

Consultation

RIO-3 Draft Determinations - National Grid Electricity Transmission (NET)

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The next set of price controls for the Electricity Transmission (ET), Gas Distribution (GD) and Gas Transmission (GT) sectors will cover the five-year period from 1 April 2026 to 31 March 2031 (RIO-3). In December 2024 the network companies in these sectors submitted their RIO-3 Business Plans for this period to us. We have now assessed these plans.

This document, and others published alongside it, set out our Draft Determinations for the RIO-3 price controls. These are for consultation and we would like views from people with an interest in RIO-3 by 26 August 2025. We particularly welcome responses from consumer groups and energy industry network users. We also welcome responses from other stakeholders and the public.

Once the consultation is closed, we will consider all responses. We want to be transparent in our consultations. We will publish the non-confidential responses we receive alongside a decision on next steps on our website at [ofgem.gov.uk/consultations](https://www.ofgem.gov.uk/consultations).

If you want your response – in whole or in part – to be considered confidential, please tell us in your response and explain why. Please clearly mark the parts of your response that you consider to be confidential, and if possible, put the confidential material in separate appendices to your response.

Consultation – RIIIO-3 Draft Determinations - National Grid Electricity Transmission (NGET)

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1. Introduction

Purpose of this document

- 1.1 This document sets out our Draft Determination consultation positions for the price control areas that are specific to National Grid Electricity Transmission (NGET) covering the five-year period from 1 April 2026 to 31 March 2031 (RIIO-ET3). All figures in this document are in 2023/24 prices except where otherwise stated.

What are we consulting on?

- 1.2 In Chapter 2 we set out the NGET-specific outputs and incentives that we propose should form part of RIIO-ET3, including Licence Obligations (LOs), Price Control Deliverables (PCDs), Use-It-Or-Lose-It (UIOLI) allowances and Output Delivery Incentives (ODIs).¹
- 1.3 Chapter 3 describes our assessment of NGET's Business Plan against the RIIO-3 Business Plan Incentive.
- 1.4 Chapter 4 sets out how we propose to manage uncertainty during RIIO-ET3 for areas of uncertainty that are specific to NGET. We do this through uncertainty mechanisms (UMs), specifically volume drivers, re-openers, UIOLIs, pass-through, or indexation mechanisms.
- 1.5 In Chapter 5 we summarise the outcome of our assessment of NGET's costs and engineering justifications for the RIIO-ET3 period.
- 1.6 Chapters 6 and 7 describe our assessment of NGET's innovation and digitalisation strategies respectively.

Navigating the RIIO-3 Draft Determinations documents

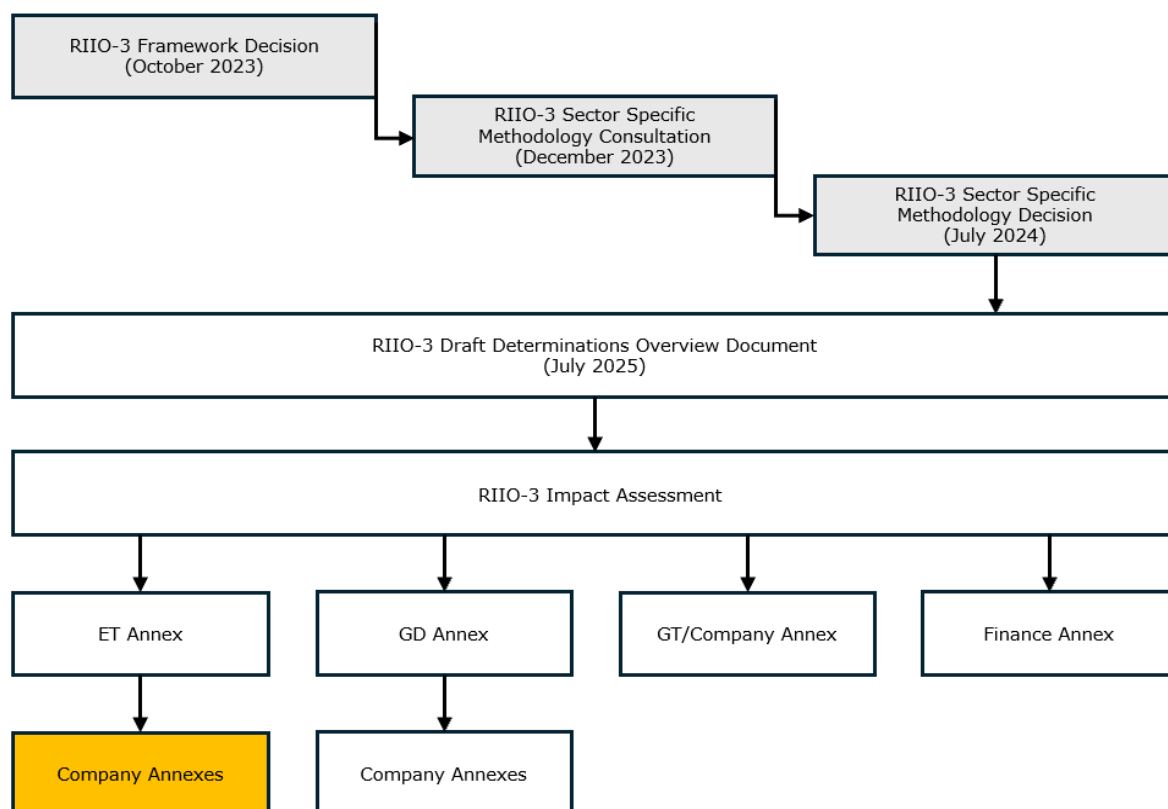
- 1.7 The RIIO-3 Draft Determinations are comprised of an Overview Document, a Finance Annex and sector annexes for ET, GD and GT. The Draft Determinations are underpinned by a RIIO-3 Impact Assessment, company annexes² and, where relevant, technical annexes. This document is the NGET Annex. Figure 1 below maps all documents relevant to our suite of RIIO-3 Draft Determinations, including the framework and methodology documents that have preceded it.

¹ ODIs can be either financial (ODI-F) or reputational (ODI-R).

² Throughout this document, 'company annexes' refers to the three TO specific annexes (their abbreviated names are NGET Annex, SHET Annex and SPT Annex).

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

Figure 1: RIIO-3 Draft Determinations map



An Overview of NGET's RIIO-ET3 Price Control

- 1.9 This section summarises the key aspects of NGET's RIIO-ET3 Draft Determinations, setting out its cost allowances, outputs, UMs, BPI outcome and financing parameters.

³ <https://www.ofgem.gov.uk/call-for-input/call-evidence-electricity-transmission-gas-transmission-and-gas-distribution-business-plans-riio-3>

Table 1: Submitted versus proposed allowed baseline Totex (£m, 2023/24 prices)

Cost area	NGET submitted totex	Ofgem proposed totex	Difference (£m)	Difference (%)
Core baseline totex	5,827	4,249	-1,579	-27%
Network Innovation Allowance (NIA)	135	117.5	-17.5	-13%
Passthrough, UIOLI and other ex ante allowances	-	2,090	-	-
Ex ante allowances	-	6,457	-	-

Table 2: Proposed outputs package

Output name	Output type	Sector(s)	Further detail
Network Asset Risk Metric (NARM)	PCD ODI-F and ODI-R	ET, GD, GT	Overview Document
Physical Security	PCD and re-opener	ET, GT	Overview Document
Cyber Resilience	PCD and re-opener	ET, GD, GT	Overview Document
Environmental Action Plan and annual environmental report	ODI-R and LO	ET, GD, GT	Overview Document
Strategic Innovation Fund (SIF)	UIOLI	ET, GD, GT	Overview Document
Network Innovation Allowance (NIA)	UIOLI	ET, GD, GT	Overview Document
Totex Incentive Mechanism (TIM)	ODI-F	ET, GD, GT	ET Annex
Operational Transport	PCD	ET, GD	Overview Document
CSNP-F Delivery	ODI-F	ET	ET Annex
Innovative Delivery Incentive	ODI-F	ET	ET Annex
Connections Capacity	ODI-F	ET	ET Annex
Insulation and Interruption Gas (IIG) emissions	ODI-F	ET	ET Annex

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Output name	Output type	Sector(s)	Further detail
Energy Not Supplied (ENS)	ODI-F	ET	ET Annex
SO:TO Optimisation	ODI-F	ET	ET Annex
Network Access Policy (NAP)	LO	ET	ET Annex
Landscape Enhancement Initiative (LEI)	UIOLI	ET	ET Annex
CSNP Coordination	LO	ET	ET Annex
New Infrastructure Stakeholder Survey (NISES)	ODI-R	ET	ET Annex
SF6 Asset Intervention Plan	PCD	NGET and SHET only	ET Annex
Cables	PCD	NGET only	This document
Protection And Control (P&C) Portfolio	PCD	NGET only	This document
OHL & Reconductoring	PCD	NGET only	This document
Substation Condition Monitoring Technology	PCD	NGET only	This document
Substation	PCD	NGET only	This document
Overhead Line (OHL) Tower Steelwork Management	PCD	NGET only	This document

Table 3: Proposed UMs package

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

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UM name	UM type	Sector(s)	Further detail
Cyber Resilience	Re-opener	ET, GD, GT	Overview Document
Co-ordinated Adjustment Mechanism (CAM)	Re-opener	ET, GD, GT	Overview Document
Net Zero	Re-opener	ET, GD, GT	Overview Document
Pre-Construction Funding (PCF)	PCD and re-opener	ET	ET Annex
Load	Re-opener and PCD	ET	ET Annex
Load	UIOLI	ET	ET Annex
CSNP-F	Re-opener and PCD	ET	ET Annex
Generation Connections	Volume driver	ET	ET Annex
Demand Connections	Volume driver	ET	ET Annex
Closely Associated Indirects (CAI)	UIOLI	ET	ET Annex
Business Support Costs	Re-opener	ET	ET Annex
Non-Load	Re-opener	ET	ET Annex
Independent Technical Adviser	Pass-through	ET	ET Annex
Community Benefits	Pass-through	ET	ET Annex
Entry and exit connection asset allowance	Volume driver	ET	ET Annex
Carbon Compensation	UIOLI	NGET and SPT	ET Annex
Estates	Re-opener	NGET only	This document
NESO Separation Costs	Re-opener	NGET only	This document

Table 4: Proposed BPI outcome

BPI Stage	NGET outcome (Bps RoRE)	Further detail
Stage A	0	Overview Document and this document
Stage B	5.73	Overview Document, ET Annex and this document
Stage C	-2.60	Overview Document and this document

Table 5: Proposed financing parameters

Area	NGET outcome	Further detail
Notional gearing	55%	Finance Annex
Cost of equity	5.64%	Finance Annex
Cost of debt (semi-nominal)	5.41%	Finance Annex
Weighted average cost of capital (semi-nominal)	5.52%	Finance Annex
Expected RoRE ranges	3.11% – 7.91%	Finance Annex

2. Outputs and incentives

2.1 This chapter sets out our views on outputs and incentives that are specific to NGET, including for bespoke proposals submitted through its business plan.

Outputs we propose to accept

Network Asset Risk Metric (NARM)

2.2 Table 6 summarises the results of our assessment and the proposed Baseline Network Risk Outputs (BNRO) per NARM asset category. Further detail about the NARM methodology can be found in the Overview Document.

Table 6: Proposed BNRO per NARM asset category

Asset Category	BNRO (R£m)
132kV Circuit Breaker	1,095.47
132kV Transformer	
132kV Reactor	1,113.25
132kV Underground Cable	
132kV OHL Conductor	
132kV OHL Fittings	
132kV OHL Tower	
275kV Circuit Breaker	2,712.67
275kV Transformer	906.91
275kV Reactor	190.03
275kV Underground Cable	
275kV OHL Conductor	
275kV OHL Fittings	1,383.82
275kV OHL Tower	
400kV Circuit Breaker	2,028.72
400kV Transformer	1,366.49
400kV Reactor	589.44
400kV Underground Cable	
400kV OHL Conductor	4,054.23
400kV OHL Fittings	3,723.37
400kV OHL Tower	

Asset Category	BNRO (R£m)
Total	19,164.40

- 2.3 Our view of the BNRO is based on NGET's proposal and adjusted to reflect our proposed volume disallowances to align with the baseline funding allowance associated with each Risk Output Unit.
- 2.4 Generally, we were able to align the BNRO and volumes submitted in NGET's NARM Business Plan Data Template (BPDT) with the volume data submitted in its Business Plan and Engineering Justification Papers (EJPs).
- 2.5 We acknowledge that our adjustments to the submitted BNRO, based on proposed volume changes, will involve a degree of approximation and may not be fully accurate at this time. This is primarily because the data we used to derive our view of the BNRO was at a much more aggregated level than that available to the network companies. Additionally, there was difficulty aligning the data for some asset categories. However, we consider this acceptable, as the adjustments are based on reasonable assumptions. Reaching a final BNRO may involve several iterations of recalculation by the network companies, and we will work closely with them to achieve this.
- 2.6 We propose to continue to use the NARM funding categories outlined in the NARM Handbook,⁴ which also indicates the scope of the NARM Funding Adjustment and Penalty Mechanism and its interaction with other mechanisms.
- 2.7 We propose that all non-load related schemes delivering lead asset replacement or refurbishment be assigned to Category A1 (NARM Funding Adjustment and Penalty Mechanism) and therefore be covered by the NARM Funding Adjustment and Penalty Mechanism.
- 2.8 We propose that all replacement and refurbishment work to be delivered through load-related schemes fall within Category A2 (Funding Under a Separate Mechanism). Any funding associated with these schemes would be covered by the relevant load-related mechanism. Should the anticipated load-related driver for these schemes not materialise then the existing assets planned for replacement or refurbishment may be considered for risk trading as part of the NARM Funding Adjustment and Penalty Mechanism. Should these assets be

⁴ https://www.ofgem.gov.uk/sites/default/files/2024-07/NARM_Handbook_v3.1_draft.pdf

replaced or refurbished in the absence of the load-related driver, then suitable justification for doing so would need to be provided.

PCDs that we propose to introduce

Purpose: To hold NGET to account for delivering specific outputs during RIIO-ET3.

Benefits: To protect consumers if any discrete capital investment is not delivered.

