

Northern Ireland Electricity Networks Ltd

Transmission and Distribution 7th Price Control (RP7)

Final Determination - Main Report 30 October 2024



About the Utility Regulator

The Utility Regulator is the independent non-ministerial government department responsible for regulating Northern Ireland's electricity, gas, water and sewerage industries, to promote the short and long-term interests of consumers.

We are not a policy-making department of government, but we make sure that the energy and water utility industries in Northern Ireland are regulated and developed within ministerial policy as set out in our statutory duties.

We are governed by a Board of Directors and are accountable to the Northern Ireland Assembly through financial and annual reporting obligations.

We are based at Queens House in the centre of Belfast. The Chief Executive and two Executive Directors lead teams in each of the main functional areas in the organisation: CEO Office; Price Controls; Networks and Energy Futures; and Markets and Consumer Protection. The staff team includes economists, engineers, accountants, utility specialists, legal advisors and administration professionals.



Abstract

This document sets out our final determination for RP7, the seventh regulatory price control for Northern Ireland Electricity Networks Ltd (NIE Networks). The RP7 price control will run from April 2025 to March 2031 and will make a key contribution to the delivery of the Northern Ireland Energy Strategy. Our final determination is a combination of targets, funding and change mechanisms which will allow NIE Networks to finance its activities while maintaining flexibility and supporting innovation in response to changing circumstances. In parallel with the publication of this final determination, we are also consulting on licence modifications which will give effect to our decisions. This licence modification consultation will close on 2 December 2024.

Audience

NIE Networks, consumers, consumer representatives, consumer groups, other regulated companies in the energy industry, government, and other bodies with an interest in the energy industry.

Consumer impact

NIE Networks has a pivotal role in terms of 'keeping the lights on'. Both the effectiveness and efficiency of NIE Networks are key to industry and domestic consumers. The RP7 Price Control aims to set an efficient revenue cap to enable NIE Networks to deliver quality outputs that customers need as we move to net-zero.

This final determination would result in a 9.8% reduction in network charges for each domestic consumer when compared to the NIE Networks business plan submission.

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Executive Summary

Introduction

NIE Networks is responsible for building and maintaining the electricity transmission and distribution networks, which allows consumers to access a secure supply of electricity. As a natural monopoly, NIE Networks is subject to economic regulation which provides protection for all electricity consumers in terms of quality and cost.

The amount of revenue which NIE Networks collects via supplier tariffs is determined by the Utility Regulator through periodic price control reviews following scrutiny and challenge of the company's business plans. RP7 is our seventh regulatory price control for NIE Networks and will run from April 2025 to March 2031.

We have followed a robust and thorough process in coming to our final decisions. This process began in mid-2021 and involved extensive engagement with NIE Networks and careful consideration of their Business Plan submission. We have publicly consulted on both our approach to the price control and our draft determination and have actively engaged with key stakeholders.

We have carefully considered the 41 responses received to our draft determination consultation and additional information provided by NIE Networks. We are now in a position to publish our final determination, which is a combination of targets, funding and change mechanisms which will allow NIE Networks to finance its activities whilst maintaining flexibility and supporting innovation in response to changing circumstances and assist in the overall delivery of the Northern Ireland Executive's Energy Strategy and the legislative targets as contained in Climate Change Act (Northern Ireland) 2022.

Key messages

- NIE Networks provides an essential service which we all rely on. As we move towards net-zero, the electricity network infrastructure must be updated and changed to facilitate increasing levels of renewable generation and the rising use of low carbon technology.
- The RP7 price control allows for £2.23 billion of expenditure and will ensure that NIE Networks is able to support Northern Ireland's energy transition. The investment will secure a robust and resilient network that will support innovation and provide increased capacity, while also securing long-term value for Northern Ireland's electricity consumers.
- The cost of this significant infrastructure upgrade will however come at a cost to NI electricity consumers. Currently for every £1 spent on electricity by a typical domestic consumer, around 25p goes towards paying for the electricity network. We refer to this as the network charge, which customers pay as part

of the bill from their supplier. We have fully scrutinised NIE Networks' costs to ensure they are efficient and that the infrastructure investment is delivered at as low a cost as possible. Following extensive scrutiny we have identified £322 million of savings (a 12.6% reduction) compared to the company's business plan submission.

• This network infrastructure cost will impact different consumers in different ways depending on their individual choices. A domestic consumer who does not change their electricity consumption or technology is not expected to see any material change in the network element of their electricity bill. Consumers who chose to adopt low carbon technology will see bills increase in line with their increased electricity consumption. Larger commercial consumers will see the greatest percentage increase as they are connected to the higher voltage electricity network, namely the transmission network. This means they pay more for transmission charges, which are rising higher than distribution costs.

RP7 and the road to net zero

The journey towards net zero has started and requires a revolution in how we generate and consume electricity. The investment facilitated through RP7 aligns with the changing energy needs of homes, businesses, transport and infrastructure in Northern Ireland. It will provide households and businesses with infrastructure that will allow them to make use of new, greener technologies. Electricity generators will be able to facilitate increased use of low carbon technologies. Investment in new infrastructure will support the electrification of public transport and private vehicles. Whilst this investment will increase the network cost for consumers, we will ensure that the transition is fair, affordable, and a just transition for all.

During this price control period, energy usage is forecast to increase as homes and businesses adapt to the use of decarbonised power, heat and transport, such as heat pumps and electric vehicles. The Energy Strategy¹ sets out substantial investment requirements, of which RP7 is a small element. We have provided information on the estimated impact of our proposed decisions on customer bills, however these figures are based upon forecast usage. Variances in actual energy usage will affect the actual cost to consumers.

RP7 Final Determination – key data

Table 1 provides a summary of the key financial data including total expenditure (totex) combining operational expenditure (opex) and capital expenditure (capex), and our estimate of revenue which will be recovered through bills.

We have also provided an estimate of the opening and closing Regulatory Asset Base (RAB) for the RP7 period, which is the amount of investment NIE Networks has not yet recovered from consumers.

¹ Page 25 NI Executive's Energy <u>Strategy</u>

		Business Plan	Draft determination	Final determination	BP to FD (%)
Total expenditure	Totex	2551.0	2212.9	2228.7	-12.6
Comprising	Opex	487.4	394.8	438.8	-10.0
	Capex	2063.6	1818.1	1789.9	-13.3
Revenue		2334.3	2200.2	2132.1	-8.7
Regulatory Asset Base					
RP7 opening	value	2144.9	2165.1	2046.8	-4.6
RP7 closing va	alue	3244.9	3048.3	2939.2	-9.4

Table 1: RP7 Final Determination – Key financial metrics £m (2021/22 prices)

Further information provided by NIE Networks since the publication of the draft determination has demonstrated and evidenced the need for a higher level of expenditure than we initially facilitated. However, these increases have been offset by a reduction in our forecast of the difference between the inflation of NIE Networks costs relative to general inflation. The net effect is an increase in total expenditure.

The costs presented in Table 1 include an estimate of costs which are not yet confirmed and will be determined through volume drivers or further determinations as the price control is delivered. For example, the capex figures include an estimate of £493m to reinforce the transmission network which will be determined once need is confirmed. Including these forecasts allows us to present a fuller picture of impact on tariffs and NIE Networks' ability to finance its Business Plan.

A further breakdown of the building blocks of revenue is set out in Table 2. This shows how revenue from the depreciation of the RAB (return of capital) and the cost of capital (return on capital) forms more than half of consumer charges in an industry with increasing investment need.

	Business Plan	Draft determination	Final determination	BP to FD (%)
Opex	515.2	422.6	459.3	-10.8
Depreciation of RAB	969.7	934.9	896.3	-7.6
Cost of capital	769.2	742.2	673.8	-12.4
Тах	108.4	128.7	123.2	13.7
Other items	-28.2	-28.2	-20.5	-27.2
Total revenue	2,334.3	2,200.2	2,132.1	-8.7

Table 2: Revenue Building Blocks £m (2021/22 prices)

Our revenue calculations are based on a post tax cost of capital net of inflation (real). We have determined a cost of capital of 4.53% compared to 4.8% in NIE Networks Business Plan. Our final determination allows the cost of capital to be adjusted for changes of inflation, cost of debt and risk free rate.

Monetary values in the final determination are stated in October 2021 prices. These values will be inflated as we calculate revenues and tariffs. We are updating our measure of inflation to CPIH (Consumer Prices Index including owner occupiers' housing costs), which is a better estimate of inflation and consumer experience.

Utility Regulator ww.uregni.gov.uk

Consumer measures

We remain committed to consumer protection and have therefore introduced a range of measures which aim to raise the bar in terms of the level of service that consumers receive during the RP7 period. These measures are particularly focused on the needs of vulnerable consumer groups. We require NIE Networks to increase the support measures they offer by gaining the internationally recognised ISO standard for Consumer Vulnerability.

Consumer tariff impact

The calculations below are based on assumptions of energy usage consistent with the planned investment. If energy usage exceeds these forecasts, individual energy bills will be lower. However, if energy usage is lower than forecast, customer bills would increase further.

Customer Group	Typical	UR Final Determination			
	MWh/a	24/25	30/31	Delta (£)	Delta (%)
Domestic	3.4	171	165	-6	-4%
Small Business	16.4	708	718	10	1%
SME, LV	275	10,609	11,035	426	4%
SME, HV	1,593	38,251	40,643	2,392	6%
LEU, HV	5,457	96,465	104,341	7,876	8%
LEU, 33kV	31,075	289,677	333,347	43,671	15%

The data compares the impact on customer bills in 2024/25 (the final year of RP6) with bills in 2030/31 (the last year of RP7).

Table 3: Typical customer impact

Next steps

In parallel with the publication of this final determination, we have published a consultation on the licence modifications necessary to give effect to our decisions, this licence modification consultation will close on 2 December 2024. The RP7 price control will commence in April 2025. The scale of investment and structural change proposed by NIE Networks is a major endeavour and a necessary contribution to a fair, affordable and just transition to net zero. We will continue to monitor delivery and the lessons learned, which will inform the development of our next price control for NIE Networks, namely RP8.

1. Introduction

Strategic context for RP7

- 1.1 The RP7 Price Control sets out how NIE Networks will recover the revenue it needs to operate, maintain and expand the electricity transmission and distribution networks from April 2025 to March 2031. In the past, NIE Networks operated in a relatively stable environment where operating costs, asset maintenance or replacement and growth to meet new demands could be forecast with reasonable certainty. However, we are moving into a period where the demands and expectations placed on the electricity network are changing rapidly as it develops to support decarbonisation of the electricity sector and wider society.
- 1.2 In December 2021, the Department for the Economy published its new Energy Strategy "A path to net zero energy". The overall goal of the strategy is to achieve net zero carbon and affordable energy for all. The strategy envisages renewable electricity and higher levels of electrification of energy supplies with increased demand, off-set in part by improved energy efficiency. RP7 must facilitate this path to net zero as part of a fair, affordable and inclusive transition. The work that NIE Networks will do in RP7 will be critical to delivering the flexible, resilient and integrated energy system described in the strategy including:
 - a) Growing and diversifying our renewables base to better meet system demands, especially when the wind is not blowing, and the sun is not shining.
 - b) Robust and well-planned infrastructure to maximise the use of locallygenerated, low-carbon electricity, complemented by interconnection to other markets to access low carbon electricity produced elsewhere.
 - c) Storage solutions, for example using batteries or storing hydrogen, to enable flexible access to low-carbon energy when renewable generation is low.
 - d) Development of markets to encourage consumers to provide important services to minimise peaks in demand and better integrate low-carbon power, heat and transport.
 - e) Access to real-time consumption data through technologies which help electricity system operators to manage the system.
- 1.3 In June 2022, the objectives of the Energy Strategy were further augmented by the Climate Change Act (Northern Ireland) 2022, which set emission

targets for 2030, 2040, and 2050. In addition, the Act sets out that the Department for the Economy (DfE) must develop and publish a sectoral plan for the Energy Production and Supply sector to achieve these targets and ensure that at least 80% of electricity consumption is from renewable sources by 2030.

- 1.4 How the sectoral plans are developed and implemented remains to be decided. The Department of Agriculture, Environment and Rural Affairs (DAERA) has consulted on Northern Ireland's 2030 and 2040 emissions reduction targets and the first three Carbon Budgets, as well as seeking views on Climate Change Committee (CCC) Advice Report: "The path to a Net Zero Northern Ireland", which will inform decisions on how carbon budget targets will be delivered.
- 1.5 The rate of development and distribution of new renewable generation and the uptake of electric vehicles (EVs) and renewable heat will have a major impact on electricity demand. The use of new technologies and the choices consumers can (and are enabled to) make will impact the way electricity is distributed and consumed. These changes will be affected by future changes in national policy, such as the decision to delay the ban on new diesel and petrol cars from 2030 to 2035, and the UK Government has also confirmed that 80% of new cars and 70% of new vans sold in GB are to be zero emission by 2030, increasing to 100% by 2035. The development of the electricity network will both influence and be affected by these changes.
- 1.6 NIE Networks has developed its plans for RP7 within this evolving strategic framework. Having considered a range of possible scenarios, it has based its central estimate of new demand on 300,000 electric vehicles (EVs) and 120,000 heat pumps (HPs) by 2030. This key assumption is a forecast, and it is likely that the outcome will be different, because investment will be committed in anticipation of uptake of low carbon technologies such as EVs and HPs, and the impact on tariffs will depend on actual uptake. To reflect this uncertainty, we have modelled the consumer impact on NIE Networks assumptions above and tested the sensitivity of bill impact assuming 75% of anticipated EV uptake and 50% of anticipated HP uptake. This is set out in Chapter 13.
- 1.7 The assumptions on low carbon technology connections which NIE Networks has made is only one driver for increased investment in RP7. Others include:
 - a) Investment in large scale transmission projects, including the North-South Interconnector. In addition to addressing increases in load, these projects will allow increasing amounts of renewable energy to be generated and distributed. They should also contribute to reductions in other market costs such as imperfection charges.

- b) A major refresh of existing IT systems, and the introduction of new systems to support digitalisation, publication of information for consumers, and more interactive management of the network.
- c) Upgrade of low-capacity sections of the network, in particular the 11kV overhead line network serving rural areas.
- 1.8 While the timing of load growth is uncertain, the trajectory is clear. The sale of new diesel and petrol cars are expected to be banned from 2035, prompting increasing demand on electricity networks. The increased investment planned for RP7 is expected to continue for at least two further price controls. The increasing level of investment necessary to upgrade electricity networks at local national, and international levels will place significant demands on supply chains. Delaying making a start on this investment can only increase the peak in future investment, making it difficult and possibly more expensive to deliver. It would also miss the opportunity to increase capacity in parallel with ongoing maintenance programmes and increase the marginal cost of future capacity upgrades. Therefore, we have concluded that, despite the uncertainty over future load projections, there is a need to begin this long-term investment in strengthening our electricity networks now, accepting that some of this investment may be in advance of need.
- 1.9 We recognise that additional investment in electricity networks will increase the overall cost which consumers as a whole will pay for network charges. This will be offset over time by additional demand to power low carbon technology. As a result, if demand increases as forecast by NIE Networks over the RP7 period, domestic consumers who do not change their demand pattern will not pay more. Those who do increase their use of low carbon technology will pay more in network charges, with the additional costs offset by reductions in transport costs and heating costs. However, if demand does not increase, the delivery of a flexible, resilient, and integrated energy system, with increased capacity for net-zero, will increase costs to all consumers.
- 1.10 This final determination for RP7 does not capture all the additional investment which might be necessary within the RP7 period. In some cases, we have included uncertainty mechanisms which allow revenues to reflect actual volumes of activities (such as metering) or reasonable estimates of future costs once they can be forecast with reasonable accuracy (such as major transmission investment). We have included forecasts of this expenditure when we have modelled consumer impact and NIE Network's ability to finance investment. However, there are two key strands of work which have remained too uncertain to include in our financial modelling or change mechanisms:

- a) The future implementation of smart metering.
- b) Any future decision to socialise an increased proportion of connection costs through NIE Networks investment and Regulatory Asset Base.

Further licence modifications will be necessary to allow NIE Networks to finance any additional functions it might be required to undertake once decisions have been made on these issues.

Purpose of this document

- 1.11 This document sets out our final determination for the RP7 Price Control. It includes our determination of the expenditure allowances, financing costs, outputs, incentives and change mechanisms necessary for NIE Networks to deliver its services efficiently and effectively as it develops its network to support society's move to net-zero.
- 1.12 This this is the seventh regulatory price control which we refer to as RP7. Its sets out how we will regulate the outputs and costs of NIE Networks for the RP7 period, which runs from April 2025 to March 2031.
- 1.13 It builds on work which began in 2022, when we published our approach to RP7, detailing our overall approach to the next price control for NIE Networks. We received NIE Networks' business plan on 31 March 2023 and we published a draft determination on 30 November 2023 for consultation. This consultation closed on the 22 March 2024 with 41 responses from various organisations as well as a response from NIE Networks. We have published the responses to the draft determination consultation on our website and we have provided a summary of the response received and how they have been addressed in Annex Z of this determination. We want to record our appreciation of the time taken by the organisations, companies and stakeholders who took the time to respond to the consultation and help inform our final determination.
- 1.14 Having published our final determination for RP7 we are now consulting on the licence modifications necessary to give effect to these decisions, this licence consultation will close on 2 December.

Our Statutory Duties and Regulatory Principles

1.15 Our principal objective in carrying out the duties associated with our electricity functions is to protect the interests of consumers of electricity supplied by authorised suppliers, wherever appropriate by promoting effective competition between persons engaged in, or in commercial activities connected with, the generation, transmission, distribution or supply of electricity, as set out more fully in Article 12 of the Energy (Northern Ireland) Order 2003 (the Energy Order)².

- 1.16 We must carry out those functions in the manner which it considers is best calculated to further the principal objective, having regard in particular to:
 - a) The need to secure that all reasonable demands in Northern Ireland or Ireland for electricity are met.
 - b) The need to secure that licence holders are able to finance the activities which are the subject of obligations imposed by or under Part II of the Electricity (Northern Ireland) Order 1992³ (the Electricity Order) or the Energy Order.
- 1.17 We must also carry out its functions consistently with a number of other duties which are set out in full at Article 12 of the Energy Order.
- 1.18 Subject to the duties already mentioned above, we are required to carry out our respective electricity functions in the manner which it considers is best calculated:
 - To promote the efficient use of electricity and efficiency and economy on the part of persons authorised by licences or exemptions to supply, distribute or participate in the transmission of electricity.
 - b) To protect the public from dangers arising from the generation, transmission, distribution or supply of electricity.
 - c) To secure a diverse, viable and environmentally sustainable long-term energy supply.
 - d) To promote research into, and the development and use of, new techniques by or on behalf of persons authorised by a licence to generate, supply, distribute or participate in the transmission of electricity.
 - e) To secure the establishment and maintenance of machinery for promoting the health and safety of persons employed in the generation, transmission, distribution or supply of electricity.
- 1.19 In performing the above duties, we shall have regard to the interests of groups of vulnerable consumers in Northern Ireland, comprising the disabled and chronically sick, pensioners, low-income consumers and residents of rural areas.

