
RIIO-ED2 Final Determinations NGED Annex

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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

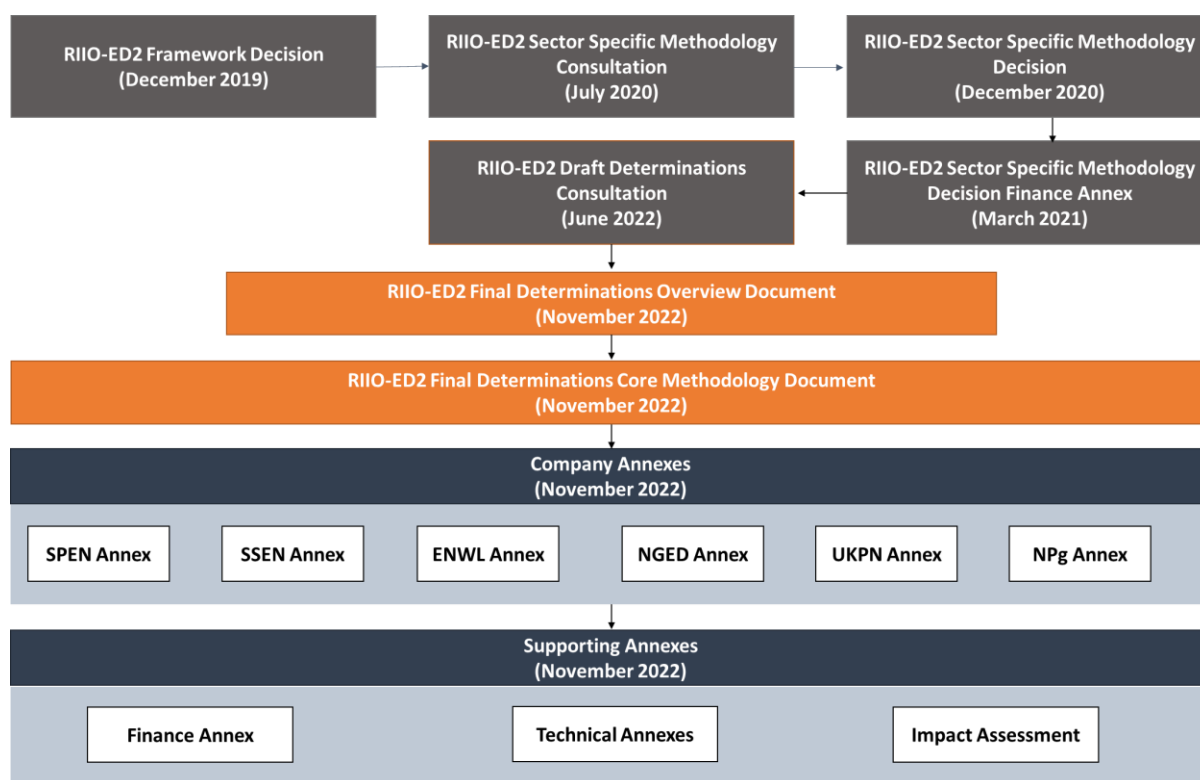
Purpose of this document

- 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 NGED¹.
- 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 NGED's licence areas including West Midlands (WMID), East Midlands (EMID), South Wales (SWALES), and South West (SWEST). 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)²
 - 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 Western Power Distribution (WPD) was renamed National Grid Electricity Distribution (NGED) on 21 September 2022. We refer to NGED throughout the remainder of this document.

² 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 NGED's Final Determinations?

- 1.6 This section provides a high-level summary of the elements of our Final Determinations which are specific to NGED.
- 1.7 Table 1 summarises our assessment of NGED 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 NGED BPI 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	£4.6m 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

NGED 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 NGED 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 NGED RIIO-ED2 submitted Totex versus allowed Totex (£m, 2020/21 prices)³

Cost activity	RIIO-ED2 submitted	DD (Net Before NPCA⁴)	FD (Net Before NPCA)	FD incl Access SCR (Net After NPCA)	Difference to submitted (on a Net Before NPCA basis)
Load related capex	931	766	716	851	-23.1%
Non-load related capex	2,082	1,677	1,853	1,853	-11.0%
Non-operating capex	517	418	437	386	-15.4%
Network operating costs	1,103	891	982	982	-11.0%
Closely associated indirects	1,506	1,219	1,350	1,059	-10.4%
Business support costs	753	609	644	588	-14.5%
Total	6,893	5,581	5,982	5,718	-13.2%

- 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 NGED in RIIO-ED2 (further details are contained within Chapter 2).

³ 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.

⁴ NPCA stands for Non-Price Control Allocations

Table 3 Summary of common and bespoke outputs applicable to NGED

Output name	Output Type	Further detail
Common Outputs		
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

Output name	Output Type	Further detail
Network Asset Risk Metric	PCD, ODI-F	Chapter 6, Core Methodology Document
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 NGED Outputs		
SWEST New Depots	PCD	Chapter 2, NGED Company Annex

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 or in the Core Methodology Document. Bespoke UMs specific to NGED are also set out in Table 4, with further details in Chapter 4.

Table 4 Summary of common and bespoke UMs applicable to NGED

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	Yes

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		Finance Annex, Chapter 10	
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	Yes

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		Document, Chapter 3	
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 Document, Chapter 3	Yes
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 NGED			
N/A	N/A	N/A	N/A

1.12 Table 5 sets out our NIA allowances for NGED (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 NGED

NGED NIA
£18m, to be reviewed by 2025.

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

Table 6 Summary of financing arrangements applicable to NGED

Finance parameter	NGED (WMID, SWALES, SWEST) 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%	

Finance parameter	NGED (EMID) Rate	Source
Notional gearing	60%	See Table 14 in Finance Annex
Cost of equity allowance	5.23%	
Cost of debt allowance	3.01%	
WACC allowance (vanilla)	3.90%	

2. Setting outputs

Introduction

2.1 In this chapter we provide our decisions on:

- The NGED 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 NGED’s Business Plan.

Common outputs

2.2 The NGED 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 NGED'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 NGED’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 WMID, EMID, SWALES and SWEST.

Table 7: IIS - unplanned CI targets

Network	2023/24	2024/25	2025/26	2026/27	2027/28
WMID	48.2	47.3	47.0	46.8	46.6
EMID	38.6	37.9	37.7	37.5	37.3
SWALES	40.5	40.3	40.1	39.9	39.7
SWEST	49.5	49.3	49.0	48.8	48.5

Table 8: IIS – unplanned CML targets

Network	2023/24	2024/25	2025/26	2026/27	2027/28
WMID	25.7	25.5	25.4	25.3	25.2
EMID	21.7	21.6	21.5	21.4	21.3
SWALES	20.3	20.2	20.1	20.0	19.9
SWEST	32.2	32.1	31.9	31.7	31.6

Table 9: IIS – planned CI target

Network	2023/24
WMID	2.13
EMID	0.65
SWALES	3.21
SWEST	3.28

Table 10: IIS – planned CML target

Network	2023/24
WMID	4.44
EMID	1.26
SWALES	4.87
SWEST	7.52

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

2.8 Table 11 summarises NGED'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
WMID	519,787,560
EMID	404,654,338
SWALES	362,711,582
SWEST	627,171,211

Consumer Vulnerability Incentive

2.9 Table 12, Table 13 and Table 14 summarise NGED'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 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
NGED bespoke target	66%	75%

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

	Year 2 target	Year 5 target
NGED bespoke target	£13.95m	£36.28m

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

	Year 2 target	Year 5 target
NGED bespoke target	£578,407.58	£1.98m

Major Connections Incentive

2.10 Table 15 shows NGED'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 revenue⁵
WMID	0.2%
EMID	0.2%
SWALES	0.6%
SWEST	0.6%

⁵ 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.

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 NGED submitted 50 outputs. These included 40 bespoke ODIs, one licence obligation (LO), three PCDs and six CVPs. We set out our assessment of each output and detail which of them we decided to accept and apply to NGED in RIIO-ED2.

Core Commitments, Bespoke ODIs and Licence Obligations

- 2.15 NGED listed 42 'Core Commitments' which would be attached to different bespoke outputs and LOs. In our Draft Determinations, we set out that we did not consider that reporting on NGED's proposed 'Core Commitments' require the introduction of bespoke ODI-Rs or LOs and did not believe that their introduction is proportionate.
- 2.16 We have decided to confirm this position for our Final Determinations in relation to NGED's bespoke ODIs and LOs submitted (see NGED Bespoke Core Commitments for a list).
- 2.17 In its response to our Draft Determinations, NGED agreed that bespoke reporting would not be required for those bespoke outputs covered by other price control arrangements. For the remainder, NGED stated that it will track delivery and report on its progress in line with obligations under Standard Licence Condition 50 (Business Plan commitment reporting).
- 2.18 We continue to encourage NGED to maintain transparency of delivery with its stakeholders on its RIIO-ED2 performance through its own reporting procedures.