Background

2.5 In its Business Plan, NGET proposed various cost and output areas which contained some degree of uncertainty regarding the volumes that it would ultimately deliver. In some cases this uncertainty was acknowledged by NGET, and in others it has been identified by us during our business plan assessment.

Consultation position and rationale

Summary of consultation position

PCD type: Various, shown in Table 7 as PCDE for Evaluative PCDs and PCDM for Mechanistic PCDs.

Output to be delivered: See Table 7.

Baseline cost allowance: See Table 7.

Reporting to stakeholders: Annual reporting through the RRs.

Delivery date: 31 March 2031.

Applied to: NGET.

Proposed PCDs

2.9 To manage the uncertainty relating to delivery of some areas of NGET's Business Plan we propose to include the PCDs shown in Table 7.

Table 7: Proposed NGET RIIO-ET3 PCDs

PCD name	DD modelled cost (£m)	Output(s) to be delivered	Delivery date
Cables PCDM	43.3	<p>[REDACTED]</p> <ul style="list-style-type: none">PCF, includes cable tunnel under the Severn estuarySupport future network capacity for:	31 March 2031

PCD name	DD modelled cost (£m)	Output(s) to be delivered	Delivery date
		<ul style="list-style-type: none"> 4.5GW of floating offshore wind in the Celtic Sea Potential future HVDC link (AC6) between Scotland and Wales 	
Protection and Control (P&C) Portfolio PCDM	97.56	<p>We note there is a substantial list of P&C assets with Ofgem Scheme References (OSRs) for refurbishment and replacement.</p> <p>The P&C assets are to be replaced with asset health scores at or exceeding 75.</p> <p>The remaining OSR list of P&C assets not up for replacement are to be refurbished for asset life extension.</p>	31 March 2031
OHL & Reconductoring PCDM	1213.91 ⁵	<p>Deeside - Legacy - Trawsfynydd / Ironbridge - Shrewsbury</p> <ul style="list-style-type: none"> Upgrade to 3160 MVA using triple Araucaria on L6 towers. [REDACTED]km of reconductoring. Full fittings replacement to reduce future outages. <p>Amersham - East Claydon - Iver</p> <ul style="list-style-type: none"> Upgrade to 3080 MVA (winter pre-fault) and 3670 MVA (post-fault). Use of twin Warwick conductor on L2 towers. <p>Barking - West Ham</p> <ul style="list-style-type: none"> Delivers +250 MW to the LE1 boundary. Warwick conductor @180°C selected. <p>Bodelwyddan - Deeside - Pentir</p> <ul style="list-style-type: none"> Upgrade to triple AAAC on L6 towers. [REDACTED]km of reconductoring. <p>BPRE (BRFO - Pelham - Braintree - Rayleigh)</p> <ul style="list-style-type: none"> Achieves 3326 MVA winter post-fault rating. [REDACTED]km of reconductoring with triple Araucaria. <p>East Claydon - Enderby - Patford Bridge</p> <ul style="list-style-type: none"> Increases B8 by 500 MW and B9 by 250 MW. Uses Warwick @180°C (ZL route) and triple Araucaria @75°C (4WP route). 	31 March 2031

⁵ This represents the submitted amount. This will be reduced once the treatment of non-RIIO-ET3 elements is determined and in accordance with our cost assessment process.

PCD name	DD modelled cost (£m)	Output(s) to be delivered	Delivery date
		<p>Feckenham - Hams Hall / Drakelow - Hams Hall</p> <ul style="list-style-type: none"> Uprate the OHL to increase boundary capability of circuits to a winter post-fault rating of at least 3100MVA as identified in the NOA7 refresh. <p>Feckenham - Ironbridge</p> <ul style="list-style-type: none"> Uprating with Warwick conductor proposed. Scope includes crossing analysis and tower steelwork considerations. <p>Gretna - Harker - Moffat</p> <ul style="list-style-type: none"> Proposed use of twin Matthew conductor @210°C. Maximises rating while avoiding Warwick due to wind loading and clearance issues. Includes optical ground wire (OPGW) installation. <p>SCRE (COTT4 - STAY4) and WRRE (WBUR4 - RATS4)</p> <ul style="list-style-type: none"> Warwick conductor selected, but limited if not strung at 180°C. Potential additional 570 MVA capacity if high-temp stringing used. <p>T3 - 4YX (Cilfynydd - Imperial Park - Seabank - Whitson - Melksham)</p> <ul style="list-style-type: none"> Replacement of [REDACTED] circuit km of quad Zebra ACSR with triple 700mm² AAAC Araucaria @75°C. Winter post-fault rating increase from 2780 MVA to 3820 MVA. Includes earthwire, fittings, tower auxiliary equipment, and steelwork <p>VM Ironbridge - Penn 2 and Ironbridge - Rugeley</p> <ul style="list-style-type: none"> Replacement of [REDACTED] circuit km of twin Zebra ACSR with twin ACCC Warwick. Delivers 3670 MVA winter post-fault rating when strung at 180°C. Includes earthwire, fittings, and tower auxiliary equipment replacement. Rating limited by out-of-scope sections (twin Rubus), which do not meet the 3100 MVA requirement. <p>Tilbury - Warley 1 and 2</p>	

PCD name	DD modelled cost (£m)	Output(s) to be delivered	Delivery date
		<ul style="list-style-type: none"> Upgrade from 860 MVA to 1720 MVA pre-fault rating by 2028. Reconductoring with Warwick conductor @150°C, fitted for future 400 kV operation (initially run at 275 kV). Full overhaul includes OHL fittings and earthwire. 	
Substation Condition Monitoring Technology PCDM	21.90	<p>Substation Condition Monitoring Technology</p> <ul style="list-style-type: none"> Deploy advanced condition monitoring tools to improve asset health assessment, includes <ul style="list-style-type: none"> SF₆ leak detection technologies to support net zero targets Use of thermal imaging, radio frequency interference (RFI), and visual inspections Introduce Beyond Visual Line of Sight (BVLOS) drones for: <ul style="list-style-type: none"> Partial discharge (PD) surveys on Gas Insulated Switchgear (GIS) Thermographic inspections and CMS data collection Enable more frequent and proactive inspections to reduce operational risk 	31 March 2031
Substation PCDE	17.44	<p>[REDACTED] Substation Upgrade –</p> <ul style="list-style-type: none"> Replace 2 x 180MVA Super Grid Transformers (SGTs) with 2 x 240MVA units Replace LV cables for SGT 2 and SGT 3 with 240MVA-rated cables (currently 180MVA) Enable 181.5MW of renewable generation connections across two Distribution Network Operators (DNOs). In situ replacement to avoid triggering a full substation rebuild New transformers already procured, with delivery scheduled for: <ul style="list-style-type: none"> SGT 1 – June 2026 	31 March 2031

PCD name	DD modelled cost (£m)	Output(s) to be delivered	Delivery date
		<ul style="list-style-type: none"> SGT 2 – June 2027 Outages booked for summer 2026 and 2027 accordingly 	
OHL Tower Steelwork Management PCDE	171.57	OHL Tower Steelwork Management <ul style="list-style-type: none"> Replace all Grade 5 & 6 steel members identified via climbing surveys Recovery paint all Grade 4 steelwork Paint all Grade 3 or lower steelwork on identified routes Annual painting volume aligned with NGET policy: <ul style="list-style-type: none"> Targeting 1/18th of the total tower population per year 	31 March 2031

PCD types

- 2.10 Mechanistic PCDs are proposed in cases where work is repeatable with a defined volume of work and we can set work by reference to the unit costs. In such cases, the recovery of any non-delivery of work is automatic.
- 2.11 Evaluative PCDs are proposed in cases where the exact work delivered has potential to vary in part from the company business plan submission, either in cost or output. For evaluative PCDs, our approach allows for an in-depth assessment of the output delivered and whether an adjustment to allowances is necessary to protect consumers.
- 2.12 Both PCD types allow us to return money to consumers in the event that the output is not delivered.

Output to be delivered and baseline cost allowance

- 2.13 The outputs proposed in Table 7 have been defined using information from NGET's Business Plan, without any material alterations.
- 2.14 The costs proposed in Table 7 have been set using information from NGET's Business Plan. These have been amended to reflect unit cost modelling through the Project Assessment Model (PAM) and the application of ongoing efficiency.

Reporting to stakeholders

- 2.15 We propose to require annual reporting on PCDs in the RRP, which will enable us to monitor status of these PCDs, including timelines and costs.

Questions

NGETQ1.	Do you agree with our proposal to introduce these six PCDs for NGET?
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3. Business Plan Incentive (BPI)

- 3.1 This chapter sets out NGET's results for each stage of the BPI, along with the rationale for the result given. For information on what the BPI is and how it is assessed, see the Overview Document.
- 3.2 In assessing business plans against the BPI Stages A and C, we assessed each plan on its own merit based on criteria set out in the Sector Specific Methodology Decision (SSMD) and Business Plan Guidance. A consistency check was undertaken across companies and sectors to ensure we were being consistent in our assessment; but the business plans were not assessed against one another. For Stage B, depending on the nature of the assessment methodology the companies could be compared against one another within each sector. For further information on Stage B, see Chapter 6 of the ET Annex.
- 3.3 Table 8 sets out our proposed BPI results for NGET and where further information on each stage and the result and rationale can be found.

Table 8: Proposed BPI results for NGET

BPI Stage	Assessment result	Further detail
A	Pass	Overview Document for approach to assessment. This chapter for specific views on the assessment result.
B	5.73 bps	Overview Document for approach to assessment. The ET Annex for the network results compared within the sector and an explanation of the assessment methodology. This chapter for specific views on the assessment result.
C	-2.60 bps	Overview Document for approach to assessment. This chapter for specific views on the assessment result.
Total bps	3.13 bps	
Total 5 year monetary equivalent £m	13.3	

Stage A

- 3.4 Following our assessment, we consider that NGET met all the minimum requirements, as set out in the Business Plan Guidance, and has passed Stage A of the BPI.

Stage B

3.5 The overall assessment result for NGET is 5.73 bps, which corresponds to the weighted average of the outcomes from the comparative (7.14 bps, 18%) and bespoke (-1.41 bps, 82%) assessments. The following sections provide detail on the assessment of each cost category.

Comparatively assessed costs

3.6 The table below sets out the comparatively assessed costs and their weightings within the overall Stage B assessment score.

Comparatively assessed cost category	Weighting	Efficiency benchmark	Efficiency score	BPI reward/ penalty (bps)
Closely Associated Indirects	9%	1.16	0.66	3.61
Business Support Costs	7%	1.08	0.83	2.79
Insurance	2%	1.37	0.86	0.74
Total	18%			7.14

Bespoke costs

3.7 The table below sets out bespoke costs assessed and the result and rationale.

Bespoke Cost	Weighting	BPI reward/ penalty (bps)	Rationale
Closely Associated Indirects: Operational Training	3.1%	0.61	Quality of cost evidence met the requirements and useful benchmarking annex provided. Costs have been allowed in full.
Network Operating Costs	19.9%	0.00	Small or no adjustments made to cost and volumes. Unit costs benchmarked using international study. However limited justification of some categories and supplementary questions (SQs) were required.
Non-operational Capex	2.0%	0.40	Quality of cost evidence was comprehensive, and outcome of qualitative review was positive, particularly due to inclusion of survey data. Unit cost and volumes criterion not applicable.
Other Costs (Physical Security)	1.0%	0.07	Clearly evidenced costs based on RIIO-ET2. Adequate justification of unit costs and

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Bespoke Cost	Weighting	BPI reward/ penalty (bps)	Rationale
			volumes although light on detail.
Business Support Costs: IT & Telecoms	2.5%	0.00	Fair quality of cost evidence, use of consultancy benchmarking for run-the-business cost evidence. However, EJP justification not sufficient as several SQs required. Unit cost and volumes criterion not applicable.
Non-operational Capex: IT & Telecoms	4.7%	0.00	Fair quality of cost evidence, good outcome for qualitative assessment however limited justification of costs other than based on existing contractual pricing. Unit cost and volumes criterion not applicable.
Network Operating Costs: Operational Technology	5.3%	0.00	Fair or adequate justifications. Limited justification of efficient costs as based on RIIO-ET2 contractor quotations. Adequate justification of OpTel investments. However, several SQs required to acquire further evidence.
Load Related Capex: Local Enabling (Entry)	0.0%	0.00	Comprehensive cost evidence and high scope confidence, adequate unit cost and volume justification.
Load Related Capex: Local Enabling (Exit)	0.2%	0.04	Comprehensive cost evidence, robust justification of unit cost and volumes also evidenced in benchmarking.
Load Related Capex: Wider Works	6.1%	0.00	Comprehensive and well justified cost evidence however poor justification of efficient unit costs as evidenced by most schemes having higher costs than the benchmark.
Load Related Capex: LRE - Local Enabling (Exit - sole-use)	0.2%	0.00	Fair cost evidence and justification of efficient volumes.
Load Related Capex: LRE - Local Enabling (Exit - sole-use)	0.0%	0.00	Comprehensive cost evidence and justification of efficient unit costs, supported by benchmarking where schemes

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Bespoke Cost	Weighting	BPI reward/ penalty (bps)	Rationale
			were significantly lower than the benchmark.
Non-Load Related Capex: Replacement	19.0%	-3.79	Poor quality of cost evidence and justification of efficient unit costs. Poor justification of volumes. Engineering review scored low on optioneering scope confidence and concerns of high costs, also shown through benchmarking.
Non-Load Related Capex: Refurb Major	1.6%	0.00	Comprehensive cost evidence and adequate volumes, all schemes fully justified. Poor justification of efficient unit costs as no schemes were below the benchmark.
Non-Load Related Capex: Refurb Minor	2.6%	0.00	Comprehensive cost evidence, all schemes fully justified. Poor justification of volumes. Unit cost criterion not applicable.
Non-Load Related Capex: ESR	0.3%	0.00	Fair cost evidence and adequate volume justification, although partially justified needs cases yield concerns for scope and incremental costs. Unit cost criterion not applicable.
Non-Load Related Capex: Spares	2.1%	0.00	Fair cost evidence and adequate volume justification, although partially justified needs cases yield concerns for scope and incremental costs. Unit cost criterion not applicable.
Other Costs: Cyber Security	5.2%	0.00	Fair quality of cost evidence. Unit cost and volumes criterion not applicable.
Network Operating Costs: Data & Digitalisation	0.6%	0.11	Comprehensive cost evidence and all projects approved. Unit cost and volumes criterion not applicable.
Non-operational Capex: Data & Digitalisation	5.5%	1.10	Comprehensive cost evidence and all projects approved. Unit cost and volumes criterion not applicable.