² <u>https://www.legislation.gov.uk/nisi/2003/419/contents</u>

³ https://www.legislation.gov.uk/nisi/1992/231/contents

- 1.20 In carrying out our electricity functions, we must not discriminate between persons whose activities include generating, supplying, or transmitting electricity.
- 1.21 Our approach is based on best practice regulation of natural monopolies. Our task essentially consists of implementing a framework within which, in return for providing monopoly services to an acceptable quality, the company receives a reasonable assurance of a revenue stream in future years that will cover its efficient costs and ensure fairness for the consumer.

The Electricity Industry in Northern Ireland

- 1.22 Due to its natural monopoly position, the amount of revenue which NIE Networks can recover is subject to a price control. This is set by us following consultation with stakeholders and the wider public.
- 1.23 The electricity network is made up of a transmission and a distribution component. NIE Networks has full responsibility for the distribution system. However, due to EU requirements for the independence of certain activities, NIE Networks shares the responsibilities for the transmission system with the System Operator for Northern Ireland (SONI). NIE Networks owns, finances and carries out the necessary maintenance and development of the transmission network.
- 1.24 SONI is responsible for the day-to-day operation of the transmission system. That is, SONI directs the flows of electricity over the transmission network from generators. In doing this they are continually matching the supply of and demand for power across Northern Ireland. SONI is also responsible for connections to the transmission system. More recently SONI has become responsible for transmission system planning.
- 1.25 The various activities and responsibilities within the electricity industry in Northern Ireland are illustrated below⁴.

⁴ Diagram sourced from NIE Networks RP7 business plan.



Overall Approach and Timelines for RP7

- 1.26 The RP7 process began in mid-2021, when meetings were held with NIE Networks, identifying the key issues and challenges that faced RP7.
- 1.27 In addition to the engagement with NIE Networks, we also engaged with other key stakeholders, including representatives from the Consumer Council of Northern Ireland (CCNI), SONI and DfE.
- 1.28 Following consideration of this initial feedback, we issued a draft Approach document⁵ for consultation for RP7 in March 2022. We received nine responses to this consultation.
- 1.29 In its response to the draft Approach document, NIE Networks explained why it considered the timelines outlined in our Approach document to be challenging. It proposed that the RP7 business plan submission date should be delayed by five months to 31 March 2023 (from October 2022), to allow for a more significant period of engagement with UR, and other stakeholders, during 2022. NIE Networks believed that this would lead to a better and more informed RP7 Business Plan submission.
- 1.30 Having considered all responses, we published our Final Approach document⁶ for RP7 in July 2022. In our Final Approach document for RP7, we explained that in setting revised key milestones for RP7 we intended to take account of the response by NIE Networks, that we accepted in principle the argument in favour of delaying the date for the Business Plan submission, and that we consequently intended to consult on licence modifications for a one-year extension to the current RP6 price control, so as

⁵ RP7 approach document | Utility Regulator (uregni.gov.uk)

⁶ https://www.uregni.gov.uk/news-centre/final-approach-nie-networks-next-price-control-published

to facilitate that extension.

- 1.31 On 25 January 2023 we launched a consultation⁷ on the proposed licence modifications necessary to extend the RP6 price control by one year. The closing date for responses was 24 February 2023. Four responses were received.
- 1.32 Having considered the responses to the consultation, we considered that the licence modifications⁸ set out in the document are those which are best calculated to comply with our statutory duties. Those modifications were substantially the same as those on which we consulted. The RP6 price control was extended by one year, which came into effect on 24 May 2023.
- 1.33 At the same time, we engaged with NIE Networks to develop the Business Plan Submission Templates and Commentary documents, including some supplemental papers for RP7. The Business Plan Submission Templates built on the RP6 Business Plan Templates, and the Regulatory Information Guidance Templates used for annual cost and performance reporting. The Business Plan guidance and commentary, along with the supplemental papers were finalised and submitted to NIE Networks in August 2022 and published shortly after⁹.
- 1.34 At the end of March 2023, NIE Networks submitted its RP7 Business Plan¹⁰, with commentary and supplemental papers. A requirement of the submission was to produce a public facing document that was published on the NIE Networks website, to enable open dialogue with other stakeholders on the key issues.
- 1.35 Following detailed scrutiny of NIE Networks' business plan, we published our RP7 Draft Determination for consultation on 30 November 2023. We have now reviewed our proposals for RP7 in light of the responses received to the consultation on the RP7 Draft Determination and we are publishing our final determination for the RP7 period, accompanied by a consultation on related licence modifications. The licence modification consultation will close on 2 December 2024.
- 1.36 Following due consideration of the responses received to the consultation, we expect to publish our decision on the licence modifications for RP7 by 4 February 2025. The effective date of the licence modifications will be at least 56 days after the publication of the licence modification decision, in line with

- ⁸ <u>Consultation and Notice on proposed licence modifications to reflect the RP6 price control extension</u> Utility Regulator (uregni.gov.uk)
- ⁹ RP7 Business Plan Templates | Utility Regulator (uregni.gov.uk)

⁷ https://www.uregni.gov.uk/consultations/proposed-licence-modifications-reflect-rp6-price-control

¹⁰ Investing For The Future: Our RP6 Business Plan | Northern Ireland Electricity Networks (NIE Networksetworks.co.uk)

the requirements of Article 14(10) of the Electricity Order. This period provides an opportunity for NIE Networks, any other licence holder materially affected by the decision, a qualifying body or association representing one or more of those licence holders, and/or CCNI to appeal the decision on the licence modifications to the Competition and Markets Authority (CMA).

- 1.37 An application to the CMA for permission to appeal must be made before the end of 20 working days from the date of the decision to modify the licences. Such an appeal to the CMA brought under Article 14B of the Electricity Order would follow the procedure set out in Schedule 5A of the Electricity Order.
- 1.38 Subject to any suspension which may be directed by the CMA if an appeal is brought, the RP7 price control will take effect on 1 April 2025.
- 1.39 The key milestones of the RP7 price control are summarised in Table 1.1 below.

RP7 Key Milestones	Revised timeline
Issue draft approach to RP7.	2 March 2022
Consultation on approach closes.	4 May 2022
UR publishes final approach to RP7.	6 July 2022
Draft information requirements issued.	31 March 2022
Final comments on the information requirements.	15 August 2022
Final information requirements issued.	31 August 2022
Business plan submission.	31 March 2023
Publish the Draft Determination.	30 November 2023
Consultation on the Draft Determination ends.	22 March 2024
Publish Final Determination and proposals on licence modifications.	30 October 2024
Close of representations on proposals.	2 December 2024
Decision on licence modifications published (no later than).	4 February 2025
Licence modifications come into effect.	1 April 2025

Table 1.1: Price control process key milestones

Structure of this document

- 1.40 This document is structured in chapters, each addressing different aspects of the price control. The chapters are as follows:
 - a) The Executive Summary: provides an overview of the key findings and key decisions of this price control.

- b) Chapter 1, Introduction: provides an overview of the purpose of this RP7 Final Determination, our statutory duties and regulatory principles and the electricity industry in Northern Ireland.
- c) Chapter 2, Price Control Submission and RP6 Performance: provides an overview NIE Networks' business plan submission and a review of its performance in RP6 to date.
- d) Chapter 3, Network Costs: summarises the network expenditure allowances requested by NIE Networks (excluding direct investment and other items described below), our assessment of these costs and our decision on allowances for the RP7 price control period.
- e) Chapter 4, Direct Network Investment: details our assessment of direct network capital investment for RP7.
- f) Chapter 5, Frontier Shift: details our approach to frontier shift, including real price effects (RPEs) and productivity assumptions across both operational and capital expenditure.
- g) Chapter 6, IT, DSO and Digitalisation: provides our assessment of NIE Networks planned IT, DSO and digitalisation expenditure.
- h) Chapter 7, Metering Market Operations: sets out our assessment of an efficient level of expenditure for Metering Market Operations and other related costs.
- i) Chapter 8, Innovation and Incentives: sets out our decision on the funding of innovation initiatives and the financial incentives which will apply to NIE Networks in RP7.
- j) Chapter 9, Consumer Measures and Consumer Engagement: sets out our decisions on consumer measures and the process of development of targets and reporting in the RP7 period.
- k) Chapter 10, Evaluative Performance Framework (EPF) Guidance and Principles: sets out the principles for the EPF and provides guidance on NIE Networks will be assessed against this framework, including the role of an independent EPF Panel.
- Chapter 11, Environmental Action Plan: summarises NIE Networks' proposals and commitments on environmental improvements and our reporting requirements.
- m) Chapter 12, Energy Strategy and Price Control Design: explains the background to the design of the RP6 Price Control and the development of uncertainty mechanisms for RP7.

- n) Chapter 13, Financial Aspects: sets out our decisions on financial issues, in particular rate of return, depreciation, tax and financeability.
- o) Chapter 14, Business Plan Assessment: reviews the quality of the business plan submitted by NIE Networks.
- p) Chapter 15, Next Steps: sets out how we are consulting on licence modifications to give effect to the decisions of this final determination, and how we will address future monitoring and future decisions not covered in this final determination.
- 1.41 The main chapters in this final determination provide a high-level summary of our analysis and decisions. Our detailed assessments, how we have taken account of responses to the draft determination consultation and our final decisions, are provided in the supporting annexes referenced in this document.

2. Price Control Submission and RP6 Performance

RP7 Business Plan submission

- 2.1 NIE Networks submitted a comprehensive business plan on 31 March 2023. This business plan addressed the various requirements which we set out in our Business Plan Templates (BPT)¹¹ and associated information requirements as follows:
 - a) BPT Overarching Guidance which included a brief set of instructions for the RP7 Business Plan submission, alongside our requirement for a public facing Executive Summary, and a Glossary.
 - BPT Guidance Notes providing detailed reporting definitions similar to those employed across the existing RP6 Regulatory Information Guidance (RIGs).
 - c) BPT Reporting Workbooks, where NIE Networks was expected to populate its historical and forecast projections alongside other data in support of its RP7 Business Plan.
 - d) BPT Commentary for Pensions, where NIE Networks had the option to populate in free text any special considerations worth drawing to our attention when using its data submission.
- 2.2 The company's website¹² contains a summary report, its full report and a summary of stakeholder feedback on the draft plan they consulted on in 2022:
 - RP7 Business Plan Summary Report
 - RP7 Business Plan Full Report
 - RP7 Business Plan Stakeholder Report
- 2.3 In addition, the company submitted a suite of BPT documents comprising completed Excel spreadsheets and commentary Word documents, as provided by us for completion. These fulfilled our requirements on:
 - a) BPT Reporting Workbooks where NIE Networks populated spreadsheets with its historical and forecast projections alongside

¹¹ <u>https://www.uregni.gov.uk/rp7-business-plan-templates</u>

¹² https://www.nienetworks.co.uk/rp7-business-plan

other data in support of the RP7 Business Plan; and

- b) BPT Commentary Templates where NIE Networks had the option to populate in free text, any special considerations worth drawing to our attention when using its data submission.
- c) Various supporting reports and supplemental documents to the suite of BPT documents in fulfilment of our requirement to provide supporting material, consistent with the information in the suite of BPT documents, the RP7 Main Report and Executive Summary.
- 2.4 Key financial metrics from the RP7 Final Determination (Totex, Capex and Opex) is shown in Table 2.1 and this is compared with the expected out-turn data for RP6. To ensure a like for like comparison all data is presented in 2021/22 prices using CPIH to covert from nominal values.

		RP6 Outturn ¹³	RP7 Final Determination
Total expenditure	Totex	1,499.0	2,228.7
comprising	Opex	443.9	459.3
	Capex	960.2	17,89.9
	Pensions	94.9	(20.5)

Table 2.1: RP7 Final Determination – Key financial metrics £m (2021/22 prices)

- 2.5 This table demonstrates the stepped change in investment proposed by the company to address the transition to net zero. It includes additional investment in the transmission network, reinforcement of the distribution network to accommodate low carbon technologies and significant investment in replacement and improved IT systems to enable more intelligent use of the network.
- 2.6 Following receipt of the company's business plan, we reviewed and challenged the plan through ongoing engagement with the company and a formal query process. In this, we were supported by external consultants on cost of capital, network cost benchmarking, pensions and some areas of direct network costs to arrive at our draft and final determinations.

Overview of NIE Networks RP6 performance

2.7 Our final determination for RP7 builds on information of NIE Networks costs and performance in RP6. In particular, we have relied on actual unit costs provided by NIE Networks, up to and including 2023/24, to inform various

¹³ The figures for RP6 Outturn are the final 6 years of RP6 only, for comparative purposes with the 6 years of the RP7 Final Determination

part of our decisions. In this section we provide a summary of the performance of NIE Networks in RP6, up to and including the year to 31 March 2024. Selected RP6 allowances, targets and projections for a number of key areas are compared with out-turns values. A more detailed assessment of NIE Networks' costs and performance in RP6 can be found in Annex A of this determination.

2.8 In the following sub-sections we provide information on Opex, Capex, network performance and the quantity of electricity consumed as summary indicators of NIE Networks' performance in RP6.

Opex performance

2.9 The company has out-performed its cumulative Opex allowance by 9.3% to 31 March 2024 and will retain half of this out-performance. A separate element of operating costs in the RP6 price control are subject to a pass-through mechanism and not included in this comparison. But for the majority of Opex, expenditure is subject to a cost risk sharing mechanism whereby the company retains 50% of any outperformance and bears 50% of any cost overrun.

Capex performance

- 2.10 The company's cumulative Capex to the end of 2023/24 was lower than the regulatory allowances. NIE Networks has explained that its delivery was impacted by COVID 19, both in terms of restrictions in availability of resource/material and because it had focussed efforts on essential customer services. NIE Networks had anticipated increasing its outputs after the impact of COVID 19, to make up any shortfall arising within the RP6 period.
- 2.11 However, NIE Networks currently anticipates that it will complete some of its RP6 outputs in the first 24 months of RP7, but it will continue to strive to do all that it can to achieve the outputs within the original timeframe, and to minimise the level of carryover. NIE Networks has also noted that it expects costs to exceed allowances over the remaining years of RP6 due to above inflation cost pressures driven by contractor rates and material prices. We will continue to monitor the delivery of the RP6 programme and make appropriate adjustments under the licence for the deferral of RP6 investment into RP7.

Network performance

2.12 There has been an improvement in networks performance as experienced by consumers over the RP6 period:

- The reliability of the network, as measured in faults per 100km of networks, has increased from the start of RP7, returning to 2015 levels.
- However, customer interruptions (CI) due to both planned and unplanned interruptions have both continued to trend downwards.
- There has been a significant stepped reduction in the impact of interruptions on consumers, measured as customer minutes lost (CML), following the introduction of a CML incentive for RP6.

Electricity units distributed

- 2.13 The quantity of electricity units distributed in the RP6 period has reduced. NIE Networks has indicated that from 2020, social and economic factors played a more significant role in influencing the amount of electricity used by each market sector.
- 2.14 NIE Networks has forecast an increase in units of electricity supplied in the RP7 period, based on its best view of low carbon technology (LCT) uptake in the period, for example a forecast of 300,000 EVs and 120,000 heat pumps installed in homes in Northern Ireland by 2031. We intend to monitor the level of LCT uptake during RP7 as well as the quantum of electricity units.

Cost and performance reporting

2.15 RP6 ends on 31 March 2025. Once we have received final cost and performance data for the RP6 period, we will publish a more detailed cost and performance report, including information on carry over of RP6 deferred capital outputs into RP7.

3. Network Costs

Overview

- 3.1 Network costs cover a range of expenditure on recurring activities. This includes network operating costs (NOCs), which combine expenditure on three categories of costs collectively described as IMFT&I:
 - Inspections, maintenance, faults, and tree cutting (IMFT).
 - Indirect activities known as business support costs (BSC) including IT spend and closely associated indirects (CAI).
 - Non-operational capex (principally property costs).
- 3.2 Network costs covered in this chapter also include pension deficit recovery costs, severe weather costs, business rates and licence fees (both treated as pass through costs), and income received by NIE Networks.
- 3.3 The total costs for these categories included in the company business plan under these headings are set out in Table 3.1 below where they are compared with the costs allowed in the final determination. This comparison is in 2021/22 prices before the application of frontier shift (see Chapter 5).

	Business Plan submission (£m)	RP7 Final Determination (£m)
IMFT&I	688.3	606.4
Pension deficit recovery	-38.8 ¹⁴	-20.5
Severe weather costs	5.6	4.8
Business rates and licence fees (pass through)	103.7	106.7
Income	-33.4	-33.4
Total	725.4	664.1

Table 3.1: Networks costs summary £m (2021/22 prices)

3.4 When submitting their business plan NIE Networks are expected to reasonable justification for all the costs requested in the submitted business plan. Detailed supporting information on our assessment and decisions on networks costs can be found in: Annex B – Efficiency Modelling; Annex D - Modelled & Non-Modelled Costs; and Annex F and Annex G – Pensions. A summary of key issues and our decisions are set out in the sub-sections

¹⁴ This figure was subsequently amended post the business plan submission. The figures in Table 3.5 represent the updated request.

below.

IMFT and Indirect costs (IMFT&I)

NIE Networks' business plan submission

- 3.5 IMFT&I covers three categories of expenditure: inspections, maintenance, faults, and tree cutting; indirect costs and non-operational capex (principally property costs).
- 3.6 NIE Networks based its submission of IMFT&I costs on three broad categories:
 - Additional indirect costs (such as project management and design costs) necessary to deliver a stepped increase in direct capital expenditure, referred to as a capex scalar.
 - An increase in other general costs following a benchmark comparison with GB costs. NIE Networks in 2021/22 were significantly lower than GB benchmark. The company concluded that this was because GB companies were already undertaking new activities in respect of netzero which NIE Networks would have to incur in the future.
 - Additional IT expenditure determined from an assessment of future increases in costs as it replaces its IT systems on obsolescence and improves its management of the network (see Chapter 6).
- 3.7 The company's top-down business plan submission of IMFT&I costs and its revised position following the draft determination are summarised on Table 3.2 below.

