Decision

RIIO-ED2 Final Determinations SPEN Annex

Publication date:	30 November 2022
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The next electricity distribution price control (RIIO-ED2) will cover the five-year period to 31 March 2028. In December 2021 the Distribution Network Operators (DNOs) submitted their business plans to Ofgem setting out proposed expenditure for RIIO-ED2. We assessed these plans and published our consultation on Draft Determinations in June 2022.

This document and others published alongside it, set out our Final Determinations for companies under the RIIO-ED2 price control, which will commence on 1 April 2023.

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1. Introduction

Purpose of this document

1.1 This document sets out our Final Determinations for the Electricity Distribution (ED) price control (RIIO-ED2) for the areas that are specific to SPEN.

1.2 The RIIO-ED2 price control will cover the five-year period from 1 April 2023 to 31 March 2028. All figures are in 2020/21 prices except where otherwise stated.

1.3 The purpose of this document is to focus on those elements of our Final Determinations for the price control settlement which specifically affect SPEN's licence areas covering Scottish Power Distribution (SPD) and Scottish Power Manweb (SPMW). This includes:

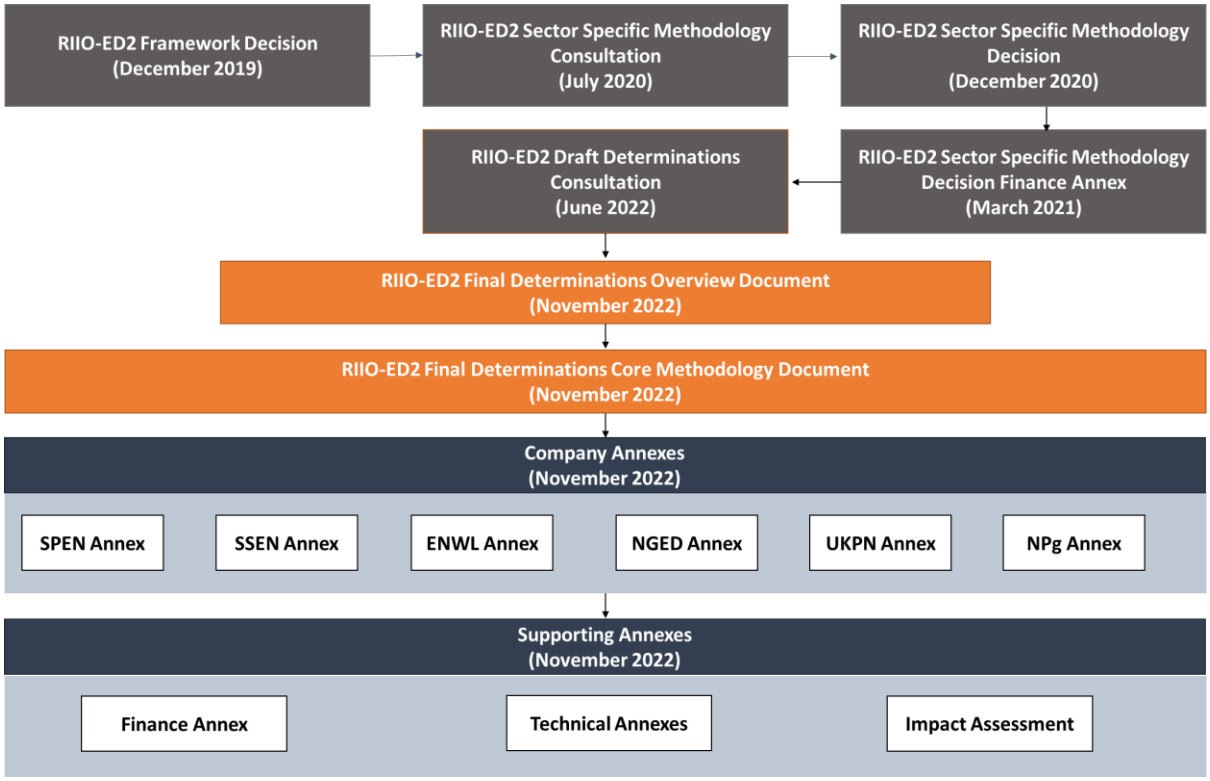
- our assessment of the business plan incentive (BPI), including consumer value propositions (CVPs)
- ex ante cost allowances
- parameters for common outputs
- bespoke Output Delivery Incentives (ODIs)[1]
- bespoke Price Control Deliverables (PCDs)
- bespoke Uncertainty Mechanisms (UMs)
- Network Innovation Allowance (NIA) funding.

1.4 This document is intended to be read alongside the RIIO-ED2 Final Determinations Core Methodology Document and RIIO-ED2 Final Determinations Overview Document.

1.5 Figure 1 sets out where you can find information about other areas of our RIIO-ED2 Final Determinations.

[1] In this document, we refer to 'ODI-F' which is a financial incentive and 'ODI-R' which is a reputational incentive.

Figure 1 Navigating the RIIO-ED2 Final Determinations documents



What are the company specific elements of SPEN's Final Determinations?

1.6 This section provides a high-level summary of the elements of our Final Determinations which are specific to SPEN.

1.7 Table 1 summarises our assessment of SPEN across the four stages of the BPI and where you can find additional information about our decision for each stage.

Table 1 Summary of proposed SPEN performance

BPI Stage	Final Determination	Further Detail
Stage 1 minimum requirements	Pass	Overview Document for approach to assessment and rationale
Stage 2 Consumer Value Propositions	No reward	Chapter 2 of this document
Stage 3 Penalty	No penalty	Chapter 3 of this document
Stage 4 Reward	No reward	Chapter 3 of this document

1.8 The cost confidence assessment we have undertaken as part of this process results in a Totex Incentive Mechanism (TIM) incentive rate for

SPEN of 50.0%. For further details on the TIM, see Chapter 9 in the Overview Document.

1.9 We present a summary of our ex ante Totex allowances for SPEN in Table 2. This reflects our view of efficient costs including ongoing efficiency over RIIO-ED2. For further details, please refer to Chapter 7 of the Core Methodology Document.

Table 2 SPEN RIIO-ED2 submitted Totex versus allowed Totex (£m, 2020/21 prices)[2]

Cost activity	RIIO-ED2 submitted	DD (Net Before NPCA[3])	FD (Net Before NPCA)	FD incl Access SCR (Net After NPCA)	Difference to submitted (on a Net Before NPCA basis)
Load related capex	434	374	327	357	-24.6%
Non-load related capex	1,173	1,007	1,052	1,052	-10.3%
Non-operating capex	164	142	135	135	-18.1%
Network operating costs	531	459	467	467	-12.1%
Closely associated indirects	726	627	662	554	-8.8%
Business support costs	369	319	302	271	-18.2%
Total	3,397	2,928	2,945	2,835	-13.3%

1.10 The common outputs that we are implementing for all DNOs in RIIO-ED2 are set out in Table 3 with further details provided in the Core Methodology Document. Table 3 also sets out the bespoke outputs that we are applying to SPEN in RIIO-ED2 (further details are contained within Chapter 2).

Table 3 Summary of common and bespoke outputs applicable to SPEN

Output name	Output Type	Further detail
Common Outputs		

[2] Note that these costs do not include RPEs or post-modelling adjustments for reversing of ongoing efficiency for Worst Served Customers and Visual Amenity, adding Cyber resilience OT allowances and the Shetland Link RAV transfer, and deducting related party margins, disposals, and other controllable opex.
[3] NPCA stands for Non-Price Control Allocations

Output name	Output Type	Further detail
Annual Environmental Report	ODI-R	Chapter 3, Core Methodology Document
DSO	ODI-F	Chapter 4, Core Methodology Document
Digitalisation Licence Obligation	LO	Chapter 4, Core Methodology Document
Technology Business Management (TBM) taxonomy for classifying digital/IT spend	ODI-R	Chapter 4, Core Methodology Document
Collaborative project with networks to develop a new regulatory reporting methodology	ODI-R	Chapter 4, Core Methodology Document
Smart Optimisation Output	LO	Chapter 4, Core Methodology Document
Customer Satisfaction Survey	ODI-F	Chapter 5, Core Methodology Document
Complaints Metric	ODI-F	Chapter 5, Core Methodology Document
Time to Connect	ODI-F	Chapter 5, Core Methodology Document
Guaranteed standards of performance - Connections	Statutory instrument	Chapter 5, Core Methodology Document
Major Connections Incentive	ODI-F	Chapter 5, Core Methodology Document
Treating domestic customers fairly	LO	Chapter 5, Core Methodology Document
Consumer Vulnerability Incentive	ODI-F	Chapter 5, Core Methodology Document
Annual Vulnerability Report	ODI-R	Chapter 5, Core Methodology Document
Interruptions Incentive Scheme	ODI-F	Chapter 6, Core Methodology Document
Guaranteed standards of performance - Reliability	Statutory Instrument	Chapter 6, Core Methodology Document
Network Asset Risk Metric	PCD, ODI-F	Chapter 6, Core Methodology Document

Output name	Output Type	Further detail
Cyber Resilience Information Technology	PCD	Chapter 6, Core Methodology Document and Confidential DNO Annexes
Cyber Resilience Operational Technology	PCD	Chapter 6, Core Methodology Document and Confidential DNO Annexes
Bespoke SPEN Outputs		
N/A	N/A	N/A

1.11 The common UMs that we have decided to put in place for all DNOs in RIIO-ED2 are set out in Table 4 with further details set out in the Overview Document or in the Core Methodology Document. Bespoke UMs specific to SPEN are also set out in Table 4, with further details in Chapter 4.