Bespoke Price Control Deliverables

- 2.19 The table below summarises the bespoke PCD proposals that NGED submitted as part of its business plan and outlines our Final Determinations position.

PCD name and description	Consultation response summary	Final Determination	Draft Determination
<p>PCD-1: Transition 89% of commercial van fleet to be non-carbon vehicles by 2028.</p>	<p>NGED disagreed with our Draft Determinations saying this risks NGED not being carbon net zero by 2028.</p>	<p>Reject output and subject costs to benchmarking. We have rejected the treatment of this proposal as a PCD because we are not satisfied that NGED has provided sufficient evidence to support the accelerated removal of vehicles ahead of their end-of-life. Additionally, we found that NGED provided insufficient evidence as to why delivery is at risk and how clawback of unspent allowances would be administered.</p> <p>Although we reject the bespoke nature of the proposal, we consider there is value in carrying out the underlying activity. We have adjusted volumes to only fund the replacement of vehicles at end-of-life. As we consider the associated costs to be BAU, they are subject to benchmarking.</p> <p>We will require reporting through the Annual Environment Report.</p>	<p>Same as FD</p>
<p>PCD-2: Modernising NGED’s radio-based telecoms system to enable communication between control systems and</p>	<p>NGED agreed with our proposal not to treat this activity as a PCD but noted that a re-opener should be available should Ofcom's</p>	<p>Reject output: We have decided to reject this PCD proposal. As stated at Draft Determinations, while we support the work outlined by NGED, we consider the timing for this investment is premature and will most likely be required in the</p>	<p>Same as FD</p>

PCD name and description	Consultation response summary	Final Determination	Draft Determination
field-based assets.	decision on spectrum be announced within RIIO-ED2.	<p>next Electricity Distribution price control period, once Ofcom has provided an update on spectrum options.</p> <p>We note NGED's concerns relating to a potential decision on spectrum allocation within RIIO-ED2 and suggest that should this occur, DNOs can use the Digitalisation re-opener. Further information is available in chapter 4 of our Core Methodology Document.</p>	
<p>New Depots: to ensure delivery of new depots in the south-west.</p>	<p>NGED provided further details on the relevant EJPs to substantiate deliverability of the proposed scope of works.</p>	<p>Establish PCD output and technical assessment treatment:</p> <p>We were persuaded by the evidence submitted by NGED and have decided to accept these costs.</p> <p>We have decided to subject these costs to a PCD to cover the wider depot development, and to ensure adequate protection for consumers from any deliverability concerns that remain.</p> <p>Given the discrete nature of the activity, the associated costs have been subject to technical assessment rather than cost benchmarking.</p>	<p>Updated at FD NGED submitted this proposal as part of their business plan and did not attach a specific output mechanism to its delivery.</p> <p>In our Draft Determinations, we proposed a downward adjustment on the submitted costs, based on an engineering review of relevant EJPs which highlighted that these costs as partially justified.</p>

New Depots PCD

Purpose	To ensure delivery of the South-West new depots in line with the benefits highlighted by NGED in their Engineering Justification Paper for the works.
Benefits	New depot buildings with lower operational costs, more work and storage space and incremental efficiency benefits thereafter.

Final Determination

Output Parameter	Final Determination	Draft Determination
Overall Decision	Accept output and technical assessment treatment	New at FD
Type of PCD	Evaluative	
Outputs	3 new Depot Buildings	
Delivery date	30th March 2028	
Totex allowances	£40m ⁶	
Re-opener	No	
Reporting mechanism	RRP	
Licence area	SWEST	
Licence condition	3.3	

Consumer Value Propositions

2.20 The table below summarises the CVP proposals that NGED 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
CVP 1: NGED is a net zero business by 2028 and	NGED disagreed with our Draft Determination	Reject reward and subject cost to benchmarking.	Same as FD

⁶ Figures are gross costs and do not include efficiency challenge.

CVP name and description	Consultation response summary	Final Determination	Draft Determination
adopts a stretching science-based target of 1.5 degree.	position and recommended that we apply a reward.	<p>As per our Draft Determination position, we were not satisfied the proposal goes above the baseline expectations for its Environmental Action Plan (EAP).</p> <p>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.</p>	
<p>CVP-2: Proactively partner with every local authority in NGED’s region to help develop ambitious Local Area Energy Plans to facilitate an efficient and timely decarbonisation of the energy system.</p>	<p>The CG supported our decision, noting that the BAU assessment is a sensible approach.</p> <p>NGED provided their own new criteria for evidence of beyond BAU, but we were not satisfied that the evidence submitted satisfied that criteria.</p>	<p>Reject reward, technically assess costs.</p> <p>We reject the output and its bespoke nature, because NGED did not provide sufficient evidence to demonstrate that its proposed engagement with local authorities goes beyond BAU expectations, or beyond other DNO proposals, and therefore merits reward.</p> <p>However, we consider there is value in delivering this proposal. Given the discrete nature of the activity, the associated costs have been subject to technical assessment rather than benchmarking.</p>	Same as FD
<p>CVP-3: Establish community energy engineers to</p>	<p>NGED disagreed with our Draft Determination position and</p>	<p>Reject reward and subject costs to benchmarking: As per our Draft Determination position, we are not</p>	Same as FD

CVP name and description	Consultation response summary	Final Determination	Draft Determination
<p>support the development and delivery of community-based energy schemes to drive the UK’s achievement of net zero.</p>	<p>recommended that we apply a reward.</p>	<p>satisfied that NGED has provided sufficient evidence to show that this activity clearly goes beyond the baseline expectations set out for their EAP.</p> <p>We consider it is the role of the DNOs to have technical resources in place to engage with communities as a BAU responsibility in RIIO-ED2.</p> <p>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.</p>	
<p>CVP-4: Building decarbonised communities and local energy schemes by funding solar on schools and communities in areas of high economic deprivation, funded by shareholders.</p>	<p>NGED, having further assessed this against its enhanced criteria, agreed with our position on CVP-4.</p>	<p>Reject reward: We have decided to maintain our Draft Determination position and reject the CVP reward.</p> <p>We support NGED and other DNOs using shareholder funds to offer additional support to customers and local communities. However, our view is that this CVP constitutes Corporate Social Responsibility and that shareholder funded CVPs should not receive any associated reward as it would be funded by customers.</p> <p>We were furthermore not satisfied that NGED’s methodology for</p>	<p>Same as FD</p>

CVP name and description	Consultation response summary	Final Determination	Draft Determination
		evaluating this CVP is sufficiently robust, nor are we satisfied that NGED provided sufficient information on a clawback methodology should there be under or non-delivery.	
<p>CVP-5 - Smart Energy Action Plans: Offering 1.2 million PSR customers a bespoke smart energy action plan, every two years.</p>	<p>NGED and a consumer body agreed with our Draft Determinations proposal. NGED proposed a reward methodology for our consideration. Please see below for further details.</p>	<p>Accept with reward: We have decided to maintain our Draft Determinations position as we are satisfied with the proposed CVP reward.</p> <p>Given the discrete nature of the activity, the associated costs have been subject to technical assessment rather than cost benchmarking. Please see below for further details.</p>	<p>Same as FD</p> <p>Acceptance of this proposal was subject to whether a suitable reward methodology could be established.</p>
<p>CVP-6: Deliver an annual £1m 'Community Matters' Fund, funded entirely by shareholders, to achieve positive community outcomes in relation to vulnerability, environment and education.</p>	<p>NGED, having further assessed this against its enhanced criteria, agreed with our position on CVP-6.</p> <p>A consumer body agreed with our position that NGED's proposal constitutes Corporate Social Responsibility and should not be subject to reward.</p>	<p>Reject reward: We have decided to maintain our Draft Determination position and reject the reward associated with this proposal.</p> <p>We think that this CVP constitutes Corporate Social Responsibility and that shareholder funded CVPs should not receive any associated reward as it would be funded by customers.</p> <p>However, we recognise that a shareholder fund which supports vulnerable communities provides the potential for valuable additional benefit in the context of the cost-of-living crisis. We support NGED and</p>	<p>Same as FD</p>

CVP name and description	Consultation response summary	Final Determination	Draft Determination
		other DNOs utilising shareholder funding to offer additional support to customers where this is possible.	