	Business Plan submission (£m)	NIEN revised position (£m)
Capex scalar (additional indirects)	13.6	8.4
Benchmarked IMFT&I (including efficiency gap uplift)	94.5	94.5
Additional IT costs	5.9	5.9
Total IMFT&I (business plan submission)	114.0	108.8

Table 3.2: Networks costs summary £m per annum (2021/22 prices)

Capex scalar (additional indirects)

3.8 In its business plan submission, NIE Networks suggest that a £1 increase in direct capex will lead to a £0.15 increase in indirect costs. During RP7, capex is forecast by the company to increase by £545m. This suggests

gross indirect costs will increase by £82m over the six years of RP7, or £14m per annum.

- 3.9 In terms of the indirect scalar uplift to account for the changing capital programme, some addition seems justified. We have had significant engagement on this issue by way of feedback and query responses.
- 3.10 In the draft determination, we allowed an additional £4.5m capex scalar uplift. It is accepted that our draft determination position was incorrect. In response to the draft determination, NIE Networks consultants (NERA) pointed out that:

"The functional form of the regression was in levels, so the coefficient on CAI captures the change in CAI (in monetary terms) resulting from a change in capex. The coefficient for capex represented the increase in indirect expenditure (i.e. in pounds) associated with a unit (i.e. £1) increase in capex, holding MEAV fixed. Hence, the coefficient of 0.108 implied that a £1 increase in capex would increase a DNO's CAI by £0.108."

- 3.11 NIE Networks also revised its request with respect to this uplift. In response to a query, they consider that £8.4m represented an appropriate CAI uplift rather than the £14m set out in the business plan. This change is due to the willingness to accept the Ofgem chosen coefficient.
- 3.12 For the final determination we have accepted the company proposal and updated the scalar for the final determination capex allowances. We estimate that the capital programme for non-load related and reinforcement expenditure in RP7 will increase by £525m. Applying the 0.108 coefficient results in an uplift of £56.6m in total or £9.4m per annum.
- 3.13 The scalar has been applied to additional direct capex excluding D5 projects. We include an allowance for additional CAI in the determination of D5 projects and there is no need to make provision for this in the ex-ante determined costs.

NIE Networks' benchmarked IMFT&I costs

- 3.14 Econometric benchmarking has typically been applied to IMFT&I costs to determine whether a catch-up target should be imposed on future costs. NIE Networks summarised its understanding of our process as follows:
 - Stage 1 We will benchmark historic costs to determine an "efficiency gap" (being the difference between actual costs and the expected expenditure for a company operating at the upper quartile).
 - Stage 2 We will apply the determined efficiency gap to base year expenditure. This gives a starting point for allowances.

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- Stage 3 We will consider if any additional allowances are appropriate, for example if there are new activities to be carried out in future that do not feature in the base year.
- Stage 4 We will roll forward the allowances determined at Stage 3 year-on-year, applying adjustments for real price effects (RPEs) and productivity improvements.
- 3.15 Following this approach, NIE Networks consultants assessed the distribution operator as being more efficient than the upper quartile (UQ). NIE Networks assumed this outperformance represented scope differences rather than efficiency. Its premise is that GB companies were already undertaking new activities in respect of net-zero, which NIE Networks would have to incur in the future.
- 3.16 As a consequence, NIE Networks used the findings to support an uplift to indirect and IMFT costs. It concluded that a negative efficiency gap of up to 24% to the upper quartile determined by its consultants should be applied to the IMFT&I baseline cost in 2021/22 of £76m to establish a new baseline for RP7 of £94m per annum (i.e., £76m x 1.24).

UR efficiency benchmarking

- 3.17 With the aid of consultancy support, we have independently assessed NIE Networks performance by benchmarking against GB Distribution Network Operators (DNOs). The findings of this analysis are set out in Annex B of the determination and the Annex B addendum report.
- 3.18 In terms of the modelling the three key issues raised by NIE Networks and NERA in the consultation response include the following:
 - 1) Treatment of connection costs.
 - 2) Regional wage adjustment (RWA) application.
 - 3) Weighting placed on more disaggregated models covering only some opex activities (NOCs).
- 3.19 In terms of connection costs, we have decided to retain reliance on both pre and post allocation models. As at RP6, it is our view that this strikes the right balance between concerns over allocations and accounting for the different level of connection activity.
- 3.20 This decision is due to a number of factors including the fact that there is a wide range of market shares across GB DNOs, yet Ofgem did not exclude connection costs from its benchmarking. The difference in market share also

does not seem to fully explain the much larger connection costs reported by NIE Networks. Neither did the company provide any other compelling arguments to explain the differential.

- 3.21 In terms of the RWA and application of local labour proportions, we have accepted the company argument to an extent. However, we have not applied the local labour adjustment to NIE Networks costs. This is due to the fact that they already operate in the lowest cost region of the UK, so have limited incentive to procure services elsewhere. Neither is there evidence that GB companies incur much labour cost outside of GB.
- 3.22 Furthermore, whilst there is some anecdotal evidence of the company procuring GB labour, the materiality of this has not been established. It is our expectation that this would be low, particularly as the company has recognised that they can procure all the referenced services locally.
- 3.23 However, we have taken on board the feedback with respect to the NOCs models. These have been excluded from the final triangulation of efficiency performance. This removes any potential bias.

Model Number	NIE Networks Efficiency Score	Upper Quartile Score	% Uplift to UQ
2.1 = IMFT&I (inc. connection costs)	0.871	0.961	10.3%
2.2 = IMFT&I (inc. connection costs)	0.888	0.974	9.7%
2.3 = IMFT&I (inc. connection costs)	0.839	0.957	14.1%
2.1 = IMFT&I (excl. connection costs)	0.820	0.982	19.8%
2.2 = IMFT&I (excl. connection costs)	0.836	1.000	19.6%
2.3 = IMFT&I (excl. connection costs)	0.770	0.945	22.7%
Totals (Average of the six models)			16.0%

3.24 The efficiency scores and the potential uplift to get to UQ spend (as per the NIE Networks approach) is set out in Table 3.3 below.

Table 3.3: CEPA alternative model efficiency scores¹⁵

3.25 The results suggest that no catch-up efficiency target is appropriate. However, they also indicate that the NIE Networks 24% base uplift is not supported by the top-down analysis. Had we followed the approach which NIE Networks adopted of applying the uplift to the 2021/22 baseline cost of £76.2m, we would have arrived at a top-down estimate for these costs of

¹⁵ A score below 1 represents efficiency whilst a score above 1 represents inefficiency against the average performance.

£88.4m/a, £6.1m/a less than that proposed by NIE Networks.

Additional IT costs

- 3.26 NIE Networks set out a significant level of additional IT expenditure in RP7 to replace its IT systems on obsolescence and improve its management of the network. Following a detailed appraisal of these costs (see Chapter 6) we concluded that additional IT costs of £6.9m/a should be allowed in RP7 which would be classified as IMFT&I costs. We agree that these costs should be included in any detailed bottom-up assessment which begins from the existing cost baseline and adds any additional cost required to meet future needs which is well explained and justified.
- 3.27 However, we disagree with NIE Networks that this cost should be automatically added to the top-down assessment over and above the benchmarked cost and capex scalar costs discussed above. This would assume that none of these costs were included in the benchmark uplift described above, which NIE Networks has suggested reflects additional activities undertaken by GB companies that NIE Networks will have to carry out in the future.
- 3.28 We have not undertaken benchmarking excluding IT costs, so cannot have certainty the impact this issue is having on the scope difference. However, we would note that the scale of the IT and telecoms uplift request for business support costs is much larger for NIE Networks than for GB DNOs, suggesting that much of the differential is already provided by the scope uplift.
- 3.29 Were we to add these costs to the top-down allowance, this has the effect of potentially pushing costs above the UQ level, which we would consider to be inappropriate. Because of this, we gave further consideration and greater weight to a bottom-up assessment of total IMFT&I costs described below.

UR assessment of IMFT&I costs

- 3.30 In order to determine IMFT&I allowances for the final determination, we have considered spend from both a top-down and bottom-up basis.
- 3.31 For the top-down analysis we have used the CEPA findings for the efficiency gap. Unlike at the draft determination stage, we have assumed a 100% uplift of the gap is due to scope differences between Northern Ireland and GB. In addition to the benchmark uplift, we have added in our full determination of the capex scalar. For the reasons described above, we have not added in the bottom-up estimate of additional IT costs to the top-down allowance.
- 3.32 For the bottom-up assessment we have again applied the indirect scalar uplift. We have also assessed additional IMFT, property and indirect costs

and IT costs based on further company submissions which we have added to the 2021/22 IMFT&I baseline of £76m. This assessment took account of the additional dossier of evidence on bottom-up IMFT&I costs provided by NIE Networks in response to the draft determination. Results of the IMFT&I deliberations are set out in Table 3.4 with further detail of our bottom-up assessment provided in Annex D.

	NIE Networks Request	UR Top-Down	UR Bottom-Up
Total IMFT&I	£114.7m/a	£97.9m/a	£101.1m/a

Table 3.4: NIE Networks request and UR allowance for IMFT&I

- 3.33 For the final determination, our allowance is based on the £101.1m/a bottomup calculation. This provides for scope differences, new activity, property costs and uplifts associated with the larger capital programme. It also provides for close to the full IT request as established by the separate IT review. We think this represents a reasonable position having considered both the top-down and bottom-up company justification.
- 3.34 Whilst still short of the business plan request, the final position does not differ substantially from the revised position as set out by NERA in the response to the draft determination consultation.
- 3.35 We are of the opinion that the allowance strikes a fair balance between uplifts for new activity and risk taken by the consumer of such material cost increases. This is particularly true in light of the fact that NIE Networks is substantially below the spend it had forecast for 2023-24 for IMFT&I spend. The final position also represents a substantial uplift from the £88.8m per annum allowance at the draft stage.

Pensions deficit recovery and related issues

3.36 For RP7, we commissioned the Government Actuary's Department (GAD) to provide expert advice on pension aspects. Our detailed assessment and decisions on pension aspects of the final determination are set out in Annex F supported by the detailed advice from GAD produced as Annex G.

Pension deficit recovery

- 3.37 In our Approach to RP7, we noted that we intended to continue to apply the principles developed for RP6 to pension deficits and ongoing contributions. In particular:
 - a) Costs of the defined contribution pension scheme will be covered by benchmarking.

- b) We will take account of the current scheme funding, based on the latest actuarial valuation of the scheme, using the Technical Approach method and take into consideration the current treatment by Ofgem on this area, including deficits and the funding implications that will result from this. In particular, we will continue to apply the principle that the "established deficit" which represents the difference between assets and liabilities attributable to pensionable service up to 31 March 2012 will be 100% funded by consumers, subject to an Early Retirement deficit contribution liability factor which reflects historical decisions by NIE Networks on enhancement to pension benefits with no additional funding when the scheme was in surplus.
- 3.38 As a result, we have allowed for future pension contributions and most deficit repair costs (if any) within our assessment of detailed cost allowances. The only specific funding for pension costs in RP7 relates to the established deficit up to 31 March 2012, which has been 100% funded by consumers. This follows the approach adopted in RP5 and RP6 where funding was allowed for this specific element of pension deficit.
- 3.39 NIE Networks advised us that it ceased making deficit repair payments on 30 September 2023. As a result, it proposed to refund the RP6 allowances it had not used in the first year of RP7. Following the draft determination, NIE Networks adjusted its estimate of the proposed refund, taking account of the latest inflation indices. We have reviewed and accepted the revised refund amounts as set out in Table 3.5.

	NIEN Business Plan	RP7 DD (£m)	RP7 FD (£m)
Distribution	19.8	19.8	15.8
Transmission	6.1	6.1	4.7
Total	25.9	25.9	20.5

Table 3.5: RP7 pension deficit repair refund £m (2021/22 prices)

Other pension related issues

- 3.40 We propose accepting NIE Networks' proposal that the Regulatory Fraction be 100% for the RP7 period. We do not propose to make a retrospective adjustment in respect of RP7 and previous price controls since this would involve adjustment for other price control aspects as it could not be adjusted in isolation.
- 3.41 We do propose to accept NIE Networks' proposal of an update to the trigger thresholds referenced in the draft determination (70% and 110%). NIE Networks pointed out that the thresholds included in the RP6 final

determination were 75% and 105%. The RP6 framework was cited in the draft determination, and our intention would be to maintain continuity with this.

- 3.42 In the draft determination, we noted that no amount has been requested relating to ERDCs for the RP7 period, and accordingly allocated an allowance of £0, under the same ERDC framework as had been employed in RP6. We are satisfied that the disallowance has been addressed in full, and there is no need to include an ERDC mechanism.
- 3.43 We also have accepted NIE Networks' comments in its consultation response that provided extra detail concerning the 31 March 2023 funding update, and statement that they also monitor developments in funding informally, during intervening periods to a funding update. We understand this as clarifying that the company has some awareness of an indicative/informal funding position, after commenting upon our surprise (in the draft determination) that NIE Networks stated they did not have an approximate funding update since the valuation of 31 March 2022.
- 3.44 In its consultation responses, the trustees of the NIEPS, and NIE Networks, queried our proposals concerning the Pensions Monitoring Framework, and suggested that we adopt Ofgem's current framework for a re-opener, including a triennial recalibration of pension allowances, following an actuarial valuation. NIE Networks also expressed concern that the present re-opener framework may lead to it having to finance significant amounts of new deficit contributions in advance of receiving regulatory allowances. The trustees of the NIEPS stated that UR's proposed approach should be more aligned with Ofgem's approach.
- 3.45 We do not propose to proceed with the approach the NIEPS trustees and NIE Networks have proposed. We do not view it as a likely prospect that NIE Networks would carry the type of deficits mooted and note that NIE Networks has echoed this position on the low likelihood.
- 3.46 Ofgem is consulting on whether they should review the present policy highlighted in the consultation responses. We will take account of the outcome of the Ofgem review when considering whether we should review the present framework. UR's position on this issue, set out in the 2014 Position Paper on Pension Deficit Recovery¹⁶, aimed for consistency with the treatment of pension deficits by Ofgem while allowing for variation between Northern Ireland regulation and regulation in Great Britain, to reflect differences in markets. We believe a proper consideration of updating the 2014 principles, to include due consideration of how a surplus should be treated, should be outside this determination, as any changes we would

¹⁶ <u>Utility Regulator: Pension Deficit Recovery – A Utility Regulator Position Paper, December 2014.</u>

consider or propose would apply not just to the NIEPS, but to other regulated companies as well.

- 3.47 NIE Networks requested a re-opener as part of RP7 should any deficit contributions arise beyond 30 June 2026, with no funding ratio threshold applied to this. We do not consider this necessary at this point and propose retaining the same 'trigger' framework adopted in RP6 (including an 'upside' trigger), with NIE Networks only approaching us when it is clear (at a triennial valuation) there has been a substantial fall in the NIEPS funding position.
- 3.48 During RP5, one of the decisions involved basing price control allowances on a similar approach to that used by Ofgem, by adopting its Pension Deficit Allocation Methodology (PDAM) framework. This approach was retained for RP6 and is also maintained for RP7.
- 3.49 We have decided to continue to use the CMA methodology to allocate a deficit cut-off date of 31 March 2012. Under this methodology, the historic pre cutoff fund is designated as being the consumers responsibility and the incremental post 31 March 2012 fund is designated as being shareholders responsibility.
- 3.50 Whilst recognising that the current funding position could worsen compared with expectations at the 2022 valuation largely due to the performance of the scheme assets not keeping pace with the increasing value of the liabilities it is not certain that future deficit contributions will be necessary. It is also possible that the scheme will move into surplus.
- 3.51 We would wish NIE Networks to take appropriate action in the event of the pension scheme coming into surplus and ensure the consumer benefits. NIE Networks should indicate to us in a timely manner that the scheme is in surplus, or they consider it will be in surplus in the foreseeable future and accompany this with appropriate proposals to benefit the consumer. Ofgem's recent Pension Reasonableness Review found mitigating the risk of a stranded surplus is becoming more of a consideration when setting investment and funding strategies and highlighted more detailed review may be required as part of future reasonableness reviews.
- 3.52 We note also that Ofgem has issued a call for input (which closed in April 2024) for a proposed Pension Policy Review of its current policy for funding Pension Scheme Established Deficits, including its present use of triennial reviews.
- 3.53 Although we are not proposing changes to the monitoring framework at this time, we maintain NIE Networks and the NIEPS will have opportunity to use other mechanisms to engage with us if a deficit emerges and on our review of the policy.

- 3.54 We note that the contribution rates offered for the Options Defined Contribution scheme are not significantly out of line with typical UK schemes. However, costs of ongoing service accrual in the NIEPS have increased significantly. Although this only affects a small number of mature members, and therefore a lower proposition of the overall cost, NIE Networks should explore if they can provide these benefits in future, at a lower upfront cost.
- 3.55 We have also highlighted NIEPS expense costs appear high when compared to schemes of similar size, and we will engage further with NIE Networks to understand the reasons why.

Other costs

3.56 The following sub-sections address severe weather costs, business rates and licence fees and income.

Severe weather

- 3.57 In Northern Ireland the threshold for a severe weather event is defined in the licence, as inclement weather resulting in 13 times the average daily high voltage (HV) fault rate calculated over the previous 10 years. Costs associated with this event are treated as a separate category in this determination.
- 3.58 The company's business plan included a provision of £5.6m (£0.93m/a) for severe weather events. However, it requested that these costs be treated as a pass-through as opposed to an ex-ante allowance subject to the 50/50 cost sharing mechanism.
- 3.59 Our approach at the draft stage proposed to retain an ex-ante allowance with 50:50 risk sharing. Using the average cost run-rate of the last 11 years (from 2013 to 2023) resulted in a £0.64m/a or £3.84m total allowance over the RP7 period.
- 3.60 Consultation responses received on this issue focused on the following issues:
 - Due to climate change, events are predicted to occur more frequently in future such that ex-ante funding is likely to be inadequate.
 - Severe weather is outside of company control and is becoming more prevalent. To set an ex-ante allowance creates unacceptable risk.
 - Ofgem adopted a cost-pass through for 1-in-20 year events.
- 3.61 Whilst it is possible that the frequency of events may rise, we would note the following key points:
- Ofgem only adopted a cost pass through (and no ex-ante allowance) for a much more limited set of severe weather events.
- Ofgem stated that, "Our current position is to not set a cap. This is because SW 1-in-20 costs have historically been low and, because the frequency and impact of severe weather are not expected to significantly increase over the course of RIIO-ED2."¹⁷
- Average costs for NIE Networks for the six-year period (2013 to 2018) have fallen from £0.83m/a to £0.78m/a in the most recent six-year period (2019 to 2024), suggesting an upward trend is not inevitable.
- NIE Networks do not seem to have factored into account the increased resilience of the network from the additional network investment which would be expected to mitigate some of the possible impact of climate change events.
- 3.62 We have determined to maintain the principle of draft determination, setting an ex-ante allowance based on long term average costs. We have updated our assessment for 2024, which includes the costs of Storm Isha of January 2024.
- 3.63 As a result, our determination is based on an increased run rate of £0.80m/a compared to £0.64m/a at the draft determination. This gives a total RP7 allowance of £4.82m for severe weather events. We have also determined that these costs are split between opex and capex as per the historic percentages, rather than 100% capitalisation as per the business plan. Within their response, NIE Networks appear to agree with this decision.