Table 4 Summary of common and bespokes UMs applicable to SPEN

UM Name	UM Type	Further detail	Proposed in DDs
Common UMs			
Cost of Debt	Indexation	Finance Annex, Chapter 2	Yes
Cost of Equity	Indexation	Finance Annex, Chapter 3	Yes
Inflation indexation of RAV and allowed return	Indexation	Finance Annex, Chapter 9	Yes
Real Price Effects	Indexation	Annex 2, Chapter 4 of SSMD	Yes
Bad debt/valid bad debt claims by IDNOs	Pass-through	Finance Annex, Chapter 10	No
Business/Prescribed Rates	Pass-through	Annex 2, Chapter 8 of SSMD	Yes
Ofgem Licence Fee	Pass-through	Annex 2, Chapter 8 of SSMD	Yes
Pension Deficit Repair Mechanism	Pass-through	Annex 2, Chapter 8 of SSMD and Finance Annex, Chapter 10	Yes

Ring Fence Costs	Pass-through	Annex 2, Chapter 8 of SSMD	Yes
Severe Weather 1-in-20	Pass-through	Core Methodology Document, Chapter 7	Yes
Smart Meter Communication Costs	Pass-through	Core Methodology Document, Chapter 7	Yes
Smart Meter Information Technology Costs	Pass-through	Core Methodology Document, Chapter 7	Yes
Supplier of Last Resort	Pass-through	Finance Annex, Chapter 10	No
Transmission Connection Point Charges	Pass-through	Annex 2, Chapter 8 of SSMD and Core Methodology Document, Chapter 7	Yes
Cyber Resilience OT	UIOLI	Core Methodology Document, Chapter 6	Yes
Visual Amenity	UIOLI	Core Methodology Document, Chapter 3	Yes
Worst Served Customers	UIOLI	Core Methodology Document, Chapter 6	Yes
LRE - Low Voltage (LV) Services	Volume driver	Core Methodology Document, Chapter 3	Yes
LRE - Secondary Reinforcement	Volume driver	Core Methodology Document, Chapter 3	Yes

Polychlorinated Biphenyls (PCB)	Volume driver	Core Methodology Document, Chapter 3	Yes
Indirect Scaler	Volume Driver	Overview Document, Chapter 6	No
Coordinated Adjustment Mechanism	Re-opener	Overview, Chapter 5 of SSMD	Yes
Cyber Resilience IT	Re-opener	Core Methodology Document, Chapter 6	Yes
Cyber Resilience OT	Re-opener	Core Methodology Document, Chapter 6	Yes
Digitalisation	Re-opener	Core Methodology Document, Chapter 4	Yes
DSO	Re-opener	Core Methodology Document, Chapter 4	Yes
Electricity System Restoration	Re-opener	Core Methodology Document, Chapter 6	Yes
Environmental	Re-opener	Core Methodology Document, Chapter 3	Yes
High Value Projects	Re-opener	Overview Document, Chapter 6	Yes
LRE	Re-opener	Core Methodology Document, Chapter 3	Yes
Net Zero	Re-opener	Core Methodology	Yes

		Document, Chapter 3	
Physical Security	Re-opener	Core Methodology Document, Chapter 6	Yes
Rail Electrification	Re-opener	Core Methodology Document, Chapter 7	Yes
Storm Arwen	Re-opener	Overview Document, Chapter 6	Yes
Streetwork Costs	Re-opener	Core Methodology Document, Chapter 7	Yes
Tax Review	Re-opener	Finance Annex, Chapter 7	Yes
Wayleaves and Diversions	Re-opener	Overview Document, Chapter 6	No
Bespoke UMs for SPEN			
EV Optioneering	UIOLI	SPEN Company Annex, Chapter 4	No

1.12 Table 5 sets out our NIA allowances for SPEN (further details can be found in Chapter 5). Our general approach to the NIA is set out in Chapter 3 of our Core Methodology Document.

Table 5 Summary of NIA applicable to SPEN

SPEN NIA
£11.1m, to be reviewed by 2025

1.13 Table 6 summarises the financing arrangements that we are applying to SPEN. Please refer to Chapter 4 of our Finance Annex for more detail on these areas.

Table 6 Summary of financing arrangements applicable to SPEN

Finance Parameter	**SPEN (SPD and SPMW) Rate**	**Source**
Notional gearing	60%	See Table 14 in Finance Annex
Cost of equity allowance	5.23%	
Cost of debt allowance	3.07%	
WACC allowance Vanilla	3.93%	

2. Setting outputs

Introduction

2.1 In this chapter we provide our decisions on:

- The SPEN specific parameters for common outputs, detailed in our Core Methodology Document, which we propose to apply to all DNOs.
- The bespoke outputs and CVPs proposed in SPEN's Business Plan.

Common outputs

2.2 The SPEN specific parameters for the common outputs which we have determined for all DNOs in RIIO-ED2 are set out in the tables below. Further details on these outputs and our decisions are set out in the Core Methodology Document of these Final Determinations.

Interruptions Incentive Scheme (IIS)

2.3 Tables 7 and 8 summarise SPEN's unplanned Customer Interruptions (CI) and Customer Minutes Lost (CML) targets. The targets are based on information we have at the time of the FD publication. The final numbers will be set out in SpC 4.4 of the licence.

2.4 The unplanned targets are calculated under a common methodology that uses each DNO's own historical performance to determine their targets, which means they are bespoke for each DNO. This methodology ensures the DNOs are incentivised to improve their performance (or avoid it deteriorating) but recognises that there are factors that will affect each DNO's current performance and the cost and impact of any changes.

2.5 Tables 9 and 10 summarise SPEN's planned CI and CML targets.

2.6 Please refer to Chapter 6 of the Core Methodology Document for further details.

2.7 Please refer to Appendix 7 of the Finance Annex for the incentive values, including the IIS revenue cap and collar values for SPD and SPMW.

Table 7: IIS - unplanned CI targets

Network	2023/24	2024/25	2025/26	2026/27	2027/28
SPD	41.6	40.8	40.0	39.2	39.0
SPMW	31.9	31.8	31.6	31.5	31.3

Table 8: IIS – unplanned CML targets

Network	2023/24	2024/25	2025/26	2026/27	2027/28
SPD	28.0	27.5	26.9	26.4	25.9
SPMW	26.5	25.4	24.9	24.4	23.9

Table 9: IIS - planned CI target

Network	2023/24
SPD	0.99
SPMW	1.69

Table 10: IIS - planned CML target

Network	2023/24
SPD	2.66
SPMW	4.67

Network Asset Risk Metric (NARM) PCD and ODI-F

2.8 Table 11 summarises SPEN's Network Asset Risk Metric (NARM) baseline network risk output for RIIO-ED2. Please refer to Chapter 6 of the Core Methodology Document for further details.

Table 11: NARM PCD and ODI-F – Baseline Network Risk Outputs (£R, 2020/21 prices)

Network	Baseline Network Risk Output
SPD	359,533,473
SPMW	454,515,554

Consumer Vulnerability Incentive

2.9 Table 12, Table 13 and Table 14 summarise SPEN's vulnerability incentive targets for PSR Reach, the value of fuel poverty services delivered and the value of low carbon support services delivered. Financial targets are set out in net present value (NPV). Please refer to Chapter 5 of the Core Methodology Document for further details.

Table 12: Consumer Vulnerability Incentive (ODI-F): PSR Reach target

	Year 2 target	Year 5 target
SPEN bespoke target	74%	80%

Table 13: Consumer Vulnerability Incentive (ODI-F): the value of fuel poverty services delivered (NPV, £m)

	Year 2 target	Year 5 target
SPEN bespoke target	£5.70m	£8.53m

Table 14: Consumer Vulnerability Incentive (ODI-F): the value of low carbon transition services delivered (NPV, £m)

	Year 2 target	**Year 5 target**
SPEN bespoke target	£1.96m	£11.55m

Major Connections Incentive

2.10 Table 15 shows SPEN's maximum penalty exposure for the Major Connections Incentive which is a penalty-only ODI-F. Please refer to Chapter 5 of the Core Methodology Document for further details.

Table 15: Major Connections Incentive - maximum penalty exposure

Network	**RIIO-ED2 penalty exposure in base revenue[4]**
SPD	0.5%
SPMW	0.7%

Bespoke outputs

2.11 For RIIO-ED2, we invited DNOs to propose additional bespoke outputs as part of their Business Plans reflecting the needs of, and feedback from, their stakeholders and consumers.

2.12 We said that companies were required to support their bespoke proposals with robust justification. In our Business Plan Guidance (BPG), we asked for this justification to ensure that the potential consumer benefits put forward under bespoke proposals were significant enough to merit introducing any additional cost and/or regulatory complexity associated with them.