Bespoke Cost	Weighting	BPI reward/ penalty (bps)	Rationale
Business Support: Data & Digitalisation	0.3%	0.05	Comprehensive cost evidence and all projects approved. Unit cost and volumes criterion not applicable.
Total	82%	-1.41	

Stage C

- 3.8 The below sections set out the assessment results and rationale for the Clarity and Business Plan Commitments assessments for Stage C of the BPI.

Clarity

Assessment result: 0 bps.

- 3.9 NGET's plan had mixed results in our clarity assessment and scored 'outstanding' on two criteria (layout and structure, and relevance of information) but also scored 'poor' on two criteria (the clarity of information that supports the demonstration of value to consumers, and coherence and justification). We rated the criteria for accessibility and conciseness as 'acceptable'.
- 3.10 Regarding clarity of information, Data & Digitalisation required SQs however still lacked clarity. There were several environment related examples which lacked a degree of clarity or were missing, such as no inclusion of non-SF6 emissions in IIG submissions, a portion of its operational transport commitment missing from the EAP, and a lack of transparency on Biodiversity Net Gain (BNG) costs. On coherence and justification, the plan lacked a clear thread particularly around NARM and asset management plans. There were contradictions between the load plan and non-load plan which suggested a lack of long term planning and meant that the overall plan lacked coherence in places.
- 3.11 On layout and structure, the BPDTs and EJPs were found to be well structured and clearly signposted including helpful charts and graphs and 'micro-plans' for easy and digestible reading. The relevance of information contained within engineering data and the load strategy around connections and Clean Power 2030 (CP2030) were also of a very high quality and thus marked as 'outstanding'.

Business Plan Commitments

Overall assessment result: -2.60 bps

Outcome: Infrastructure fit for a low-cost transition to net zero

Assessment result: -1.30 bps

- 3.12 NGET scored 'acceptable' across most criteria however were found to be 'poor' on the consumer value and additionality metric.
- 3.13 Our engineering assessment highlights several critical issues with the proposed use of Gas Insulated Switchgear (GIS) and the lack of justification, with its shorter lifespan and greenhouse gas impacts making it less beneficial for consumers. There is also a significant lack of clear interactions between Load Related Expenditure (LRE) and Non-Load Related Expenditure (NLRE), which are essential for ensuring project alignment and mutual support. NGET also provided a disappointing lack of detail within its losses strategy. All of these issues make it challenging for us to be confident in the consumer value that NGET's Business Plan will provide in these areas, and in some cases we have concerns regarding risk of consumer detriment.
- 3.14 Furthermore we consider that NGET's failure to have a substantial number of load projects that were at a stage of development to be ready to request RIIO-ET3 baseline funding risks creating consumer detriment. We acknowledge that there are a range of uncertainties, including connections reform, which made it challenging for all TOs to have all RIIO-ET3 load investments ready to request baseline funding in December 2024. However, we expect that all TOs should have done more to identify low/no-regret load investments to include in their load baselines, leaving fewer projects that require in-period assessment and providing greater certainty regarding network design.

Outcome: Secure and resilient supplies

Assessment result: -1.30 bps

- 3.15 NGET scored 'acceptable' across most criteria however were found to be 'poor' on the stretching performance metric. On the latter, its commitments reflect compliance with our wider engineering standards rather than strategic improvement. Overall, its committed transformation of its asset management capabilities seems to be a regression. It was the only TO to propose an ENS target different to its RIIO-ET2 target. This was initially an 8% reduction, but this was later revised by NGET to 172 MWh, a 17% increase over its RIIO-ET2 target. Workforce growth is noted, but the aim to "remain competitive" appears unambitious, given the expected demands in RIIO-ET3.

- 3.16 The other criteria were rated as 'acceptable' for a number of reasons. Its overhead line (OHL) conductor replacement and ENS incentive targets (both the original and revised targets) appear achievable, while its digital strategies suggest potential consumer savings. However, several commitments lack clarity or ambition, with some merely aligning with existing codes or Ofgem guidance. While its cyber and AI proposals are broadly acceptable, it has requested relatively high allowances and offers vague implementation details. Although NGET shows willingness to collaborate on risk methodologies and has undertaken analysis for strategic planning, inconsistent ambition and unresolved concerns from previous price controls temper confidence in its overall plan.

Outcome: High quality of service from regulated firms

Assessment result: 0 bps

- 3.17 NGET's Business Plan includes a wide range of commitments under the quality of service banner, but these are often characterised by limited ambition, vague implementation plans, and a tendency toward business-as-usual (BAU) approaches. For example, the use of the Quality of Connections Survey as a success metric against a commitment is questionable, given our SSMD position to remove the survey from RIIO-ET3. NGET stated that its stakeholder engagement commitments aim to deliver "an integrated platform that provides seamless, personalised engagement." While this could represent a meaningful improvement, especially considering stakeholder concerns on this topic in response to our Call for Evidence, the lack of rigour and clarity in execution plans weakens confidence in its impact. The same applies to the SO:TO interface commitment, which discusses broadening incentives but provides no concrete metrics or delivery mechanisms, appearing to meet only minimum expectations. Internal diversity targets compare favourably to sector averages, but these are largely inward facing rather than offering direct financial consumer value.

Questions

- | | |
|---------|--|
| NGETQ2. | Do you agree with our view that NGET passed all of the minimum requirements and has passed Stage A of the BPI? |
| NGETQ3. | Do you agree with our assessment results for NGET against Stage B of the BPI? |
| NGETQ4. | Do you agree with our assessment results for NGET against Stage C of the BPI? |

4. Managing uncertainty

- 4.1 This chapter sets out our views on UMs that are specific to NGET, including bespoke UM proposals submitted through its Business Plan.

UMs we propose to accept

NESO Separation Re-opener

Purpose: To enable NGET to recover potential costs from the separation of NESO from the National Grid Group.

Benefits: Opportunity for NGET to recover efficient costs incurred following NESO separation.

Background

- 4.2 The NESO became operationally independent from National Grid Group on 1 October 2024. Nonetheless, NESO will rely on National Grid back-office, operational and property services under commercial agreements until October 2026, resulting in consequential costs for NGET. These costs may arise because the NESO will no longer utilise the National Grid Group shared services function, generating consequential costs for NGET.

Consultation position and rationale

Summary of consultation position

UM type: Re-opener.

Scope: Recover any efficiently incurred costs due to separation from NESO.

Re-opener window: April 2027.

Trigger: TO trigger.

Additional requirements: We expect NGET to demonstrate proactiveness in mitigating the impact of consequential costs underpinned by a clear, detailed plan. We also expect NGET to clearly set out the need for consequential costs in addition to those within the scope of the recovery mechanism implemented for RIIO-ET2.⁶

- 4.3 Given the uncertainty on the level of future consequential costs and the extent to which these can be mitigated, we agree with NGET's proposal for a re-opener.

⁶ [Funding National Grid's consequential costs from the separation of the Electricity System Operator | Ofgem](#)

NGETQ5. Do you agree with our proposal to introduce and proposed design of a NESO Separation re-opener?

Property Re-opener

Purpose: To enable NGET to seek funding for efficient costs for investments related to its property portfolio.

Benefits: Provides a range of opportunities for NGET to make its property function more efficient.

Background

4.4 NGET is considering a range of training and development, workspace and logistics investments for which we require more clarity on need, optioneering and cost.

Consultation position and rationale

Summary of consultation position

UM type: Re-opener.

Re-opener window: April 2028 to March 2029

Trigger: TO trigger

Scope: Will cover the following applicable projects: Eakring Training Centre; substation building interventions; training and development; and workspace and logistic investments.

Additional requirements: We expect NGET to provide clear need, optioneering and scoping information in its consultation response. This will be used to evaluate any changes to the proposal ahead of Final Determinations.

4.5 Given the high level of uncertainty around the range of these property related investments, we propose to introduce a re-opener mechanism.

Questions

NGETQ6. Do you agree with our proposal to introduce and proposed design of the Property re-opener mechanism?

Generation and Demand Connections Volume Driver

4.6 TOs are required to provide connection offers within specific timeframes and ensure the transmission network meets technical standards. Customers

connecting to the network are either generators or demand users. Generation connections often necessitate substation upgrades and network reinforcements, while demand connections may involve new infrastructure at Grid Supply Points (GSPs). Given the customer-driven nature of these projects, future investment needs are uncertain.

- 4.7 To manage this, we propose to retain and update the volume driver mechanism used in previous price controls for projects with uncertain needs but predictable, repeatable, and measurable work, allowing revenue adjustments based on actual connection volumes. Table 9 sets out our proposed unit rates for NGET.

Table 9 Generation and Demand Connections Volume Driver modelled unit costs (£k/#, 2023/24 prices)

Volume driver component	Unit cost (£m)
Substation - generation	[REDACTED]
Substation - demand	[REDACTED]
OHL - new	[REDACTED]
OHL reconductor	[REDACTED]
Cable <1km	[REDACTED]
Cable >=1km	[REDACTED]

NGETQ7. Do you agree with our proposed unit rates?

5. Cost of service

5.1 This chapter sets out our Draft Determinations on baseline allowances for the different cost areas within NGET's Business Plan submission and summarises our review of the Engineering Justification Papers (EJPs).

Baseline allowances

5.2 Baseline totex referenced in this chapter comprises of forecast controllable costs and is inclusive of our proposed ongoing efficiency challenge. The figures presented in this chapter do not include Real Price Effects (RPEs) to allow comparisons with TOs' submissions which were exclusive of RPEs. They also do not include ex ante funding such as UIOLI allowances, pass-throughs or NIA (for NGET's overall ex ante funding, see Table 1).

5.3 Table 10 compares NGET's submitted baseline totex with our Draft Determinations position at a disaggregated cost activity level.

Table 10 Submitted versus proposed allowed baseline Totex (£m, 2023/24 prices)

Cost area	NGET submitted totex	Ofgem proposed totex	Difference (£m)	Difference (%)
Load related capex	340	244	-96	-28%
Non-load related capex	1,610	1,002	-608	-38%
Non-operational capex	665	530	-135	-20%
Network operating costs	1,620	1,013	-607	-37%
Business support costs	576	516	-60	-10%
Closely associated indirects	707	652	-55	-8%
Other costs	309	292	-17	-6%
Baseline totex	5,827	4,249	-1,579	-27%

Engineering assessment of NGET's business plan

Plan Quality

- 5.4 NGET's EJP submissions are generally high quality with large amounts of supporting evidence and data. NGET provided EJPs utilising all EJP options in our guidance.
- 5.5 NGET's narrative-based EJPs are not standardised which has made carrying out our assessment more difficult. The evidence and data which NGET has provided in these has, at times, been contradictory with its other EJPs and asset data. Where this has occurred, the outcome has been that optioneering is assessed as Partially or Not Justified.

Thematic Issues

Overview

- 5.6 In this section we set out four thematic issues identified with NGET's EJP submissions. These are common issues which multiple EJPs did not address adequately. A more detailed review of NGET's EJPs is in Appendix 1.
- 5.7 Where we have found elements to be Partially or Not Justified we welcome NGET's additional information in its consultation response to address these issues. We have set out from paragraph 5.26 some additional information that we would find useful for our assessments.

Investment Triggers in NLRE

- 5.8 We have been unable to reconcile NGET's NLRE investment proposals with the End of Life (EoL) and/or NARM scorings for the relevant assets. Where NGET has proposed replacement of assets with a good EoL score and/or NARM without providing a justification, we have removed these volumes from NGET's allowance. For example:
- NGET proposes to replace a Circuit Breaker with a poor EoL score (90 from 100), and this replacement is broadly in line with our expectations. This is likely to be a justified intervention.
 - NGET proposes to replace a Circuit Breaker listed as being in good condition, with an EoL score of 2 from 100. We consider this replacement to be inefficient, and is likely to be a not justified intervention.
 - NGET has not proposed to replace assets which have poor condition (ie high EoL scores), nor has NGET proposed any site strategy to intervene.

- 5.9 These decisions all taken together suggest a lack of clarity about the approach NGET has taken in deciding its intervention and we would welcome further detail from NGET on its approach.
- 5.10 Additionally, our assessments of NGET's EJPs have relied on the EoL score, rather than the NARM score. The relationship between the EoL and NARM scorings are unclear to us, and we believe that the EoL is the most robust data point in this instance – we welcome engagement from NGET to clarify these relationships.

Site Strategies

- 5.11 We are largely supportive of NGET's approach to site strategies. It covers a range of EJP types with some being Major Projects and others being NESO driven. NGET's optioneering approach is often limited in its justification for the solutions proposed, we are therefore not able to assess this as justified at this stage.
- 5.12 The interaction between NLRE and LRE also presents issues when considering the investment efficacy. Specifically, NGET's approach to why sites are either in, or not in, site strategies is unclear. For example:
- Some sites have a range of assets which have high EoL scores generally and it is justifiable that a major replacement is undertaken.
 - However, some sites are being neither replaced nor reconfigured, despite a range of high EoL scores for assets and an operationally limited electrical arrangement in-service.
 - Conversely, there are sites which despite relatively low EoL scores for assets are being proposed for replacement.
- 5.13 These examples all taken together suggest a lack of clarity about the approach NGET has taken and as a result we recommend that either the needs case or optioneering for some works are partially or not justified.
- 5.14 Where baseline funding has been requested in relation to a site strategy that we have determined to be partially or not justified, we propose reduced allowances depending on the type of funding requested. We will continue to review the interaction between the portfolio EJPs and the site strategies through the RIIO-ET3 period.

Increasing Use of GIS

- 5.15 We have been concerned by NGET's increasing use of GIS throughout the course of RIIO-ET2 and this concern continues into RIIO-ET3. NGET has regularly

specified GIS for projects in its EJPs without sufficient justification or evidence for why alternative insulating technology is not appropriate.