Business rates and licence fees

- 3.64 We treat two categories of network costs as pass through: the business rates which NIE Networks pays to Land and Property Services; and the licence fees which NIE Networks pays to us to cover our activities and the costs of CCNI.
- 3.65 For business rates, NIE Networks has forecast spend of £93m over RP7 across the distribution and transmission business. We forecasted an allowance of £87m for the draft determination.
- 3.66 For the RP7 final determination we have assumed an allowance of £90m based on the latest year data. However, we have accepted that these costs will be treated as a pass-through, subject to evidence that they have been efficiently incurred and subject to appropriate challenge.

¹⁷ See the ED-2 Core Methodology <u>document</u>, para 6.174, p205.

- 3.67 NIE Networks licence fees costs for RP7 are based on actual licence fees incurred in 2021-22 of £1.8m per annum. We have assumed a higher level across the RP7 price control period.
- 3.68 The final determination makes provision for annual licence fees of £2.8m per year in RP7, though this will be adjusted for actuals throughout the period. This reflects our expanded role in relation to energy transition and delivery of the Northern Ireland Executive's Energy Strategy.

Income

NIE Networks recovers a range of income from its activities which off-set some of the cost it incurs. The business plan forecasts income rising from £5.3m per year in RP6 to an average of £5.6m in RP7. Following clarification post the draft determination, we accept that the income forecasts are reasonable. For the final determination, we have accepted the business plan proposals.

4. Direct Network Investment

Overview

- 4.1 Direct network investment are those activities which involve physical contact with network system assets, such as refurbishment or reinforcement of existing assets and the creation of new assets. It forms part of the overall capital investment proposed by the company for RP7. Other strands of investment not covered in this section include indirect expenditure (see Chapter 3), IT investment (see Chapter 6, metering and market operations (see Chapter 7) and innovation (see Chapter 8).
- 4.2 Following consideration of the response to the draft determination, our final determination for RP7 of £1,365m includes 98% of the direct network investment requested by the company. This includes a reasonable estimate of investment which will be determined in future decisions, in particular £493m of investment expected to be made in major transmission projects. It also includes a reasonable estimate of investment determined at unit rates and subject to a volume driver, which will be corrected for actual volumes through the price control. All figures in this chapter (Chapter 5) are stated in 2021/22 prices before the application of a frontier shift.
- 4.3 Detailed supporting information on our assessment and decisions on direct network investment can be found in Annex P (Assessment of RP7 network investment direct allowances), Annex Q (planned network investment volumes and allowances) and Annex R (RP7 Price Control engineering support and asset management advice - GHD).

UR Appraisal of direct network investment

4.4 We have taken account of the responses to our draft determination, and the additional information and data provided by NIE Networks which we have used to revise our assessment of allowances for the final determination. As a result, our final determination for RP7 of £1,365m includes 98% of the direct network investment requested by the company. The movement from the NIE Networks business plan submission to the draft determination, and subsequently to the final determination is shown in Figure 4.1 and Table 4.1 below.

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Figure 4.1: Movement from submission to final determination¹⁸

	Distribution (£k)	Transmission (£k)	Total (£k)
NIE Networks Business Plan Submission	800,657	587,437	1,388,093
Less innovation & D5 estimates	-19,080	-493,400	-512,480
Business plan core investment net of Innovation and D5 estimates	781,577	94,037	875,614
UR DD adjustments to core investment plan	-57,873	-8,386	-66,259
Draft determination of core investment plan	723,704	85,651	809,355
UR FD adjustments to core investment plan	52,683	4,649	57,332
Final determination excluding innovation & D5 estimates	776,387	90,300	866,687
Add back innovation & D5 estimates	4,750	493,400	498,150
Final determination	781,137	583,700	1,364,837

Table 4.1: Change in direct network investment from the business plan submission to draft determination to final determination

4.5 The following section summarises key points from NIE Networks responses to the draft determination and our subsequent adjustments.

¹⁸ Excludes innovation and D5 estimates

Reason for increased allowance from the draft determination

- 4.6 Since the draft determination we have reviewed the determined allowances and unit rates to take account of representations from the company and additional outturn cost information for 2023/24 included in the annual RIGS submission for 2023/24 which we received at the end of July 2024.
- 4.7 In particular, we have adjusted the allowances for:
 - Investment in upgrading the 11kV network, which began at the end of RP6 under the Green Recovery initiative, to reflect the company's submission.
 - Secondary network reinforcement to include NIE Networks' "Touch the Network Once" approach.
 - Increased the allowance for Non-recoverable Alterations to reflect increased activity forecast during RP7.

Volume Driven Allowances

- 4.8 Volume driven allowances are used in the price control where we can determine a reasonable unit rate for an activity, but we do not want to constrain investment by defining the volume of activity. This is the case when the volume of activity must be responsive to external needs and drivers. In RP6 we used a cost driver for undereaves as part of the determination of direct network investment. In RP7 we have expanded the scope of volume drivers to include:
 - a) Undereaves.
 - b) LCT driven cutouts.
 - c) Secondary Network Reinforcement (see separate section below).
- 4.9 As we have expanded the scope of volume drivers, we have placed a cap on the value of licence term for volume driven allowances (VDA_DNt) of estimated expenditure plus 10% (£152.3m). At least six months in advance of the company forecasting that it will exceed the cap it should provide to UR, in writing, a fully justified submission explaining the reasons for the excessive expenditure and the forecast expenditure remaining before the close of the price control period. We will consider the evidence and may approve an increase of the cap in a written determination.

Secondary Network Reinforcement

4.10 For RP7, we have changed our approach to investment in secondary network reinforcement from ex-ante allowances (in part subject to the

deferral mechanism) to a volume driver. This will allow the company to flex investment in response to need and will protect consumers if investment is not required or delivered at the expected pace.

- 4.11 For the final determination, and in consultation with NIE Networks, we have reviewed both the structure and the rates of the volume driver. This has allowed us to incorporate the TTNO investment into the network rates and ensure that as little as possible would fall into a reopener mechanism.
- 4.12 In support of the use of a volume driver for secondary network investment, we have asked the company to provide an annual Utilisation Report as part of its annual RIGs submission. This report will demonstrate the current and forecast utilisation of secondary network assets and provide justification for the investment ahead of need.

D5 Projects

- 4.13 Our treatment of transmission projects which increase capacity and/or capability of the network is explained in Annex S and remains unchanged from the draft determination.
- 4.14 The company has estimated costs in the region of £493m to undertake several significant projects which include the North-South Interconnector (estimated at £250m) and 275kV substation redevelopments (estimated at £76m).
- 4.15 Also included in the project list are the following asset condition related projects:
 - Ballylumford Hannahstown 275kV DC OHL
 - Hannahstown Castlereagh 275kV DC OHL
 - Castlereagh Rosebank 110kV DC OHL (dismantling)
- 4.16 While these projects do not add transmission network capacity or capability, the scope of the work remains sufficiently uncertain to include them as D5 projects at this stage with an ex-ante allowance determined once the scope and timing of the projects have been developed.
- 4.17 While D5 transmission project investment is subject to future decisions, we have included the estimated amounts (£493m) when modelling revenues and consumer impact (tariffs). This allows us to present a fuller estimate of the impact on consumers and properly test the ability of NIE Networks to finance its functions.

5. Frontier Shift

Overview

- 5.1 Our assessment of NIE Networks future costs for RP7 is developed in 2021/22 prices, determined from a combination of benchmarking, historical costs and bottom-up estimates. During the price control, we use CPIH as a general measure of inflation to convert determined values to nominal values.
- 5.2 However, we recognise that the NIE Networks costs will not necessarily move in line with CPIH due to industry specific factors and we expect costs to reduce over time due to improved productivity in the wider economy. We reflect these changes by applying a frontier shift to our assessment of costs for RP7.
- 5.3 The frontier shift is then a combination of real price effects (RPEs) and productivity (or ongoing efficiency) adjusted for general inflation. This can be represented as:

Frontier shift in real terms	 input price increase minus 	
		forecast CPIH (measured inflation) minus
		productivity increase

- 5.4 This chapter gives details of our analysis and considerations around frontier shift assumptions for RP7. The various components of the calculations are assessed in turn before drawing final conclusions. Full details and considerations are provided in Annex C.
- 5.5 Our determination of the frontier shift for opex and capex are summarised in Table 5.1. These are the factors we apply to our base determined costs (in 2021/22 prices) for each year of the price control. These values are significantly lower than those proposed by NIE Networks in its business plan and significantly lower than the those included in our draft determination.
- 5.6 The key reason for the change from draft to final determination is that we have been able to take account of actual indices for 2023/24 which have shown a more rapid return to normal levels following the recent inflationary peak that we had projected at draft determination.
- 5.7 In its business plan, the company estimated that frontier shift would add £128m to estimated base costs (in 2021/22 prices). Our final determination of frontier shift results in a reduction of £90min base costs. This change underpins a major part of the difference between the totex included in the company's business plan and our determination.

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	RP6			RP7					
	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31
Opex frontier shift	0.97	0.97	0.96	0.96	0.95	0.95	0.93	0.93	0.93
Capex frontier shift	0.99	0.96	0.94	0.95	0.95	0.95	0.95	0.95	0.95

Table 5.1: RP7 frontier shift factors

5.8 In this chapter, the various components of the calculations are assessed in turn before drawing final conclusions. Full details and considerations are provided in Annex C with key points summarised below.

Real Price Effects

- 5.9 For the assessment of RPEs, we have made very few methodological changes since the draft determination. We have largely adopted the same indices and cost category weightings as NIE Networks. These indices have been subject to significant scrutiny by Ofgem. However, we continue to make no separate provision for specialist labour. We have also updated 'other costs' for the latest estimates of inflation.
- 5.10 The main differences from business plan to final determination in respect of RPEs can be summarised as follows:
 - a) Use of the latest OBR inflation forecasts.
 - b) No provision for specialist labour.
 - c) Use of a two-year rather than a five-year glidepath for returns to long term averages.
 - d) Inclusion of 'atypical years' in long term average calculations.
- 5.11 Differences between ourselves and NIE Networks figures for materials and plant/equipment simply reflect later data, not a revised methodology.
- 5.12 The indices used in the final determination mirror those used previously and can be summarised in Table 5.2. This table includes the weighting of detailed indices within the overall basket of indices for materials and plant/equipment.

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Indices	Weighting
Labour	
OBR – Average Hourly Earnings Growth	100%
Materials	
BCIS FOCOS Resource Cost Index of Infrastructure Materials	20%
BCIS 3/58 Pipes and Accessories: Copper	20%
BCIS 3/59 Pipes and Accessories: Aluminium	20%
BCIS 3/S3 Structural Steelwork Materials: Civil Engineering	20%
BEAMA's Distribution Transformers	20%
Plant and Equipment (P&E)	
BCIS 90/2 Plant and Road Vehicles	50%
ONS Machinery & Equipment n.e.c. for domestic market (G6V6)	50%
Other	
General inflation (OBR – April 2023)	100%

Table 5.2: UR input indices and weightings

5.13 We arrived at different RPEs for capex and opex through the application of different weightings of the headline indices or grouping of indices above by the further weightings in the table below.

Indices	Орех	Capex
Labour	77.3%	52.8%
Materials	7.7%	30.2%
Plant and equipment	0.0%	5.9%
Other	15.0%	11.1%

Table 5.3: Weighting of indices / groups of indices in RPEs

- 5.14 NIE Networks asked that we separate the index for labour into indices for general and specialist labour. We concluded that this was not appropriate.
- 5.15 From analysis of high-level Standard Occupational Classification (SOC) data, pay increases for key occupations specific to NIE Networks are not growing as fast as the overall average. This includes areas such as professional and technical jobs, skilled trades, administration, and management positions.
- 5.16 Given this detail, it is our view that OBR average earnings forecasts will suffice for the purposes of estimating the company's labour costs. When comparing the specialist labour historic growth, we find that some specialist salaries are growing slightly below the OBR average hourly earnings index. Specialist provision does therefore not seem necessary.
- 5.17 Looking back to RP5, the Competition Commission (CC) considered this

issue closely. Its conclusion was that "any split between specialist and general labour categories was relatively arbitrary and was unlikely to introduce greater reliability into our estimate. We therefore decided that there was insufficient evidence to justify the use of a specialist labour premium above the level of general labour inflation contained in the OBR forecasts."¹⁹

- 5.18 For materials and plant/equipment costs we accept NIE Network's idea to utilise a glidepath for these indices. However, we disagree with its plan to use it for five years. Rather we recommend maintaining the approach which was used in the GD23 price control, which assumes a glidepath for two years.
- 5.19 At the draft determination, we excluded the 'atypical' years of the financial crash and latterly the war in Ukraine price spikes, when we calculate the long-term RPE averages. We reviewed this decision for the final determination and concluded that we should include these atypical years in our analysis. While this incorporates large inflationary spikes (and falls), it does avoid the perception of partiality in the analysis. The result is to slightly increase RPEs which lowers the overall risk on NIE Networks.
- 5.20 Over the nine-year period from the 2021/22 base year to the end of RP7, the opex RPE is estimated at an average of +0.25% per annum. This is a downward shift from an average of +0.8% per annum submitted by NIE Networks in its business plan. The capex RPE is estimated at an average of +0.5% per annum. This is below the average of +1.9% per annum in the NIE Networks business plan.
- 5.21 Our RPE estimates for the final determination are a significant reduction from the draft determination. This reflects updated actual data for 2023-24 and the fact that material costs have declined faster than anticipated. This change makes a material impact to final determination allowances.

RPE true-up mechanism

- 5.22 In its business plan submission NIE Networks raised the issue of a 'true-up' mechanism for RPEs. It highlighted, in general terms, the impact which higher real price effects might have had in the later years of RP6. It noted the risk that RPEs in RP7 could exceed that forecast in the final determination. The company suggested we follow Ofgem precedent in this regard by introducing an RPE re-opener.
- 5.23 As well as the RPE true-up mechanism, NIE Networks consultation response also proposed a network direct investment unit cost midpoint re-opener in

¹⁹ See Competition Commission RP5 Final <u>Determination</u>, p11-8, para 11.39.



respect of material costs.

- 5.24 In the draft determination we followed the approach applied in our recent price control for gas distribution networks (GD23) and did not adopt an RPE re-opener mechanism. In their consultation response E&Y and NIE Networks made various representations on this issue. Their key points can be summarised as follows:
 - Outturn input prices for the first four years of RP6 materially differed from UR's forecasts, with much greater volatility than anticipated.
 - Given the volatility, a true-up mechanism in line with that applied by Ofgem is a "safe hedge" for NIE Networks and its customers.
 - The draft determination did not include any discussion of regulatory precedent on this issue.
 - Ofgem applied a true-up mechanism in respect of RPEs.
 - No reasons are given in the draft determination for choosing to follow the approach in GD23 in preference to Ofgem's approach.
 - Risk of NIE Networks not being able to recover efficient costs.
 - Any additional burden that would arise from administering the mechanism would be outweighed by the benefits.
- 5.25 We consider that the regulatory framework already provides significant protection from price volatility by virtue of the following factors:
 - a) Ex-ante allowances for RPEs.
 - b) 50:50 cost sharing mechanism.
 - c) Employee salary control and contractor management practices.
 - d) Provision of general inflationary uplifts.
- 5.26 We also note that the true-up mechanism proposed by NIE Networks is more burdensome than that adopted by Ofgem. In terms of precedent, regulators have adopted both approaches. We see merit in both, but note the existing protections afforded by the regulatory framework.
- 5.27 Nonetheless, we recognise that there does remain the risk of some level of windfall gain or loss depending on how RPEs outturn. The experience of recent years is of volatility in general and industry specific inflation which was not foreseen. This is emphasised by the change in our assessment of real price effects between the draft and final determination primarily because one

additional year of inflation indices was available to be used in our analysis.

- 5.28 In light of this, we have decided that there is merit in considering an RPE true up mechanism. In considering how such a mechanism could operate, it is our view that the following principles should apply:
 - Only applicable to labour and material costs as the most significant expenditure areas (as per Ofgem approach).
 - To be undertaken at the end of the price control period when outturn values are known. This would ensure we are not taking regulatory action on annual changes which might be minimal or be reversed quickly in subsequent years. However, we could be open to considering in-period adjustments should NIE Networks demonstrate that these are material.
 - Applicable only to price control allowances, not re-openers. We generally make our decisions on re-opener allowances at a time when the costs are well established and real price effect adjustments no longer relevant. Detailed consideration will be necessary to ensure that the determined amounts are properly considered in the licence formula where they adjust for inflation and real price effects as the nominal revenues are calculated and Regulated Asset Base values maintained.
 - Can be both a positive and negative adjustment. The RPE mechanism is a cost risk mitigation measure which should act symmetrically to protect both NIE Networks and consumers.
 - Only applicable in the event of certain materiality thresholds being breached (to be determined, taking account of the approach introduced by Ofgem).
 - True-up adjustment would be based on agreed/published indices and not NIE Networks own rates. We would continue to adopt the basket of indices used in the final determination unless we considered there was good reason to change them, having also considered any representations from NIE Networks. Using a consistent set of established external indices maintains an appropriate efficiency challenge on NIE Networks.
 - While we have excluded specialist labour from our determination of RPEs, we may consider a specialist labour adjustment should it materially diverge from average economy rates. However, analysis of all roles would need to be undertaken to ensure a symmetrical approach.

- 5.29 We have concluded that the introduction of an RPE re-opener mechanism further supports our decision not to introduce a mid-point review of capex unit rates. To undertake both would run a significant risk of placing a reliance on NIE Networks own costs and double counting underlying cost pressures which must be avoided.
- 5.30 We have not included the RPE true up mechanism in the RP7 licence modifications as the details of how the mechanism will operate in practice have not yet been developed. We are of the view that the details included in this chapter of the final determination, in particular, the statement of principles should provide NIE Networks assurance that in the event of significant price volatility, we retain the right to adjust the framework to ensure appropriate cost recovery.