2.13 Having considered all responses to our Draft Determinations proposals, our decision for each bespoke proposal strikes an appropriate balance between these trade-offs. You can find the background and our assessment approach in our RIIO-ED2 Draft Determinations Overview Document.

2.14 SPEN submitted one ODI-R, three ODI-Fs, one PCD, four CVPs, and five 'Licence Obligations (LOs) with clawback'.[5]

[4] The penalty is calculated by applying approximately a 0.1% penalty rate per Relevant Market Segment (RMS) within the scope of the incentive, up to a maximum exposure of 0.9% base revenue. Please see Appendix 7 of the Finance Annex for this penalty rate to be translated to RoRE.

[5] Some bespoke proposals were submitted by SPEN as both CVP and either 'LO with clawback' or PCD. We assessed these 'LOs with clawback' where relevant as CVPs, and as Use-it-Or-Lose-it allowance or PCD, depending on how SPEN proposed each mechanism should work. Please see the "Bespoke UM Proposals" section in Chapter 4 of

2.15 We provide a summary of each bespoke proposal below, with the full details of each bespoke output put forward by SPEN found in its business plan submission. We set out our assessment of each output and detail which of them we have decided to accept and apply to SPEN in RIIO-ED2.

Bespoke Output Delivery Incentives

2.16 The table below summarises the bespoke ODI proposals that SPEN submitted as part of its business plan and our Final Determinations position.

ODI name and description	Draft Determination responses	Final Determination	Draft Determination
Community Energy Strategy (ODI-F): Increase awareness through a Community Energy Education Programme and support the delivery of activities that facilitate community-led renewable energy demand reduction, and energy supply projects.	SPEN did not comment on our treatment of this output specifically but noted disappointment with the proposal to generally reject its bespoke ODIs. SPEN's CEG disagreed with our position, arguing that SPEN presented a clear and logical argument about the value of Community Energy to future electricity networks.	Reject output and subject costs to benchmarking: As per our Draft Determinations position, we consider engagement with local communities and energy groups as a Business as Usual (BAU) activity in RIIO-ED2. Therefore, we reject the treatment of this proposal as an ODI-F. Although we reject the bespoke nature of the proposal, we consider there is value in carrying out the underlying activity. As we consider the associated costs to be BAU, they are subject to benchmarking.	Same as FD

this document for the 'Distribution Net Zero Fund' and 'Electric Vehicle (EV) Optioneering' proposals; the "Customer Value Propositions" section in Chapter 2 of this document for details on 'Direct Low Carbon Transition Support to Vulnerable Customers', and 'Network Loss Reduction and Safety Enhancement'; and the "Bespoke Price Control Deliverables" section for details on 'Biodiversity'.

ODI name and description	Draft Determination responses	Final Determination	Draft Determination
		Please see paragraphs 2.17 to 2.21 below for further detail.	
LV Connections Offer Accelerator (ODI-F): A reward-only ODI-F based on time to quote metrics for certain low voltage (LV) connection customers, on the basis that the connection work is similar to the Minor Connections LV connections, where a common Time to Connect ODI-F already exists.	SPEN did not comment on our treatment of this output specifically but noted disappointment with our proposal to generally reject its bespoke ODIs.	Reject output: We have decided to reject this ODI-F. No costs were submitted against this output for us to assess. SPEN's proposal noted this activity can be delivered at zero cost. Where a DNO is able to improve their service provision, through amending processes to increase efficiency, at zero cost to consumers, we consider they should do so as part of developing and maintaining an efficient, coordinated and economical network. As a result, we do not consider this should be incentivised by an ODI-F.	Same as FD
Advice Services ODI-F: Provision of a range of advice services that help customers to reduce household or business costs, drive energy efficiency and access the	There was mixed support for our proposed position. One consumer body agreed with our rejection of the ODI-F, given the overlap with other incentives. However, SPEN,	Reject outright: We have decided to maintain our Draft Determination position and reject this output and the costs associated with this proposal. We maintain the view that there are	Same as FD

ODI name and description	Draft Determination responses	Final Determination	Draft Determination
benefits of the low carbon transition.	SPEN's CEG and another consumer body disagreed, noting clear stakeholder support for this service. SPEN's CEG challenged our assertion that there are existing service providers that are adequately meeting the needs of vulnerable and commercial consumers, especially in light of the current cost of living crisis.	existing avenues which support customers in driving energy efficiency, reducing bills and accessing low carbon technologies. We consider that DNO focus should be on providing advice where there is a clear network benefit, or clear benefits to vulnerable customers, including to customers who are in fuel poverty.	
Losses ODI-R: A reputational incentive to assess DNO ambition and progress in addressing losses on the networks.	SPEN did not comment on our treatment of this output specifically but noted disappointment with the proposal to generally reject its bespoke ODIs. SPEN's CEG stated their disappointment that there is no financial incentive to minimise losses and deem reliance on reputational regulation through the Annual Environment Report (AER) weak.	Reject output: we have decided to reject this output. No costs were submitted against this output specifically for us to assess. We maintain our Draft Determination position and remain unclear of the benefits offered by this ODI-R over and above the AER. However, we note that SPEN is still required to report on their Losses Strategy through the AER. For further details on the reputational incentive of the	Same as FDs

ODI name and description	Draft Determination responses	Final Determination	Draft Determination
		AER, please refer to chapter 3 of the Core Methodology Document.	

Community Energy Strategy

Background

2.17 SPEN proposed to provide additional resource to increase awareness through a Community Energy Education Programme as well as support the delivery of activities that encourage and facilitate community-led renewable energy demand reduction, and energy supply projects.

Final Determination rationale and Draft Determination responses

2.18 We maintain our Draft Determination position to reject this proposal as an ODI-F and to subject the associated costs to benchmarking. At Draft Determinations, we proposed to reject this bespoke ODI-F in the absence of sufficient evidence or justification, and because we did not consider an ODI-F a proportionate mechanism to facilitate greater community energy within their licence areas.

2.19 SPEN disagreed with our position to reject its bespoke ODI proposals. It stated that its final business plan demonstrated that these align with the priorities of its customers and stakeholders and have the potential to generate clear positive benefits. SPEN stated that our proposed decision undermined one of the underlying features of RIIO which is meant to be 'an incentive-based model'.

2.20 SPEN's CEG disagreed with our Draft Determinations position, arguing that SPEN presented a clear and logical argument about the value of community energy to future electricity networks. SPEN's CEG stated the proposal demonstrated a clear 'whole systems' approach to the critical role community energy groups will play in unlocking and coordinating citizen adoption of low carbon solutions.

2.21 We have considered the responses relating to this proposal and we disagree that it merits an ODI-F. We expect engagement with local communities and community energy groups to be Business as Usual (BAU) in RIIO-ED2, and we maintain the view that an ODI-F is not a proportionate mechanism to facilitate greater community energy activity in the licence areas.

Bespoke Price Control Deliverables

2.22 The table below summarises the bespoke PCD proposals for SPEN and outlines our Final Determinations position.

PCD name and description	Consultation response summary	Final Determination	Draft Determination
Land Rights PCD: Delivery of efficient settlement of valid outstanding injurious affection claims from the RIIO-ED1 period.	SPEN and SPEN's CEG disagree with our position. SPEN note that the costs associated may increase and SPEN has an obligation to settle claims with landowners.	Reject outright: We have decided to reject the PCD and the cost associated with this PCD. We maintain our Draft Determination position that these costs are best managed through SPEN's totex allowances. We also think that SPEN can manage any associated risks through the Wayleaves and Diversions UM.	Same as FD
Biodiversity (submitted as LO with clawback)**:** Enhance biodiversity across SPEN's networks and pilot biodiversity enhancement initiatives across 25 hectares of non-operational land and existing linear infrastructure.	SPEN proposed to reduce their biodiversity target by a third as they recognised the low maturity in this area. An industry stakeholder supported this proposal being partially rejected by Ofgem, due to the apparent lack of supporting evidence for a wider project.	Reject output, partially accept expenditure and technical cost assessment treatment: We have decided to reject attaching a PCD to this proposal. We have decided to outright reject part of the costs proposed to enhance biodiversity allocated to projects and programs across SPEN's network. Approaches to biodiversity measurement and enhancement are still under development across the UK and devolved governments and we are not confident that these activities present value for	Same as FD In our Draft Determinations, we said that we proposed to fund £0.5m of this proposal and that this should be delivered through a PCD. We note that this was an error and should have read that we will fund the £0.5m through ex-ante allowances.