CVP 5 - Smart energy action plans

Purpose To provide 1.2 million Priority Services Registered customers with the opportunity to receive a bespoke smart energy action plan every two years

Benefits Targeted advice and support for customers in vulnerable situations in relation to low carbon technologies and participation in the energy system transition

Final Determination

2.21 The table below outlines our Final Determination position.

CVP parameter	Final Determination	Draft Determination
Overall decision	Accept and reward	Accept and reward subject to suitable CVP reward being established
Output	Delivery of the smart energy action plans proposal to offer 1.2m PSR customers bespoke action plans every two years.	Same as FD
Performance measurement	The number of bespoke smart energy action plans offered to PSR customers.	Same as FD
Delivery date	End of RIIO-ED2	Same as FD
CVP value (£m)	£9.2m This value has increased as a result of our consideration of NGED's provision of an updated benefits valuation.	Amended for FD CVP value was £7.1m in DDs
CVP reward (£m)	£4.6m	Amended for FD

CVP parameter	Final Determination	Draft Determination
	This value has increased as a result of the updated valuation of benefits associated with this proposal.	CVP reward was £3.6m in DDs
Reporting method	Reporting of CVP delivery through the Annual Vulnerability Report.	Same as FD
Adjustment mechanism	In the event of under-delivery NGED are to return a proportionate element of the CVP reward and funding, in accordance with the licence.	Same as FD
Licence obligation	SpC 4.7	SpC 4.7

Final Determination rationale and Draft Determination responses

- 2.22 We have decided to accept this CVP to reward NGED for its ambition to support 1.2 million PSR customers with bespoke smart energy action plans every two years. We consider that this proposal goes beyond the vulnerability baseline expectations by targeting customers in vulnerable circumstances, who are at risk of being left behind by the energy transition to net zero, with bespoke advice and support at the large scale proposed.
- 2.23 At Draft Determinations, our acceptance of this proposal was subject to establishing a suitable CVP reward methodology.
- 2.24 NGED agreed with our Draft Determinations proposals and submitted an updated valuation of the benefits associated with the CVP to reflect the work undertaken to ensure that the methodology for calculating the benefits associated with activities undertaken by a DNO are consistent and comparable across all DNOs.
- 2.25 We were content with the evidence submitted by NGED in supporting the updated benefits valuation. We are satisfied that this represents a more accurate reflection of the benefits and overall consumer value of this proposal. The effect of this change is set out in the CVP value and reward in the table above.
- 2.26 NGED also provided a proposal for an adjustment mechanism for clawing back CVP rewards in the event of under-delivery of the proposal. The proposed adjustment mechanism is based on the number of smart energy action plans offered to PSR customers compared to the target (1.2m every two years) and the NPV delivered as a result compared to the initial target (CVP value). We noted that NGED’s proposal included the

opportunity for the CVP reward to increase should NGED offer more smart energy action plans to PSR customers than its target.

- 2.27 A consumer body agreed with our proposals for this CVP and stated that we should consider including the volumes of smart energy action plans offered in the reward clawback mechanism.
- 2.28 We consider that the adjustment mechanism for the CVP reward and funding should be calculated on a proportionate basis with NGED's delivery of the CVP, in accordance with the licence. As CVP rewards are provided ex ante as part of the BPI, we do not consider it appropriate to allow a scale up in rewards at the end of the price control period. Therefore, the adjustment mechanism will be based on NGED's delivery of the CVP to offer 1.2m PSR customers a bespoke smart energy action plan, every two years where any under-delivery of these volumes will result in a proportionate element of the CVP reward and funding being returned to customers.
- 2.29 We have decided to accept the CVP proposal in full, as we are satisfied NGED has provided us with an appropriate valuation of the benefits of the proposal to determine the CVP reward. Similarly, we consider that the adjustment / clawback mechanism, stated in the table above, is appropriate for the purposes of this CVP.

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 NGED'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, Table 17, Table 18 and Table 19 compare NGED'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: WMID RIIO-ED2 submitted Totex versus allowed Totex by cost activity (£m, 2020/21 prices)⁷

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	34	36	32	74	-5.4%
New Transmission Capacity Charges	3	2	3	3	-11.0%
Primary Reinforcement	64	55	58	61	-9.7%
Secondary Reinforcement	127	98	85	85	-33.4%
Fault Level Reinforcement	10	8	9	9	-10.9%
Civil Works Condition Driven	27	22	18	18	-35.5%

⁷ 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.

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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)
Blackstart	-	-	-	-	-
Legal & Safety	9	8	11	11	14.0%
QoS & North of Scotland Resilience	5	-	0	0	-99.9%
Flood Mitigation	1	1	1	1	-9.7%
Physical Security	-	-	-	-	-
Rising and Lateral Mains	1	1	1	1	-10.8%
Overhead Line Clearances	29	24	28	28	-6.1%
Losses	1	1	1	1	-12.9%
Environmental Reporting	9	7	8	8	-11.3%
Operational IT and Telecoms	56	46	48	48	-14.8%
Worst Served Customers	2	1	1	1	-10.4%
Visual Amenity	2	2	4	4	116.0%
Diversions (excl Rail)	64	52	57	57	-10.4%
Diversions Rail Electrification	-	-	-	-	-
Civil Works Asset Replacement Driven	12	10	13	13	7.1%
Asset Replacement NARM	220	180	192	192	-12.5%
Asset Replacement Non-NARM	92	75	80	80	-12.4%

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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)
Asset Refurbishment Non-NARM	37	30	33	33	-9.5%
Asset Refurbishment NARM	9	8	10	10	4.7%
IT and Telecoms (Non-Op)	71	59	64	58	-10.1%
Non-Op Property	7	10	6	5	-6.7%
Vehicles and Transport (Non-Op)	31	26	25	21	-21.3%
Small Tools and Equipment (STEPM)	16	13	13	11	-15.6%
HVP RIIO-ED2	-	-	-	-	-
Shetland	-	-	-	-	-
Tree Cutting	61	50	53	53	-13.3%
Faults	123	101	114	114	-7.5%
Severe Weather-1-in-20	9	-	-	-	-100.0%
Occurrences Not Incentivised (ONIs)	45	37	35	35	-21.5%
Inspections	21	17	19	19	-9.5%
Repair and Maintenance	48	39	43	43	-9.5%
Dismantlement	0	0	0	0	50.0%
Remote Generation Opex	-	-	-	-	-
Substation Electricity	11	9	10	10	-10.4%

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)
Smart Metering Roll Out	5	5	5	5	-11.4%
Total Closely Associated Indirects (CAI)	456	374	399	304	-12.5%
Total Business Support	222	182	194	177	-12.7%
Cost Activities Sub-Total	1,941	1,586	1,672	1,593	-13.9%
Excluded Cost Activities	-14	-	-0	-0	-100.0%
Total Totex (modelled component)	1,927	1,586	1,672	1,593	-13.2%
Technically Assessed Totex	7	1	7	6	-6.4%
Total Totex	1,934	1,588	1,679	1,599	-13.2%

Table 17: EMID RIIO-ED2 submitted Totex versus allowed 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	112	101	97	140	-13.5%
New Transmission Capacity Charges	6	5	6	6	-8.5%
Primary Reinforcement	55	47	48	50	-12.9%

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.

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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)
Secondary Reinforcement	109	83	79	79	-27.8%
Fault Level Reinforcement	36	30	22	22	-39.4%
Civil Works Condition Driven	20	17	18	18	-12.4%
Blackstart	-	-	-	-	-
Legal & Safety	7	6	10	10	32.9%
QoS & North of Scotland Resilience	8	-	0	0	-99.9%
Flood Mitigation	6	5	6	6	-2.6%
Physical Security	-	-	-	-	-
Rising and Lateral Mains	1	0	0	0	-7.4%
Overhead Line Clearances	17	14	14	14	-17.8%
Losses	1	1	1	1	-14.6%
Environmental Reporting	8	6	7	7	-11.4%
Operational IT and Telecoms	75	61	68	68	-9.3%
Worst Served Customers	0	0	0	0	-7.7%
Visual Amenity	1	1	3	3	124.5%
Diversions (excl Rail)	82	67	66	66	-19.7%
Diversions Rail Electrification	-	-	-	-	-
Civil Works Asset Replacement Driven	23	19	18	18	-23.1%
Asset Replacement NARM	220	181	200	200	-9.0%
Asset Replacement Non-NARM	70	58	64	64	-8.7%