Productivity change

- 5.31 We expect that even the most efficient company can continue to improve its efficiency over time as it strives to reduce costs and to reflect wider productivity gains in the economy as a whole. We reflect this by making an allowance for overall productivity when we calculate the frontier shift.
- 5.32 NIE Networks provided estimates of productivity improvement to apply in RP7 of 0.8% per annum for both opex and capex. In our draft determination, we proposed a higher productivity challenge of 1.0% per annum.
- 5.33 In response to the draft determination, NIE Networks and other stakeholders made various points such as:
 - Given existing levels of efficiency, the scope for NIE Networks to deliver further efficiency during RP7 to the extent required to meet a 1% productivity target is very limited.
 - The expansion of the workforce is likely to dampen NIE Networks' productivity levels during RP7 as the new staff are incorporated into the workforce.
 - Northern Ireland has a productivity gap with GB, meaning that targets should not be as stretching.
- 5.34 We did not consider these arguments to be compelling for a variety of reasons including increased digitalisation, labour productivity forecasts and innovation spend. We also recognise that DfE are committed to closing the productivity gap, suggesting a greater scope for improvement in Northern Ireland compared to the UK.
- 5.35 In making a final decision, we considered various pieces of evidence to

support our analysis. This included review of historic productivity by industry, regulatory precedent, labour and regional productivity.

5.36 Given our analysis and review of NIE Networks submission, we have retained the draft position and adopted a 1% per annum productivity target. This has been determined for both operational and capital expenditure.

	Opex	Capex
UR productivity challenge	1.0%	1.0%

Table 5.4: RP7 productivity target per annum at final determination

- 5.37 It is our view that this target is supported by both the quantitative evidence and regulatory precedent, including Ofwat's recent draft determination for PR24. It is also within (albeit at the top of the range) suggested by NIE Networks own consultants.
- 5.38 We have not imposed any further challenge because of innovation funding. However, we would note that some of these projects are expected to have impacts on working patterns and productivity. Given this separate allowance, it might be reasonable to expect NIE Networks productivity to improve at a faster pace than the general economy.
- 5.39 It is also noteworthy that Europe Economics has produced a report for Ofwat indicating that the factors contributing to the slowdown in economy-wide productivity growth since the mid-2000s would not be expected to affect productivity growth in the water sector. It is highly likely that some of these conclusions are also applicable to electricity networks.

6. IT, DSO and Digitalisation

- 6.1 NIE Networks' Business Plan submission included a Non-Operational IT and Telecoms investment plan (covering the RP6 extension year and the RP7 periods), which proposed total investment of £252.6m²⁰ (excluding connections).
- 6.2 NIE Networks proposals were broken down into four areas:
 - a) 99 Specific IT projects

The 99 individual IT projects proposed to be delivered by NIE Networks during RP7 are grouped in 6 separate programmes of work (Digital Transformation, Enterprise & Resource Planning, Open Data, Secure & Stable IT Environment, Sustainability and DSO Transition).

As demonstrated further below in paragraph 6.7, while we support NIE Networks IT programme, we have provided allowances for Years 1 and 2 (Phase 1) of RP7, for certain IT projects which are critical to begin during this time of RP7. The remaining allowances will be subject to a re-opener, after Year 2, once the scope and costs have become more certain.

b) IT Opex (Distribution and Transmission)

NIE Networks distribution and transmission operational expenditure associated with IT can be further broken down into 4 separate categories (Business as Usual IT & Telecoms, Changes Driven by Non Network IT Projects, Changes Driven by Network IT Projects and New Opex since the base year 2021/2022). Each area is explored further in this Annex. Table 6.1 below demonstrates we have allowed £50.1m out of £66.3m requested. The majority of this difference (£15.4m) is associated with "Changes Driven by Non Network IT Projects", this amount is associated with recurring Opex associated with the 99 specific IT projects (such as annual licence fees). Similar to the 99 specific IT projects, we have only provided allowances for Years 1 and 2 of RP7 for recurring Opex, with the remaining requested amounts being considered as part of the re-opener.

c) Enduring Solution (Market Services)

Enduring Solution costs are incurred by the NIE Networks' Market Operations business and relate to retail market IT services. These costs are split into IT Support Costs, Hardware, Software and Market Entry Costs and Market Services Staff Costs. As demonstrated in Table 6.1, we have awarded the majority of costs associated for the Enduring Solution. Similar to

²⁰ Revised post draft determination from an original submission of £255.7m

IT Opex (Distribution and Transmission), the majority of the difference $(\pounds 1.5m)$ is associated with "Changes Driven by Non Network IT Projects", these costs will be considered in the re-opener.

d) Market Operations BAU IT and Telecoms

Again, as demonstrated in Table 6.1, we have provided the majority of the allowances associated with Market Operations BAU and IT Telecoms with the majority of difference (£4.7m) associated with "Changes Driven by Non Network IT Projects" costs.

- 6.3 There are some areas of IT Opex (Distribution and Transmission), Enduring Solution (Market Services) and Market Operations BAU IT and Telecoms which will have not been provided for (£1.2m) and will not be part of the IT re-opener.
- 6.4 Our detailed assessment of company's proposals is set out in Annex W (RP7 Information Technology). Our assessment was supported by external consultants whose report is included as Annex X. While we have supported the company's plans, we not included some of the proposed expenditure in Year 3 to Year 6 of the price control pending further development by the company to refine its plans and further regulatory submissions and determination of additional allowances.
- 6.5 The increased in IT investment in RP7 is driven by two key issues:
 - a) The need to replace the company general enterprise software (with SAP S/4 Hana) which will not have vendor support by the end of RP7.
 - b) The need to respond to new challenges such as heightened cyber security and the need to support the transition to net zero.
- 6.6 The move towards a low carbon economy will change the way we generate and use electricity in Northern Ireland. New technologies, digitalisation and changing customer needs will require active management of flexible Distributed Energy Resources (DER), including generation, services and demand management. This will require more intelligent and responsive system management to maximise the benefits. It will support NIE Networks as it develops from a network operator to system operator and will enable consumers, generators and system service providers to engage in ways which minimise peak demands and maximise existing system capacity. It will help support digitalisation and publication of network and system data which will allow consumers to make more informed decisions on connections and use of the network.
- 6.7 Having reviewed the NIE Networks proposals, we have concluded that they are reasonable. As a result, we have included 99% of the required

expenditure when we modelled future revenues and financeability for RP7. However, it became clear that there was merit in delaying our decision on funding parts of the IT programme to allow a longer period for detailed planning, to confirm the scope and costs of a large, complex but also highly relevant part of the RP7 IT programme.

- 6.8 To help mitigate the risk associated with this uncertainty, in the majority of cases we have only provided allowances for Years 1 and 2 (Phase 1) of RP7 for certain IT projects. During these first two years of the price control, we expect NIE Networks to progress the development of these projects to allow a future determination of costs through a reopener mechanism. For example, this approach would allow the company to better define the work necessary to procure new systems to meet the SAP end-of-support date.
- 6.9 In one instance, for the project DIG01, we have provided an additional allowance (£177,267) for Year 3. This is the only project where an allowance has been provided in Phase 2 of RP7. For this reason, we have provided more allowance than requested by NIE Networks. This can be seen in Table 6.1 below in the "RP7 99 Projects" section.
- 6.10 Due to the additional evidence provided by NIE Networks in its response to our draft determination, we have provided an additional £10m (approx.) increasing our determined allowance from £144m to £154m. The reasons for this increase in determined allowances are explored in more detail in Annex W.
- 6.11 A high-level view of the company's submission and our draft and final determination allowances are included in Table 6.1. The total value of NIE Networks request for the RP7 IT programme is £252.6m (excluding connections). We have, in the main, supported the company's plans and included 99% of its estimate when we modelled revenues and financeability. However, at this stage, we have only included determined allowances of £154.3m in the final determination licence allowance, pending the outcome of further development work by the company which will inform future decisions on additional allowances.
- 6.12 The company's plans for IT investment in RP7 might have to be revised significantly with the proposed introduction of smart metering. Any changes relating to smart metering would have to be integrated into the work the company has already planned. The additional work may require a review of priorities and pace of work in the medium term. This issue will require careful consideration as part of the reopener for IT investment from Year 3 onwards.

	Draft determination	Final determination
RP7 – 99 specific projects	£m	£m
NIE Networks Request (RP7 total)	£131.7	£130.8
NIE Networks Request (Years 1 and 2)	£55.9	£54.3
UR Allowance (Years 1 and 2)	£47.5	£54.4
IT Opex (Distribution and Transmission)		
NIE Networks Request	£68.4	£66.3
UR Allowance	£48.8	£50.1
Enduring Solution (Market Services)		
NIE Networks Request	£41.7	£41.7
UR Allowance	£38.3	£40.1
Market Operations BAU IT and Telecoms		
NIE Networks Request	£13.8	£13.8
UR Allowance	£9.9	£9.9
Total allowance (Licence amounts)		
NIE Networks Request	£255.7	£252.6
UR Allowance	£144.5	£154.3
Total allowance (Totex)		
Total NIE Networks IT request	£255.7	£252.6
Total value of UR Allowance	£253.1	£251.3

 Table 6.1: UR draft and final determination allowances (excluding connections)

7. Metering and Market Operations

- 7.1 This chapter summarises the metering and market operations expenditure proposed by NIE Networks in its business plan and sets out our conclusions on reasonable levels of expenditure for RP7. It provides a high-level summary of a more detailed assessment which is set out in Annex O of this final determination.
- 7.2 Metering constitutes a range of activities including meter reading, meter installations/changes, meter recertifications and others that support NIE Networks' market operations functions. In GB, DNOs do not perform these activities, therefore, we exclude NIE Networks' metering costs from our top-down benchmarking and conduct a separate cost analysis.
- 7.3 NIE Networks set out its proposals for RP7 metering related expenditure, and overhead costs allocated to metering, within its market operations submission document. Subsequent to the draft determination publication, NIE Networks provided a revised submission for the metering services direct costs element, as result of the conclusion of a meter procurement exercise.
- 7.4 The key changes from draft to final determination are as follows:
 - Increased meter reading allowance to account for the forecast growth in meters to be read as result of new connections.
 - New meter categories and unit rates created for meter configurations that are forecast to be demanded by consumers installing LCTs.
 - Allowances based on outturn data updated to include the now available outturn data from the 2023/24 reporting year.
- 7.5 Our final determination has been primarily based on outturn costs NIE Networks has incurred over the RP6 period to date in fulfilling its metering functions, along with some specific adjustments for RP7. It is our view that this is the most appropriate approach given that all of the metering functions are well established, and we are not convinced that further scope and cost changes are not adequately addressed by related price control mechanisms.
- 7.6 Our assessment is based on four broad categories of activity:
 - Meter reading.
 - Metering services.
 - Other metering costs.

• Fault and overhead costs.

Meter reading

- 7.7 NIE Networks collect and process meter reading data on behalf of suppliers from all its c.930,000 customer premises throughout Northern Ireland. Under NIE Networks' Overall Standards, it is required to obtain a meter reading from 99.5% of customers once per year. To achieve this, NIE Networks aims to read each meter on a quarterly basis, which involves over 3.6 million visits to customer premises per annum.
- 7.8 To set the meter reading allowance for RP7 we used the RP6 average annual outturn costs with an adjustment to account for NIE Networks' forecast growth in connections. Our final determination meter reading allowance is £25.11m, which is a £0.44m (1.7%) reduction from NIE Networks' RP7 request.

Metering services

- 7.9 NIE Networks install, exchange and alter electricity meters at the request of customers and electricity suppliers, or if the meter has reached the end of its certified lifecycle. Unit rate allowances are set for the direct onsite material and labour costs for 16 metering categories, with the final allowance adjusting with the volume delivered. This ensures that the final allowance reflects actual activities driven by external factors such as consumer demand which NIE Networks is not in control of. A separate ex-ante allowance is set for the indirect costs element of metering services, incurred primarily in employment of staff who manage and administer the programme and meter stock.
- 7.10 For the direct cost element, we have accepted the requested unit rate for the low volume categories associated with high load and high voltage installations. For the high volume categories, we have primarily based allowances on long term RP6 outturn costs. Three new meter categories and unit rates, set to the company's request, have been created for meter configurations that are forecast to be demanded by consumers installing LCTs. For the indirect costs element, we developed a methodology that used the number of direct activities as a scalar for the indirect costs. This used the company's RP7 forecast direct activity volume to multiply the RP6 indirect cost per direct job to provide our determined allowance. The indirect allowance remains fixed.
- 7.11 Based on NIE Networks' forecast activity for each metering category our final determination meter services direct allowance is £27.42m, which is a £3.56m (12%) reduction from NIE Networks' revised RP7 request. Our final determination metering services indirect allowance is £11.86m, which is a

£4.84m (29%) reduction from NIE Networks' RP7 request. This provides a forecast total metering services allowance of £39.29m.

Other metering costs

- 7.12 Other metering costs consist of four key areas. These include the following:
 - Keypad operating costs contractual arrangements for the provision of the secure encryption service to support keypad vending and staff costs associated with keypad registration.
 - Transactional services services to suppliers in support of the competitive retail market i.e. provision of data, re-energisation etc.
 - Transactional income income in respect of transactional services that is derived from charging the supplier.
 - Revenue protection activities to detect and deter cases of electricity theft and to collect money owed in relation to that illegal abstraction.
- 7.13 For the purposes of the final determination we have retained the same approach as previously. This bases future allowances on the RP6 run rate. The only difference is that the rate now includes the latest available year. There has been no real increase in these costs at the end of RP6 and we do not think consumers should pay for services being provided to suppliers.

Fault and overhead costs

- 7.14 Faults, business support and other overheads make up the remainder of the market operations request. The activities can be summarised as follows:
 - Faults and emergency costs the direct cost of repairing metering faults which present a risk to safety or result in a supply interruption.
 - Control centre and customer contact centre market operations allocation of these activity costs to reflect their role in the management of metering faults.
 - Other overheads market operations allocation of costs associated with general overheads such as HR, finance, stores, training etc.
- 7.15 The company has failed to justify the significant increases expected in metering overheads. Neither do we consider it appropriate to provide a topdown efficiency scope uplift in line with benchmarking results. No other DNOs in GB undertake these activities. As such, efficiency benchmarking in other areas is not applicable to market operations.
- 7.16 For the final determination we have retained the RP6 run rate approach. The

only difference is the inclusion of the latest year data and correction of an inflationary mistake at the draft stage. We also incorporate bottom-up allowances for the market operations IT spend.

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Metering conclusions

7.17 Table 7.1 below provides NIE Networks' request, inclusive of revisions, along with our draft and final determinations.

	NIE Networks' Proposal	Draft Determination	Final Determination
Meter Reading	25.56	23.99	25.11
Metering Services	47.69 ²¹	38.03	39.27
Other Metering Costs	4.12	2.53	2.54
Fault and Overhead Costs	47.81	41.31	43.40
Total Metering	125.18	105.86	110.32

Note 1. Figures may not sum due to rounding.

Table 7.1: RP7 metering market operations summary £m (2021/22 prices)

7.18 NIE Networks' proposals for the market services element of its market operations functions are assessed in the Information Technology sections of this final determination. Market services include the operation of IT systems and provision of data, including metering data, that supports retail and wholesale electricity markets.

²¹ NIE Networks' metering services proposal is as per its revised submission received following the draft determination publication.

8. Innovation and Incentives

Overview

- 8.1 NIE Networks proposed an updated innovation framework for RP7. This includes provision of funding through two mechanisms, a baseline ex-ante fund of £8.8m to deliver innovation projects, and a Network Innovation Fund (NIF) of up to £10.3m provided through a re-opener mechanism.
- 8.2 Within the RP6 price control period the company advised that it:
 - Adopted a 'fast follower' approach to innovation, taking onboard innovations that had been trialled and deployed elsewhere, evaluating new technologies and processes within its own network and transitioning them into BAU.
 - Focused on innovations that would defer or avoid network reinforcement by deploying alternative flexible solutions, due to the benefits they offer.²²
- 8.3 NIE Networks has suggested that the RP6 programme will deliver c. £10.9m in savings in the RP7 period. NIE Networks has advised that it has been able to reduce the ex-ante RP7 capital request because of the investment in innovation.

Innovation

- 8.4 For the ex-ante request we are proposing a small uplift from draft allowances to £4.75m. This is equivalent to 54.1% of the business plan request. There is however the potential to increase this allowance on provision of acceptable supporting information.
- 8.5 Any project not approved as part of our final determination can be reconsidered at a later date if further detail and justification is provided. Full details on this analysis can be found in Annex N.

²² Innovation funding design and benchmarking paper, WSP, p3.

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Innovation Project	NIE Networks Request	UR Allowance	
Data Analytics	£0.65m	£0.00m	
Real-Time Fault Level Monitoring (RTFLM)	£1.03m	£0.98m	
HV Active Network Management (HV ANM)	£0.69m	£0.66m	
Vehicle to X	£1.26m	£0.00m	
DC Readiness	£0.50m	£0.44m	
Flexibility Market Development	£0.88m	£0.82m	
Virtual STATCOM	£0.47m	£0.45m	
Micro-Resilience	£0.74m	£0.72m	
Supporting Vulnerable Customers	£0.36m	£0.00m	
Customer Load Active System Services	£1.43m	£0.00m	
Real-Time Thermal Rating at 110kV	£0.78m	£0.69m	
Totals	£8.79m	£4.75m	

Table 8.1: RP7 innovation request and allowances in 2021-22 prices

- 8.6 The outcome of our deliberations on the innovation framework can be summarised as follows:
 - a) Provision of both an ex-ante allowance and an innovation re-opener mechanism has been accepted.
 - b) We have determined an initial ex-ante allowance of £4.75m based on a bottom-up assessment of the business cases.
 - c) The NIF uncertainty mechanism will be put in place and we expect this to outturn at £6m for the RP7 period, though no formal cap is proposed.
 - d) There will be three windows of opportunity for innovation applications after year 1 (August 2026), year 3 (August 2028) and year 5 (August 2030) of RP7.
 - e) Business cases in line with NIE Networks and our criteria for submissions should be provided to support NIF cost requests.
 - f) Our criteria for NIF submissions has been amended to be less onerous in terms of audit trails for costs/benefits.
 - g) Annual reporting by project should become a part of the regulatory reporting process. This should also be published by NIE Networks and include post-project evaluations upon project completion.
 - h) Both over and underspend against collective innovation allowances

will be subject to 50:50 cost sharing.