PCD name and description	Consultation response summary	Final Determination	Draft Determination
		money for consumers. However, we consider there is value in delivering biodiversity initiatives across 25 hectares of non-operational land and existing infrastructure and have accepted the associated expenditure proposed. Given the discrete nature of the activity, the associated costs have been subject to technical assessment rather than benchmarking. See below for further detail.	
Direct Low Carbon Transition Support to Vulnerable Customers: (submitted as CVP and LO with clawback) Providing assistance to a targeted group of vulnerable customers to reduce energy bills and carbon emissions by funding demand reduction technology and	Please see "Consumer Value Propositions" section below.	Reject outright: we have decided to reject attaching and output to this proposal and to reject associated costs. Please see "Consumer Value Propositions" section below for details.	Same as FD

PCD name and description	Consultation response summary	Final Determination	Draft Determination
increasing the uptake of smart meters.			
Network loss reductions and safety enhancement: (submitted as CVP and LO with clawback) driving a purpose-built vehicle (MAAV) around communities to identify faults in electrical equipment to reduce technical losses.	Please see "Consumer Value Propositions" section below.	Reject output: We have decided not to attach an output to this proposal and subject the cost to benchmarking. Please see "Consumer Value Propositions" section below.	Same as FD

Biodiversity PCD

Background

2.23 SPEN proposed to enhance biodiversity across their networks on projects and programs by 500 biodiversity units (£7.5m) as well as pilot biodiversity enhancement initiatives across 25 hectares of non-operational land and existing linear infrastructure (£0.5m) at a total cost of £8.0m to consumers. SPEN proposed this output as a "LO with clawback" and we have assessed this as a PCD proposal.

Final Determination rationale and Draft Determination responses

2.24 We maintain our Draft Determination position and have decided to reject the PCD attached to this proposal. We have decided to reject the costs proposed to enhance biodiversity allocated to projects and programs across SPEN's network. However, we consider there is value in delivering biodiversity initiatives across 25 hectares of non-operational land and existing infrastructure and have accepted the associated expenditure proposed. Given the discrete nature of the activity, the associated costs have been subject to technical assessment rather than benchmarking.

2.25 At Draft Determinations, we proposed to reject this output and the £7.5m of proposed funding allocated to projects and programs across their network as the linkages to network developments and/or sites were not sufficiently evidenced. We proposed to fund biodiversity initiatives across

25 hectares of non-operational land and existing infrastructure. This component of the proposal represents a cost of £0.5m.

2.26 As part of their consultation response, SPEN proposed to reduce its biodiversity target by a third and lower their total cost down to £6.5m as they recognised the maturity in this area was low as approaches to biodiversity measurement and enhancement are still being developed across the developed governments. An industry stakeholder supported this proposal being partially rejected by Ofgem, due to the apparent lack of supporting evidence for a wider project. They stated that given the importance of biodiversity, it appears suitable to fund a smaller sum (£0.5 million) to protect consumers from under-delivery.

2.27 Having considered the consultation responses, we have decided to reject attaching a PCD to this proposal and reject the part of the costs proposed to enhance biodiversity allocated to projects and programs across SPEN's network. Approaches to biodiversity measurement and enhancement are still being developed across the UK and devolved governments. This is recognised by SPEN within their consultation response and has contributed to a reduced number of projects being proposed which on further reflection were not considered to deliver good value for money for consumers. In light of this uncertainty and as per our Draft Determination position, we have decided to only fund biodiversity initiatives across 25 hectares of non-operational land and existing infrastructure during the first years of RIIO-ED2. This component of the proposal represents a cost of £0.5m to consumers.

Consumer Value Propositions

2.28 The table below summarises the CVP proposals that SPEN submitted as part of its Business Plan and our Final Determinations position in relation to each. Where appropriate, further information setting out the rationale for our decisions is set out under specified headings.

CVP name and description	Consultation response summary	Final Determination	Draft Determination
Direct low carbon transition support to vulnerable customers: Providing assistance to a targeted group of vulnerable customers to reduce energy bills and carbon	SPEN did not comment on our treatment of this CVP specifically but noted disappointment with the fact that we have rejected the reward associated with all of their CVP proposals. A consumer body	Reject outright: We have decided to reject the reward and the costs associated with this CVP proposal. We did not receive sufficient evidence that SPEN is best placed to deliver	Same as FD

emissions by funding demand reduction technology and increasing the uptake of smart meters.	agreed with our Draft Determinations position. The Scottish Government expressed concern that rejection of this CVP would result in customers in South Scotland being worse off than those receiving support through SSEN's Personal Resilience Plans CVP.	this CVP and consider there to be risk of overlap with the supplier-led smart meter rollout. In response to the Scottish Government's concerns, we think different treatment is warranted as SSEN's CVP relates to the role of a DNO in supporting vulnerable customers during supply interruptions.	
EV Optioneering: EV optioneering aims to identify the optimal placement of EV charging infrastructure, saving on connections costs and accelerating the EV infrastructure rollout.	SPEN did not comment on our treatment of this CVP specifically but noted disappointment with the fact that we have rejected the reward associated with all of their CVP proposals. One consumer body, the RIIO-ED2 Challenge Group, and SPEN's CEG all agreed with our rationale that engagement with local authorities on future investment and infrastructure is BAU for a DNO, and so should not attract additional rewards.	Reject output, technically assess costs: We reject the treatment of this proposal as a CVP as it does not clearly go beyond SPEN's baseline expectations. However, we consider there is value in delivering this proposal and have established this output as a UIOLI. Please see the Bespoke UMs section in Chapter 4 of this document for a summary of our Final Determinations position on the UIOLI and treatment of associated costs.	Updated at FD In our Draft Determinations, we proposed that this output should be delivered through a PCD allowance with clawback. We note that this was an error and should have read that this output should be delivered through a UIOLI instead.

Network loss reductions and safety enhancement: driving a purpose-built vehicle (MAAV) around communities to identify faults in electrical equipment to reduce technical losses.	SPEN were pleased that Ofgem accepted these costs, however, given the nature of the spend and the deliverables they stated it would be more appropriate for these costs to be awarded as UIOLI allowances with licence drafting giving sufficient assurance around spend. The SPEN CEG highlighted that SPEN will have an allowance and obligation to deliver on this but will not be rewarded for doing so. They note our proposed decisions appear to be pragmatic.	Reject CVP reward and subject cost to benchmarking: As per our DD position, we do not believe this proposal clearly goes beyond SPEN's baseline expectations[6] and we remain dissatisfied that the proposal includes a sufficiently robust methodology to evaluate the consumer value benefit and delivery associated with the mobile asset assessment vehicle. Although we reject the bespoke nature of the proposal, we consider there is value in carrying out the underlying activity. As we consider the associated costs to be BAU, they are subject to benchmarking.	Updated at FD In our Draft Determinations, we said that we proposed that this activity should be delivered through a PCD. We note that this was an error and should have read that we will fund the activity through ex-ante allowances.
Advanced Fault Management: Install fault level monitoring across 41 constrained	SPEN did not comment on our treatment of this CVP specifically but noted	Reject CVP reward and subject cost to benchmarking:	Same as FD

[6] The role of a DNO is to use reasonable endeavours to reduce their controllable losses and we believe that deploying technological options to do so is a BAU responsibility for DNOs in RIIO-ED2.

locations instead of traditionally reinforcing the network.	disappointment with the fact that we have rejected the reward associated with all of their CVP proposals.	As per our Draft Determinations position, we do not believe that this proposal goes beyond a DNO's baseline expectations[7]. Although we have rejected the bespoke nature of this proposal, we consider there is value in carrying out the underlying activity. As we consider the associated costs to be BAU, they are subject to benchmarking.	

[7] Where an efficient solution has been identified to defer reinforcement, we believe that this should be considered as a BAU activity for the DNO.

3. Setting ex ante allowances

Introduction

3.1 This chapter sets out our Final Determinations on ex ante allowances for the different cost areas within SPEN's business plan submission. This chapter should be read alongside other parts of our Final Determinations that set out our overall approach to RIIO-ED2.

Ex ante allowances

3.2 Ex ante Totex referenced in this chapter comprises forecast controllable costs and is inclusive of our proposed ongoing efficiency challenge, unless stated otherwise. Furthermore, the figures presented in this chapter do not include real price effects (RPEs) to allow comparison with DNOs' submissions.

3.3 Table 16 and Table 17 compare SPEN's submitted ex ante Totex for its network, our Draft Determination proposals, and our Final Determinations position at a disaggregated cost activity level.

Table 16: SPD RIIO-ED2 submitted Totex versus proposed Totex by cost activity (£m, 2020/21 prices)[8]

Cost activity	RIIO-ED2 submitted	DD (Net Before NPCA)	FD (Net Before NPCA)	FD incl Access SCR (Net After NPCA)	Difference to submitted (on a Net Before NPCA basis)
Connections	35	30	27	33	-21.8%
New Transmission Capacity Charges	21	18	19	20	-8.2%
Primary Reinforcement	56	49	44	46	-21.2%
Secondary Reinforcement	132	114	88	88	-33.2%
Fault Level Reinforcement	14	11	12	14	-15.2%
Civil Works Condition Driven	18	16	16	16	-14.0%

[8] Note that these costs do not include post-modelling adjustments for reversing of ongoing efficiency for Worst Served Customers and Visual Amenity, adding Cyber resilience OT allowances and the Shetland Link RAV transfer, and deducting related party margins, disposals, and other controllable opex.