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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)
Asset Refurbishment Non-NARM	20	17	20	20	-0.3%
Asset Refurbishment NARM	9	7	11	11	23.5%
IT and Telecoms (Non-Op)	78	64	74	65	-4.8%
Non-Op Property	6	9	6	5	0.0%
Vehicles and Transport (Non-Op)	39	32	31	26	-18.5%
Small Tools and Equipment (STEPM)	18	15	16	13	-12.7%
HVP RIIIO-ED2	-	-	-	-	-
Shetland	-	-	-	-	-
Tree Cutting	61	50	47	47	-22.7%
Faults	142	117	132	132	-7.4%
Severe Weather 1-in-20	9	-	-	-	-100.0%
Occurrences Not Incentivised (ONIs)	34	28	28	28	-16.2%
Inspections	22	18	22	22	-1.2%
Repair and Maintenance	49	41	49	49	-1.2%
Dismantlement	0	0	0	0	164.0%
Remote Generation Opex	-	-	-	-	-
Substation Electricity	19	16	18	18	-7.7%
Smart Metering Roll Out	5	4	5	5	-6.2%
Total Closely Associated Indirects (CAI)	476	392	443	331	-6.9%
Total Business Support	225	185	206	186	-8.3%
Cost Activities Sub-Total	2,067	1,696	1,831	1,726	-11.4%

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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)
Excluded Cost Activities	-17	-	-0	-0	-100.0%
Total Totex (modelled component)	2,050	1,696	1,831	1,726	-10.7%
Technically Assessed Totex	7	1	7	6	-6.4%
Total Totex	2,058	1,697	1,838	1,732	-10.7%

Table 18: SWALES RIIO-ED2 submitted Totex versus allowed 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	24	23	17	33	-30.2%
New Transmission Capacity Charges	5	4	4	4	-10.9%
Primary Reinforcement	59	49	52	53	-11.9%
Secondary Reinforcement	72	58	46	46	-35.6%
Fault Level Reinforcement	3	2	4	4	65.7%
Civil Works Condition Driven	11	9	9	9	-19.3%
Blackstart	-	-	-	-	-
Legal & Safety	12	10	12	12	-6.4%
QoS & North of Scotland Resilience	1	-	0	0	-100.0%

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.

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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)
Flood Mitigation	2	2	2	2	-6.4%
Physical Security	-	-	-	-	-
Rising and Lateral Mains	1	0	0	0	-9.9%
Overhead Line Clearances	18	15	26	26	44.3%
Losses	1	1	1	1	-7.3%
Environmental Reporting	4	4	4	4	-6.7%
Operational IT and Telecoms	44	36	34	34	-22.3%
Worst Served Customers	2	1	1	1	-9.5%
Visual Amenity	1	1	2	2	114.9%
Diversions (excl Rail)	31	26	32	32	5.7%
Diversions Rail Electrification	-	-	-	-	-
Civil Works Asset Replacement Driven	9	7	8	8	-8.0%
Asset Replacement NARM	129	107	118	118	-8.2%
Asset Replacement Non-NARM	37	31	35	35	-5.7%
Asset Refurbishment Non-NARM	16	13	15	15	-3.9%
Asset Refurbishment NARM	14	12	13	13	-11.0%
IT and Telecoms (Non-Op)	54	45	44	39	-19.4%
Non-Op Property	6	8	5	5	-20.0%
Vehicles and Transport (Non-Op)	27	23	21	18	-23.9%
Small Tools and Equipment (STEPM)	7	6	6	6	-13.9%

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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)
HVP RIIO-ED2	30	25	27	27	-10.9%
Shetland	-	-	-	-	-
Tree Cutting	50	42	49	49	-1.9%
Faults	54	45	51	51	-6.1%
Severe Weather 1-in-20	5	-	-	-	-100.0%
Occurrences Not Incentivised (ONIs)	17	14	14	14	-16.5%
Inspections	15	13	12	12	-18.9%
Repair and Maintenance	27	23	22	22	-18.9%
Dismantlement	0	0	0	0	51.0%
Remote Generation Opex	0	0	0	0	-9.5%
Substation Electricity	7	6	7	7	-9.4%
Smart Metering Roll Out	3	3	3	3	-19.3%
Total Closely Associated Indirects (CAI)	231	193	221	182	-4.6%
Total Business Support	115	95	94	87	-17.9%
Cost Activities Sub-Total	1,145	952	1,012	975	-11.6%
Excluded Cost Activities	-6	-	-0	-0	-100.0%
Total Totex (modelled component)	1,139	952	1,012	975	-11.2%
Technically Assessed Totex	4	1	4	3	-6.4%
Total Totex	1,143	953	1,015	978	-11.1%

Table 19: SWEST RIIO-ED2 submitted Totex versus allowed Totex by cost activity (£m, 2020/21 prices)¹⁰

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	37	31	27	53	-25.8%
New Transmission Capacity Charges	4	3	3	3	-17.0%
Primary Reinforcement	75	60	64	65	-15.0%
Secondary Reinforcement	87	63	55	55	-37.3%
Fault Level Reinforcement	11	8	7	7	-31.5%
Civil Works Condition Driven	10	8	10	10	-2.0%
Blackstart	-	-	-	-	-
Legal & Safety	16	12	15	15	-5.8%
QoS & North of Scotland Resilience	12	-	0	0	-100.0%
Flood Mitigation	2	1	2	2	-1.0%
Physical Security	-	-	-	-	-
Rising and Lateral Mains	0	0	0	0	-15.4%
Overhead Line Clearances	58	44	53	53	-8.6%
Losses	1	1	1	1	-12.3%
Environmental Reporting	8	6	7	7	-12.5%
Operational IT and Telecoms	61	46	44	44	-27.0%
Worst Served Customers	1	1	1	1	-14.9%

¹⁰ 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.

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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)
Visual Amenity	2	2	5	5	103.3%
Diversions (excl Rail)	68	52	57	57	-16.2%
Diversions Rail Electrification	-	-	-	-	-
Civil Works Asset Replacement Driven	17	13	14	14	-16.4%
Asset Replacement NARM	234	178	195	195	-16.4%
Asset Replacement Non-NARM	78	59	67	67	-14.0%
Asset Refurbishment Non-NARM	21	16	19	19	-9.6%
Asset Refurbishment NARM	13	10	12	12	-8.1%
IT and Telecoms (Non-Op)	65	50	50	45	-23.9%
Non-Op Property	6	25	5	4	-21.9%
Vehicles and Transport (Non-Op)	32	25	24	22	-24.2%
Small Tools and Equipment (STEPM)	13	10	9	8	-26.3%
HVP RIIO-ED2	-	-	-	-	-
Shetland	-	-	-	-	-
Tree Cutting	74	56	69	69	-7.0%
Faults	108	83	95	95	-12.5%
Severe Weather 1-in-20	8	-	-	-	-100.0%
Occurrences Not Incentivised (ONIs)	27	21	22	22	-20.5%
Inspections	20	16	16	16	-19.7%
Repair and Maintenance	34	26	27	27	-19.7%

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)
Dismantlement	0	0	0	0	121.2%
Remote Generation Opex	5	4	4	4	-14.2%
Substation Electricity	10	8	9	9	-14.8%
Smart Metering Roll Out	3	2	3	3	-0.8%
Total Closely Associated Indirects (CAI)	341	261	286	240	-16.1%
Total Business Support	187	143	145	134	-22.4%
Cost Activities Sub-Total	1,749	1,342	1,423	1,384	-18.7%
Excluded Cost Activities	-19	-	-0	-0	-100.0%
Total Totex (modelled component)	1,730	1,342	1,423	1,384	-17.7%
Technically Assessed Totex	28	1	27	24	-6.2%
Total Totex	1,758	1,343	1,449	1,408	-17.6%

Technically assessed costs

3.4 For technically assessed costs, we have made the following adjustments, listed in Table 20 below. Our view of bespoke proposals is presented in Chapter 2. Further detail on the “New Depots” PCD is provided in the section “Engineering Justification Paper review”.

Table 20: Technically Assessed Costs (£m, 2020/21 prices)

Proposal name	Submitted	DD¹¹	FD	Confidence
CVP2: Proactively partner with every local authority in NGED’s region	2.3	-	2.3	High

¹¹ DD and FD figures are gross costs and do not include efficiency challenge.

to help develop ambitious Local Area Energy Plans to facilitate an efficient and timely decarbonisation of the energy system.				
CVP5: Offer 1.2 million PSR customers a bespoke smart energy action plan every two years	5	5	5	High
New Depots PCD	40	-	40	High

Engineering Justification Paper review

Overview

- 3.5 Our review of NGED’s Engineering Justification Papers (EJP), and the associated supporting information, is one of several assessment tools that has contributed to our overall assessment of NGED’s submission. The positions 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 document¹², and our review of Draft Determination consultation responses and additional material provided by NGED, 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 NGED’s EJPs is presented in Table 21, showing the number of EJPs in each category and how our overall assessment has changed between Draft and Final Determinations. We

¹² RIIO ED2 Engineering Justification Paper Guidance
https://www.ofgem.gov.uk/sites/default/files/docs/2021/02/riio_ed2_engineering_justification_paper_guidance.pdf

have provided more detail on EJPs of significant value where our review determined the EJP to be Partially Justified or Unjustified in Appendix 1, 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. We set out some potential examples of areas where we will consider enhanced reporting in Appendix 2.