- Underspend against ex-ante allowances will not be mechanistically used to offset future NIF cost submissions. However, it may influence NIF or RP8 funding decisions if existing innovation projects have not been adequately progressed.
- An Innovation Council is not mandated by us. NIE Networks will however need to consider how it engages with consumers and other stakeholders to support any future submissions.
- 8.7 We have considered significant stakeholder feedback in this area. The main changes from the draft stage include more flexibility, less onerous application responsibilities and less focus on cost underspends.
- 8.8 We consider that the final determination addresses many of the stakeholder concerns and provides sufficient flexibility whilst not exposing consumers to unnecessary risk.
- 8.9 We would expect that NIE Networks will be able to progress some of the existing projects via the NIF when issues are resolved. We are also supportive of advancing the potential links with academia throughout RP7.
- 8.10 Whilst not mandating the Innovation Council at this time, it is clear from stakeholder feedback that the idea still has merit. NIE Networks is free to pursue this if it considers this the best way to develop its innovation plans going forward.
- 8.11 If the Innovation Council is not progressed, we would as a matter of course expect NIE Networks to demonstrate how it is developing its innovation plans, partnerships and strategies.
- 8.12 Finally, we welcome the commitment of NIE Networks to annual project reporting and post-project evaluations, including RP6 reporting. It is essential that the company can demonstrate how customers benefit from such investment, or the project learnings should benefits not materialise.
- 8.13 Given that consumers are funding these projects, we are of the view that the annual reporting and findings should be published and fully transparent.

Incentives

Reliability incentive

8.14 The purpose of this section is to detail proposed changes to the financial incentive framework operating upon NIE Networks. Separate discussion on the Evaluative Performance Framework (EPF) is captured in Chapter 10.

- 8.15 For the purposes of the reliability incentive, NIE Networks has proposed some significant changes including amending the target setting methodology and removing planned CML from the incentive entirely.
- 8.16 In summary we have determined the following changes to the reliability incentive:
 - Move to the Ofgem methodology of setting unplanned CML targets based on fixed percentage year-on-year reductions.
 - Propose a starting point using a 4-year average (and latest data) with 2% year-on-year reductions and adjustments for funded improvements.
 - Amend the risk/reward exposure for unplanned and planned CML to £2.5m (2021-22 prices) per annum.
 - Adjust the proportional revenue allocation to an 80:20 split (£2.0m / £0.5m) between unplanned and planned CMLs respectively.
 - Update the value of lost load (VOLL) based on the latest available willingness-to-pay (WTP) research.
 - Retain the planned CML in the reliability incentive but reduce the reward / penalty associated with it.
 - Retain planned CML targets but move to a rolling 3-year average with a 2-year lag to set objectives (as per Ofgem). However, given the large capital programme increase, this mechanism has been tailored to allow some deterioration before a penalty would be incurred.
 - Amendment of the unplanned customer interruption definition from one minute to three minutes, as per GB approach.
- 8.17 NIE Networks made significant representation on this issue. They felt that performance in RP6 should be taken into consideration when setting unplanned CML targets. They also felt that absolute performance is not a reliable metric given the different network characteristics of the Northern Ireland network.
- 8.18 Whilst we welcome the high achievement in RP6, we recognise that the scope for improvement still exists. Although topography is different, other GB DNOs with a high proportion of overhead lines have better performance. We have targeted further catch-up towards the GB average. The final unplanned targets are slightly less challenging than the draft determination due to use of the latest data to calculate the starting point.

8.19 The outworking of the new reliability incentive approach for unplanned CMLs can be summarised as follows in Table 8.2:

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Year	Start	25/26	26/27	27/28	28/29	29/30	30/31
2.0% Reductions	40.45	39.64	38.85	38.07	37.31	36.56	35.83
RP7 Programme		0.00	0.46	0.89	1.34	1.78	2.24
Unplanned CML Target	40.45	39.64	38.39	37.18	35.97	34.78	33.59

Table 8.2: UR proposed unplanned CML targets



Figure 8.1: UR proposed unplanned CML targets with cap/collar

- 8.20 For RP7 we consulted on the Ofgem approach for planned CML target setting. This will mean targets being calculated annually using the 3-year rolling average with a 2-year lag.
- 8.21 NIE Networks raised significant objections to this approach including the following concerns:
 - The scale of the increase in the NIE Networks capital programme is much higher than GB DNOs.
 - The proposed methodology creates a perverse incentive to deliver an inefficient, in initial years, or scaled back capital delivery programme.
 - Dynamic targets do not allow for adequate long term business planning as targets are not fixed.
- 8.22 We have not changed the methodology extensively. Whilst there are timing

differences, a material gap exists in planned CML performance. NIE Networks has suggested that timing differences exist due to work already undertaken in GB. However, if this is the case it is therefore not clear why performance is much better in GB.

- 8.23 We also reject the notion that adoption of the Ofgem methodology would create an incentive to incur higher than normal planned CMLs in the first few years to create a scenario where a positive incentive payment could be earned in the final years.
- 8.24 Even if planned interruptions were artificially increased as suggested, NIE Networks would have to incur several years of penalties to gain a reward in the final year of RP7. This would be an unsound strategy to adopt.
- 8.25 However, we do recognise that there is a proportionally larger increase in capital works for NIE Networks than other DNOs. Under such a scenario it is tougher for NIE Networks to maintain the current level of service. By way of a compromise position, we have allowed for some deterioration.
- 8.26 For the final determination we have adopted the Ofgem 3-year average to set the target plus 5 CMLs. This ensures that the company are not penalised immediately for any deterioration. They would also gain a reward for maintaining current service levels.
- 8.27 This dynamic approach only allows for the setting of a specific target for the first year of RP7. Targets will automatically be recalibrated each year thereafter depending on outturn performance.

Year	2025-26
Planned CML Target (with cap/collar)	42.73 (+/- 8.27 CML)

Table 8.3: Planned CML targets for final determination

8.28 Given the level of uncertainty, we are however determining that the percentage of revenue exposed to this target is lowered to 20%. This reduces the risk faced by the company for declining performance.
Furthermore, we have provided additional funding (c. £1m) in fleet costs to support the purchase of additional live line lorries to improve service levels.

Customer interruptions

- 8.29 NIE Networks proposed that the 3-minute interruption window is extended to cover unplanned CI and CML statistics. They also suggest that a new Short Term Interruption Report is reported against during RP7.
- 8.30 This issue was not discussed in the draft determination. However, we agree with the company suggestions. This change should be implemented from the

start of RP7. Correction of this inconsistency should also help address benchmarking issues for unplanned CMLs in RP8.

Other mechanisms

- 8.31 For the 50:50 cost sharing mechanism, the incentive remains largely unchanged. The only difference relates to certain cost exclusions such as business rates.
- 8.32 We also plan to retain the revenue protection service incentive unchanged from RP6. We further welcome NIE Networks proposals to address worst served customers (WSCs).
- 8.33 During our engagement with NIE Networks, the company provided additional information to justify its request for funding. We were convinced by the new information that our draft determination position of disallowing all funding required revision. The main reason for our re-evaluation was that NIE Networks is required to carry out certain works that would not be included in the allowances for 11kV rebuild.
- 8.34 We are of the opinion that allowing the funding requested together with a reporting regime to measure the number of WSC is a relatively low risk and will provide valuable learning for RP8.
- 8.35 To this end, the funding request has been accepted along with the associated 50% WSC reduction target. We expect to develop the necessary reporting structure in the first year of the RP7 price control.

9. Consumer Measures and Consumer Engagement

9.1 This chapter summarises our decisions in respect of Consumer Measures and Consumer Engagement for NIE Networks for the RP7 period. It provides a high-level summary of a more detailed assessment which is set out in Annex U of this final determination.

Overview

- 9.2 In the draft determination we proposed 14 consumer measures as part of the RP7 Price Control. Some of these measures were put forward by NIE Networks in its Business Plan and the remaining measures were proposed by us. We also recognised the important role of the Consumer Engagement and Advisory Panel (CEAP)²³ for RP7.
- 9.3 Subsequent to the draft determination publication, we have assessed and considered the relevant draft determination responses and representations made by NIE Networks and other stakeholders. We have considered these contributions to reach our final determination. We have also had ongoing engagement with NIE Networks and members of the CEAP.
- 9.4 For the final determination for RP7 we have decided to retain all 14 consumer measures. The package of consumer measures creates a framework that will help to embed high levels of service, identify key issues affecting the consumer experience and improve the quality of service consumers receive from NIE Networks throughout the price control period. The framework will do this by:
 - Requiring NIE Networks to support consumers in vulnerable circumstances and to demonstrate this by gaining and maintaining the BS ISO 22458 standard on Consumer Vulnerability.²⁴
 - Measuring the responsiveness of NIE Networks' contact centre performance.
 - Measuring the effectiveness of NIE Networks' complaint resolution function.

 ²³ The Customer Engagement Advisory Panel (CEAP) is a panel made up of designated representatives of the Consumer Council for Northern Ireland (CCNI), Department for the Economy (DfE), NIE Networks and UR. The purpose of the panel is to ensure that customer priorities, current and emerging, are understood by NIE Networks and are reflected in its business plans.
 ²⁴ BS ISO 22458 - Consumer vulnerability | BSI (bsigroup.com).

- Providing insight into the consumer experience on electricity matters involving supply interruptions, connections, and the energy transition using established methods such as satisfaction surveys and the Net Promoter Score.
- Measuring the responsiveness and timeliness of NIE Networks' connection services.
- 9.5 We have set targets for six consumer measures where we have robust historical data to use as a baseline against which we can reliably set the target and monitor and review NIE Networks' performance annually from the outset of RP7. We detail these in Table 9.1 below.

	Consumer Measure	Draft Determination Target	Final Determination Target
1	BS ISO 22458 on Consumer Vulnerability - the design and delivery of inclusive services.	Certification	Seek accreditation in Year 1, with attainment within 6 months of the start of Year 2 at the latest.
2	Enquiries: response within 2 days	90%	94%
3	Enquiries: response within 5 days	100%	98%
4	All Calls answered	99%	99%
5	% Calls answered within service level- 20 seconds	93%	93%
6	Customer Satisfaction Surveys	8.2	8.2

Table 9.1: Consumer measures and targets from Year 1

9.6 For the remaining measures we have not set out targets in the final determination, we have, however, set out the process in Annex U through which targets will be set. There were limitations on the data available for these measures which reduced our ability to set out reliable targets to apply from the start of Year 1. We detail these in Table 9.2 below.

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	Consumer measure	Draft Determination Target	Final Determination Target
7	Complaints to be resolved Day +1 (24hrs)	80%	Target set to apply from start of Year 2
8	Complaints to be resolved Day +31	95%	Target set to apply from start of Year 2
9	Net Promoter Score (NPS)	No target	Target set to apply from start of Year 2
10	First Point of Contact Resolution (FPOCR)	No target	Target set to apply from start of Year 2
11	Communication Channels	No target	Target (s) set to apply from start of Year 2
12	Time to Connect & Time to Quote	No target	Target set to apply from start of Year 3
13	Connections - Customer Satisfaction Surveys	No target	Target set to apply from start of Year 2
14	Energy Transition - Customer Satisfaction Surveys	No target	Target set to apply from start of Year 2

Table 9.2: Consumer measures and targets for Year 2 or 3 of RP7

9.7 For these measures we require NIE Networks to collect the relevant data for each measure and report this to ourselves and CEAP to set targets that will apply from the start of Year 2. In the case of the Time to Quote and Time to Connect measures, targets will apply from the start of Year 3.

Consumer Engagement

9.8 CEAP will play a vital role relevant to the RP7 consumer measures framework. The panel will help to develop the consumer measures and the associated targets. Additionally, NIE Networks' performance against all the RP7 consumer measures and associated targets will be reviewed and assessed annually through CEAP. Where appropriate, as part of this annual process, targets for the consumer measures may be reset, guided by the principle of continuous improvement. CEAP will also produce a publicly available report on NIE Networks' performance for each measure.

10. Evaluative Performance Framework Principles and Guidance

Overview

- 10.1 This chapter identifies the principles for the EPF and provides guidance on how the assessment of NIE Networks performance will operate, timelines, incentive/penalty methodology and the nature of the EPF Panel.
- 10.2 The framework will aim to incentivise NIE Networks to take advantage of new opportunities, proactively progress initiatives in areas that will bring the greatest benefit to Northern Ireland customers, and ensure we continually adapt to the emerging energy landscape. A key element of the EPF is to bring additional skills, insights and knowledge to UR's review of NIE Networks' performance.
- 10.3 Key changes from the draft determination include
 - a) Reinforcing panel independence.
 - b) Introducing a short review period for NIE Networks to review EPF panel assessments.
 - c) Attaching fixed weightings to the EPF roles amongst other minor amendments.
- 10.4 Further detail on draft determination consultation responses and URs comments on these can be found in Annex Z Consultation Responses Report.

Principles

- 10.5 The following principles have been developed to incentivise NIE Networks to:
 - Improve its performance to maximise the efficiency of the whole electricity system for the benefit of customers.
 - Build constructive, value add relationships with key stakeholders.
 - Provide clear accountability to customers.
 - Have flexibility in a changing industry to find the best system solutions.
 - Develop new/emerging roles or initiatives that deliver decarbonisation.

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- Engage with stakeholders in a balanced way that aims to hear and consider the best ideas from all voices.
- 10.6 Some of the key attributes of the framework are: Principles based, outcomes focus; Accountability; Flexibility and Adaptability; Holistic; Balanced decisions and proportionate risk/reward; and Transparency.

Guidance

- 10.7 NIE Networks will appoint and maintain an evaluation panel, comprising a set of individuals appointed for the purposes of evaluating the performance of NIE Networks. It is important that the panel is seen to represent a range of interests and expertise as well as to operate independently to NIE Networks. To provide appropriate assurance in this, we will retain the ability to veto any appointment.
- 10.8 In relation to each financial year in which the EPF is operational, there will be two phases of assessment by the panel:
 - After the publication of NIE Networks annual Forward Plan, the panel will make an evaluation of it against a set of evaluation criteria.
 - After the end of each financial year, the panel will make an evaluation of performance within that year, against the evaluation criteria concerning the NIE Networks plan delivery and wider performance.
- 10.9 For each of these two phases of assessment, the panel will determine a grade for NIE Networks proposed annual Forward Plan and set out its reasoning in a report to us. NIE Networks may ultimately be exposed to a positive incentive amount or a negative incentive amount. The incentive amounts are subject to caps on the maximum financial upside of £3m and maximum financial downside of £3m in relation to each financial year. This is symmetrical. To ensure appropriate levels of transparency all documentation associated with this process will be published.
- 10.10 The panel should draw on evidence and views provided by stakeholders in making its evaluation. The panel does not have any decision-making powers. Instead, its evaluation forms a recommendation that goes to us. We will then take full account of this recommendation as part of our decision on any financial reward or penalty. The financial reward or penalty will be calculated in accordance with the incentive calculation methodology set out within this chapter.
- 10.11 Longer term thinking is an important behaviour that the EPF will incentivise. The panel should only take account of evidence where NIE Networks can demonstrate the consumer value driven by 'new' activity or undertaking

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'existing' activity in new, more effective or innovative ways. We would also expect clear progression of initiatives previously identified in plans that could deliver future benefits for consumers. Where NIE Networks has previously been awarded a higher performance score on the basis of a planned initiative from a previous year's forward plan, this would be factored into the performance baseline going forward to ensure that those planned improvements are maintained.

11. Environmental Action Plan

Overview

- 11.1 NIE Networks included an Environmental Action Plan (EAP) as part of its business plan submission. The plan set out NIE Networks plans and ambitions on environmental sustainability measures and addressed the sustainability information requirements in the published RP7 Business Plan Guidance. Its submission detailed NIE Networks' RP7 ambitions to achieve best practise and meet stakeholders' net zero and environmental responsibility expectations and included a set of sixteen commitments that contribute towards these goals.
- 11.2 In the NIE Networks' Environmental Commitments Summary section below, we have summarised and commented on some of the key commitments and grouped them under the following headings:
 - Business carbon footprint.
 - Network losses.
 - Embodied carbon footprint and environmental impact.
 - Supply chain management.
 - Pollution prevention.
- 11.3 We have not detailed our assessment of any of NIE Networks' proposed expenditure related to its commitments in this chapter. The commitments are costed by NIE Networks throughout a number of submission areas within the business plan and these are assessed throughout the final determination.
- 11.4 NIE Networks noted that legislative requirements and stakeholder expectations are likely to change during the RP7 period, necessitating a change in the level of ambition in its EAP. As a result, it proposed an environmental reopener mechanism that can be triggered at any time during the price control by either the company or ourselves. We have not accepted this proposal, as the existing change of law provision provides an adequate mechanism for recovering costs associated with environmental legislative changes.

NIE Networks' environmental commitments summary

Business carbon footprint

11.5 NIE Networks has committed to reduce its 2019 baseline internal business
carbon footprint by half by 2030. Its target is aimed at its Scope 1 and Scope 2 emissions, as defined by Green House Gas Protocol reporting standards. Scope 1 emissions are the direct carbon emissions from the company's direct use of fossil fuels, and Scope 2 are the indirect carbon emissions from NIE Networks usage of electricity generated from fossil fuels. For NIE Networks, and other electricity distribution network operators, electricity usage includes network losses, which we have discussed separately further below.

- 11.6 NIE Networks are proposing a number of initiatives towards meeting its targets:
 - Reduce buildings energy use and carbon footprint through refurbishments, solar panel installations, constructing new buildings to Nearly Zero Energy Buildings standard and purchasing electricity generated from renewable sources.
 - Replace >70% of current fleet vehicles with electric vehicles by 2030 and roll out electric vehicle charging infrastructure at its operational sites and central substations.
 - Trial alternative fuels such as hydrotreated vegetable oil for larger fleet vehicles and mobile generators.
- 11.7 NIE Networks has not included external Scope 3 emissions in the target, as at it has deemed them not material at this stage. Scope 3 emissions are the indirect carbon emissions, incurred by external parties, in the creation and provision of goods and services other than electricity, that NIE Networks uses. While NIE Networks has not included scope 3 emissions in this target, it has established a baseline and will review these emissions annually. It is also taking steps to attempt to influence the emissions of its supply chain as detailed in the supply chain management section below.