Electricity System Restoration (Blackstart)	3	2	2	2	-7.7%
Legal & Safety	18	15	12	12	-33.1%
QoS & North of Scotland Resilience	12	-	-	-	-100.0%
Flood Mitigation	5	5	5	5	-1.8%
Physical Security	-	-	-	-	-
Rising and Lateral Mains	34	29	31	31	-8.5%
Overhead Line Clearances	10	8	9	9	-9.1%
Losses	15	13	14	14	-8.5%
Environmental Reporting	38	33	32	32	-15.5%
Operational IT and Telecoms	105	91	85	85	-18.4%
Worst Served Customers	6	5	6	6	-6.7%
Visual Amenity	2	2	2	2	32.9%
Diversions (excl Rail)	19	16	17	17	-7.4%
Diversions Rail Electrification	-	-	-	-	-
Civil Works Asset Replacement Driven	14	12	12	12	-14.6%
Asset Replacement NARM	146	127	135	135	-7.4%
Asset Replacement Non-NARM	73	63	69	69	-5.2%
Asset Refurbishment Non-NARM	18	16	17	17	-7.4%
Asset Refurbishment NARM	5	5	5	5	-9.8%
IT and Telecoms (Non-Op)	50	44	42	42	-15.9%
Non-Op Property	24	21	17	17	-28.1%

Vehicles and Transport (Non-Op)	6	6	5	5	-22.9%
Small Tools and Equipment (STEPM)	5	5	8	8	45.7%
HVP RIIO-ED2	-	-	-	-	-
Shetland	-	-	-	-	-
Tree Cutting	24	21	20	20	-18.1%
Faults	121	105	113	113	-6.9%
Severe Weather 1-in-20	6	-	-	-	-100.0%
Occurrences Not Incentivised (ONIs)	26	22	24	24	-5.4%
Inspections	9	8	9	9	0.7%
Repair and Maintenance	40	35	40	40	0.7%
Dismantlement	1	1	0	0	-37.5%
Remote Generation Opex	-	-	-	-	-
Substation Electricity	12	11	11	11	-8.0%
Smart Metering Roll Out	12	11	10	10	-19.5%
Total Closely Associated Indirects (CAI)	363	315	347	291	-4.4%
Total Business Support	190	165	159	144	-16.5%
Cost Activities Sub-Total	1,688	1,447	1,466	1,406	-13.1%
Excluded Cost Activities	-18	-	-	-	-100.0%
Total Totex (modelled component)	1,670	1,447	1,466	1,406	-12.2%
Technically Assessed Totex	6	4	3	2	-52.7%
Total Totex	**1,676**	**1,451**	**1,469**	**1,408**	**-12.4%**

Table 17: SPMW RIIO-ED2 submitted Totex versus proposed Totex by cost activity (£m, 2020/21 prices)[9]

Cost activity	RIIO-ED2 submitted	DD (Net Before NPCA)	FD (Net Before NPCA)	FD incl Access SCR (Net After NPCA)	Difference to submitted (on a Net Before NPCA basis)
Connections	18	15	18	31	1.2%
New Transmission Capacity Charges	2	1	1	1	-11.8%
Primary Reinforcement	51	44	44	48	-12.8%
Secondary Reinforcement	88	76	55	55	-38.2%
Fault Level Reinforcement	17	14	18	20	5.1%
Civil Works Condition Driven	20	17	20	20	0.7%
Blackstart	4	3	3	3	-11.8%
Legal & Safety	23	20	13	13	-41.5%
QoS & North of Scotland Resilience	14	-	-	-	-100.0%
Flood Mitigation	4	4	5	5	7.3%
Physical Security	-	-	-	-	-
Rising and Lateral Mains	27	23	24	24	-12.4%
Overhead Line Clearances	15	13	13	13	-13.0%
Losses	8	7	7	7	-13.1%
Environmental Reporting	41	36	35	35	-16.6%

[9] Note that these costs do not include post-modelling adjustments for reversing of ongoing efficiency for Worst Served Customers and Visual Amenity, adding Cyber resilience OT allowances and the Shetland Link RAV transfer, and deducting related party margins, disposals, and other controllable opex.

Operational IT and Telecoms	117	101	89	89	-24.0%
Worst Served Customers	9	8	8	8	-11.7%
Visual Amenity	3	2	4	4	28.6%
Diversions (excl Rail)	38	33	41	41	6.9%
Diversions Rail Electrification	-	-	-	-	-
Civil Works Asset Replacement Driven	13	11	11	11	-14.6%
Asset Replacement NARM	190	163	191	191	0.4%
Asset Replacement Non-NARM	83	71	78	78	-5.5%
Asset Refurbishment Non-NARM	28	24	25	25	-10.3%
Asset Refurbishment NARM	14	12	17	17	17.5%
IT and Telecoms (Non-Op)	49	42	38	38	-22.3%
Non-Op Property	17	15	13	13	-26.0%
Vehicles and Transport (Non-Op)	6	5	4	4	-27.6%
Small Tools and Equipment (STEPM)	6	5	7	7	16.8%
HVP RIIO-ED2	-	-	-	-	-
Shetland	-	-	-	-	-
Tree Cutting	58	50	43	43	-25.3%
Faults	121	104	106	106	-12.4%
Severe Weather 1-in-20	9	-	-	-	-100.0%
Occurrences Not Incentivised (ONIs)	25	21	22	22	-9.9%
Inspections	12	10	10	10	-18.0%
Repair and Maintenance	53	45	43	43	-18.0%

Dismantlement	1	0	0	0	-38.6%
Remote Generation Opex	-	-	-	-	-
Substation Electricity	9	8	8	8	-12.3%
Smart Metering Roll Out	8	7	6	6	-23.1%
Total Closely Associated Indirects (CAI)	358	308	310	258	-13.3%
Total Business Support	179	154	143	127	-20.1%
Cost Activities Sub-Total	1,737	1,474	1,473	1,425	-15.2%
Excluded Cost Activities	-23	-	-	-	-100.0%
Total Totex (modelled component)	1,714	1,474	1,473	1,425	-14.0%
Technically Assessed Totex	7	4	3	2	-64.1%
Total Totex	**1,721**	**1,477**	**1,476**	**1,427**	**-14.3%**

Technically assessed costs

3.4 For technically assessed costs, we have made the following adjustments, listed in Table 18 below. Our view of bespoke proposals is presented in Chapter 2.

Table 18: Technically Assessed Costs (£m, 2020/21 prices)

Proposal name	**Submitted**	**DD[10]**	**FD**	**Confidence**
Biodiversity	8	0.5	0.5	High
CVP: EV Optioneering	5.4	5.4	5.4	High

[10] DD and FD figures are gross costs and do not include efficiency challenge.

Engineering Justification Paper review

Overview

3.5 Our review of SPEN's Engineering Justification Papers (EJPs), and the associated supporting information, is one of several assessment tools that has contributed to our overall assessment of SPEN's submission. The position set out in this section should be considered in the wider context of the cost assessment methodology set out in Chapter 7 of the Core Methodology Document.

3.6 Following our review of EJPs in accordance with paragraph 2.23 of the Engineering Justification Papers for RIIO-ED2 Guidance document[11], and our review of Draft Determination consultation responses and additional material provided by SPEN, this section sets out our engineering assessment as part of our Final Determinations.

3.7 As discussed in Chapter 7 of our Core Methodology Document, our assessment provides a view on each EJP that was assigned one of three outcomes: Justified, Partially Justified, or Unjustified.

3.8 A summary of our review of SPEN's EJPs is presented in Table 19, showing the number of EJPs in each category and how our overall assessment has changed between Draft and Final Determinations. We have provided more detail on EJPs of significant value where our review determined the EJP to be Partially Justified or Unjustified in Appendix 2, noting instances where we have changed our EJP review position as part of our Final Determinations.

3.9 We intend to work with DNOs and other stakeholders to identify additional and enhanced reporting requirements to improve our ongoing monitoring and review of DNOs' performance and delivery of their outputs in period.

Table 19: Summary of Ofgem's view of SPEN's EJPs

EJP Review Outcome (Count of EJPs)	**Final Determinations**	**Draft Determinations**
Justified	117	107
Partially Justified	14	22
Unjustified	0	2
Total EJPs[12]	132	132

[11] RIIO ED2 Engineering Justification Paper Guidance https://www.ofgem.gov.uk/sites/default/files/docs/2021/02/riio_ed2_engineering_justification_paper_guidance.pdf

[12] One EJP is cyber resilience related and dealt with separately in confidential annex.

Load Related Expenditure (LRE): Draft Determination responses and Final Determination rationale

3.10 Chapter 7 of our Final Determinations Core Methodology Document details the interactions between our engineering review of the LRE EJPs and the final cost settlement.

3.11 For LRE, SPEN provided a range of responses which detailed additional information and further analysis on its proposals in this investment area, in relation to specific EJPs.

3.12 There was a limited number of LRE EJPs that we had deemed to be Unjustified or Partially Justified at Draft Determinations. The additional information provided by SPEN in relation to these EJPs has addressed some of the concerns that we raised at Draft Determinations. However, for some of these EJPs, there remains uncertainty associated with the proposed investment. Therefore, these EJPs are deemed to be Partially Justified.

3.13 Further details on our view on SPEN's LRE EJPs are presented in Appendix 1, as well as within the SPEN Annex that we published as part of our Draft Determinations.

Non-Load Related Expenditure (NLRE): Draft Determination responses and Final Determination rationale

3.14 For NLRE, we note that there were errors in our Draft Determinations in relation to the timing of SQ submissions. In some instances, we note that the SQs were submitted ahead of our EJP review closing date which was incorrectly labelled as after the EJP review closing date. This has been rectified as part of our Final Determinations, with these papers generally being classed as Justified, following our review of the relevant SQ responses.