Table 21: Summary of Ofgem view of NGED's EJPs

EJP Review Outcome (Count of EJPs)	Final Determinations	Draft Determinations
Justified	153	89
Partially Justified	31	50
Unjustified	3	48
Total EJPs ¹³	193	193

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

- 3.10 Chapter 7 of the Core Methodology Document details the interactions between our engineering review of the LRE EJPs and the activity-level assessment of LRE.
- 3.11 For LRE, NGED 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 The additional information provided by NGED has addressed a number of the concerns that we raised at Draft Determinations, and in a number of instances has provided sufficient evidence for EJPs that were previously considered to be Unjustified or Partially Justified, to now be considered as Justified. This included further evidence to demonstrate the needs case for the proposed works, or additional detail in relation to the overall deliverability of the works within RIIO-ED2.
- 3.13 Please see Appendix 1 for further detail on our assessment of the LRE EJPs.

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

- 3.14 For NLRE investments, NGED provided a significant amount of asset information to support their original submission, which clarified a number of the concerns that we raised as part of our Draft Determinations.

¹³ 6 EJPs are cyber resilience related and dealt with separately in a confidential annex.

- 3.15 Based on the additional information, we have updated our engineering position for a number of EJPs from Unjustified to Partially Justified with volumes accepted as submitted or, where NGED has provided sufficient information, Justified.
- 3.16 We welcomed the significant amount of information provided on scope and solution selection for SWEST Depots. Based on the additional evidence, we acknowledge these investments to be in the interest of consumers. However, we consider there is still uncertainty around deliverability. To ensure delivery is in alignment with the principles presented within the EJP and thus minimise the risk to consumers, we have decided to implement a PCD. Please see Chapter 2 for further detail.

TIM

- 3.17 Our updated cost confidence assessment results in a proposed Totex Incentive Mechanism (TIM) incentive rate for NGED 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 NGED does not incur any penalty following our BPI Stage 3 assessment. This is the same approach that we proposed at Draft Determinations.
- 3.19 NGED agreed with the overall assessment. We are satisfied that NGED 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 NGED will earn no reward following our BPI Stage 4 assessment. This is the same approach that we proposed at Draft Determinations.
- 3.21 In its Draft Determinations response, NGED questioned whether the mechanics of the Stage 4 assessment were working as the policy intended. It argued that the outcome suggested that the opportunity for rewards under Stage 4 is unobtainable and therefore not a true opportunity for DNOs to achieve rewards. We disagree and consider that the approach set out at Draft Determinations is appropriate.
- 3.22 Table 22 sets out our proposals on high confidence cost categories and allowances (before the application of RPEs and ongoing efficiency).

Table 22: Final Determinations on BPI Stage 4 (£m, 2020/21 prices)

Cost Category	NGED's view	Ofgem view	BPI reward
Modelled Costs	6,848.3	6,433.6	N/A
Bespoke Outputs and Technically Assessed	47.3	46.5	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.
- 4.5 The table below summarises the bespoke UM proposals that NGED submitted and outlines our Final Determinations position. For full details on bespoke UMs, refer to NGED's Business Plan submission.

Bespoke UM name and description	Consultation response summary	Final Determination	Draft Determination
Primary LRE uncertainty mechanism	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: 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

Bespoke UM name and description	Consultation response summary	Final Determination	Draft Determination
Secondary LRE uncertainty mechanism	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: 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
Service unlooping uncertainty mechanism	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: 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

5. Network Innovation Allowance

Introduction

- 5.1 Our SSMD and the Core Methodology Document set out the criteria that we have used to assess NIA funding requests. The 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 NGED in its business plan proposed it should be awarded £30m of NIA over 5 years, equivalent to £6m per year which was close to its maximum annual NIA spent in RIIO-ED1. This was less than what it had been allowed to spend annually in RIIO-ED1.

Final Determination

Name of the measure	Final Determination	Draft Determination
Level of NIA funding	£18m, to be reviewed at the latest by 2025	£14.4m ¹⁴ , to be reviewed by 2025

Final Determination rationale and Draft Determination responses

- 5.3 We have decided to award NGED £18m, to be reviewed by 2025. This is the equivalent of three years' worth of its annual request.
- 5.4 NGED was the only stakeholder that commented on the NIA proposed for it. At Draft Determinations, we rated NGED as meeting four out of five criteria because we had doubts about its process to rolling out innovation to BAU. It had neither explained its process for tracking benefits of innovation projects before roll-out nor had it provided evidence that gave us confidence that it has a robust process in place. NGED disagreed with our assessment. As part of its response to Draft Determinations, NGED provided additional qualitative evidence where it explained how the business tracks benefits of innovation projects as they are ongoing and at completion, as part of a wider process to identify solutions suitable to be rolled out to BAU.
- 5.5 We have revised our assessment of NGED in light of this additional evidence submitted. It now meets all five of our NIA criteria.
- 5.6 NGED also disagreed with our approach to rating DNOs. It stated that we should have applied a sliding scale rather than what it referred to as a "blunt" approach of rating companies as having passed or failed a criterion, and that we should have included additional criteria, such as related to innovation culture.

¹⁴ In Draft Determinations, this number was erroneously stated as £17.7m due to a transposition error.

- 5.7 We disagree that our methodology is blunt, as it took into account a broad range of factors as set out in SSMD and the RIIO-ED2 Business Plan Guidance. This included evidence of processes and frameworks to embed innovation across the business.

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 23: LRE - Key Engineering Recommendations

EJP	Final Determinations	Draft Determinations
EJP111: Directional Power Flow at Primary Substations	Justified Sufficient information provided in relation to volume estimation and deliverability for the EJP to be deemed Justified.	Partially Justified NGED provided a sufficient overview of the needs case on the basis that power flow monitoring is likely to be a pre-requisite for DSO/active distribution networks. In addition, more granular monitoring provides opportunity to increase asset utilisation. NGED demonstrated that they had undertaken some high-level optioneering, but there was limited justification for the volumes proposed within the proposal, in particular while noting the significant volume increase from RIIO-ED1 into RIIO-ED2. Insufficient assurance was provided in NGED’s ability to efficiently deliver these volumes across RIIO-ED2. Due to the lack of justification for the specific volumes, there was a risk that the out- turn volumes would differ from the volumes that NGED proposed in its submission, as well as NGED’s ability to efficiently deliver the volume increase during RIIO-ED2.
EJP112: Secondary Reinforcement Programme	Partially Justified Further detail is provided on the method used by NGED to determine the proposed	Partially Justified The submission provided relevant background on the needs case with an overview

EJP	Final Determinations	Draft Determinations
	<p>volumes, and the reasons why they believe these volumes are efficient and deliverable. However, there remains significant uncertainty associated with the proposal, leading to a risk that the outturn volumes, and hence costs, will differ from those that have been proposed. Therefore, the EJP remains Partially Justified.</p>	<p>of expected LCT uptake as well as how NGED had utilised Distribution Future Energy Scenarios (DFES) and its Best View scenario. The Network Investment Forecast Tool (NIFT) is used to identify which networks would break without investment and forecast how NGED can accommodate future connections. A high-level overview of the modelling was provided, but with insufficient detail to justify the magnitude of the proposed investment. NGED provided an overview of the options that were considered within its analysis and modelling, with some details of how these informed the outputs. NGED provided details of the volumes that it expects to address during RIIO-ED2, with these broken down across licence areas on an asset basis.</p> <p>There remained a deliverability risk for the works, mainly based on the significant increase in volumes/expenditure from RIIO-ED1 through to RIIO-ED2, and the insufficient detail provided to justify the specific volumes that have been proposed.</p>
<p>EJP122: Coventry 132kV Fault level Reinforcement</p>	<p>Justified</p> <p>Sufficient evidence has now been provided to justify the needs case and optioneering. We also note that 410 MW of additional distributed generation has been committed to the network since the original EJP was submitted.</p>	<p>Unjustified</p> <p>The EJP did not demonstrate the need for the investment with sufficient detail, with insufficient data and evidence used to demonstrate the overall needs case. The optioneering presented by NGED did not include sufficient detail on why</p>

EJP	Final Determinations	Draft Determinations
		<p>options were discounted relatively early in the process, leaving only one alternative solution for the cost benefit analysis.</p> <p>Due to the lack of justification provided for the needs case, there was a risk that the proposed investment would not be required during RIIO-ED2.</p>
<p>EJP144: Upper Boat - Mountain Ash, Dowlais and Merthyr East 132kV Circuit Reinforcement</p>	<p>Justified</p> <p>Sufficient additional evidence provided for the investment needs case, including requirements for network integrity as well as enablement of expected distributed generation.</p>	<p>Unjustified</p> <p>The needs case for the investment was not sufficiently justified within the submission, with insufficient evidence provided to demonstrate the need to exceed P2/7 requirements.</p> <p>Due to the lack of justification provided for the needs case, there was a risk that the proposed investment would not be required during RIIO-ED2.</p>
<p>EJP179: Pembroke 132kV Network Reinforcement</p>	<p>Justified</p> <p>NGED provide sufficient justification for the investment within the relevant addendum; risks raised at Draft Determinations have been sufficiently addressed.</p>	<p>Unjustified</p> <p>The needs case for the investment was based on a proposed upgrade of network, despite the fact that the network will remain P2/7 compliant throughout RIIO-ED2. The submission provided insufficient justification for this intervention. The submission discussed some proposed distributed generation. However, limited details were provided of projects with sufficient maturity to drive the need for the investment.</p> <p>Due to the lack of justification provided for the needs case, there was a risk that the proposed investment would</p>

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EJP	Final Determinations	Draft Determinations
		not be required during RIIO-ED2.