Network losses

- 11.8 Losses are the difference between the electrical energy entering the network and leaving it that arises for technical and other reasons. In the 2021/22 reporting year 7.4% of energy that entered NIE Networks' distribution system was lost. Technical losses relate to the heat and noise emissions as energy passes through cables and transformers, while non-technical losses include theft and measurement errors.
- NIE Networks has set a target of 80% of overall losses being supplied from renewable sources. This aligns with Climate Change Act (Northern Ireland)
 2022 target of 80% of electricity consumption from renewable sources by 2030 and will be delivered by decarbonisation of electricity generation.

- 11.10 NIE Networks' commitment primarily relates to the impact of carbon emitted in the generation of the energy that is lost. It is aiming to achieve this by accommodating connection of more low carbon/renewable sources of generation through relief of capacity constraints in its network.
- 11.11 Low carbon/renewable generation is likely to connect to lower voltage distribution systems, increasing the percentage of overall network losses due to increased loading and variation of loading on lower capacity equipment. As a result, while the carbon impact of losses may be reduced, the economic impact may increase as generators are fully compensated for the energy supplied to the network by consumers, who pay for what they consume as well as what is lost.
- 11.12 NIE Networks is attempting to be proactive in limiting the percentage of overall network losses through network load management, network reinforcement and replacing aged assets with higher capacity or more efficient versions. The primary strategic driver for these activities is either facilitating net zero ambitions or maintaining a resilient network, not reducing losses. We agree with this approach to minimise losses where practical, rather than directly targeting investment in loss reduction which would not be cost effective. We will however continue to regularly monitor performance.

Embodied carbon footprint and environmental impact

- 11.13 NIE Networks is aiming to develop tools and processes to help it take a more holistic view on activities, products and potential projects. It will attempt to quantify the embodied carbon of activities and equipment in order to first establish a baseline. From this baseline, targets and a monitoring and reporting process will ensue.
- 11.14 NIE Networks also intends to introduce a natural capital assessment tool to quantify net changes in natural capital for relevant network projects to aid in optioneering. A natural capital assessment assigns a monetary value to potential environmental and eco-system impacts that may result from pursuing a specific project, allowing for easier integration into the overall project decision-making process.
- 11.15 NIE Networks are also committing to action opportunities to offset its environmental impacts, through rewilding projects at substations and offsetting every tree cut for resilience reasons by planting two new ones, among other initiatives.
- 11.16 We agree that carbon emissions, impacts to biodiversity and the natural habitat should be minimised. Initiatives that help ensure these impacts are integrated into decision-making processes and opportunities to offset impacts are considered, are a positive step. We are supportive of NIE

Networks' ambition and keen that this is reported in a manner allowing comparisons with other similar sized companies, including those outside the regulated industry.

Supply chain management

- 11.17 NIE Networks propose to work with and influence contractors, industry suppliers and manufacturers to quantify and reduce the environmental impact associated with the products and services it uses. NIE Networks will issue a supplier code detailing its environmental stewardship expectations and revise elements of its tender process to include questions and assessment of sustainability. It will also work with suppliers to develop recycling opportunities and reuse of materials at the end of its operational life, as well as reducing the use of non-recyclable materials.
- 11.18 We welcome the steps NIE Networks has proposed, and the aims associated with this commitment. An organisation of NIE Networks' scope and size could have significant influence in encouraging improved environmental practices in its supply chain and wider industry, to the benefit of many stakeholders.

Pollution prevention

- 11.19 Electrical networks utilise a variety of substances that contribute towards effective electrical network operations, however some substances can have a detrimental environmental impact if they leak. The two highest profile substances of this type are SF6 (Sulphur Hexafluoride) insulant gas and oil used in fluid filled underground cables. Minimising leakages of these substances is the main focus of NIE Networks pollution prevention commitments.
- 11.20 SF6 is widely used in the electricity industry as an insulation medium in plant and switchgear. However, it is a potent greenhouse gas, with a global warming potential tens of thousands of times greater than carbon dioxide. NIE Networks are committing to limit SF6 losses to less than 1% of the total volume in its network assets. NIE Networks are also working with industry partners to develop alternatives to SF6 and equipment that does not require SF6.
- 11.21 Fluid filled cables are some of the best performing electricity network assets in terms of reliability, however leaked oil, particularly near watercourses, will have a detrimental effect on the environment. NIE Networks are committing to reducing oil leakages from fluid filled cables by 10% over the full RP7 regulatory period (excluding third party damages) compared with its RP6 performance. It is planning to deliver its commitment through replacement of 5km of the worst leaking circuits with non-oil alternatives and tagging all

circuits with tracer fluid that aid rapid leak detection and repair.

11.22 NIE Networks' pollution prevention commitments also include the removal of Polychlorinated biphenyls contaminated equipment, compliance with updated creosote pole legislation on storage and disposal and reducing noise pollution from substations through the installation of noise enclosures.

Environmental action plan monitoring

- 11.23 For the draft determination we did not propose any incentives or the introduction of any further licence conditions specific to NIE Networks' environmental action plan commitments.
- 11.24 We noted that NIE Networks currently provide data on network losses, SF6 emissions and oil leakages annually. We also stated that it is our intention to amend the RIGs templates to capture business carbon footprint data annually through RP7. We requested this data as part of the RP7 business plan submission, and future annual data would be in a similar format.
- 11.25 We noted that Ofgem has introduced a licence obligation for licensees to publish an annual environmental report to update stakeholders on progress against environmental action plan commitments. We stated that it was our belief that NIE Networks' existing regulatory and legislative reporting requirements are sufficient, particularly with the addition of Streamlined Energy and Carbon Reporting legislation from 2019²⁵.
- 11.26 However, NIE Networks developed its environmental action plan commitments in conjunction with stakeholders. We therefore sought views from stakeholders during the draft determination consultation period on whether the requirement to publicise an annual environmental report should be introduced as a reputational incentive.
- 11.27 For the draft determination, we also acknowledged the ability for NIE Networks to deliver above and beyond what has currently been identified. If they aimed and evidenced Best in Class in this area, there would be the option for this to be recognised within the EPF.

Final determination

11.28 In response to our request for feedback from stakeholders, The Department for Agriculture, Environment and Rural Affairs (DAERA), CCNI, the Institute of Directors (IoD) and others agreed that publication of an annual

²⁵ <u>https://assets.publishing.service.gov.uk/media/5de6acc4e5274a65dc12a33a/Env-reporting-guidance_inc_SECR_31March.pdf</u>

environmental report (AER) would be useful.

- 11.29 NIE Networks did not provide a view in its draft determination response on this matter. However, following a pre-final determination UR query requesting its view, it questioned the added benefit of this requirement, considering the volume and complexity of its other environmental and sustainability reporting requirements. In particular, it highlighted that GB DNOs are not required to comply with the new EU Corporate Sustainability Reporting Directive (CSRD), but as part of the ESB group, NIE Networks will. It therefore considered that there is a much stronger argument for Ofgem's decision for GB DNOs to deliver an AER, when compared to NIE Networks.
- 11.30 Its response also highlighted that sustainability is one of the four key roles that will be assessed within the Evaluative Performance Framework (EPF). It further added, that as part of the EPF process the panel will adjudicate with respect to the level and appropriateness of NIE Networks' environmental and sustainability reporting and engagement. It considered that this creates a clear incentive for NIE Networks to deliver the appropriate level of related reporting.
- 11.31 NIE Networks requested that if an AER publication is required that we consider resource impact, content, time frame for publication and how it is to be governed.
- 11.32 We have assessed and considered NIE Networks' feedback and requests. As noted at the draft determination, the company's environmental and sustainability performance will only be considered for the EPF whenever Best in Class is aimed for and evidenced in this area.
- 11.33 It is our view that other existing reporting would not be specific to the RP7 commitments and fulfil the stakeholders' request. CSRD is not yet in place; therefore, we cannot assess if its content or format is appropriate. We are not intending that preparation of the AER will be as significantly onerous as to require resource considerations for NIE Networks. Preparation of existing related reporting will provide information that can be referenced and RP7 specified for the AER. We are also not intending to be prescriptive on the content of the AER, other than recommending that NIE Networks should report progress on its RP7 commitments to a level that would be to the satisfaction of stakeholders.
- 11.34 Given the feedback from other stakeholders, and our views above, we have determined that an AER publication will be a requirement for RP7.

12. Price Control Design

Overview

- 12.1 Annex S to the RP7 Final Determination sets out our proposals for the design of the RP7 price control. It shows how the price control design builds on the design of the RP5 and RP6 price controls. It responds to proposals which NIE Networks made in its business plan submission and in response to the draft determination to amend existing uncertainty mechanisms or introduce new mechanisms which allow funding to be amended or determined during the course of the price control.
- 12.2 We will give effect to the price control design set out in the chapter and in Annex S by modifying the NIE Networks transmission and distribution licences. In parallel with this final determination, we have published a consultation on licence modifications. The consultation sets out the detail of the changes we propose to make and the reasons and effects for those changes. This chapter and the supporting annex provide further information on the general design of the price control including the background to the development of the RP6 licence, which we are now modifying. It also provides a commentary on other changes to the design of the price control proposed by NIE Networks which we have decided not to include in our proposals for RP7.
- 12.3 The underlying principle of the price control design is that a reasonable estimate of most future costs can be determined in advance. It is then for NIE Networks to meet its obligations within these ex-ante allowances. The existing price control mechanisms allows these ex-ante allowances to be determined in one of three ways:
 - a) Allowances for capex and opex set out in the final determination of the price control. These are intended to cover the company's normal activities and are based on historical costs, subject to efficiency challenge and reasoned adjustments for future changes in activities.
 - b) Volume drivers which apply pre-determined unit cost rates to the actual number of units delivered (for example meter installation).
 - c) Re-opener mechanisms, whereby additional ex-ante allowances (or savings) are determined within a price control for a project or activity once there is more certainty on the needs case, project scope or quantities (for example large transmission projects).
- 12.4 The price control allows for some costs which NIE Networks cannot control to be passed through to consumers, although these are limited.

Building on RP5 and RP6 price control designs

- 12.5 The design of the RP7 Price Control builds on the design of the RP5, and RP6 price controls.
- 12.6 First, it continues key design features included in the RP5 Price Control including:
 - The determination of ex-ante allowances for most of the costs incurred by NIE Networks to discharge its functions, through a combination of allowances fixed in the price control, volume drivers and re-opener mechanisms described above.
 - b) The retention of 50:50 cost sharing of the difference between actual costs and ex-ante cost allowances. This provides a strong incentive for NIE Networks to deliver to less than the determined costs while providing consumers and the company with some protection against cost forecasting risk.
 - c) A mechanism to protect consumers against costs which are demonstrably inefficient and wasteful.
 - d) The ability and incentive for NIE Networks to defer certain categories of planned investment in a way which reduces short term costs for consumers, but also ensuring that any deferred investment is not funded a second time in a subsequent price control.
 - e) The ability to delay the determination of ex-ante allowances (initially limited to major transmission projects) allow the scope and cost of these projects to be defined, thus mitigating a major source of scope and cost forecasting risk.
 - f) The use of volume drivers which apply ex-ante cost rates to activities (such as the number of meters installed) to calculate an allowance.
- 12.7 The high-level design for RP5 formed the basis of the design of the RP6 price control with some amendments and additions including:
 - a) The introduction of a reliability incentive mechanism designed to incentivise the company to reduce customer minutes lost due to planned and unplanned interruptions to supply.
 - b) The introduction of additional categories of costs determined through a re-opener mechanism. For example, innovation, low carbon technology investment and investment to address generation congestion on the 33kV network.

- c) An additional volume driver for undereaves wiring allowed capex.
- A mechanism to provide flexibility on investment decisions by allowing NIE Networks to substitute between different investment categories while maintaining the overall value of investment delivered to consumers.
- e) A Rate of Return Adjustment Mechanism which allows the determined cost of capital to be updated for the benchmark nominal cost of debt when NIE Networks raises new debt.
- 12.8 Much of the high-level price control design for RP5 and RP6 has been carried forward into RP7 with appropriate modifications to address additional challenges and uncertainties of developing electricity networks to support the delivery of net zero.

NIE Networks proposals for RP7

- 12.9 In its business plan, NIE Networks set out its proposals on various price control mechanisms which it thought should be retained, amended or added for RP7. We have summarised these proposals and our response in Table 12.1 below with a more detailed assessment provided in Chapter 4 of Annex S.
- 12.10 Key changes to the price control design in response to the proposals made by NIE networks are:
 - a) The introduction of re-opener mechanisms and volume drivers for distribution primary and secondary networks load related expenditure in place of the lump sum allowances in RP5 and RP6.
 - b) The determination of ex-ante allowances for IT investment up to Year 2 of RP7 with a re-opener mechanism for the determination of investment in the subsequent years. This is not subject to the 50/50 share mechanism.
 - c) The determination of business rates as a pass-through cost (subject to checks on efficiently incurred costs) as opposed to ex-ante allowances in RP5 and RP6.
- 12.11 In addition, we have identified two key uncertainties which we have not addressed in the design of the price control because the likely outcome is too great to capture in an uncertainty mechanism as follows:
 - a) The introduction of smart metering.
 - b) The development of a new connection charging policy.

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12.12 We intend to address these changes through future licence modifications when there is sufficient clarity to scope them. This will include the determination of additional allowed capex and opex as appropriate.

Other key design changes for RP7

- 12.13 In addition to considering the changes proposed by NIE Networks, we have concluded that other changes should be made to the design of the price control in RP7, including:
 - a) The introduction of an Evaluative Performance Framework incentive mechanism which provides an incentive for NIE Networks to develop its Forward Work Programme in RP7 taking account of stakeholder engagement (see Annex V).
 - b) Amendments to the Rate of Return Adjustment Mechanism to adjust for actual inflation and risk-free rate throughout RP7. This will remove the inflation forecasting risk from the determination of cost of capital and align the calculation of revenue with the inflation of the Regulatory Asset Base (RAB).

Giving effect to the price control design

12.14 The outworking of the principles and processes which underpin the design of the price control are codified in NIE Networks' distribution and transmission licences, in particular those sections of the licence which detail how the maximum regulated revenue the company can recover from its customers is calculated. In parallel with this final determination, we are consulting on licence modifications to give effect to the price control.

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Uncertai	inty/Risk	RP6 Framework	Proposal for RP7	UR determination	
Primary Network – Forward Power Flow		Ex-ante allowance with 50/50 mechanism	Ex-ante plus reopener	Multiple approaches to cover all eventualities (50:50, deferral, substitution, ex-post review and reopener windows)	
Primary Network Power Flow	< – Reverse	Reopener	Ex-ante plus reopener	Accepted in principle with the exception that materiality threshold is increased to 10%	
Secondary Netw Reinforcement	vork	Ex-ante allowance with 50/50 mechanism	Ex-ante plus volume driver with mid-point review	Volume driver for all expenditure.	
Low rated cut ou	uts	Ex-ante allowance with 50/50 mechanism	Volume driver	Accepted in principle	
Looped Services		Ex-ante allowance with 50/50 mechanism	Volume driver with mid-point review	Accepted in principle but no mid-point review	
Net zero		n/a	Reopener	Reopener, limited to initiation by UR.	
Environmental		n/a	Reopener	Existing change of law mechanism to apply	
Sub-sea cables		n/a	Ex-ante allowance for inspection and testing and reopener as business case materialises	Accepted in principle	
Telecoms	SONI asset transfer	n/a	Reopened	Accepted in principle	
	DSO Operation Telecoms		Reopener (2-stage)	Accepted in principle	
OTN Comms conditional investment			Reopener	Accepted in principle	
Creosote Poles		n/a	Reopener	Existing change of law mechanism to apply	
Non-recoverable alterations		Ex-ante allowance with 50/50 mechanism	Pass through	Not accepted. Ex- ante allowances increased in FD.	
Innovation		UIOLI allowance approved through reopener mechanism	Ex-ante for defined projects plus reopener (light touch) for network innovation (NIF)	Not accepted. Existing re-opener mechanisms to be updated in line with proposals in Annex N.	

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Uncertainty/Risk	RP6 Framework	Proposal for RP7	UR determination
Capex asset replacement (Asset requirements may change as needs arise)	Limited substitution offered in RP6 50/50 Mechanism	Broader use of substitution mechanism	Substitution increased to 40% of programme value
Transmission capacity and capability projects (For projects brought forward by SONI)	Reopener: the 'D5 mechanism'	Refinement to the D5 mechanism	Accepted. Further engagement proposed on pre- construction cost approvals.
Large scale capex asset replacement (For large scale projects whose costs are uncertain at the time of setting the price control)	Reopener: the additional capex reopener. Specific projects cited for both transmission and distribution.	Retain RP6 arrangement	Accepted for projects defined in the RP7 determination
Transmission protection philosophy (Philosophy set by SONI. Changes can have cost implications)	Reopener	Retain RP6 arrangement	Accepted
Severe weather	Ex-ante allowance with 50/50 mechanism	Pass-through	Not accepted, ex-ante allowance increased for the FD.
Distribution undereaves	Volume driver	Retain RP6 arrangement	Accepted
Cluster developments	Connecting customers bear the costs through the SoCC Unrecovered costs added to the RAB	Retain RP6 arrangement	Accepted
Distribution connection charging policy (Cost implications of change of policy)	n/a	Reopener	Not accepted. Further licence modifications would be considered, when required.
Meter installations/replacements (Costs driven by volumes)	Volume Driver	Retain RP6 arrangement	Accepted
Smart meters (Cost implications if smart meters are mandated)	No explicit method to address costs	Reopener (2-stage)	Reopener proposed for planning and development costs. New licence modifications would be considered, if and when required.
I-SEM (Cost implications if there are changes to the wholesale market)	Some opportunity for additional allowances through the ESt term (For the Enduring Solution)	Retain RP6 arrangement	Accepted

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Uncertainty/Risk	RP6 Framework	Proposal for RP7	UR determination
IT Systems (New requirements)	Some opportunity for additional allowances through the NESt term (for new energy strategy IT solution or market services IT systems)	Refinement of the RP6 arrangement to incorporate the delivery of the S/4 HANA project in RP7	Ex-ante allowance determined for the first 2 years with a reopener mechanism for the determination of investment in the subsequent years.
Injurious affection (cost implications of IA claims)	Reopener: the IAt term	Retain RP6 arrangement	Accepted
Business rates (cost implications following revaluations)	Ex-ante allowance with 50/50 mechanism	True-up mechanism	Accepted as pass through, subject to checks
Corporation tax (tax rates are outside our control)	Applicable rate varies according to the prevailing rate set by HMRC	Retain RP6 arrangement	Accepted
Pension historic deficit repair (cost implications if deficit worsens)	Customers bear 100% of deficit repair costs for pre- April 2012 deficit. The balance is borne by the company	Retain RP6 arrangement	Accepted
UR licence fees	Pass through	Retain RP6 arrangement	Accepted
Change of law (CoL)	Reopener: the Change of Law provision	Retain RP6 arrangement	Accepted
Price indexation	RPI used to adjust allowances	CPIH used to adjust allowances	Accepted
Real price effects	Ex-ante allowance with 50/50 mechanism	True-up adjustment based on indexation	True-up mechanisms accepted in principle subject to further engagement.