3.15 We commend the quality of SPEN's EJP submissions in the RIIO-ED2 process. The majority of NARM-related NLRE major works have been deemed as Justified. We note similar quality in both EJP addendums and SQs.

3.16 A number of non-NARM NLRE EJPs were deemed to be Partially Justified or Unjustified as part of our Draft Determinations. Some of these EJPs are now considered to be Justified, based on the additional information provided by SPEN. However, we note that a number of these EJPs remain as Partially Justified, as we are not satisfied that the risks that we had previously identified have been sufficiently addressed within SPEN's consultation response. These are mainly in relation to uncertainty associated with the proposed volumes, or deliverability risks.

TIM

3.17 Our updated cost confidence assessment results in a proposed Totex Incentive Mechanism (TIM) incentive rate for SPEN of 50.0%. For further details on the TIM, see Chapter 9 of the Overview Document.

BPI Stage 3

3.18 We have decided that SPEN does not incur any penalty following our BPI Stage 3 assessment. This is the same approach that we proposed at Draft Determinations.

3.19 SPEN partially agreed with the proposed approach, however noted their disagreement with our proposed approach to Biodiversity, Natural Capital and Carbon offsetting as set out in Chapter 3 of the RIIO-ED2 Draft Determinations Core Methodology Document. We are satisfied that SPEN did not submit any poorly justified, lower confidence costs and as such there were no costs liable for penalties under Stage 3.

BPI Stage 4

3.20 We have decided that SPEN will earn no reward following our BPI Stage 4 assessment.

3.21 SPEN disagreed with our proposed approach to BPI Stage 4. It proposed that BPI Stage 4 High Confidence Cost assessment and potential reward calculations should be undertaken following the disaggregation of allowances and rewards calculated through comparisons to submitted cost. We disagree and consider that the approach set out at Draft Determinations is appropriate.

3.22 Table 20 sets out our decisions on high confidence cost categories and allowances (before the application of RPEs and ongoing efficiency).

Table 20: Final Determination on Stage 4 (£m, 2020/21 prices)

Cost Category	SPEN's view	Ofgem view	BPI reward
Modelled Costs	3,384.3	3,1527.0	N/A
Bespoke Outputs and Technically Assessed	13.3	5.78	N/A

4. Adjusting ex ante allowances for uncertainty

Introduction

4.1 In this chapter we set out our Final Determinations position on bespoke UMs.

4.2 We set out more detail on the common UMs in our Core Methodology Document and Overview Document, including our broader Final Determinations position and rationale.

Bespoke UM Proposals

4.3 In our SSMD we invited DNOs to propose bespoke UMs with suitable justification in their business plans. When assessing those we have considered the extent to which the supporting information provided by the DNOs justifies the key criteria outlined in the BPG:

- materiality and likelihood of the uncertainty
- how the risk is apportioned between consumers and the network company
- the operation of the mechanism
- how any drawbacks may be mitigated to deliver value for money and efficient delivery.

4.4 We also considered whether the uncertainty was regionally specific, or sector wide, to assess whether a common UM could be more appropriate. You can find the background and our assessment approach in Chapter 6 of our Overview Document. For full details on bespoke UMs, refer to SPEN's business plan submission.

4.5 The table below summarises the bespoke UM proposals that SPEN submitted and outlines our Final Determinations position.

Bespoke UM name and description	**Consultation response summary**	**Final Determination**	**Draft Determination**
Polychlorinated biphenyl (PCB) volume driver: To manage the volumes of PCB contaminated pole-mounted transformers (PMTs).	SPEN are pleased that Ofgem has proposed a common volume driver in this area.	Reject bespoke UM: We have decided to reject this proposal as a bespoke UM and to address PCB contamination in PMTs through a common volume driver design for all DNOs with an overhead network. The	Same as FD

Bespoke UM name and description	Consultation response summary	Final Determination	Draft Determination
		replacement of ground mounted transformers will be addressed using ex ante allowances. Additional detail can be found in Chapter 3 of our Core Methodology Document.	
Managing uncertainty in the load programme (strategic investment UM): a set of uncertainty mechanisms (re-opener and two volume drivers) to manage LRE uncertainty.	No responses received in relation to this bespoke UM. Please refer to Chapter 3 of the Core Methodology Document for more information on responses to our LRE UMs.	Reject bespoke UM: We consider it is addressed by our common LRE UMs. Please refer to Chapter 3 of the Core Methodology Document for more information.	Same as FD
EV charge point Provider of Last Resort: pass-through mechanism to remunerate costs associated with discharging its obligations under Standard Licence Condition 31F (Requirements relating to Electric Vehicle Recharging Points).	SPEN and SPEN's CEG agreed with the approach we outlined in our Draft Determinations.	Reject bespoke UM: In consideration of concerns raised about SLC 31F in responses to Draft Determinations and from engagement with stakeholders, we consider that SLC 31F requires further review, and we intend to consult on whether it should be removed entirely.	Updated at FD: In our Draft Determinations we said that we would accept this proposal as a common UM. We proposed to establish a new funding mechanism for PoLR activities.
Significant Code Review: an	No responses received in	Reject bespoke UM: We consider	Same as FD

Bespoke UM name and description	Consultation response summary	Final Determination	Draft Determination
uncertainty mechanism to manage significant deviation from forecasts due to Access SCR.	relation to this bespoke UM. Please refer to Chapter 12 of the Overview Document for information on responses to our RIIO-ED2 treatment of the Access SCR.	it is addressed by our common LRE Re-opener. Please refer to Chapter 12 of the Overview Document and Chapter 3 of the Core Methodology Document for more information.	
Severe Weather 1-in-20 (SW 1-in-20): pass-through mechanism to remunerate costs associated with a storm event which meets the severe weather 1-20 thresholds.	SPEN and SPEN's CEG agreed with the approach we outlined in our Draft Determinations.	Reject bespoke UM: We consider this is addressed by our pass through totex allowance for SW 1-in-20 costs. Please refer to chapter 6 of our Core Methodology Document for more information.	Same as FD
Digitalisation: an uncertainty mechanism to allow DNOs to respond to policy/system changes in the rapidly moving digitalisation policy area.	SPEN and SPEN's CEG agreed with the approach we outlined in Draft Determinations.	Reject: We have decided to propose a variant of this UM as a common UM for all DNOs. Please refer to Chapter 4 of the Core Methodology Document for more information.	Same as FD
Distributed restart: To facilitate the delivery of Electricity System Restoration (ESR) Services at Distributed Energy Resources (DER) sites.	SPEN and SPEN's CEG agreed with the approach we outlined in our Draft Determinations.	Reject bespoke UM: We consider this is addressed by our common ESR UM. Please refer to Chapter 6 of the Core Methodology Document for more information.	Same as FD

Bespoke UM name and description	Consultation response summary	Final Determination	Draft Determination
Distribution Net Zero Fund: (submitted as LO with clawback) A Use-it-or-Lose-it allowance of £30m to support innovation and vulnerable customers. The Fund will uniquely focus on supporting community-led decarbonisation projects	SPEN highlighted their disappointment with this decision and believe the £30m funding pot is justified both in terms of value and need. The SPEN CEG stated that SPEN's Net Zero Fund is a well justified and designed proposition reflective of stakeholders' views. There were further ten responses from industry stakeholders in support of SPEN's Distribution Net Zero Fund, stating that this funding will play an increasingly important part in enabling communities to transition to Net Zero.	Reject bespoke UM: As per our Draft Determination position, we are not satisfied with the evidence provided to quantify the funding pot. We were not satisfied the needs case was sufficiently justified. DNOs are expected to provide guidance and support to vulnerable consumers as well as engage with local communities to help facilitate the net zero transition as part of the RIIO-ED2 price control.	Same as FD
Electric Vehicle (EV) optioneering (UIOLI) (submitted as LO with clawback): EV optioneering aims to identify the optimal placement of EV	See Section 2 "Consumer Value Propositions" in this document for responses received on the CVP proposal.	Accept output, technically assess costs. We have decided to amend our Draft Determinations and accept this proposal as a UIOLI.	New to FD We note that this proposal was incorrectly labelled as a PCD in our Draft Determinations, as opposed to the intended UIOLI.

Bespoke UM name and description	**Consultation response summary**	**Final Determination**	**Draft Determination**
charging infrastructure, saving on connections costs and accelerating the EV infrastructure rollout.		We consider this clawback, as proposed by SPEN, appropriate given the uncertainty of the number of optioneering reports that will be undertaken. Given the discrete nature of the activity, the associated costs have been subject to technical assessment rather than benchmarking.	

5. Network Innovation Allowance

Introduction

5.1 Our SSMD and the Draft Determinations Core Methodology Document set out the criteria that we have used to assess NIA funding requests. The Final Determinations Core Methodology Document also details our Final Determination position for the RIIO-ED2 NIA Framework and extension of the existing Strategic Innovation Fund to the DNOs.

5.2 SPEN proposed in its business plan it should be awarded £35m of NIA over 5 years, equivalent to £7m per year, which is approximately double what SPEN had access to annually in RIIO-ED1.