Table 24: NLRE (Non-NARM) - Key Engineering Recommendations

EJP	Final Determinations	Draft Determinations
<p>EJP001: Replacement of Internal Combustion Engine (ICE) Vehicles with Pure Electric Vehicles (EVs) and Charger Installation</p>	<p>Partially Justified</p> <p>NGED provide further breakdown of the various CBAs that they have undertaken to quantify the benefits of replacing their ICE vehicles with EVs, including fuel/electricity costs. The addendum also details the benefits of developing charging infrastructure at NGED's sites. The addendum confirms that any residual value from the ICE vehicles that will be sold have been included within the CBAs. However, based on the significant value of the EJP, as well as the uncertainties associated with the delivery of the volumes (and potential unit cost fluctuation during ED2), we believe that the EJP is Partially Justified.</p>	<p>Partially Justified</p> <p>NGED presented a high-level needs case for the investment, with the reduction of emissions being the primary investment driver. The EJP sets out NGED's plans to reduce fuel emissions by replacing ICE vehicles with EVs. However, limited data was used to justify the expected benefits to consumers from the investment. In addition, we did not believe that the proposed volumes were justified at this stage, given that many vehicles would be taken out of service before their end of life.</p> <p>Due to the lack of justification for the specific volumes, there was a risk that the out-turn volumes would differ from the volumes that NGED proposed in its submission.</p>
<p>EJP004, 005, 006: Exeter, Torquay and Plymouth Depot Refurbishment</p>	<p>Partially Justified – Control Required</p> <p>NGED have provided further details on consenting to substantiate the deliverability of these projects. However, we believe that a PCD is required to cover the wider depot developments in the South West, and to ensure adequate protection for consumers from any deliverability concerns that remain.</p>	<p>Partially Justified</p> <p>NGED presented sufficient needs case and optioneering for the three different EJPs. The EJPs included a proposed schedule for the projects, as well as a detailed cost overview. However, the EJPs provided insufficient details on the planning consent requirements and measures in place to ensure efficient delivery.</p> <p>Due to the lack of maturity in the project development for each site, there was a deliverability risk during RIIO-ED2.</p>

EJP	Final Determinations	Draft Determinations
<p>EJP016: Diversions - Conversion of Wayleaves to Easements, Easements and Injurious Affection Claims</p>	<p>Partially Justified – Control Required</p> <p>NGED provide further details on its strategy and associated processes, as well as providing more information on cost assumptions. However, based on the significant value of the EJP, as well as the uncertainties associated with the proposed volumes, we believe that the EJP is Partially Justified and that a control is used to protect consumers.</p>	<p>Partially Justified</p> <p>NGED presented a justified needs case for the investment, making use of data and accompanying analysis to forecast into RIIO-ED2. The optioneering was limited, however NGED presented sufficient evidence that the proposed strategy is effective. Wayleaves and diversions are inherently subject to a high degree of uncertainty.</p> <p>Due to the expected uncertainty within this area during RIIO-ED2, there was a risk that the proposed volumes would differ during the period.</p>
<p>EJP032: LTE Network Build & Growth</p>	<p>Partially Justified</p> <p>In its consultation response, NGED state that “Due to the comments made by Ofgem with regards to the delay in spectrum being released and also the ownership of the infrastructure, NGED will need to invest in its current UHF Scanning Telemetry and Private Mobile Radio (PMR) Networks, to ensure they remain reliable, resilient and secure.” However, we note that the deliverability risk that we described in our Draft Determinations was not an implication or a suggestion of measures or interventions that should be actioned during RIIO-ED2. It is the responsibility of NGED to determine, and justify, economic and efficient investments for the regulatory period.</p>	<p>Partially Justified</p> <p>The EJP included a sufficient needs case, presenting the need to replace the UHF radio network with a private long term evolution (LTE) network. The EJP demonstrated sufficient rationale for the proposed engineering approach, however, significant uncertainty remained in relation to the investment as the timing of the release of the spectrum was unknown, as well as who would own the infrastructure.</p> <p>Due to the timing and ownership uncertainty in relation to this EJP, there was a deliverability risk during RIIO-ED2.</p>

EJP	Final Determinations	Draft Determinations
	<p>Insufficient evidence has been presented by NGED to alleviate the concerns that we presented at Draft Determinations in relation to the deliverability of this investment. Therefore, the EJP remains as Partially Justified.</p>	
<p>EJP037: Remote Terminal Unit (RTU) Replacement Programme</p>	<p>Justified NGED have provided sufficient evidence to justify the proposed volumes, and how they will be delivered.</p>	<p>Partially Justified Clear needs case presented to replace the RTUs at the end of their life. NGED demonstrated sufficient consideration of options and related investment drivers. However, NGED provided insufficient detail on exactly when each asset would reach end of life, and how this informed the planning of the delivery. Insufficient data was used to justify this aspect of the proposal. Due to the lack of justification for the specific volumes, there was a risk that the out-turn volumes would differ from the volumes that NGED proposed in its submission.</p>
<p>EJP042 & EJP043: LV and HV Underground Cable Replacement Programme</p>	<p>Justified Sufficient detail provided by NGED on the proposed volumes, including specific circuits for interventions.</p>	<p>Partially Justified Sufficient justification provided for the investment’s needs case. The optioneering was high-level but provided a sufficient overview of the relevant options. The proposed volumes were based on a combination of analysis with engineering judgement. However, there was a significant increase in volumes when compared to RIIO-ED1 run rates, with</p>

EJP	Final Determinations	Draft Determinations
		<p>insufficient justification and explanation provided for this.</p> <p>Due to the lack of justification for the specific volumes, there was a risk that the outturn volumes would differ from the volumes that NGED proposed in its submission, in particular when noting the increase in volumes during RIIO-ED2.</p>
<p>EJP065: LV Cut Outs Replacement Programme</p>	<p>Partially Justified</p> <p>Following our review of the additional information provided by NGED, we remain of the view that insufficient justification has been provided for the proposed volumes. Therefore, the EJP is Partially Justified.</p>	<p>Partially Justified</p> <p>Sufficient justification provided for the investment’s needs case. However, the optioneering was high-level, with insufficient justification for how this informed the proposed volumes. NGED provided insufficient detail of the data that was used to determine the condition of cut-outs. There was insufficient explanation of how volumes were derived.</p> <p>Due to the insufficient optioneering, and the lack of justification for the volumes, there was a deliverability and volume risk associated with this proposed investment.</p>
<p>EJP066: LV Services (UG) Replacement Programme</p>	<p>Justified</p> <p>Sufficient information has been provided by NGED to justify the proposed volumes and the associated investment.</p>	<p>Partially Justified</p> <p>Sufficient justification provided for the investment’s needs case. The optioneering was high-level but provided a sufficient overview of the relevant options. The proposed volumes were mainly based on the continuation of RIIO-ED1 run rates. However, NGED provided insufficient demonstration of lessons learned or efficiencies that</p>