- 5.16 We expect all TOs to undertake thorough optioneering to ensure their solutions are economic and efficient. In some cases NGET's optioneering is not clear. This is because there are, on occasions, conflicting statements and approaches in the EJPs including: comparing Air Insulated Switchgear (AIS) and GIS life spans; the approach used for CBA; and cost breakdowns. This lack of clarity has impacted our optioneering assessment. Our feedback on individual assessments is given in Appendix 1 to demonstrate where our review has found a range of sites which the optioneering is either partially or not justified.

Interactions with Accelerated Strategic Transmission Investment (ASTI) projects

- 5.17 Several of the proposed investments within NGET's Business Plan interact directly with ongoing network upgrades underway as part of ASTI. The EJPs do not explicitly explain how the proposed investments interact with the ASTI programme, in terms of whether the upgrades are to work alongside ASTI or if they are required to support delivery of the ASTI scheme and output. It has therefore been difficult to ascertain whether these are investments that should be funded within the RIIO-ET3 baseline.
- 5.18 Typically, we would expect that projects that are integral to the delivery of the ASTI output should be included in the related ASTI submissions rather than in the RIIO-ET3 EJPs. With this in mind, we encourage NGET to ensure there is a clearer articulation of exactly how these investments interact with ASTI schemes, whether they are required to deliver the full benefit of an ASTI scheme, and why the relevant funding should sit outside of the ASTI framework.
- 5.19 Some ASTI projects are in the development phase, meaning their exact technical design remains uncertain at this point in time. Where proposed investments in RIIO-ET3 interact with these projects, it is important that there is consistency in the assumed design of the related ASTI projects. As such, we encourage NGET to ensure that submissions for RIIO-ET3 are clear on any interaction with project submissions under ASTI and each are clearly and consistently articulated and justified to ensure consumer benefits are maximised.
- 5.20 We will continue to monitor and engage on these issues through the course of RIIO-ET3.

Assessment

- 5.21 In the ET sector, due to the different types of EJP used we do not refer to EJPs as our standard terminology, instead we refer to Ofgem Scheme References (OSRs) which makes the integration of our engineering assessment into the cost assessment process more transparent. This means that our assessment is on a per OSR basis as opposed to per EJP⁷ basis.
- 5.22 We reviewed 1703 OSRs from NGET,⁸ this equates to roughly £6bn of planned ET3 expenditure and covered both baseline and re-opener requests. The majority of the OSRs are contained within Portfolios and Major Projects EJPs.
- 5.23 Following our technical review and analysis, we found that Needs Case, Optioneering, and Scope Confidence for 774 of the OSRs we reviewed were fully justified. This represents 62% of all OSRs which were requested as baseline funding. We have not commented further on these OSRs, which are recommended for approval in our Draft Determinations.
- 5.24 In our review, we found that the Needs Case of 905 OSRs were fully justified,⁹ and 115 were partially justified, and 683 were unjustified. The Optioneering of 894 OSRs were fully justified, 125 were partially justified, and 683 were unjustified. The Scope Confidence of 807 EJPs was high, 287 was medium, and 586 EJPs was low.
- 5.25 The funding outcomes of our engineering assessments can be found the PAM models issued to TOs.

Consultation Response

- 5.26 To ensure that we are clear on the benefits of NGET's existing plan we have detailed our expectations for NGET's consultation response.
- 5.27 For NLRE investments:
- If NGET could provide more detail on its asset investment plan, we can better understand its investment triggers and concerns over potential gaming or diluting of the NARM incentive. This would avoid a range of our concerns regarding NGET's ability to outperform NARM in an unjustified manner.

⁷ Individual EJPs may have multiple OSRs and so where we do reference an EJP it is to minimise the administration on listing all applicable OSRs.

⁸ See Chapter 5 of the ET annex for an explanation of OSRs and our overall EJP assessment process.

- If NGET can provide more clarity or propose a different UM for its pipeline works this may enable a more expedient regulatory process.
- To ensure overall network availability it would be beneficial for NGET to highlight how they intend to manage the high-risk assets that are not being proposed for intervention on its network.

5.28 For Major Projects:

- If NGET could provide further and improved justification of their proposed GIS usage in its major projects this would minimise our concerns around future impacts.
- We expect NGET to improve the justification for the proportion of GIS usage in its major projects.
- We want NGET to provide us with an overview document that details its usage of GIS as a percentage of new build substation investments from 2020 through to the current RIIO-ET3 Business Plan. This would benefit from a wider narrative regarding GIS usage for newbuild substations and NGET's commitments for future extendibility of GIS equipment, outage implications, Whole Life Costs and Original Equipment Manufacturer (OEM) tie-in risks.
- To assist further in limiting our engineering concerns regarding the balance between the AIS and GIS in NGET's optioneering. We expect NGET to provide robust cost assurances against AIS equivalents and separately explanations for those EJPs that do not currently have AIS costs in its solutions.
- To ensure that NGET is working to minimum scheme requirements, if NGET could explain at a portfolio level why it has proposed the socialised use of GIS to meet connection timescales it would help us to understand how this impacts NGET's connections strategy and consumers.

5.29 There are other investments that are confidential and we will engage with NGET directly to provide us with additional information which evidences long-term consumer cost efficacy.

Questions

NGETQ8. Do you agree with our position on not providing funding for the non-load replacement of healthy assets?

NGETQ9. Do you agree with our requirement for clarity and consistency in optioneering assessments and underlying assumptions when considering asset health and GIS use for Site Strategies?

NGETQ10. What are your views on our engineering assessment of NGET's Business Plan?

6. Innovation

Background

- 6.1 The SSMD, Business Plan Guidance and Overview Document identify the criteria and process that we have used to assess NIA funding requests. The Overview Document also details our proposals for NIA oversight, the SIF, increasing third party involvement and innovation deployment.
- 6.2 We set out below our Draft Determinations on NGET's RIIO-3 NIA funding.

Consultation position and rationale

Level of Network Innovation Allowance (NIA) funding: In its Business Plan, NGET requested £135m of NIA funding. Following our assessment, we propose to award £117.5m.

- 6.3 Innovation Strategy: Overall, we found that NGET had an ambitious and well-justified innovation strategy fit for the net zero transition. Its strategy is focused around accelerating customer connections, building the future network, improving resilience and enhancing sustainability, and it provided evidence of how it was rolling out previous innovation and incorporating it into its BAU activities.
- 6.4 NIA Workstreams: We deducted £3m from NGET's request in relation to its workstream "SF6 projects". Based on the evidence provided, we were not convinced that this area required further innovation funding, due to other incentives within the RIIO-3 framework to reduce SF6 emissions and previous funding that has been given in this area.
- Business Plan Assessment: After assessing NGET's Business Plan against the criteria set out in the Business Plan Guidance (paragraph 3.13), it was scored against each of these based on whether it had provided sufficient evidence to justify the amount of NIA it was requesting. Based on NGET's score, we decided to further reduce its NIA award by 11%. From the criteria, we expected additional detail to be given in the following areas:
 - How activities will be delivered: NGET lays out its internal process for delivering innovation activities at a high level. It identifies areas where it will improve its delivery in RIIO-3, but we would expect more detail on how activities will be delivered and the process of taking an innovation from ideation to deployment.

- Ensuring no duplication: NGET explains at a high level how it will work to avoid duplication, but we would expect more detail to be given here on the exact processes they have in place and how they work in practice to ensure that no duplication occurs.
- Proposals to disseminate: NGET gives examples of dissemination events it held in 2024 and also states that it will review its dissemination work in RIIO-3. We would expect more detail here, and this is also an area where NGET's Independent Stakeholder Group identified that more work needs to be done.
- An explanation of why the innovation in question cannot be funded from the Totex allowance: NGET outlines multiple reasons as to why, at a portfolio level, activities cannot be funded by its Totex allowance, but has not explained this at a workstream level as required in the Business Plan Guidance.

Questions

NGETQ11. Do you agree with the level of proposed NIA funding for NGET?
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7. Data and Digitalisation

Introduction

- 7.1 The SSMD, Business Plan Guidance and Overview document identify the criteria and process that we have used to assess the funding of proposed data and digitalisation investments. The Overview document also details our proposals for further digitalisation of the sector through the existing Digitalisation licence condition, a proposed Data Sharing Infrastructure (DSI) licence condition, and a Digitalisation Re-opener.
- 7.2 We have set out below our Draft Determinations on NGET's RIIO-3 data and digitalisation funding.

Summary of consultation position

Level of data and digitalisation funding: In its Business Plan, NGET requested £322.5m in funding. We identified £0.67m of investments as miscategorised, which should have been IT and Telecoms. This left £321.9m in data and digitalisation funding requested. Following our assessment, we propose to award £315.0m, or 98% of the total data and digitalisation funding requested.

Consultation position and rationale

- 7.3 NGET proposed an ambitious suite of investments that fed into a wider strategy of enabling smarter network operation and management, upgrading and utilising infrastructure more efficiently, and building a digital culture. These investments will benefit consumers as they support a more efficient, resilient and innovative system.
- 7.4 NGET evidenced its compliance and ambitions for the Data Best Practice Principles, as an appendix to its Digitalisation Strategy and Action Plan (DSAP). It also noted where investments ensured continued or increased compliance with the principles. These principles ensure that data is managed in a way that maximises value, transparency, and trust, and enables the full benefits of data to be unlocked for consumers.
- 7.5 In the Business Plan Guidance we noted that all licensees should signpost investments that would allow them to connect and utilise the Data Sharing Infrastructure (DSI) effectively. During the assessment period for business plans, we have published our decision on governance of the DSI.¹⁰

¹⁰ [Governance of the Data Sharing Infrastructure | Ofgem](#)

- 7.6 In its 'Enabling Data' EJP, NGET outlined its vision of connecting its Data Fabric to the DSI for seamless integration, and more broadly how the DSI was a priority area. Many of NGET's proposed investments additionally plan to utilise or are linked to the DSI. We are confident that the proposed investments being made by NGET will allow them to effectively connect to and utilise the DSI. These investments will provide consumer benefits as the DSI will support innovation by making data more accessible, and improve NGET's understanding and visibility of energy system data.
- 7.7 We are not awarding £6.87m of NGET's proposed Data and Digitalisation investments. This represents 2.1% of the total £321.9m requested. Our rationale for this reduction is below:
- NGET proposes an investment of £4.52m in Cost and Estimation Management tools. NGET has existing cost and estimation tools referenced in its March 2024 DSAP, and the project description does not include sufficient detail explaining why this additional investment is needed. We consider this discovery investment more appropriate for re-opener funding.
 - NGET proposes an additional investment of £2.35m in Resource Management. This tool aims to optimise siloed systems into one place, but the project description is too vague to understand how this will work, and which software or solutions will be used. We therefore do not consider the justification provided was sufficient to assess whether this investment is proportional.
- 7.8 We consider that an additional £0.67m of proposed investment was miscategorised as Data and Digitalisation investment. This relates to NGET's Site Comms project, which requires investment in hardware and technologies that will enable digitalisation but are more suited as IT&T investments as they primarily involve upgrading NGET's IT estate.

Questions

NGETQ12. Do you agree with our proposed level of funding for NGET's data and digitalisation investments?
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8. Your response, data and confidentiality

All proposals published as part of these documents are draft proposals, subject to consultation. We will publish our decisions on the RIIO-3 price controls in our Final Determinations later this year. We will implement our Final Determinations by modifications to the companies' licence conditions, after further consultation on licence drafting.

Consultation stages

- 8.1 Table 11 below sets out the key stages for this consultation and how we will progress from Draft Determinations to Final Determinations

Table 11: Consultation Stages

Stage	Date
Consultation Open	01/07/2025
Consultation closes (awaiting decision). Deadline for responses	26/08/2025
Final Determinations (including publication of consultation responses)	Winter 2025

How to respond

- 8.2 We want to hear from anyone interested in this consultation. Please send your response to RIIO3@ofgem.gov.uk.
- 8.3 We've asked for your feedback in each of the questions throughout. Please respond to each one as fully as you can.
- 8.4 We will publish non-confidential responses on our website at www.ofgem.gov.uk/consultations.

Your response, your data and confidentiality

- 8.5 You can ask us to keep your response, or parts of your response, confidential. We'll respect this, subject to obligations to disclose information, for example, under the Freedom of Information Act 2000, the Environmental Information Regulations 2004, statutory directions, court orders, government regulations or where you give us explicit permission to disclose. If you do want us to keep your response confidential, please clearly mark this on your response and explain why.
- 8.6 If you wish us to keep part of your response confidential, please clearly mark those parts of your response that you *do* wish to be kept confidential and those

that you *do not* wish to be kept confidential. Please put the confidential material in a separate appendix to your response. If necessary, we'll get in touch with you to discuss which parts of the information in your response should be kept confidential, and which can be published. We might ask for reasons why.

- 8.7 If the information you give in your response contains personal data under the General Data Protection Regulation (Regulation (EU) 2016/679) as retained in domestic law following the UK's withdrawal from the European Union ("UK GDPR"), the Gas and Electricity Markets Authority will be the data controller for the purposes of GDPR. Ofgem uses the information in responses in performing its statutory functions and in accordance with section 105 of the Utilities Act 2000. Please refer to our Privacy Notice on consultations, see Appendix 4.
- 8.8 If you wish to respond confidentially, we'll keep your response itself confidential, but we will publish the number (but not the names) of confidential responses we receive. We won't link responses to respondents if we publish a summary of responses, and we will evaluate each response on its own merits without undermining your right to confidentiality.

General feedback

- 8.9 We believe that consultation is at the heart of good policy development. We welcome any comments about how we've run this consultation. We'd also like to get your answers to these questions:
1. Do you have any comments about the overall process of this consultation?
 2. Do you have any comments about its tone and content?
 3. Was it easy to read and understand? Or could it have been better written?
 4. Were its conclusions balanced?
 5. Did it make reasoned recommendations for improvement?
 6. Any further comments?

Please send any general feedback comments to stakeholders@ofgem.gov.uk

How to track the progress of the consultation

You can track the progress of a consultation from upcoming to decision status using the 'notify me' function on a consultation page when published on our website. Choose the notify me button and enter your email address into the pop-up window and submit.