Final Determination

Parameter	Final Determination	Draft Determination
Level of NIA funding	£11.1m, to be reviewed at the latest by 2025.	Same as FD

Final Determination rationale and Draft Determination responses

5.3 We have decided to confirm our position to award SPEN with £11.1m of NIA, to be reviewed at the latest by 2025, as set out at Draft Determinations. This is equivalent to three years' worth of what it on average had access to annually in RIIO-ED1.

5.4 SPEN was the only stakeholder that commented on the NIA proposed for it, disagreeing with our proposal. It disagreed with our methodology which benchmarks companies against RIIO-ED1 NIA awards and links allowances to DNOs' size, unless a strong case was put forward for why companies required more. SPEN stated that our approach was inconsistent with SSMD. We disagree because our methodology was based on assessing DNOs' requests for NIA and the quality of business plan submissions against the five criteria set out in SSMD and separately considering DNOs' justification for requesting more NIA than in RIIO-ED1.

5.5 SPEN scored satisfactorily against our five SSMD NIA criteria but did not provide a case strong enough to justify receiving more NIA than in RIIO-ED1. In its response to our Draft Determinations, SPEN argued that it requires more ringfenced innovation stimulus than was available in RIIO-ED1 to meet the net zero challenge. We disagree, given the substantial amount of funding that has been available to DNOs over past price controls through the Low Carbon Networks Fund, Network Innovation Competition and NIA. SPEN also did not submit additional evidence to support the claim that increased funding is required in its response to our Draft Determinations.

Appendix 1 Key Engineering Recommendations

A1.1 This section provides additional details regarding our assessment of specific EJPs.

A1.2 Due to the high number of EJPs presented within the submission, we have focused on EJPs of significant value where our Draft Determinations review determined the EJP to be Partially Justified or Unjustified.

Table 21: LRE - Key Engineering Recommendations

EJP	Final Determinations	Draft Determinations
HV and LV Network Reinforcement (ED2-LRE-SPEN-002-CV2-EJP)	Partially Justified The additional information provided by SPEN, and the supporting analysis and development largely meets our expectations. The information and associated analysis provided by SPEN highlights the significant development effort undertaken. However, there exists inherent uncertainty associated with the DFES, as well as the expected levels of flexibility and the risk that the proposed volumes will differ during the RIIO-ED2 period.	Partially Justified We agreed with the needs case and optioneering presented by SPEN. We had confidence in SPEN's proposed intervention volumes as their baseline scenario is at the lower end of net-zero compliant scenarios, and SPEN anticipate non-linear delivery aligned to forecast constraints. Flexibility at the time of the submission was sufficient to defer 19% of substation interventions. We considered that the planned retendering of flexibility may allow further interventions to be deferred, resulting in cost savings.
Reinforcement of LV Services (ED2-LRE-SPEN-001-CV2-EJP)	Partially Justified SPEN have provided additional justification on why volumes of investment, identified by SPEN to be required after RIIO-ED2, should be brought forward and delivered in RIIO-ED2. SPEN provided further justification explaining why these are to be brought forward, which benefits the consumer and reduces the overall cost of the reinforcement if it were to	Unjustified We agreed with SPEN's needs case to reinforce LV looped services. We raised concern that SPEN's proposal includes intervention on assets forecast to be overloaded out to 2050. While we agreed in principle that SPEN's proposed approach will yield programme efficiency gains, we considered the uncertainty in the needs case for intervention at the

	take place in the reactive manner discounted by SPEN. SPEN's forecast on LCT uptake and estimation on where proposed investment is needed is clear. However, there remains a risk in relation to the efficiency of the proposed volumes.	individual property level a significant risk in SPEN's proposal. We identified a risk of LCT uptake forecasting inaccuracies out to 2050.
SPM 33kV Ring Main Unit Fault Level Mitigation (ED2-LRE-SPM-011-CV3-EJP)	Justified Sufficient information has been provided by SPEN to address the concerns that raised at Draft Determinations.	Partially Justified We agreed with SPEN's needs case, however considered the optioneering limited. The make/break duty % thresholds applied to determine the optimum solution were inadequately justified, with a number of remote terminal units proposed for replacement over Real Time Fault Level Monitoring (RTFLM) that were marginally over the aforementioned thresholds. We considered the justification for the proposed intervention on these assets needed further work. We did not believe that the proposed volumes had been sufficiently justified at this stage. Therefore, there was a risk that the out-turn volumes may differ from the proposed volumes.

Table 22: NLRE (Non-NARM) - Key Engineering Recommendations

EJP	**Final Determinations**	**Draft Determinations**
DSO Infrastructure (ED2-NLR(O)-SPEN-001-DSO-EJP)	Partially Justified SPEN have provided additional information to indicate the proposed investment will be sufficient and unlikely to change. However, there remains a risk that changes may occur,	Partially Justified We agreed with the needs case and optioneering presented by SPEN, however there was uncertainty in relation to the proposed volumes.

	and the proposed investment is not delivered in RIIO-ED2.	There was uncertainty in the volume, location and size of Constrained Management Zones, therefore there was a risk that such changes will impact the proposed project costs.
Rising Lateral Mains (ED2- NLR(A)-SPEN-005-RES-EJP)	Partially Justified SPEN provided additional information related to the proposed volumes, however state that they have not identified all of the sites proposed for intervention in RIIO-ED2. We note the additional development and information provided. However, we conclude that there remains a risk with the delivery of the proposed volumes.	Partially Justified We agreed with the needs case and optioneering presented by SPEN. However, we were concerned that SPEN's proposal was based on survey data from a small sample size extrapolated over the asset base. We considered the volume of interventions proposed by SPEN to be uncertain. There was a risk that the out-turn volumes would differ from the volumes that SPEN proposed in their submission.
Site Security (ED2-NLR(A)-SPEN-002-SAF-EJP)	Partially Justified SPEN have provided additional information related to the delivery of the proposed investment. However, delivery concerns remain due to a significant step-up in works when compared to historic performance. SPEN have provided sufficient evidence for needs case and prioritisation. There is concern associated with the unit cost as this combines refurbishment, upgrades and installation of new security systems with costs based on RIIO-ED1. Very few interventions were carried out in RIIO-ED1 so may not be representative.	Partially Justified We agreed in principle with SPEN's desire to upgrade substation site security. We were concerned with the significant increase in expenditure proposed by SPEN when compared to RIIO-ED1, however we broadly agreed with SPEN's optioneering and intervention prioritisation. Due to the significant increase in proposed expenditure, we believed there was a deliverability risk associated with the EJP.

Legal and Safety – Fire Protection ED2-NLR(A)-SPEN-003-SAF-EJP	Partially Justified SPEN have provided additional information relating to the fire detection system upgrades. SPEN have informed that these are aligned to site security system upgrades, therefore the prioritisation is adequate. Fire Risk Assessment (FRA) closeout volumes are based on assumptions from RIIO-ED1 experience, however RIIO-ED1 FRAs were far more prioritised so may not be representative. SPEN state that they expect greater FRA close-out needs compared to what they've forecast and so anticipate greater prioritisation rather than under-delivery. However, there remains a risk with the delivery of the proposed volumes in RIIO-ED2.	Partially Justified Whilst we agreed with the needs case in principle, we did not believe that sufficient justification had been provided for SPEN's proposed significant increase in expenditure. In particular, we considered SPEN's proposal was based on limited sampling beyond desktop surveys. We therefore had insufficient confidence in the forecast volumes. The limited sampling used by SPEN meant that there was a risk that the outturn volumes differ significantly from SPEN's proposed volumes.
Environmental Flood Resilience ED2-NLR(A)-SPEN-003-RES-EJP	Partially Justified SPEN have provided additional information related to the proposed volumes. Outturn intervention volumes remain uncertain as they are based on historic rates of intervention to surveys. SPEN point to flood maps continually being updated as an indicator that volumes of applicable sites will increase and thus intervention volumes likely to increase. The additional information does not address concerns over basing interventions on historic rates.	Partially Justified We agreed with the needs case presented by SPEN. However, we considered the proposed volumes to be uncertain as they are based on DCPR5 and RIIO-ED1 intervention rates, as opposed to site requirements, which will be known after SPEN complete their proposed surveys. There was a risk that the out-turn volumes will differ from the volumes that SPEN have proposed in their submission.
Condition Driven Civils	Justified Sufficient information has been provided by SPEN to address the concerns that	Partially Justified We agreed with the needs case presented by SPEN. However, we considered the volume and cost of