EJP	Final Determinations	Draft Determinations
		<p>would be applied to the RIIO-ED2 proposal.</p> <p>Due to the lack of justification for the specific volumes, there was a risk that the outturn volumes would differ from the volumes that NGED proposed in its submission.</p>
<p>EJP067: LV Services (OH) Replacement Programme</p>	<p>Partially Justified – Accept Submitted Volumes</p> <p>NGED provided additional information that somewhat justified the volumes proposed, however there remains a risk associated with the efficient delivery of the volumes. Therefore, it is proposed to accept the submitted volumes with additional reporting.</p>	<p>Partially Justified</p> <p>Sufficient justification provided for the investment’s needs case. The optioneering was high-level but provided a sufficient overview of the relevant options. The proposed volumes were mainly based on the continuation of RIIO-ED1 run rates. However, NGED provided insufficient demonstration of lessons learned or efficiencies that would be applied to the RIIO-ED2 proposal.</p> <p>Due to the lack of justification for the specific volumes, there was a risk that the outturn volumes would differ from the volumes that NGED proposed in its submission.</p>
<p>EJP072: Tree Clearance</p>	<p>Partially Justified</p> <p>NGED have provided some further details on the 'sub-optioneering' that they have undertaken in relation to their proposed works. Information is provided on how the volumes are derived. However, insufficient justification has been provided to fully accept the volumes. There remains a risk that the outturn volumes will differ to those that have been proposed, impacting on the proposed benefits.</p>	<p>Partially Justified</p> <p>The EJP demonstrated a clear needs case for the works. However, the optioneering and subsequent volume derivation indicated that insufficient alternatives were considered. The two alternative options that were listed and considered were to divert all impacted overhead line (OHL) circuits, and to underground all impacted OHL circuits. These would have led to unfeasible alternatives. The chosen</p>

EJP	Final Determinations	Draft Determinations
		<p>option should consider sub-options to inform the most appropriate strategy to be followed during RIIO-ED2.</p> <p>Due to the lack of justification for the specific volumes, there was a risk that the outturn volumes would differ from the volumes that NGED proposed in its submission.</p>
<p>EJP110: LV Network Monitoring</p>	<p>Partially Justified</p> <p>NGED have provided additional details on the methodology that they have followed to determine the required volumes. However, there remains significant uncertainty associated with these volumes, noting the interactions with the smart meter rollout during RIIO-ED2.</p>	<p>Partially Justified</p> <p>The EJP provided sufficient explanation for the needs case. The optioneering provided sufficient justification for the proposed solution, including why the option with a more favourable NPV was discounted. However, insufficient justification was provided for the final volumes proposed within NGED’s submission.</p> <p>Due to the lack of justification for the specific volumes, there was a risk that the out-turn volumes would differ from the volumes that NGED proposed in its submission.</p>

Table 25: NLRE (NARM) - Key Engineering Recommendations

EJP	Final Determinations	Draft Determinations
<p>EJP051: 132kV Overhead Tower Line Conductor and Fittings Replacement Programme</p>	<p>Justified</p> <p>Sufficient information has been provided by NGED to justify the proposed volumes and the associated investment.</p>	<p>Partially Justified</p> <p>Sufficient justification was provided for the investment’s needs case, with the asset health, and its subsequent impact on the network acting as the main driver for the investment. The optioneering was high-level, providing some details on NGED’s decision making in relation to replacing or refurbishing its assets, but provided a sufficient overview of the relevant options and the various modelling that were considered to determine the most efficient solution. The proposed volumes for the 132kV conductors were based on a list of circuits identified as being in poor condition by NGED’s engineers – we believed that these were sufficiently justified. However, NGED’s submission did not include sufficient detail or data to justify the proposed 132kV fittings volumes.</p> <p>We believed that NGED justified the proposal for the 132kV conductors, including the volumes. However, insufficient detail was provided to justify the proposed 132kV fittings volumes, leading to a risk in the final outturn volumes for these assets.</p>
<p>EJP052: 132kV Overhead Tower Replacement Programme</p>	<p>Justified</p> <p>Sufficient information has been provided by NGED to justify the proposed volumes</p>	<p>Partially Justified</p> <p>Sufficient justification provided for the investment’s needs case, with the asset health, and its subsequent</p>

EJP	Final Determinations	Draft Determinations
	and the associated investment.	<p>impact on the network acting as the main driver for the investment. The optioneering was high-level, providing some details on NGED’s decision making in relation to replacing or refurbishing its assets, but provides a sufficient overview of the relevant options and the various modelling that was considered to determine the most efficient solution. However, NGED provided insufficient justification for the proposed volumes. We would have expected that NGED should have been able to provide a list of assets that were expected to be replaced to substantiate their proposal. However, this was not provided.</p> <p>Due to the lack of justification for the specific volumes, with limited detail provided in relation to specific assets, there was a risk that the outturn volumes would differ from the volumes that NGED proposed in its submission.</p>
EJP059: 132kV Circuit Breaker Replacement Programme	<p>Justified</p> <p>Sufficient information has been provided by NGED to justify the proposed volumes and the associated investment.</p>	<p>Partially Justified</p> <p>Sufficient justification provided for the investment’s needs case, with the asset health, and its subsequent impact on the network acting as the main driver for the investment. The optioneering was high-level, providing some details on NGED’s decision making in relation to replacing or refurbishing its assets, but provided a sufficient overview of the relevant options and the various modelling that was considered to determine the</p>

EJP	Final Determinations	Draft Determinations
		<p>most efficient solution. However, NGED provided insufficient justification for the proposed volumes, with limited explanation provided for the need to intervene on some of the listed assets.</p> <p>Due to the lack of justification for the specific volumes, there was a risk that the out-turn volumes would differ from the volumes that NGED proposed in their submission.</p>
<p>EJP062: HV Transformer Replacement Programme</p>	<p>6.6/11kV Transformer (PM): Justified</p> <p>We maintain our Draft Determinations position that sufficient explanation was provided for the proposed volumes.</p> <p>6.6/11kV Transformer (GM): Partially Justified - Accept Submitted Volumes</p> <p>NGED provided additional information that somewhat justified the volumes proposed, however there remains a risk associated with the efficient delivery of the volumes. Therefore, it is proposed to accept the submitted volumes with additional reporting.</p>	<p>Partially Justified</p> <p>Sufficient justification provided for the investment’s needs case, with the asset health, and its subsequent impact on the network acting as the main driver for the investment. The optioneering was high-level, providing some details on NGED’s decision making in relation to replacing or refurbishing its assets, but provided a sufficient overview of the relevant options and the various modelling that was considered to determine the most efficient solution.</p> <p>6.6/11kV Transformer (GM) – NGED provided insufficient justification for accommodating HI3 assets within volumes.</p> <p>6.6/11kV Transformer (PM) – sufficient explanation provided to justify the proposed volumes.</p> <p>We believed that NGED justified the proposal for the pole mounted transformers, including the volumes. However, insufficient detail was provided to justify the</p>

EJP	Final Determinations	Draft Determinations
		<p>proposed ground mounted transformer volumes, leading to a risk that the final outturn volumes for these assets would differ from NGED’s proposal.</p>
<p>EJP063 & EJP 064: EHV and 132kV Transformer Replacement Programme</p>	<p>Partially Justified - Accept Submitted Volumes</p> <p>NGED provided significant additional information that provided confidence in the proposal if delivered as planned. However there remains a risk associated with the efficient delivery of the volumes through the modelling used. Therefore, it is proposed to accept the submitted volumes with additional reporting to ensure the benefits of the proposals are realised.</p>	<p>Unjustified</p> <p>Sufficient justification provided for the investment’s needs case, with the asset health, and its subsequent impact on the network acting as the main driver for the investment. However, the optioneering was high-level, with insufficient justification for how this informed the proposed volumes. We would have expected an asset-by-asset breakdown of the proposed interventions, including the justification and the optioneering to be presented at an asset-level. However, this was not provided in sufficient detail.</p> <p>NGED provided insufficient detail on a granular level for the assets, leading to a deliverability risk for these assets, as well as a risk of outturn volumes differing from those proposed by NGED.</p>

Appendix 2 Examples of Enhanced Reporting

Category	Asset Category	Volumes (Additions)	Relevant reporting lines	Potential monitored outcomes
LV, HV & EHV Conductors (km)	LV Main (OHL) Conductor	734.0	km of assets replaced	Improving network safety and reliability Improving network resilience, in particular for storms
	LV Service (OHL)	26,365.0		
	6.6/11kV OHL (Conventional Conductor)	1,617.8		
	33kV OHL (Pole Line) Conductor	231.5		
	66kV OHL (Pole Line) Conductor	31.5		
	33kV OHL (Tower line) Conductor	89.7		
	66kV OHL (Tower Line) Conductor	17.3		
LV, HV & EHV Poles & Fittings	LV Poles	39,650	No. of assets replaced	Addressing common failure modes e.g. swan neck defects Improving network safety and reliability Improving network resilience, in particular for storms
	6.6/11kV Poles	50,685		
	33kV Pole	5,955		
	66kV Pole	1,420		
	33kV Fittings	446		
	66kV Fittings	95		
HV, EHV & 132kV GM Transformers	6.6/11kV Transformer (GM)	2,965	No. of assets replaced MVA added	Replacement of ageing fleet Increased ratings with modern equivalent, in line with NGED's RIIO-ED2 submission

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Category	Asset Category	Volumes (Additions)	Relevant reporting lines	Potential monitored outcomes
				Assets with modern tap changers, enabling reverse power flows Reduced maintenance costs