[ofgem.gov.uk/consultations](https://www.ofgem.gov.uk/consultations)

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Would you like to be kept up to date with *Consultation* name will appear here? subscribe to notifications:

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Submit >

Once subscribed to the notifications for a particular consultation, you will receive an email to notify you when it has changed status. Our consultation stages are:

Upcoming > **Open** > **Closed** (awaiting decision) > **Closed** (with decision)

Appendix 1 – Summary of Engineering Review

- A1.1 The table below provides details on the EJPs/OSRs that we propose to reject, or approve with reduced allowances. It also provides our view of a number of EJPs/OSRs in which our recommendations have not impacted any funding requests.
- A1.2 For Portfolio EJPs there are a large number of assets contained within each EJP which have requested interventions. In our review, some of the assets contained within the EJP will have both the needs or optioneering outcome as justified and these will have been included in the PAM model. However, within this portfolio some will be not justified or partially justified. Therefore, most portfolio EJPs will have an outcome of Partially Justified reflecting this diversity of outcome at an individual asset level. In each portfolio review we have not broken out the individual assets in the table due to the sensitive nature of the asset data included.
- A1.3 Broadly for those Portfolio Assets which are included as justified, this is generally as the EoL score has met our thresholds. We have not discussed these assets in line with our position to not discuss EJPs, which are fully justified.
- A1.4 For those which are not justified, to enable our review to consider these as justified, NGET will need to provide clearer information on its investment triggers.

Table 1: Summary of NGET Engineering Recommendations

EJP reference / OSR	Needs Case	Optioneering	Scope Confidence	Comments
SGT_Portfolio (Spanning multiple OSRs)	Partially Justified	Partially Justified	Partially Justified	<p>The needs case for NGET's SGT replacement portfolio is partially justified, which is due to the outcomes of our assessments across the OSRs being a mixture of justified, partially justified, and not justified.</p> <p>We consider that some of the Super Grid Transformers (SGTs) within this Portfolio EJP are justified, with a clear trigger for intervention.</p> <p>Others are not justified or partially justified due to lack of a clear trigger for intervention on an asset health basis. There are also some assets without proposed interventions, despite their high EoL scores, suggesting that intervention might be necessary. We have identified similar issues within the portfolio, including for assets which we believe to be under warranty, those which were previously funded under RIIO-ET1 or RIIO-ET2 and those which are now part of ASTI schemes.</p> <p>Our consultation position is reflected in the PAM output. For us to assess NGET's needs case as justified we require further information on, but not limited to, asset health triggers, interactions with ASTI and warranty disputes with the OEM.</p>
Circuit_Breaker_Portfolio (Spanning multiple OSRs)	Partially Justified	Partially Justified	Low Confidence	<p>The needs case for NGET's CB replacement portfolio is partially justified as there is not a clear trigger for intervention on an asset health basis in NGET's proposal.</p> <p>We consider that some of the of Circuit Breakers (CB) within this Portfolio EJP are justified.</p> <p>NGET's EoLs and NARM scoring is unclear in supporting a trigger point for investment for several CBs. It is difficult to decipher why certain assets are being intervened on now, and why others, including those with higher EoL scores, are omitted. There is a lack</p>

EJP reference / OSR	Needs Case	Optioneering	Scope Confidence	Comments
				<p>of justification and clarity regarding obsolescence and it does not appear to be reflected in the EoL score.</p> <p>Our consultation position is reflected in the PAM output. For us to assess NGET needs cases as justified we require further information on, but not limited to, asset health triggers, treatment of obsolescence, treatment of supporting data.</p>
OHL Fittings Portfolio (Spanning multiple OSRs)	Partially Justified ¹¹	Partially Justified	Medium-Low Confidence	<p>The needs case for NGET's OHL Fittings replacement portfolio is partially justified as we are not clear from NGET's proposal on the trigger for intervention on an asset health basis.</p> <p>There has been a range of Fittings interventions within this Portfolio EJP which we consider are justified. NGET states in its proposal that circuit candidates for its OHL fittings programme were chosen where one or more of the fittings groups (spacers, dampers, insulators or fittings) has an EoL score of greater than 70 by the end of RIIO-ET3.</p> <p>However, the EoL score of insulators that do not have a sacrificial Zinc Collar are automatically uprated to maximum EoL. We understand this to be a family type modifier to the EoL, which in general we find a suitable way of managing family type issues. There is however a concern that this practice is not used in other asset classes and as such we are unclear why it is used here. In many cases, this is what appears to trigger inclusion of a proposed circuit in NGET's proposed OHL fittings programme. NGET has not sufficiently evidenced the need to replace insulators that do not have a sacrificial Zinc Collar.</p> <p>NGET proposed a mix of full and partial fittings replacements across different circuits. In many cases, the other fittings assets proposed</p>

¹¹ We note that the Needs Case, Optioneering and Scope Confidence were assessed on an OSR by OSR basis and differ across the OHL Portfolio (Fittings) OSRs listed in this table. For simplicity, we have presented an aggregated view of our assessment on these OSRs.

EJP reference / OSR	Needs Case	Optioneering	Scope Confidence	Comments
				<p>to be included within the replacement programme are reported to be healthy, or have only low numbers of assets that would be deemed suitable for replacement based on their EoL scores. NGET has not adequately justified why full circuit replacement of fittings assets are required or economical. We consider there to be a high cost for these replacements due to appreciable early asset write offs.</p> <p>Our consultation position is reflected in the PAM output. For us to assess NGET needs cases as justified we require further information on, but not limited to, asset health triggers, treatment of Zinc Coating issues, clarification over the intervention of healthy assets.</p>
<p>Instrument_Transformers_(Combined CTs/VTs)</p> <p>(Multiple OSRs across the non-lead portfolio)</p>	Partially Justified	Partially Justified	High - Low Scope Confidence	<p>The needs case for NGET's Current Transformers/Voltage Transformers (CT/VT) replacement portfolio is partially justified as we are not clear on the trigger for intervention on an asset health basis.</p> <p>There has been a range of instrument transformers (combined CTs/VTs) within this Portfolio EJP which we consider are justified.</p> <p>A recurring theme for instrument transformers (IT) replacements across multiple substations we have observed is assets of the same asset family & model with no supporting data being requested for replacement. We are unclear if these assets are separate phase assets and NGET are approaching works on a circuit level. Regardless, this has resulted in assets being considered not justified on need for intervention, at this stage.</p> <p>Our consultation position is reflected in the PAM output. For us to assess NGET needs cases as justified NGET need to provide additional information on why its replacement of what appear to be healthy assets is appropriate.</p>

EJP reference / OSR	Needs Case	Optioneering	Scope Confidence	Comments
Instrument_Transformers_(CTs) (Multiple OSRs across the non-lead portfolio).	Partially Justified	Partially Justified	High - Low Scope Confidence	<p>The needs case for NGET's Current Transformers (CT) replacement portfolio is partially justified as we are not clear on the trigger for intervention on an asset health basis.</p> <p>There have been a range of Instrument Transformers (CTs) within this Portfolio EJP which are justified.</p> <p>A recurring theme for Instrument Transformers (CTs) replacements across multiple substations we have observed is assets of the same asset family & model with no supporting data being requested for replacement. We are unclear if these assets are separate phase assets and NGET are approaching works on a circuit level. Regardless this has resulted at this stage in assets being considered not justified on need for intervention.</p> <p>Our consultation position is reflected in the PAM output. For us to assess NGET needs cases as justified NGET need to provide additional information on why its replacement of what appear to be healthy assets is appropriate.</p>
Instrument_Transformers_(VTs) (Multiple OSRs across the non-lead portfolio).	Partially Justified - Not Justified	Partially Justified - Not Justified	High - Low Scope Confidence	<p>The needs case for NGET's Voltage Transformers (VT) replacement portfolio is partially justified as we are not clear on the trigger for intervention on an asset health basis.</p> <p>There has been a range of Instrument Transformers (VTs) within this Portfolio EJP which are justified. A recurring theme for VT replacements across multiple substations was that it is hard to understand why certain assets are being replaced and why some are omitted as there was no supporting data to show what the investment trigger is.</p> <p>Our consultation position is reflected in the PAM output. For us to assess NGET's needs cases as justified, NGET need to provide additional information on why its replacement of what appear to be assets is appropriate.</p>

EJP reference / OSR	Needs Case	Optioneering	Scope Confidence	Comments
Protection & Control_Portfolio (Multiple OSRs across the non-lead portfolio).	Partially Justified - Not Justified	Partially Justified - Not Justified	High - Low Scope Confidence	<p>The needs case for NGET's protection and control replacement portfolio is partially justified, as we are not clear on the trigger for intervention on an asset health basis.</p> <p>There has been a range of Protection and Control (P&C) interventions within this Portfolio EJP which are justified. A recurring theme for P&C replacements across multiple substations was that it is hard to understand why certain assets are being replaced and why some are omitted as there was no supporting data to show what the investment trigger is.</p> <p>Our consultation position is reflected in the PAM output. For us to assess NGET needs cases as justified NGET need to provide additional information on why its replacement of what appear to be healthy assets is appropriate.</p>
Reactive_Compensation_Portfolio (NGNLT30004 & Pipeline Scheme)	Partially Justified - Not Justified	Partially Justified - Not Justified	High - Low Scope Confidence	<p>The needs case for NGET's reactive compensation devices replacement portfolio is partially justified as we are not clear on the trigger for intervention on an asset health basis.</p> <p>There has been a range of reactive compensation interventions within this Portfolio EJP which are justified.</p> <p>A recurring theme for reactive compensation replacements across multiple substations was that it is hard to understand why certain assets are being replaced and why some are omitted as there was no supporting data to show what the investment trigger is.</p> <p>Our consultation position is reflected in the PAM output. For us to assess NGET needs cases as justified NGET need to provide additional information on why its replacement of what appear to be healthy assets is appropriate.</p>
Substation_Overheads_Portfolio	Not Justified	Justified	Medium Confidence	<p>The needs case for NGET's substation overheads replacement portfolio is partially justified as we are not clear on the trigger for intervention on an asset health basis.</p>

EJP reference / OSR	Needs Case	Optioneering	Scope Confidence	Comments
(NGNLT30000 & Pipeline Scheme)				<p>There has been a range of overhead within this Portfolio EJP which are justified. A recurring theme for substation overheads replacements across multiple substations was that it is hard to understand why certain assets are being replaced and why some are omitted as there was no supporting data to show what the investment trigger is.</p> <p>Our consultation position is reflected in the PAM output. For us to assess NGET needs cases as justified NGET need to provide additional information on why its replacement of what appear to be healthy assets is appropriate.</p>
Through_Wall_Bushings_Portfolio (NGNLT30001 & Pipeline Scheme)	Partially Justified	Justified	Medium Confidence	<p>The needs case for NGET's through-wall-bushings replacement portfolio is partially justified as we are not clear on the trigger for intervention on an asset health basis.</p> <p>There has been a range of through-wall-bushings within this Portfolio EJP which are justified. A recurring theme for through-wall-bushings replacements across multiple substations was that it is hard to understand why certain assets are being replaced and why some are omitted as there was no supporting data to show what the investment trigger is.</p> <p>Our consultation position is reflected in the PAM output. For us to assess NGET needs cases as justified NGET need to provide additional information on why its replacement of what appear to be healthy assets is appropriate.</p>
Substation_Cables_Portfolio (Pipeline Scheme)	Not Justified	Not Justified	Low Confidence	<p>The needs case for NGET's cable replacement portfolio is partially justified as we are not clear on the trigger for intervention on an asset health basis.</p> <p>There have been a range of cable assets within this Portfolio EJP which are justified. A recurring theme for cable replacements across multiple substations was that it is hard to understand why certain</p>

EJP reference / OSR	Needs Case	Optioneering	Scope Confidence	Comments
				<p>assets are being replaced and why some are omitted as there was no supporting data to show what the investment trigger is.</p> <p>Our consultation position is reflected in the PAM output. For us to assess NGET's needs cases as justified NGET need to provide additional information on why its replacement of what appear to be healthy assets is appropriate.</p>
CC Portfolio	Not Justified	Not Justified	Low Confidence	<p>The needs case for NGET's Customer Connections portfolio is Not justified as we are not clear when the needs case is or is not related to customer connections and when the needs case is driven by asset health.</p> <p>The optioneering is Not Justified because the level of detail provided is not sufficient for us to understand with enough clarity as to why the proposed options are appropriate.</p> <p>We consider some of the substation proposals within this EJP to be underdeveloped and should have been submitted with a more detailed cost and scope breakdown than what is presently provided.</p> <p>We support the development of the projects in this portfolio and propose that these projects are brought forward via an appropriate uncertainty mechanism when the need crystallises and they are developed to the point where funding is required to undertake pre-construction activities. We note that this EJP covers a CAI allowance as such our review has not been included in the PAM modelling.</p>
Energy Efficiency Applicable reporting table in BPDT: 9.17 Environmental Action Plan	Not Justified	Not Justified	Low Confidence	<p>The needs case for NGET's energy efficiency programme is not justified as we are not certain there is a robust implementation plan and that given the limited cost data we are unclear on the cost to benefits relationship.</p> <p>The optioneering is not justified as there is insufficient evidence to support the different options presented. This mainly related to the</p>

EJP reference / OSR	Needs Case	Optioneering	Scope Confidence	Comments
				<p>inability to link the site, the options selected and what the benefits would be at that site of those options should then be delivered.</p> <p>We understand that, in a licensee of the scale of NGET, there will be a few energy efficiency works which would bring consumer benefit if correctly evidenced. At a portfolio level NGET have not adequately assessed the long-term implications of its proposal with respect to substation LVAC supplies or possible future emissions of heat pump refrigerant gas. Furthermore, NGET's solar PV proposals appear costly with respect to good industry benchmarks for solar installation as a £/kWp installed.</p> <p>Our consultation position is reflected in the PAM output. For us to assess NGET needs cases as justified, NGET need to provide a clear list of the intervention proposed for each of the [REDACTED] sites individually. Furthermore, a more detailed cost breakdown for rooftop PV at substations with the expected benefit of that installation per substation. As well as a clearer risk mitigation strategy for where LVAC panel boards will require uprating for new ASHPs and solar additions and the impacts this will have on site supplies under emergency conditions.</p>
Enhanced Ratings Strategy No OSR: funding request via the STCP 11.4 process and the SO:TO incentive.	Partially Justified	Partially Justified	Medium Confidence	<p>The needs case for NGET's enhanced ratings strategy is partially justified because the benefits of these interventions are sometimes unclear given there appears to be overlap on the indicative circuits listed for dynamic line ratings (DLR), and those in ASTI or other projects.</p> <p>Generally, we support the needs case for installing monitoring equipment and establishing the associated systems and processes to provide Enhanced Rating into the NESO Control Room as the consumer benefits in the round are far greater than lifetime costs. We are unclear as to why, with a target list from NESO that NGET have not requested baseline funding.</p>