ED2-NLR(A)-SPEN-002-RES-EJP	were raised at Draft Determinations. We note our error in Draft Determinations around SQ timing. This paper should have been classified as "Justified" at Draft Determinations.	interventions proposed to be uncertain, as the scope of works on a site-by-site basis was yet to be determined. The specific scope of works had not yet been confirmed, therefore there was a risk of a significant difference to the final expenditure in relation to these works.
Telecoms Improvement ED2-NLR(O)-SPD-001-TEL-EJP ED2-NLR(O)-SPM-001-TEL-EJP	Partially Justified SPEN have provided information that indicates the relocation of vulnerable sites is justified. Site specific justifications were provided alongside a clear strategy to secure buildings and reduce dependence on 3rd party buildings. SPEN consider British Telecoms (BT) fibre solutions to be non-resilient and have a long-term strategy to remove reliance on 3rd party routes and utilise own fibre on SPMW core network. RIIO-ED2 routes therefore appear justified, however long-term strategy of moving from all 3rd party solutions questionable. SPEN did not provide a Cost Benefit Analysis (CBA) for this.	Partially Justified The overall needs case and associated optioneering was considered to be sufficient. The ODI expansion and Plesiochronous Digital Hierarchy (PDH) replacement volume drivers were clarified through SPEN's SQ response. However, insufficient justification was provided for the volumes associated with the relocation of vulnerable assets. Whilst the EJP and the SQ response listed specific factors on the proposed locations, no detail of overall network integrity risk and why those particular sites were considered beyond increased critical services was provided. There was a risk that the outturn volumes for these works will differ from those discussed and proposed within the EJP.
Quality of Supply Investment ED2-NLR(A)-SPEN-001-QOS-EJP	Partially Justified Uncertainty in volume of Network Control Points (NCP) remains. SPEN acknowledge that modelling methodology will tend to overestimate NCPs, however note this may be offset by network topography requiring multiple NCPs to enable back feeds. SPEN also note that any 'extra' volumes will be absorbed into lower priority	Partially Justified The EJP presented sufficient needs case for additional NCPs. However, we considered that SPEN's proposed intervention volume was uncertain, noting that volume derivation is based on models, which means that there is a risk that the out-turn volumes of NCPs will differ from the volumes that

	circuits - however modelling covered all HV circuits with full volume included - any other low priority circuits will be where CBAs dictated no NCPs beneficial.	SPEN have proposed in their submission.
PCBs (ED2- NLR(A)-SPEN-003-ENV-EJP)	Partially Justified We note the additional information provided by SPEN, however we remain of the view that the proposed volumes, and hence costs, are uncertain.	Partially Justified We agreed with the needs case and investment methodology presented by SPEN. However, we noted that the EJP presented intervention volumes that do not account for the PCB Volume Driver. We therefore expected the proposed volumes to reduce between Draft Determinations and Final Determinations. There was a risk that the out-turn volumes will differ from the volumes that SPEN have proposed in their submission because the volumes associated with the RIIO-ED1 re-opener have not been considered within the EJP.
Legal and Safety (ED2- NLR(A)-SPEN-001-SAF-EJP)	Partially Justified SPEN have provided additional information that justifies the need case for the investment on recreational sites, however there remains a risk in the delivery of the proposed investment as data from the proposed 2023 Light Detection And Ranging (LIDAR) survey is not available. There also remains a risk with the proposed volumes of metal theft as SPEN consider socioeconomic impacts in the volume estimate, which is likely to change during the RIIO-ED2 period.	Partially Justified Limited details were provided in relation to SPEN's needs case for increased expenditure in Safety and Recreational Sites, which is attributed to "high profile incidents outside SPEN area". We also considered the volume proposed uncertain as SPEN indicate they plan on using LIDAR data (not available at the time of submission) to identify risk areas. We also considered SPEN's SPD metal theft volumes to be uncertain based on the smart lock rollout planned within RIIO-ED2, as this rollout in SPMW

		in RIIO-ED1 was attributed to a reduction in metal theft. There was a risk that the out-turn volumes will differ from the volumes that SPEN have proposed in their submission.
Diversions (ED2-NLR(A)-SPEN-001-CV5-EJP)	Partially Justified – Control Required SPEN have provided additional information on how the proposed volumes were determined, however highlight the risk, and Ofgem's concern, that the outturn volumes being different from the proposal. Therefore as there remains a risk with the volumes to be delivered in RIIO-ED2, the EJP remains Partially Justified and we propose that a control is used to protect consumers.	Partially Justified We agreed with the needs case for continued spend in this area and considered SPEN's proposal to continue at the RIIO-ED1 spend rate appropriate given the unknown volume of works. Due to the reactive nature of these works, there was a risk that the out-turn volumes will differ from the volumes that SPEN have proposed in their submission.
Worst Served Customers (ED2-NLR(O)-SPEN-001-WSC-EJP)	Justified SPEN have provided additional justification for the volume and proposed investment for the WSC schemes. The needs case is justified, and the evidence provided for the volumes is clear.	Partially Justified We agreed with the needs case presented by SPEN, however SPEN had not outlined the works they will consider in making improvements for WSCs. Further, their proposed request was based on an allowance per WSC that is not reflective of scheme costs. The EJP provided limited confidence in the deliverability of the works during RIIO-ED2. Therefore, there was a risk that the outputs at the end of RIIO-ED2 will differ from those that have been proposed.
Visual Amenity (ED2-NLR(O)-SPEN-001-ENV-EJP)	Partially Justified SPEN have provided additional information on how schemes will be identified, based on application from members of the public. SPEN	Partially Justified We agreed with the needs case presented by SPEN. However, we were concerned that schemes for intervention were yet to be identified, with

	state an ambition to deliver 7km in SPMW and 7.5km in SPD however this is dependent on the applications and suitable schemes being accepted. Therefore there remains a concern with the delivery of the proposed volumes.	SPEN anticipating investment in the last 3 years of RIIO-ED2. We considered SPEN's proposals to base intervention volume on an uplifted RIIO-ED1 rate based on stakeholder support alone unjustified. As the specific schemes for intervention had not been identified at this stage, there was a risk in relation to both the deliverability and the volume outputs of this EJP.
Carbon offsetting (ED2-NLR(A)-SPEN-005-ENV-EJP)	Partially Justified SPEN provided additional information relating to the justification of the need case, however provided limited new information related to the delivery of the proposed volumes. There remains a risk delivery of the proposed volumes within the RIIO-ED2 period.	Partially Justified We agreed with the needs case presented by SPEN, and SPEN's optioneering resulting in a preferred solution of carbon offsetting through rewilding. There was a risk that the out-turn volumes will differ from the volumes that SPEN have proposed in their submission.
RTS Control System Simulator (ED2-NLR(O)-SPEN-005-RTS-EJP)	Justified SPEN have provided sufficient information and evidence to address the risks that we raised at Draft Determinations.	Unjustified Whilst we agreed with the needs case; the cost information presented within the EJP, and therefore the associated CBA, was limited. This was mainly to do with the long-term use of the simulator where only the first 2 years have been planned. There was a risk that both the needs case and optioneering provide insufficient justification for the works, in particular due to the limited cost information that has been provided.
Noise Pollution	Justified SPEN have provided sufficient information and evidence to	Partially Justified SPEN's proposal was broadly in line with RIIO-ED1 rates

(ED2-NLR(A)-SPEN-001-ENV-EJP)	address the risks that we raised at Draft Determinations.	for SPMW, however far greater than RIIO-ED1 rates for SPD. We considered this increased expenditure in SPD was unjustified. There was a volume and deliverability risk based on the increased expenditure from RIIO-ED1.

Table 23 - NLRE (NARM) - Key Engineering Recommendations

EJP	Final Determinations	Draft Determinations
LV Underground Cable Modernisation ED2-NLR(A)-SPEN-003-UG-EJP	Justified SPEN have provided analysis which looks to highlight fault rate per km which has been used to determine their volumes. The difference on a fault per km between nominal performance and poor performance has been used; with circuits selected for intervention having significantly higher fault rates compared to the average. Sufficient evidence has been provided to justify the proposed volumes.	Partially Justified Whilst we agreed with the needs case for continued investment presented by SPEN, they proposed to align investment to total RIIO-ED1 volumes. This represented an increase in average annual investment which we considered had not been sufficiently justified. The increase in average annual volumes resulted in a deliverability risk for the volumes presented within this EJP.
Secondary Substation ED2-NLR(A)-SPEN-001-SWGTX-EJP	Justified SPEN have addressed our concerns by highlighting relevant EJP data and augmenting with year 7 RRP data. This shows that their RIIO-ED1 forecast has been taken into account in their RIIO-ED2 request. Sufficient evidence has been provided to justify the proposed volumes.	Partially Justified We agreed with SPEN's needs case for the proposed investment. However, we noted that for the LV Switchgear interventions proposed, RIIO-ED1 planned interventions had not been taken into account. We considered the actual volumes in RIIO-ED2 will decrease. SPEN also propose to phase in the use of SF6-free Switchgear and Ring Main Units, assuming they will be commercially available from 2025. This comes at an additional unit cost. The EJP does not consider the planned RIIO-ED1 interventions, therefore there was a risk to the proposed volumes.
4ZC Route 132kV Overhead Line Modernisation	Justified SPEN have provided sufficient evidence that has identified the need for the overhead line to be replaced "within the next 12 months or sooner".	Partially Justified We agreed with the needs case and optioneering presented by SPEN. However, previous discussions with NGET to upgrade the 132kV

(ED2-NLR(A)-SPM-009-OHL-EJP)	This information, considered alongside the original EJP is sufficient to consider the EJP to be Justified.	route to 400kV were driven by new nuclear power stations, which did not materialise. We considered there remains uncertainty in the optimum whole system solution. There was a deliverability risk in relation to this EJP due to the uncertainty associated with the whole system solution.