Appendix 3 NGED Bespoke Core Commitments

Output name	Description
Core commitment 1 (ODI-R)	Drive the achievement of net zero across our regions sooner than 2050 in line with stakeholder plans (some areas as early as 2028), by ensuring network capacity is available.
Core commitment 2 (ODI-R)	Ensure customers are able to connect low carbon technologies quickly and easily, with the network being ready to support at least an additional 1.5 million electric vehicles and 600,000 heat pumps by 2028.
Core commitment 3 (ODI-R)	Make it easy for customers to adopt low carbon technologies and achieve net zero in their region much sooner than 2050, by driving the delivery of ambitious Local Area Energy Plans and proactively engaging all 130 local authorities each year via 90 local energy surgeries.
Core commitment 4 (ODI-R)	Deliver a network to meet the evolving needs of our customers by aligning our future energy forecasts with the plans of local regions and the Electricity System Operator, by updating NGED’s Distribution Future Energy Scenarios every 12 months.
Core commitment 5 (ODI-R)	Keep bills as low as possible and minimise the requirement for load related reinforcement by adopting a ‘flexibility first’ approach in order to maximise the utilisation of the existing network.
Core commitment 6 (ODI-R)	Unlock capacity from the existing grid and therefore avoid the need for reinforcement, by stimulating the development of flexibility markets and implementing simple, fair and transparent rules for procuring flexibility services, with a six monthly tender and exceptional customer satisfaction for flexibility services.
Core commitment 7 (ODI-R)	Deliver solutions that achieve the greatest social benefit to customers by utilising a whole system approach for major reinforcement to improve network efficiency. We will undertake three regional collaboration trial schemes by 2025 involving gas, electricity, water, waste, transport and heating sectors.
Core commitment 8 (ODI-R)	Actively support the expansion of green, renewable energy generation and help local communities to decarbonise and lower their bills, by connecting at least 30 community energy groups to the network each year. We will hold 60 community energy surgeries per year and provide a dedicated NGED community energy

Output name	Description
	representative to assist with connection and flexibility offers.
Core commitment 9 (ODI-R)	Support a growth in community energy schemes by facilitating their access to available funding streams.
Core commitment 10 (ODI-R)	Achieve net zero in our internal business carbon footprint by 2028 (excluding network losses) and follow a verified Science Based Target of 1.5°C to limit the climate impact of our activities.
Core commitment 11 (ODI-R)	Avoid damage to the environment by reducing the volume of oil leaked from fluid filled cables by 50% by 2028 and replacing 90km of the worst leaking circuits with non-oil alternatives putting NGED on target to remove all oil-filled cables by 2060.
Core commitment 12 (ODI-R)	Significantly reduce our impact on climate change by delivering a 20% reduction in SF6 losses and drive industry partners to develop technological alternatives to reduce overall volumes of SF6 on the system.
Core commitment 13 (ODI-R)	Significantly reduce the environmental impact of our operations by achieving zero waste to landfill by 2028 (excluding hazardous waste) and delivering an overall 30% reduction in tonnage of waste produced.
Core commitment 14 (ODI-R)	Improve visual amenity by removing at least 50km of overhead lines in Areas of Outstanding Natural Beauty and National Parks.
Core commitment 15 (ODI-R)	Achieve a 10% net gain in biodiversity (in line with nationally recognised assessment tools) for new major projects and for selected primary and grid substation sites.
Core commitment 16 (ODI-R)	Keep bills for customers low by delivering an additional stretch efficiency saving of £95m through RIIO-ED2 (on top of £723m of efficiencies already included in the plan) by utilising innovation to improve our processes and show a positive carbon impact.
Core commitment 17 (ODI-R)	Enhance access to data that is tailored to the individual needs of our customers, by making 60% of NGED's network data available via an interactive Application Programming Interface.
Core commitment 18 (ODI-R)	Ensure customers are not left behind in the smart energy transition by offering at least 600,000 Priority Services Register customers a bespoke smart energy action plan each year.

Output name	Description
Core commitment 19 (ODI-R)	Support at least 113,000 fuel poor customers to save £60m on their energy bills over RIIO-ED2.
Core commitment 20 (ODI-R)	Expand the reach of our Priority Services Register to at least 75% of total eligible customers and 80% of customers with critical medical dependencies to ensure those in greatest need receive targeted support services. This will include registering at least 50,000 additional 'hard-to-reach' customers each year.
Core commitment 21 (ODI-R)	Achieve a 'one-stop-shop' service so that customers only have to join the Priority Services Register once to be registered automatically with their energy supplier, water company, gas distributor and telecommunications companies.
Core commitment 22 (Licence Obligation (LO))	Maintain high quality data to allow us to deliver bespoke support to customers in vulnerable situations by proactively contacting over two million Priority Services Register (PSR) customers once every two years to remind them of NGED's services and update their records (with 60% via direct telephone call).
Core commitment 23 (ODI-R)	Support and add significant value to our local communities via a 'Community Matters' social initiative associated with the smart energy transition, vulnerability, environment and sustainability. This will include a shareholder funded annual £1m community support fund and 1,000 volunteer days per year for NGED staff to support local causes.
Core commitment 24 (ODI-R)	Deliver enduring, long-term support to our communities by publishing an updated NGED Social Contract and performance report every year and maintain our prime Environmental, Social and Governance rating.
Core commitment 25 (ODI-R)	Build decarbonised communities and local energy schemes by providing £540,000 shareholder funded support per year to install solar PV on schools in areas of high economic deprivation.
Core commitment 26 (ODI)	Deliver exceptional service levels by achieving overall average customer satisfaction of 93% or higher by the end of RIIO-ED2, with separate reporting for emerging technology customers.
Core commitment 27 (ODI-R)	Ensure a speedy telephone response to customers by answering calls within an average of four seconds and maintain an abandoned call rate of less than 1%, within our UK based, in-region Contact Centres.

Output name	Description
Core commitment 28 (ODI-R)	Ensure a speedy social media response to customers by replying to enquiries within an average of five minutes and Webchats in an average of less than a minute, 24 hours a day.
Core commitment 29 (ODI-R)	Provide greater insight on our planned work activities and interruptions on our network by creating an online viewer.
Core commitment 30 (ODI)	When things go wrong ensure we put things right very quickly, by resolving at least 90% of complaints within one day and 99% of complaints within 25 days.
Core commitment 31 (ODI-R)	Make it as easy as possible for customers to apply to connect individual domestic low carbon technologies by providing a same day connections response via an online self-assessment tool.
Core commitment 32 (ODI-R)	Provide quicker and cheaper connections options for customers by increasing the number of flexible connection offers made, ensuring 100% of schemes receive a flexible alternative to reinforcement where the reinforcement cost is >£75k for LV, 11kV and 33kV connections and >£100k for 66kV or 132kV connections and/or where works will take more than 12 or 18 months respectively to complete.
Core commitment 33 (ODI)	Deliver improved network reliability whereon average power cuts are better than one interruption every two years lasting less than 22 minutes (12% reduction in customer interruptions (frequency) and 16% reduction in customer minutes lost (duration)), utilising vulnerable customer data to prioritise network improvement schemes.
Core commitment 34	Improve the service for at least 8,260 Worst Served Customers by undertaking 70 schemes.
Core commitment 35 (ODI-R)	Counteract deterioration of network assets through an investment of £216m per annum, delivering a 22% change in risk to keep network risk at similar levels to the start of the price control period.
Core commitment 36 (ODI-R)	Reduce the flooding risk at key sites by undertaking 102 flood defence schemes and engage stakeholders to reduce the need for new assets in flood risk areas.
Core commitment 37 (ODI-R)	Increase the safety of around 200,000 children by delivering 780 schemes to underground, insulate or divert overhead lines that cross school playing areas.

Output name	Description
Core commitment 38 (ODI-R)	Keep our children safe by sending electrical safety education packs to every primary school in NGED's region and educate at least 80,000 children per year via direct learning.
Core commitment 39 (ODI-R)	Reduce the risk of data loss or network interruption from a cyber attack by continually assessing emerging threats in order to enhance our cyber security systems.
Core commitment 40 (ODI-R)	Reduce the risk of disruption to our operations and enhance the resilience of our IT network security as we deliver greater digitalisation, by increasing levels of threat monitoring, prevention and alerting systems, and upgrading our disaster recovery capability to ensure continuity of our operations.
Core commitment 41 (ODI-R)	Demonstrate exceptional and embedded employment practices by achieving Gold accreditation with Investors in People by the end of RIIO-ED2.
Core commitment 42 (ODI-R)	Achieve year-on-year improvements to the levels of diversity within the business and publish an annually updated Diversity, Equity and Inclusion Action Plan.