EJP reference / OSR	Needs Case	Optioneering	Scope Confidence	Comments
				<p>As noted, NGET did not submit any BDPT lines or costs for this programme; hence no allowances can be provided in our draft determinations. As part of our ET sector considerations, we have asked for feedback on our proposed incentivisation of SO:TO activities, including the use of DLR.</p> <p>We propose to discuss this matter with NGET and the other TOs to establish a firm proposal at Final Determinations to ensure DLR initiatives are progressed at pace.</p>
<p>ET Submetering Project</p> <p>Applicable reporting table in BPDT: NOC Other 8.7</p>	Partially Justified	Not Justified	Low Confidence	<p>The needs case for NGET's submetering strategy is partially justified due to the lack of survey data and implementation plan.</p> <p>The Optioneering is Not Justified on account of the limited detail provided around sites and the costs of the installation.</p> <p>NGET is proposing linking all its substation sites across England & Wales onto a centralised EMS platform. However, only four trial sites have had a metering survey. Further site surveys may find that the assumptions which are presented are limited. It is unclear if existing LV infrastructure will be able to facilitate these works.</p> <p>Our consultation position is reflected in the PAM output. For us to assess NGET's needs cases as justified, NGET needs to provide sufficient evidence on how the presently metered sites will be incorporated into a new EMS platform.</p> <p>We also require a clearer optioneering on a per site basis to enable our further review.</p>
Network Operability & Reactive Compensation	Partially Justified	Not Justified	Low Confidence	<p>The needs cases for NGET's Network Operability & Reactive Compensation EJPs are partially justified due to a lack of clarity around the licensee or NESO responsibility for the works. We are concerned that in approving these works this may impact NESO Pathfinder tenders in the future.</p>

EJP reference / OSR	Needs Case	Optioneering	Scope Confidence	Comments
				<p>The optioneering is not justified on account of the lack of information provided with regards to the levels of intervention required and the location of the interventions.</p> <p>NGET are requesting funding to undertake power system studies to identify the requirements, size and location of STATCOMs and active and passive filters required on its network. NGET has not provided any upfront plant location optioneering, therefore the extent of power system studies required or its value is difficult to judge. We would also consider this to be BAU and funded via its existing CAI allowances.</p> <p>Our consultation position is reflected in the PAM output. For us to assess NGET needs cases as justified, NGET needs to provide clear rationale as to why the system studies have not already been undertaken, what remaining uncertainty there is regarding the system studies, and evidence from NGET's engagement with NESO regarding Pathfinder interactions.</p>
T3 - Air Systems	Not Justified	Not Justified	Low Confidence	<p>The needs case for NGET's air systems replacement strategy is not justified because NGET has presented an unclear interventions strategy as we would expect to see a trend of replacement of air-blast switchgear with a modern alternative and decommissioning the compressed air systems.</p> <p>The optioneering is not justified as the selected sites appear to include those in which the ABCBs are being replaced and sites which NGET have noted are likely to be replaced, and as a by-product the air system would be redundant.</p> <p>We recognise that NGET has provided supporting information which suggest the Air Blast CBs (ABCBs) are classed as obsolete. It is unclear that in NGET's TCPR4 and ET1 life extension programmes of ABCBs if the air systems were intervened in parallel.</p>

EJP reference / OSR	Needs Case	Optioneering	Scope Confidence	Comments
				<p>With an anticipated lack of future for ABCBs the investment into Air Systems appears unjustified. The link between ABCBs and compressed air network interventions is not well articulated.</p> <p>Our consultation position is reflected in the PAM output. For us to assess NGET's needs cases as justified, NGET needs to provide sufficient evidence and rationale for its continued investment in its air actuated assets.</p>
<p>T3 Cable Repairs and Minor Replacements</p> <p>(Applicable reporting table in BPDT: 8.4 Repairs)</p>	Not Justified	Partially Justified	Medium Confidence	<p>The needs case for NGET's cable repairs and replacement strategy is not justified because it is unclear why this investment isn't categorised under NGET's existing emergency repair budget.</p> <p>Our consultation position is reflected in the PAM output.</p> <p>For us to assess NGET's needs cases as justified, NGET needs to provide further rationale as to why this investment isn't allocated under the existing RIIO-ET2 emergency repair budget or is covered by totex allowances in RIIO-ET2.</p>
<p>T3 - Substation Battery Systems and Room Upgrades</p> <p>(Applicable reporting table in BPDT: 8.4 Repairs).</p>	Justified	Partially Justified	Medium Confidence	<p>The optioneering for NGET's battery replacement and upgrade strategy is partially justified because NGET proposes to replace entire battery systems without any relevant asset health data scores or EOLs for cells, strings or battery compounds provided at each substation.</p> <p>The optioneering is further limited as the needs case to optioneering relationship is unclear, but we note that battery replacement is often an economic intervention.</p> <p>NGET's intervention strategy is largely without evidence in the approach to either partial or full replacement optioneering.</p> <p>NGET further propose [REDACTED] battery room upgrade installations for ATEX equipment assumed to be required for safety compliance with DSEAR 2002. However, NGET are yet to undertake</p>

EJP reference / OSR	Needs Case	Optioneering	Scope Confidence	Comments
				<p>the necessary DSEAR risk assessments to inform the scope of remedial investment required. We expect such risk assessments to be completed, and used to define the scope, ahead of requesting funding requests. We are also unclear as to why NGET has not previously completed these risk assessments.</p> <p>Our consultation position is reflected in the PAM output.</p> <p>For us to assess NGET's needs case as justified, NGET needs to provide site details, condition surveys, scope of works and associated costs, over scoping justification and completed DSEAR surveys.</p>
<p>T3 - Substation Infrastructure Civils</p> <p>(Applicable reporting table in BPDT: 8.7 NOC Other)</p>	Not Justified	Justified	Low Confidence	<p>The needs case for NGET's infrastructure civils submission is not justified because NGET have not adequately articulated its planned programme of works to maintain substation infrastructure civils.</p> <p>NGET has not provided proposed site locations or schedules of works to be completed at each site. Furthermore, the assumed spend profile is flat throughout RIIO-3. We consider this assumption unrealistic as it's unlikely there will be identical defect identification at each substation and uniform outage approvals, especially given the large volume of interventions proposed.</p> <p>There are also several assets that were either not available for inspection or healthier than the threshold requiring intervention, and so it is unclear what the risk impacts on future costs will be if NGET does or doesn't address these items in RIIO-ET3.</p> <p>Our consultation position is reflected in the PAM output. For us to assess NGET's needs cases as justified, NGET needs to provide further a detailed site list, defect list and a realistic spend profile and process to prioritise activities with higher risk assets.</p>

EJP reference / OSR	Needs Case	Optioneering	Scope Confidence	Comments
Substation LVAC Auxiliary Infrastructure	Not Justified	Partially Justified	Low Confidence	<p>The needs case for NGET's LVAC (Low Voltage AC) submission is not justified because it is unclear what interventions are being proposed and why those interventions are needed in RIIO-ET3. Further issues include an unclear link between CAPEX and OPEX based investments.</p> <p>NGET's optioneering is partially justified as the it is unclear how the proposed options address the needs case presented.</p> <p>NGET has a variety of investment workstreams to support substation resiliency and functionality within this EJP and generally we support the principle of intervention ahead of failure. As NGET has not identified the applicable sites nor works within sites we are unable to establish the consumer benefits of these works.</p> <p>Our consultation position is reflected in the PAM output.</p> <p>For us to assess NGET's needs cases as justified, NGET needs to provide site details, condition surveys, scope of works and associated costs, and sufficient justification as to why the interventions, for example diesel generator works are allocated under maintenance and repairs.</p>
[REDACTED] Decommissioning	Not Justified	Not Justified	Low Confidence	<p>The needs case for NGET's [REDACTED] circuit deconstruction submission is not justified because the consumer benefit is unclear. This is on account of the uncertainty as to locations of large levels of generation as such our view is that that optionality around reuse of assets should not be removed.</p> <p>The optioneering was limited in the long-term impacts of the removal as NGET appears to have not considered if any further works may happen at the remote end of the line.</p> <p>We value future optionality and reuse of equipment as a key principle in our technical reviews, and as such do not support the</p>

EJP reference / OSR	Needs Case	Optioneering	Scope Confidence	Comments
				<p>decommissioning of assets without detailed analysis showing there is no future use cases.</p> <p>Our consultation position is reflected in the PAM output. For us to assess NGET's needs cases as justified, NGET needs to provide further rational on the benefits of proposed removal of this circuit over potential reuse for possible future connections</p>
<p>UIOLI Provision for Emerging Low Carbon Opportunities</p> <p>(Applicable reporting table in BPDT: 8.12 Net Zero)</p>	Partially Justified	Not Justified	Low Confidence	<p>The needs case for NGET's UIOLI Provision for Emerging Low Carbon Opportunities submission is partially justified because the significant investment proposed within this EJP is not well defined. There is also a lack of clarity on why the 'emerging low carbon opportunities' section of the paper isn't funded through the innovation channels of NIA or SIF.</p> <p>We broadly support works which seek to minimise environmental footprints where we have robust evidence that it will deliver a measurable outcome. Noting NGET's BCF works, we are unclear why optioneering in this EJP did not consider more aggressive removal of SF6 emitting assets as a valuable comparative and deliverable equivalent.</p> <p>Our consultation position is reflected in the PAM output.</p> <p>For us to assess NGET needs cases as justified, NGET need to provide sufficient evidence to justify why NIA or SIF isn't being utilised, and why HVO fuel requires an uplift in cost compared to petroleum-derived products on the basis this should be deemed as BAU to operate FLT's etc.</p>
Fawley Strategy (Chilling - Fawley and Fawley S/S)	Not Justified	Not Justified	Low Confidence	<p>The needs case for NGET's Fawley Strategy is not justified because the trigger for substation rebuild is unclear.</p> <p>The optioneering is not justified as the preferred options and rejected options appear contradictory to NGET's most recent</p>

EJP reference / OSR	Needs Case	Optioneering	Scope Confidence	Comments
				<p>investment proposals at the site which suggests more options are available to NGET than have been presented in the EJP.</p> <p>Fawley was listed in draft EJP for RIIO-ET2 as needing a full rebuild due to civil issues and asset health risks. During this time, most assets were reported as being healthy, and the civils review did not identify subsidence issues - despite evidence provided that this was present. We anticipated that NGET's RIIO-ET2 Civil Reopener would address most of these issues.</p> <p>Rather than proceed to rebuild the site in RIIO-ET2, NGET elected to continue to extend the site. Having completed this extension work, NGET is now proposing to rebuild the site. Many of the assets at the site are reported with an acceptable EoL. Combined with the decision to complete the extension works, this does not provide us confidence that a full site replacement is now required.</p> <p>Optioneering is not justified as a report on siting has been provided as supporting evidence which is contradictory to NGET's optioneering process as we understand it. In this report, a critical decision meeting between NGET and its Consultants on substation switchgear choice has been documented as 'completed', however, the consultants additional tracked comments suggest that this did not in fact take place at the time the report was produced. This makes the support of a GIS option harder to conclude as justified.</p> <p>Our consultation position is reflected in the PAM output.</p> <p>For us to assess NGET's needs cases as justified, NGET needs to provide justification on the need for intervention and a more detailed optioneering that considers the AIS equivalent in line with our whole life cost considerations.</p>
NEWX-WIMB, HURS-NEWX and	Partially Justified	Partially Justified	Low Confidence	<p>The needs case for NGET's NEWX-WIMB, HURS-NEWX and HURS-LITT cable removal works is partially justified because of NGET's intervention to decommission the asset was unclear.</p>

EJP reference / OSR	Needs Case	Optioneering	Scope Confidence	Comments
HURS-LITT Decommissioning				<p>The optioneering was similarly lacking as there was limited detail included.</p> <p>From a risk perspective NGET has made references to the Wimbledon Asset Replacement Scheme and Bengeworth Road S/S, both of which require outages that makes it unclear how this interacts with this cable decommissioning project.</p> <p>NGET has proposed to remove all associated cables on completion of London Power Tunnels 2 (LTP2), we are unclear if elements may have already been funded. Given the significant quantities of oil contained within the cables, they propose to drain and cap the cables which are not under public highways. The remaining cables would be removed from site. We are unclear on the consumer benefits of this work.</p> <p>Our consultation position is reflected in the PAM output.</p> <p>For us to assess NGET's needs case as justified, NGET needs to provide sufficient evidence to aid in clarification on the numerous interactive funding mechanisms with this project. We also require clarification as to why this was not included in the main LPT2 scheme.</p>
St Johns Wood 275 kV Rationalisation	Not Justified	Partially Justified	Low Confidence	<p>The needs case is not justified as the intervention appears to target assets which are near their end of life.</p> <p>The optioneering is partially justified in our review because we do not believe that there is sufficient clarity over the long-term impacts of the preferred option.</p> <p>The St Johns Wood 275kV site is presently reported as broadly healthy, but with an aggressive deterioration over the course of RIIO-ET3. NGET's justification for this investment is unclear given that there are a range of assets elsewhere with a higher EoL which are not included in any of its plans, and therefore it is unclear why</p>

