023 to facilitate the acceleration of over £20bn of critical network upgrades required for delivery by 2030.

The ASTI regime built on the existing Large Onshore Transmission Investment (LOTI) regime to facilitate accelerated buildout in the following ways:

- allows for flexible upfront Pre-Construction Funding (PCF) that can be used across each TO's portfolio of ASTI projects

[62] Decision on accelerating onshore electricity transmission investment | Ofgem The timeline for the completion of ASTI projects varies depending on the specific project and its complexity. However, the aim is to have the critical projects completed by 2030.

[63] Funding and approval framework for onshore transitional Centralised Strategic Network Plan 2 projects: decision | Ofgem

[64] Clean Power 2030 Action Plan | GOV.UK

[65] Clean Power 2030 | National Energy System Operator | NESO

- access to Early Construction Funding (ECF) to secure supply chain, strategic land access, and other activities that can allow for construction on projects to start sooner, and

- a strong financial incentive for TOs to deliver projects to their Earliest In-Service Dates (EISDs).

ASTI saw 26 projects[66] qualify for the regime and 8 additional projects were included as "provisional"[67] ASTI. The 26 projects have since been identified by the NESO as required to be delivered by 2030 to achieve the Government's 2030 clean power targets. The provisional ASTI projects, although not critical to delivery of Clean Power in 2030 have nonetheless been identified as being likely to deliver significant constraint savings if they can be delivered by 2030.

Since the implementation of ASTI, we have set finalised cost allowances for three projects: EGL1, EGL2, and Yorkshire GREEN. In addition, we have approved ECF for a further 12 projects, with further consultations and decisions coming shortly.

NESO's Clean Power advice indicated that from the 20 projects needed to meet the 2030 Clean Power target, there are three that require acceleration to achieve Clean Power 2030. These projects are Norwich to Tilbury (AENC and ATNC) and SeaLink (SCD1), and they are focused within East Anglia.

Changes since ASTI

Since ASTI was approved, the TOs introduced a scope change to the design of three ASTI projects (Table A6.1) in the Lincolnshire region. This has been the TOs' response to increased generation in the area, new customer connections, and what the TOs identified as consenting risks. We are currently reviewing this and looking at the justification for the change, the benefits of the new design, and the appropriate delivery parameters that reflect it.

Table A6.1: Projects with significant design changes

TO	**NOA Code**	**Licence condition date** **Output Delivery Incentive (ODI) neutral date**
NGET	GWNC	December 2031
NGET/SPT	TGDC	December 2031
NGET/SHET	E4L5	December 2031

Lastly, some provisional projects need to be reassessed / confirmed by NESO as part of the tCSNP2 refresh.

[66] Decision on accelerating onshore electricity transmission investment | Ofgem, Table 2

[67] Efficient costs developing the projects to the point the TOs have a coherent delivery plan will be recoverable. Competitively tendered projects will not receive any PCF.

Table A6.2: ASTI project status (NGET)[68]

	NOA Code	Description	Optimal date	ODI neutral date	Planning approval received / Construction underway[69]	Early Construction Funding (ECF) status	Project Assessment (PA) status
1	AENC	Norwich-Tilbury	2030	2031		Submitted	
	ATNC	Norwich-Tilbury	2030	2031			
2	BTNO	Bramford – Twinstead	2028	2029	Construction underway		Submitted
3	CGNC	Creyke Beck to South Humber	2030	2031			
4	EDEU	Brinsworth – High Marnham	2028	2029			
5	EDN2	Chesterfield to Ratclif	2030	2031			
6	GWNC	Grimsby to Walpole: **See Table A6.1**	2030	2031			
7	HWUP	Hackney – Waltham Cross	2027	2028	Construction underway	Decided	
8	OPN2	Yorkshire GREEN	2027	2028	Construction underway	Decided	Decided
9	PTC1	North-West Wales	2028	2029		Decided	
10	PTNO	North-West Wales	2029	2030		Decided	
11	SCD1	Sea Link	2030	2031		Submitted	
12	TKRE	Tilbury – Grain	2028	2029		Decided	Submitted

NOTE 1: "Decided" means we have approved some ECF funding though it might not be the full amount as a TO can apply for further ECF.

[68] Blank fields mean planning approval not received and ECF / PA not submitted.

[69] "Construction underway" means that planning approval would have also been received.

Table A6.3: ASTI project status (SPT)

	NOA Code	Description	Optimal date	ODI neutral date	Planning approval received / Construction underway	ECF application submitted	Project Assessment submitted
1	DWNO	Denny – Wishaw	2028	2029		Submitted	

Table A6.4: ASTI project status (SHET)

	NOA Code	Description	Optimal date	Licence date	Planning approval received / Construction underway	ECF application submitted	Project Assessment submitted
1	BBNC	Bealy – Blackhillock	2030	2031		Decided	
2	BDUP	Beaul-Denny uprating	2030	2031		Decided	
3	BLN4	Beauly – Loch Buidhe	2030	2031		Decided	
4	BPNC	Blackhillock – Peterhead	2030	2031		Decided	
5	PSDC	Spittal – Peterhead HVDC	2030	2031		Decided	
6	SLU4	Loch Buidhe – Spittal	2030	2031		Decided	
7	W. Isles	Arnish – Beauly HVDC	2030	2031		Decided	

NOTE 1: “Decided” means we have approved some ECF funding though it might not be the full amount as a TO can apply for further ECF.

Table A6.5: ASTI project status (Joint)

TO	NOA Code	Description	Optimal date	Licence date	Planning approval received / Construction underway	ECF application submitted	Project Assessment submitted
NGET/ SPT	E2DC	Torness to Hawthorn Pit (EGL1)	2027	2028	Construction underway		Decided*
NGET/ SPT	TGDC	East Scotland to Humber (EGL4) **See Table A6.1 above**	2030	2031		Submitted	
NGET/ SHET	E4D3	Peterhead to Drax (EGL2)	2029	2030	Construction underway		Decided*
NGET/ SHET	E4L5	Peterhead to South Humber (EGL3) **See Table A6.1 above**	2030	2031		Submitted	
SPT/ SHET	TKUP	East Coast Onshore phase 2	2030	2031		SPT: submitted SHET: Decided	

NOTE: “Decided*” means a licence modification is still in progress.