EJP reference / OSR	Needs Case	Optioneering	Scope Confidence	Comments
				<p>this rationalisation is a priority given the scale of connection and reinforcement works required elsewhere. As a result, it is unclear why this rationalisation is a priority given the scale of connection and reinforcement works required elsewhere.</p> <p>The optioneering, despite an absence of detail, appears sensible at a high-level, and supports future optionality at the site. We are however unclear on the costs and risks presented which appear to be disproportionately high. We also understand the 400kV extension will utilise more SF6 based assets.</p> <p>Our consultation position is reflected in the PAM output. For us to be able to assess NGET's needs case and optioneering as justified, we need to see additional supporting information setting out more detail on NGET's wider asset health strategy, the long-term impacts of this proposal and the use of SF6.</p>
T3 - 4TF HAWTHORN PIT - NORTON - OFFERTON Reconductoring	Not Justified	Justified	Medium Confidence	<p>The needs case for the reconductoring and fittings works is not justified because NGET has stated that there is currently no load related driver to trigger the need for this reinforcement, which includes a full fittings replacement. We note that there was funding granted in RIIO-ET2 for a full fittings replacement programme. Whilst the conductor is stated to be approaching EoL, other circuits with similar conductor health have not been included in NGET's proposals. We therefore consider the needs case to be unjustified.</p> <p>We note that the project also interacts with the pending tCSNP2 project HNRE and could be more economically delivered alongside this project.</p> <p>Our consultation position is reflected in the PAM output. For us to be able to assess NGET's needs case as justified, NGET needs to provide clearer justification for the inclusion of this circuit in its OHL reconductoring programme for both asset health and load drivers.</p>

EJP reference / OSR	Needs Case	Optioneering	Scope Confidence	Comments
T3 - VM IRON-PENN 2 and IRON-RUGE Reconductoring	Partially Justified	Justified	Medium Confidence	<p>The needs case is partially justified as reconductoring generally bring reduced losses benefits and can increase transfer capacity, but NGET appears to suggest there is no immediate LRE need for this investment.</p> <p>The optioneering is justified as we agree with NGET's conductor choice for this intervention.</p> <p>Whilst the conductor is stated to be approaching EoL, we note this is based on limited samples from 2019-2021. Further, other circuits with similar conductor health have not been included in NGET's proposals. It is therefore unclear why this is a priority given the scale of connection and reinforcement works required elsewhere. With no immediate needs case clearly presented this appears to be an Asset Health project, but with a limited asset health driver.</p> <p>Our consultation position is reflected in the PAM output. For us to be able to assess NGET's needs case as justified, NGET needs to provide additional information about LRE driver identified, the timing considerations for intervention and clarity on the EoL scoring of this asset.</p>
BODELWYDDAN - DEESIDE - PENTIR 1 and 2 OHL	Partially Justified	Justified	Medium Confidence	<p>The needs case is partially justified as the intervention will support connection works and futureproof the circuit to accommodate additional power flow.</p> <p>NGET proposes to reconductor the OHL route alongside a full refurbishment of the towers including new OHL fittings. The existing conductor is in good condition, however the reconductor is driven by the system need based on anticipated new connections, nearly all of which are expected to be more than a decade into the future.</p> <p>However, the OHL towers are in poor condition, and the existing OHL fittings are approaching EoL. We consider the needs case to be partially justified, in part due to a lack of clarity on why there does not seem to have been intervention on the towers at an earlier point</p>

EJP reference / OSR	Needs Case	Optioneering	Scope Confidence	Comments
				<p>in time. We note that in RIIO-ET2 there was funding for Towers and Conductor replacement which we are not clear has been spent to date.</p> <p>Our consultation position is reflected in the PAM output. For us to be able to assess NGET's needs case and optioneering as justified, NGET needs to provide additional information about historic approaches to the maintenance of these towers and rational as to why this investment shouldn't form part of its NLRE funding.</p>
Bolney 400kV S/S and Fleet 400kV S/S	Partially Justified	Not Justified	High Confidence	<p>The needs case is partially justified as the intervention will support connection works but we are not clear on the impacts on the DNO network and future plans.</p> <p>The optioneering is partially justified in our review because we do not believe that there is sufficient clarity over the long-term impacts of the preferred option.</p> <p>NGET propose to create a 150MW Grid Park to facilitate two battery connections at 33kV, at distribution network voltage. The power system solution and the optioneering has limited interaction with UKPN which means we are unclear on the impact this may have on UKPN's connections. This is compounded by the UKPN site replacement being adjacent to the NGET site. NGET has not adequately justified why expanding the UKPN replacement site to accommodate the proposed connections has not been considered on a whole systems basis to make best use of SGT capacity.</p> <p>Our consultation position is reflected in the PAM output. For us to be able to assess NGET's needs case and optioneering as justified, we need to see additional supporting information setting out more detail on NGET's proposed works impact on the DNO connections and its 132kV substation project. Finally, we expect NGET and UKPN to provide a whole systems option to ensure the consumer value is present.</p>

EJP reference / OSR	Needs Case	Optioneering	Scope Confidence	Comments
Bridgwater 400kV S/S	Partially Justified	Partially Justified	High Confidence	<p>The needs case is partially justified as the intervention will support connection works but we are not clear from NGET's proposal on the timing of the investment or its interaction with other LOTI projects in close proximity.</p> <p>The optioneering is partially justified in our review because we do not consider that there is sufficient clarity over the long-term impacts of the preferred option.</p> <p>The optioneering is insufficiently robust as NGET does not appear to have assessed or enquired about the impact of the proposed tertiary connections on the electricity distribution networks supplied via the SGT.</p> <p>Our consultation position is reflected in the PAM output. For us to be able to assess NGET's need optioneering as justified, we need to see additional supporting information setting out more detail on NGET's proposed works impact on the DNO connections and the linkages to assumptions in the associated LOTI project.</p>
Bulls Lodge	Partially Justified	Not Justified	Low Confidence	<p>The needs case is partially justified as the intervention will support connection works but we are not clear from NGET's proposal on the timing of the investment or if it is in compliance with the CUSC requirements for minimum scheme.</p> <p>The optioneering is not justified in our review because we do not believe that there is sufficient clarity over the long-term impacts of the preferred option in particular the selection of GIS in the preferred option.</p> <p>NGET initially considered an AIS option however they have not adequately justified its rejection without progression to a cost benefit analysis. NGET did submit AIS costs which were not modelled and showed significantly lower capital costs for all AIS options.</p>

EJP reference / OSR	Needs Case	Optioneering	Scope Confidence	Comments
				Our consultation position is reflected in the PAM output. For us to be able to assess NGET's optioneering as justified, we need to see additional supporting information setting out more detail on NGET's CBA considering the AIS option. Further information will be required to understand NGET customer connection offer and ensuring it is the minimum scheme.
Chilling Lovedean Cable Replacement	Partially Justified	Partially Justified	Low Confidence	<p>The needs case is partially justified as the intervention will support future connection works, but given the lack of information provided we are unclear from NGET what is driving this investment.</p> <p>The optioneering is partially justified as the whole life impacts of the optioneering have not been clearly evidenced.</p> <p>NGET has not provided sufficient detail on the demand and generation growth triggering the investment. The cable is currently reported in good condition, whilst the dependent network has much higher EoL scores.</p> <p>As Lovedean is being considered for full site rebuild, the optioneering is partially justified as a more holistic solution has not been detailed. We are unclear if this work will lead to an Early Asset Write Off (EAWO).</p> <p>Our consultation position is reflected in the PAM output. For us to be able to assess NGET's needs case and optioneering as justified, we request further details of the customer connection timings, locations and capacities are provided as well as a more coordinated view on asset dependencies and whole site strategy.</p>
Fixed Wire Testing (Applicable reporting table in BPDT: 8.7)	Not Justified	Not Justified	Low Confidence	The needs case for fixed wire testing is not justified because NGET has not adequately justified the scope of the proposed works with respect to works carried out during routine inspection and maintenance activities. We are also concerned about early asset write offs if NGET undertakes its investment strategy as planned.

EJP reference / OSR	Needs Case	Optioneering	Scope Confidence	Comments
				<p>NGET includes significant spend for sites which are due to be replaced which undermines the robustness of NGET's proposal. The supporting information in the EJP was insufficient for us to determine if the investment was appropriate. As a further impact the relationship between the portfolio level optioneering and the site which will be intervened was unclear.</p> <p>NGET made a similar submission in the RIIO-ET2 Civils Related Works Reopener. At the time we noted the use of NGET's new database for such information, but no extracts were provided in RIIO-ET3 submissions. We have assumed the same incomplete data set which was used for the reopener has been used again.</p> <p>Our consultation position is reflected in the PAM output. For us to be able to assess NGET's needs case and optioneering as justified, we request that NGET provides us with a more robust workplan including a list of sites and prioritisation.</p>
<p>Early Land Purchase</p> <p>(Applicable reporting table in BPDT: 6.1 C&V Load)</p>	Partially Justified	Not Justified	Low Confidence	<p>The needs case is partially justified as the intervention will support connection works at new substations or substation extensions.</p> <p>It is accepted that land will need to be procured and accepted that this may need to be done at risk. However, NGET has not presented sufficiently robust analysis to demonstrate that each of the [REDACTED] potential sites considered will require additional land for site extension or rebuilds. We therefore have insufficient confidence in the need and value for money of NGET's proposal. Our wider policy position is that this we will not be providing strategic land purchases.</p> <p>Our consultation position is reflected in the PAM output. For us to be able to assess NGET's needs case and optioneering as justified, we request NGET provide a more robust needs case for each of the potential sites proposed, as well as further clarity on which out of the proposed sites will be pursued.</p>

EJP reference / OSR	Needs Case	Optioneering	Scope Confidence	Comments
Electricity System Restoration Resilience (ESRR) (Applicable reporting table in BPDT: 7.4 ESR)	Partially Justified	Partially Justified	Medium Confidence	<p>The needs case is partially justified for ESST as we have insufficient details in the needs case or delivery of the proposed investment.</p> <p>NGET has been unable to link the proposed investments to its existing Restoration Plans and strategies. This is compounded by a number of schemes deferred from RIIO-ET2 which raises concerns around investment timing.</p> <p>Our consultation position is reflected in the PAM output. For us to be able to assess NGET's needs case and optioneering as justified, we request NGET provide more clarity on the list of substations which are on the critical path for the holistic restoration plan.</p>
Eakring Training Centre	Not Justified	Not Justified	Low Confidence	<p>The needs case for the Eakring Training Centre EJP is not justified. This is because the investments and benefits associated are unclear given NGET's existing investment strategy.</p> <p>Optioneering is also not justified. This is through the lack of options considered across the majority of investment proposals.</p> <p>The EJP covers a range of investments from Energy Efficiency to accommodation provision. For energy efficiency aspects we accept the need for these, but this on a principal basis. NGET's wider optioneering is limited in this area and costs appear high. Specifically on the accommodation block NGET have not provided sufficient evidence that continuing its temporary accommodation strategy employed during RIIO-ET1 is no longer suitable. Furthermore, NGET's optioneering appear limited in this element where we would have considered NGET utilising existing accommodation or reusing empty building in proximity to Eakring; or engaging 3rd party providers to deliver this work on NGET's behalf.</p> <p>Our consultation position is reflected in the PAM output. For us to be able to assess NGET's needs case and optioneering as justified sufficient evidence is required across each of NGET's investment</p>

EJP reference / OSR	Needs Case	Optioneering	Scope Confidence	Comments
				categories at Eakring, with supporting CBAs to be provided. In addition, further cost breakdown is required on accommodation refurbishments, oil-fired boiler replacement and LED lighting.
Operational Estate	Not Justified	Not Justified	Low Confidence	<p>The needs case for the Operational Estate EJP is not justified. This is because although there are benefits to these works, NGET has not identified why these investments are needed now, or why defects have not been previously addressed.</p> <p>Optioneering is also not justified, as in combination with the needs case elements there is insufficient information to support the funding requested.</p> <p>There is significant overlap with the Energy Efficiency programme EJP that gives rise to risks of double funding in our view. The defect management request is unclear as we would have anticipated this would be managed through existing funding allowances. While we are supportive of licensees working to ensure they provide facilities which help retain staff, we are unclear on NGET strategy for "Wellbeing & Engagement" in relation to the operational estate where there are no measurable outputs or clearly defined scopes of work.</p> <p>Our consultation position is reflected in the PAM output. For us to be able to assess NGET's needs case and optioneering as justified we require further cost breakdowns, measurable outputs for staff wellness and engagement related to the investment proposals and additional information on NGET defect resolution in RIIO-ET1 and RIIO-ET2.</p>
Iver-Laleham Cable tail uprating &	Justified	Not Justified	Low Confidence	<p>The needs case is justified as the intervention will support future connection works.</p> <p>However, the optioneering is not justified because opting to hotwire the existing circuit as opposed to reconductor is not well evidenced.</p>

EJP reference / OSR	Needs Case	Optioneering	Scope Confidence	Comments
Iver-West Weybridge Cable tail uprating				<p>The capability of the cable tails will not be useable until the circuit is reconducted. Further, the maximum capacity of this circuit is not sufficient for the long-term needs, and therefore a future uprating to 400kV seems likely. NGET did not consider cable tails rated to 400kV.</p> <p>Our consultation position is reflected in the PAM output. For us to be able to assess NGET's optioneering as justified, we request NGET provide sufficient evidence to justify the rationale behind not considering reconductoring at higher temperature to maximise capacity, or installing cable tails rated at 400kV.</p>
T3 - OHL Enabling Works	Justified	Partially Justified	High Confidence	<p>The needs case is justified as the intervention will support future connection works.</p> <p>NGET has not provided sufficient justification on its proposal to increase its Portable Free-Standing Assets that are compatible with High Temperature Low Sag conductors and composite insulators by 25%.</p> <p>Our consultation position is reflected in the PAM output. For us to be able to assess NGET's optioneering as justified, we request sufficient evidence is provided to justify the volumes proposed.</p>
T3 - OHL Repairs and Minor Replacements	Justified	Partially Justified	Medium Confidence	<p>The needs case is justified as the intervention will support future connection works.</p> <p>NGET has not provided sufficient justification as to why known defects that this proposal aims to resolve were not resolved in RIIO-ET2, what risk mitigation has been in place since identification, and why the works are not classified and funded under its maintenance and repairs budget. NGET also requested funding for emergency faults based on the 4YC incident, however, provide no information on this incident.</p>

EJP reference / OSR	Needs Case	Optioneering	Scope Confidence	Comments
				Our consultation position is reflected in the PAM output. For us to be able to assess NGET's optioneering as justified, we request sufficient evidence is provided to justify the rationale behind deferral of works in RIIO-ET2 and further evidence on the 4YC incident.
Barking	Justified	Not Justified	N/A	<p>The needs case is justified as the intervention will support connection works and potentially wider reinforcement works.</p> <p>The optioneering is not justified in our review because we do not believe that there is sufficient clarity over the long term impacts of the preferred option in particular the voltage selection of the preferred option.</p> <p>NGET discounted a 400kV replacement of the existing 275kV site due to higher cost associated with the necessary SGT replacements, however, there has been no consideration of constructing a new substation rated at 400kV but initially operated at 275kV. Nor has the wider strategic element of a long term 400kV site been considered. Had a 400kV site been considered it would appear to have a number of benefits including serving or forming part of the future replacement of the existing 400kV site and potentially allowing for the use of SF6 free switchgear.</p> <p>Our consultation position is reflected in the PAM output. For us to be able to assess NGET's optioneering as justified, we need to see additional supporting information setting out more detail on NGET's wider London 275kV long term strategy and the implications of operating 400kV switchgear at 275kV. This will also benefit any future Load Related re-opener application.</p>
Feckenham-Ironbridge OHL	Justified	Partially Justified	High Confidence	The needs case is justified as the intervention will support future connection works, and whilst the needs case is accepted, further reinforcement will be required in the long term.

EJP reference / OSR	Needs Case	Optioneering	Scope Confidence	Comments
				<p>Based on the information provided by NGET, this will likely be an uprating of the circuit from 275kV to 400kV. NGET has not adequately justified why bringing forward this uprating was not considered.</p> <p>Our consultation position is reflected in the PAM output. For us to be able to assess NGET's optioneering as justified, we need to see sufficient evidence on the benefits of not rating the circuit at 400 kV from the project's inception.</p>
Kirkstall 'A' - Skelton Grange Cable Replacement	Justified	Not Justified	Low Confidence	<p>The needs case is justified as the intervention will support future connection works and retain the existing.</p> <p>The optioneering is not justified as there was insufficient detail in the EJP.</p> <p>We note that NGET has requested a needs case assessment only in relation to this project, at this stage seeking PCF only. Whilst we agree with the needs case, the optioneering presented was insufficiently detailed. There are five different options considered during the optioneering process. The four credible options need detailed analysis and comparison, and the route optioneering is not complete in final selected option. We also note that the proposal to remove and replace 8.61km of fluid-filled cable appears costly.</p> <p>Our consultation position is reflected in the PAM output. For us to be able to assess NGET's optioneering as justified, we need to see a more robust assessment of the options to demonstrate selection of the most economical and efficient solution to be presented in the Load Related Reopener submission.</p>
Pembroke 400kV S/S	Justified	Partially Justified	N/A	<p>The needs case is justified as the intervention will support connection works and wider reinforcement works.</p>

EJP reference / OSR	Needs Case	Optioneering	Scope Confidence	Comments
				<p>The optioneering is partially justified in our review because we do not consider that there is sufficient clarity over the long-term impacts of the preferred option.</p> <p>Our concern is that the proposed investment does not sufficiently consider the longer-term risks and or limitations posed by extension of the existing site due to asset health deterioration expected. Whilst we acknowledge the issues which NGET are facing with regard to land options, any long-term operability impacts of the proposed GIS extension onto an existing AIS substation are unclear.</p> <p>Our consultation position is reflected in the PAM output. For us to be able to assess NGET's optioneering as justified, we need to see additional supporting information setting out more detail on NGET's existing assets at site and a more comprehensive understanding of its long-term strategy. This will also benefit any future Load Related re-opener application.</p>
SCRE (COTT4 - STAY4) and WRRE (WBUR4 - RATS4) OHL	Justified	Partially Justified	Low confidence	<p>The needs case is justified as we consider that the intervention will support wider reinforcement works.</p> <p>The optioneering is partially justified in our review because we do not consider that there is sufficient clarity over the preferred option to understand the proposal.</p> <p>We note that NGET discounts an option of reconductoring with Warwick conductor strung at high temperature (180C), which would maximise the circuit's rating, due to the risk of the necessary feasibility studies impacting the delivery. NGET has not justified why these feasibility studies were not commenced earlier.</p> <p>Our consultation position is reflected in the PAM output. For us to be able to assess NGET's optioneering as justified, further information is required on the benefits of stringing at a lower temperature of 150C, and why assessing the feasibility of high temperature stringing poses programme risk.</p>

EJP reference / OSR	Needs Case	Optioneering	Scope Confidence	Comments
West London Cables Strategy (Ealing - Laleham, Iver - North Hyde, Ealing Willesden)	Justified	Partially Justified	N/A	<p>The needs case is justified as the intervention will support wider reinforcement works.</p> <p>The optioneering is partially justified in our review because we do not believe that there is sufficient clarity over the preferred option to understand the proposal.</p> <p>We note that NGET has requested a needs case assessment only in relation to this project, at this stage seeking PCF only. Whilst we agree with the needs case and NGET has presented comprehensive optioneering, we note that NGET has not discounted any options or presented a preferred option. A number of options, eg like for like replacement, appear sub-optimal and short-sighted.</p> <p>Our consultation position is reflected in the PAM output. For us to be able to assess NGET's optioneering as justified, we need to see additional supporting information setting out more detail on NGET's preferred option. This will also benefit any future Load Related re-opener application.</p>
Berkswell 275kV S/S	Justified	Partially Justified	N/A	<p>The needs case is justified as we consider that the intervention will support connection works.</p> <p>The optioneering is partially justified in our review because we do not believe that the wider asset health, connections and future optionality have been sufficiently considered.</p> <p>We note that NGET has requested a needs case assessment only in relation to this project, at this stage seeking PCF only. Whilst we agree with the needs case for the demand connection of HS2, the optioneering is insufficiently robust as NGET state that further optioneering is required to determine the final HS2 connection.</p> <p>Our consultation position is reflected in the PAM output. For us to be able to assess NGET's optioneering as justified, we need to see additional supporting information setting out more detail on NGET's</p>

EJP reference / OSR	Needs Case	Optioneering	Scope Confidence	Comments
				alternative options, considerations to address asset health concerns and analysis on long term requirements of the site. This will also benefit any future Load Related re-opener application.
Burwell South 400kV S/S	Justified	Not Justified	Low Confidence	<p>The needs case is justified as the intervention will support connection works and wider reinforcement works.</p> <p>The optioneering is partially justified in our review because NGET's we do not believe NGET's optioneering has made consistent assumptions nor is sufficiently developed given the wider context of the proposed solution.</p> <p>We note that NGET has requested a needs case assessment only in relation to this project, at this stage seeking PCF only. NGET considers an option to construct a new AIS substation however found this to have a higher capital cost when compared to a GIS option. We do not consider NGET has robustly considered the whole life cost differences between the options because the assumptions made appear contradictory to other EJPs they have submitted. Furthermore, NGET notes that its preference for a GIS substation is driven by visual amenity benefits and subsequent derisking of the planning and consenting process. However, NGET has not provided sufficient information on engagement with Local Planning Authorities (LPA) to justify this approach.</p> <p>Our consultation position is reflected in the PAM output. For us to be able to assess NGET's optioneering as justified, we need to see additional supporting information setting out more detail on NGET's alternative options and their long-term efficacy against alternative options, specifically outdoor AIS options.</p>
Friston 400 kV S/S	Justified	Not Justified	High Confidence	<p>The needs case is justified as the intervention will support connection works and wider key reinforcement works.</p> <p>Specifically, the SeaLink (SCD1) ASTI project, which is integral for meeting our CP2030 objectives, will connect into this substation. As</p>

EJP reference / OSR	Needs Case	Optioneering	Scope Confidence	Comments
				<p>such we recognise the importance of timely delivery of this project. However, we will need additional justification before being able to confirm that the optioneering is fully justified.</p> <p>The optioneering is currently considered not justified because NGET has not presented sufficient evidence to discount an AIS option, nor why it has not considered an indoor AIS option to mitigate any coastal pollution risks associated with an outdoor AIS option.</p> <p>Our consultation position is reflected in the PAM output. For us to be able to assess NGET's optioneering as justified, NGET needs to provide more information on why its GIS solution is optimal on a whole life cost basis.</p>
Ickenham HS2	Justified	Not Justified	Low Confidence	<p>The needs case is justified as the intervention will support connection works.</p> <p>The optioneering is not justified in our review because we do not believe NGET's optioneering has considered a sufficiently wide range of options. Some of which may offer wider consumer benefits.</p> <p>We note that NGET has requested a needs case assessment only in relation to this project, at this stage seeking PCF only. Whilst we agree with the needs case for the demand connection of HS2, the optioneering presented is very limited. The HS2 approvals include infrastructure associated with GSPs for HS2, yet NGET remains unaware of how much land is available for the GSP, undermining the optioneering and scope with no evidence around engagement to understand land requirements.</p> <p>Our consultation position is reflected in the PAM output. For us to be able to assess NGET's optioneering as justified more information is needed regarding optioneering. Specifically, we require additional detail on substation design and land availability. This will also benefit any future Load Related re-opener application.</p>

EJP reference / OSR	Needs Case	Optioneering	Scope Confidence	Comments
Middleton 400 kV S/S	Justified	Partially Justified	Low Confidence	<p>The needs case is justified as the intervention will support connection works.</p> <p>The optioneering is partially justified in our review because we do not believe NGET's optioneering has considered sufficiently wide range of options. Some of which may offer wider consumer benefits.</p> <p>Whilst we agree with the needs case, NGET has not adequately demonstrated why an AIS extension has been discounted as an option. Similarly given the condition of Heysham, we are unclear why NGET has not provided an option through Middleton which could have resulted in the ability to replace Heysham.</p> <p>Our consultation position is reflected in the PAM output. For us to be able to assess NGET's optioneering as justified, we need to see additional supporting information setting out more detail on NGET's alternative options and their long-term efficacy against alternative options which may support Heysham's future replacement. This will also benefit any future Load Related re-opener application.</p>
NS Hinksey Cable	Justified	Partially Justified	Medium Confidence	<p>The needs case is justified as the intervention will support network code compliance requirements.</p> <p>The optioneering is not justified in our review because we do not consider NGET's optioneering has considered sufficiently wide range of options which may be of lower whole life cost.</p> <p>Our consultation position is reflected in the PAM output. For us to be able to assess NGET's optioneering as justified, we need to see additional supporting information setting out more detail on NGET's preferred option and its long-term efficacy against alternative options.</p>
Quainton HS2	Justified	Not Justified	Low Confidence	<p>The needs case is justified as the intervention will support connection works.</p>

EJP reference / OSR	Needs Case	Optioneering	Scope Confidence	Comments
				<p>The optioneering is not justified in our review because we do not believe NGET's optioneering represents long term value for money.</p> <p>We note that NGET has requested a needs case assessment only in relation to this project, at this stage seeking PCF only. Whilst we agree with the needs case for the demand connection of HS2, the optioneering presented is very limited. The HS2 approvals include infrastructure associated with GSPs for HS2, yet NGET remains unaware of how much land is available for the GSP, undermining the optioneering and scope.</p> <p>Therefore, our consultation position is that NGET's proposed solution at Quanton is too underdeveloped for PCF funding. This is on the basis there is limited optioneering to assure us that the preferred solution will be the one delivered.</p> <p>Our consultation position is reflected in the PAM output. For us to be able to assess NGET's optioneering as justified, we need to see additional supporting information setting out more detail on NGET's preferred option and its long-term efficacy against alternative options.</p>
Tilbury - Warley 1 and 2 OHL	Justified	Partially Justified	High Confidence	<p>The needs case is justified as the intervention will support reduced constraints and losses.</p> <p>The optioneering is partially justified in our review because NGET's conductor choice has not been supported by the appropriate feasibility studies.</p> <p>This is compounded by issues surrounding the Tilbury site where we understand there is a planned intervention in the future, but have limited visibility of at this time. Which results in the benefits of these works being hard to determine over time.</p> <p>Therefore, our consultation position is that NGET's proposed solution of 150C Warwick is partially justified as it represents an increase</p>

EJP reference / OSR	Needs Case	Optioneering	Scope Confidence	Comments
				<p>over existing ratings which will benefit the consumer by reducing constraints and losses.</p> <p>Our consultation position is reflected in the PAM output. For us to be able to assess NGET's optioneering as justified, we need to see additional supporting information setting out the long-term benefits of the for the 180C option against the 150C option.</p>

Appendix 2 – Privacy notice on consultations

Personal data

The following explains your rights and gives you the information you are entitled to under the General Data Protection Regulation (GDPR).

Note that this section only refers to your personal data (your name address and anything that could be used to identify you personally) not the content of your response to the consultation.

1. The identity of the controller and contact details of our Data Protection Officer

The Gas and Electricity Markets Authority is the controller, (for ease of reference, “Ofgem”). The Data Protection Officer can be contacted at dpo@ofgem.gov.uk

2. Why we are collecting your personal data

Your personal data is being collected as an essential part of the consultation process, so that we can contact you regarding your response and for statistical purposes. We may also use it to contact you about related matters.

3. Our legal basis for processing your personal data

As a public authority, the GDPR makes provision for Ofgem to process personal data as necessary for the effective performance of a task carried out in the public interest. i.e. a consultation.

4. With whom we will be sharing your personal data

We will not share your personal data with any other person or organisation.

5. For how long we will keep your personal data, or criteria used to determine the retention period.

Your personal data will be held for 12 months after the project is closed.

6. Your rights

The data we are collecting is your personal data, and you have considerable say over what happens to it. You have the right to:

- know how we use your personal data
- access your personal data
- have personal data corrected if it is inaccurate or incomplete
- ask us to delete personal data when we no longer need it
- ask us to restrict how we process your data

- get your data from us and re-use it across other services
- object to certain ways we use your data
- be safeguarded against risks where decisions based on your data are taken entirely automatically
- tell us if we can share your information with 3rd parties
- tell us your preferred frequency, content and format of our communications with you
- to lodge a complaint with the independent Information Commissioner (ICO) if you think we are not handling your data fairly or in accordance with the law. You can contact the ICO at <https://ico.org.uk/>, or telephone 0303 123 1113.

7. Your personal data will not be sent overseas

8. Your personal data will not be used for any automated decision making.

9. Your personal data will be stored in a secure government IT system.

10. More information For more information on how Ofgem processes your data, click on the link to our "[ofgem privacy promise](#)".