Table 12.1: Amendments proposed by NIE Networks and UR finaldetermination.

13. Financial Aspects

Overview

- 13.1 This chapter of the final determination provides information on the financial aspects of the RP7 price control, including:
 - a) How inflation is addressed in the price control.
 - b) The use of Regulatory Asset Base and depreciation.
 - c) The determination of a rate of return applied in the price control.
 - d) Proposals in respect of a Rate of Return Adjustment Mechanism.
 - e) Allowances for corporation tax.
 - f) Financeability.
 - g) Estimates of RP7 revenues.
 - h) How the determination will impact on consumer bills.
- 13.2 Detail supporting information for this chapter is provided in:
 - a) Annex H RP7 Rate of Return Adjustment Mechanism.
 - b) Annex I RP7 Rate of return adjustment mechanism (spreadsheet).
 - c) Annex K RP6 Financial Model (spreadsheet).
 - d) Annex L RP7 Financial Model (spreadsheet).
- 13.3 NIE Networks took issue with four main aspects of the calculation: gearing; the expected market return; the allowance for additional debt costs; and the insertion of an inflation adjustment mechanism. Specifically, NIE Networks said that:
 - An assumed 55% debt-to-RAB ratio is not an efficient capital structure, and serves to artificially improve the assessment of the financeability of the RP7 price control.
 - UR's methodology for calculating the cost of equity, and in particular, the expected market return, produces a return that is implausibly close to the cost of debt.
 - The allowance for additional debt costs is not reflective of NIE Networks actual costs or regulatory precedent.

- The proposed inflation adjustment mechanism puts NIE Networks regulatory framework out of line with Ofgem's regulatory framework and, hence, poses a significant risk to NIE Networks credit rating, funding capacity, investability and cost of capital.
- 13.4 NIE Networks did not have any fundamental issues with the other aspects of the calculations, covering: risk-free rate; beta; the calculated cost of embedded debt; the shares of embedded and new debt; or the projected cost of new debt. However, NIE Networks did note that some of the parameter estimates would need to be updated prior to the final determination.
- 13.5 CCNI was the only other respondent to make substantive comments on the cost of capital. CCNI said that they disagreed with the reference that we made to the yields on AAA rated non-government bonds in our assessment of the risk-free rate. CCNI stated that its preference is for a risk-free rate based solely on the yields on index-linked gilts (ILGs).
- 13.6 CCNI also suggested that we should weight COVID-period and non-COVIDperiod comparator company share price data when estimating beta, in accordance with the approach taken recently by the CAA in a price control decision for Heathrow Airport.
- 13.7 Further detail on draft determination consultation responses and URs comments on these can be found in Annex Z Consultation Responses Report.

Treatment of inflation

- 13.8 We have determined key financial amounts and values in this draft determination in 2021/22 base year prices. We use October 2021 inflation indices as representative of the base year, consistent with the treatment of inflation in the licence. We have presented key financial outputs, including our assessment of revenue and customer impact below, in 2021/22 prices, allowing costs to be compared on a consistent price base.
- As the licence is implemented, we apply a general measure of inflation to calculate nominal revenues and tariffs. The methodology used to adjust for inflation is set out in Annex 2 of the transmission and distribution licences. The application of that methodology can be seen in more detailed in Annex L RP7 Financial Model.
- 13.10 In RP6, RPI was used as the general measure of inflation. In RP7, we adopt CPIH as the general measure of inflation. We explored this issue when we

set out our Approach to RP7²⁶. We noted the UK Statistics Authority's view that:

- a) RPI is not a good measure, at times significantly overestimating inflation and at other times underestimating it and noted that it had consistently urged all – in Government and the private sector – to stop using it.
- Intention to bring the methods and data sources of the Consumer Prices Index including owner-occupiers' housing costs (CPIH) into RPI shortly after 2030.
- 13.11 Using CPIH as the general measure of inflation will align with the approach being adopted by ourselves and other networks regulators for other price controls. It will also ensure that the level of inflation of network prices will follow the general Consumer Prices Index (CPI) which is becoming the commonly quoted measure of inflation and a benchmark for increases in pensions, benefits and wages.
- 13.12 In moving from RPI to CPIH as a general measure of inflation for RP7, we have:
 - a) Calculated real rates of return on capital on a CPIH stripped basis.
 - b) Calculated the frontier shift on a CPIH basis.
 - c) Ensured that the opening Regulatory Asset Base for RP7 continued to take account of RPI throughout the RP6 price control period.
- 13.13 In our final determination for RP7, we use forecast inflation to calculate a real rate of return on capital, determine real price effects and test financeability. We have used updated inflation forecasts published by the Office of Budget Responsibility's (OBR) in its Economic and fiscal outlook March 2024²⁷

Regulatory Asset Base and depreciation

- 13.14 A key component of the price control design is a Regulatory Asset Base (RAB) which captures the cumulative values of allowed expenditures up until the point of recovery of those expenditures from customers as revenue through regulatory depreciation.
- 13.15 The detail of how individual RABs are amended for additions and depreciation is set out in Annex 2 of the transmission and distribution

²⁶ UR RP7 Approach

²⁷ OBR economic-and-fiscal-outlook-march-2024

licences with more detail provided in Annex L - RP7 Financial Model.

13.16 An underlying principle is that the closing RAB at the end of a year is inflated to give the opening value of the subsequent year. This approach ensures that consumers pay the real value of the assets at the time they are used, ensuring intergenerational equity. Because the RAB is inflated, the return on capital included in revenues is calculated using a real rate of return (net of inflation).

Rate of return

- 13.17 UR's regulatory model provides for NIE Networks to earn a return on its allowed expenditures up until the point of recovery of those expenditures from customers. The value of this return is calculated as a weighted average of the costs of the equity and debt finance that the companies pay to investors (a weighted average cost of capital (WACC)).
- 13.18 The rate of return applied in the price control is:
 - a) A real rate of return (net of inflation), consistent with the ongoing inflation of the RAB.
 - b) A post tax (vanilla) rate of return. As a result, a separate revenue stream is provided in respect of corporation tax.
- 13.19 In carrying out our functions, we are required to have regard to the need to secure that licence holders are able to finance their activities. This duty has underpinned our approach to the whole of our cost of capital assessment, and to the assembly of NIE Network's price controls more generally. We have provided an assessment of financeability to confirm that ability of the company to finance its activities.
- 13.20 In reaching this final determination, we have paid careful attention to the representations that NIE Networks made in its business plan submission, draft determination response and discussions prior to this final determination.
- 13.21 While we make our assessments on a reasonable balance of debt and equity, this does not necessarily reflect or constrain the choices the company might make in respect of its own capital structure. It is a matter for the company to make prudent choices in respect of its financial structure to avoid financeability issues over the medium or longer term.

Vanilla WACC

13.22 The vanilla WACC is calculated from gearing (g), real cost of debt (Kd) and real cost of equity (Ke) using the equation below.

 $vanilla WACC = g \cdot K_d + (1 - g) \cdot K_e$

Gearing

- 13.23 The assumed gearing during RP5 and RP6 reviews was 45%, following a decision made by the Competition Commission in the 2014 NIE Networks price control appeal.
- 13.24 In our draft determination, we assumed that NIE Networks would take on additional borrowing from this 45% starting point in order to finance its sizeable RP7 investment programme. We also sought to ensure that gearing would not increase to a point that would give rating agencies undue concern. Our assessment was that gearing of up to 55% would be unlikely to raise any financeability issues, but that gearing up beyond 55% could place strain on interest cover and jeopardise NIE Networks credit rating.
- 13.25 We do not think that NIE Networks has given us any reason to move away from this assessment. NIE Networks asserts that we should calibrate its cost of capital and financial modelling using a wholly hypothetical starting 60% gearing ratio. This equates to a starting level of borrowing that is approximately £360m higher than RP6 notional gearing.
- 13.26 If we were to assume such a high level of initial indebtedness, NIE Networks modelled capacity to borrow to finance investment would be significantly reduced, financial ratios would quickly become incompatible with NIE Networks current credit rating, and we would be forced to consider how best to fix a financeability problem. NIE Networks suggestion at this point appears to be that we would be required to provide a higher rate of return.
- 13.27 We do not consider that it is in the interests of consumers for us to base our RP7 decision on a hypothetical level of indebtedness that is much higher than the assumed level of RP5/RP6 gearing and which NIE Networks does not in practice have. It is clearly in customers' interests that current borrowing capacity should be deployed to finance investment. Likewise, we have been unable to identify any reason for us to provide for higher returns in response to the emergence of a wholly contrived financeability crunch.
- 13.28 We therefore conclude that NIE Networks cost of capital should be set in accordance with a 55% gearing ratio and the best available estimate of the CAPM cost of equity parameters (beta, risk-free rate and expected market return).

Real cost of debt

13.29 The allowed cost of debt is a weighted average of the cost of embedded debt and the cost of new debt, plus an allowance for transaction-related costs.

- 13.30 At the time of the draft determination, we forecast that the cost of debt during the RP7 period would be 6.11% in nominal terms or 4.49% in real terms. The tables below provide an update of these calculations using data as of August 2024.
- 13.31 Table 13.1 brings the calculations together into an overall baseline for the nominal cost of debt.

Average nominal cost of debt					
		Current market rates	5.76%		
Average interest costs	5.79%	Forward rate adjustment	nil		
Embedded debt 5.79%		Cost of new debt	5.76%		
30:70 weighted average					
Weighted average cost of debt = 5.77%					

Table 13.1: Forecast average nominal cost of debt for RP7.

13.32 We convert the nominal costs of debt in Table 13.1 into their real equivalents by adjusting for forecast average RP7 CPIH inflation of 1.88% and then adding transaction related costs. This gives the real cost of debt allowances shown in Table 13.2.

	RP7
Nominal cost of debt	5.77%
Inflation forecast	1.88%
Real cost of debt	3.82%
Transaction related costs	0.15%
Allowed cost of debt	3.97%

Table 13.2: Real cost of debt for RP7

13.33 The inputs into calculations above are as follows:

- a) Cost of embedded debt our estimate of the cost of NIE Networks existing debt remains unchanged from the draft determination.
- b) Cost of new debt we set a 'placeholder' for the cost of new debt at 5.76% based on the one-month average of the yield on the iBoxx £ non-financials BBB 10-year index and with no forward rate adjustment for anticipated moves up or down in interest rates during RP7. The credit rating of this index is chosen to correspond as closely as possible to the BBB+ rating that we expect NIE Networks to have during RP7.

- Weights for embedded and new debt our financial modelling indicates that, on average, 30% of the debt that NIE Networks will service during RP7 will be embedded debt and 70% will be new debt.
- Forecast inflation we update our forecast of CPIH inflation to align to the OBR forecasts used throughout this final determination i.e. March 2024 OBR forecasts of CPI and a longer term forecast of 2.0%.
- e) Transaction-related costs we include for the first time an allowance for 'cost of carry' in our estimate of ancillary costs and so increase the total allowance for transaction-related costs to 0.15%. The cost of carry refers to the costs that a company incurs when it issues debt in tranches ahead of investment and must bear the differential between interest paid to lenders and interest received on short-term deposits/investments prior to deploying the capital raised.
- 13.34 NIE Networks has argued in its response to the draft determination that we should increase the allowance for transaction-related costs still further.
- 13.35 First, NIE Networks asked allowance of 0.05% to cover the cost of swapping RPI-linked debt liabilities to CPI-linked debt liabilities, following our decision to switch the price control inflation index from RPI to CPIH.
- 13.36 This is, in principle, a reasonable request for a company to make where it actually has RPI-linked debt. However, we were able to establish via an information request that NIE Networks does not, in fact, have such liabilities. NIE Networks informed us that a parent company has RPI inflation swaps and may consider it necessary to novate these instruments to CPIH with attendant costs. However, we consider that these swaps sit outside the licensee and, hence, outside the boundaries of regulation. Accordingly, we do not propose to make any allowance for RPI-CPIH basis risk.
- 13.37 Second, NIE Networks said that the allowance for cost of carry should be 0.16% to 0.19%.
- 13.38 We reviewed the calculations that NIE Networks provided in response to an information request. We identified that NIE Networks costing is highly sensitive to the assumptions that one makes about the difference between interest rates payable on borrowing and deposits, the tenor of NIE Networks bonds and the frequency of debt issuance. We also noted that NIE Networks was seeking an allowance for all debt in issue, including borrowing entered into in RP5 and RP6 and the refinancing of existing debt in RP7.
- 13.39 We received several different calculations from NIE Networks of the cost of carry using a range of different assumptions. Taking the mid-point of NIE Networks submitted ranges for the interest differential (1.8%) and tenor of

bond (15 years) and combining with our modelling of the likely frequency of NIE Networks debt issuance in RP7 (every two years), we estimate that the cost of carry could add around 0.17% to the cost of a typical bond.

- 13.40 We agree that customers should cover the cost of carry when NIE Networks incurs new indebtedness to support its RP7 investment programme. But we do not consider that there is as strong a case for providing an allowance in RP7 for costs that NIE Networks incurred in RP5 and RP6 or on the refinancing of existing debt. We note that there was no allowance for cost of carry in the Competition Commission's RP5 decision and that we said in our RP6 decision that it was "reluctant to depart from this position ... because there are actions that NIE can take to manage the timings of its borrowings and thus avoid holding large cash balances." We also note that a cost of carry, by definition, does not arise when NIE Networks is refinancing existing borrowing pound-for-pound with new debt.
- 13.41 Accordingly, if we allow for a cost of carry only in respect of the additional debt that NIE Networks will take on during RP7, we find that an overall transaction-related costs allowance of 0.15% is broadly sufficient to cover NIE Networks submitted costings of debt-related fees, liquidity facilities and the cost of carry.
- 13.42 In the event that NIE Networks cost of carry is higher than we have allowed for, we consider that there is likely to be headroom elsewhere within the cost of capital calculation (e.g. as a result of our decision to benchmark the cost of NIE Networks BBB+ rated debt to a BBB index) that will cover the additional expense.
- 13.43 In a continuation of the approach, we first adopted in our RP6 decision, our determination makes provision for a rate of return adjustment mechanism that will update our forecast nominal cost of debt in line with prevailing market rates at the point when NIE Networks raises new borrowing. We have provided more detail later in this chapter on the calibration of this mechanism.

Calculating the cost of equity

13.44 In calculating the allowed cost of equity, we, like most economic regulators, use the Capital Asset Pricing Model (CAPM) to determine the returns that shareholders require in exchange for their equity investments. CAPM estimates the required return to be a function of the risk-free rate (Rf), the expected return on the market portfolio (Rm) and a firm-specific measure of risk (the equity beta (ße) as follows:

$$K_e = R_f + \beta_e \cdot \left(R_m - R_f \right)$$

Equity beta

13.45 Equity beta is calculated from the asset beta using the formula set out below. The asset beta is a hypothetical measure of the beta a company would have if it had no debt and were financed entirely by equity.

$$\beta_a = (1-g) \cdot \beta_e + g \cdot \beta_d$$

- 13.46 The draft determination estimate of NIE Networks asset beta of 0.35 was anchored to a sample of empirical beta estimates calculated using comparator company share price data.
- 13.47 CCNI is correct that the CAA weighted data from different time periods in its recent calculation of Heathrow Airport's beta. However, aviation betas were very obviously severely affected by the COVID pandemic, giving the CAA a different set of circumstances to deal with in its review. We are not aware of any regulator from outside the aviation sector that has used a weighting scheme in a beta calculation. Neither Ofwat nor Ofgem has deemed it necessary to weight historical data in its ongoing reviews. A change of approach at this late stage of the RP7 review would add complexity and increase the risk of computational error. As such, we do not think it is necessary or appropriate for us to adopt CCNI's proposed approach.
- 13.48 The draft determination beta was positioned towards the top end of NIE Networks submitted range (0.32 to 0.36). The point estimate was chosen to be consistent with Ofgem's RIIO-2 beta for the GB electricity distribution and transmission networks. In its RIIO-3 methodology document, published in July 2024, Ofgem provided for an indicative range for beta that continues to centre at 0.35.
- 13.49 Given that we have been presented with no evidence in this review to suggest that NIE Networks risk profile is materially different from the GB networks' risk profile, we confirm our previous asset beta estimate of 0.35.
- 13.50 At gearing of 55%, and assuming a debt beta of 0.075, the calculated equity beta is 0.69.

Risk-free rate.

- 13.51 The risk-free rate in the draft determination was derived from a 50:25:25 weighted average of index-linked gilt (ILG) yields and the yields on two AAA-rated corporate bond indices, respectively.
- 13.52 Table 13.3 gives the yield on these instruments during the month of August

2024. The table also includes an additional estimate derived from yields on 20-year conventional gilts. The table shows that different proxies for the riskless asset continue to point towards different values for the risk-free rate²⁸.

	Nominal	RPI real	CPIH real
Index-linked gilts, 20Y	-	1.12%	1.37%
Conventional gilts, 20Y	4.46%	-	2.47%
AAA non-government bonds, 10+Y	4.52%	-	2.51%
AAA non-government bonds, 10-15Y	4.31%	-	2.35%

Table 13.3 : Estimates of the risk-free rate

- 13.53 The 'basket' approach that we used in our draft determination is aligned to the approach used by the CMA in its 2021 redetermination following the appeals of the PR19 decision by four water companies. The CMA panel found that recent yields on ILGs are a suitable proxy for the risk-free rate. However, the panel concluded that there was some theoretical and empirical support for the argument that ILGs could underestimate the true risk-free rate in the CAPM. It therefore found that yields on AAA-rated nongovernment bonds were also a suitable input in the RFR estimation.
- 13.54 In a separate appeal by energy networks against Ofgem's RIIO-2 price controls, the CMA made a somewhat different decision and found that Ofgem was not "wrong" in using ILGs as the sole basis for the risk-free rate.
- 13.55 The UKRN cost of capital task force considered this matter in detail in 2022/23. The published guidance states that all UK regulators should use ILG yields when estimating the risk-free rate in the future. The guidance also provides that "… regulators agree that nearly any risk-free proxy stripped of accurately measured risk premia should give a value close to the 'true' risk-free rate. In principle this suggests that evidence from these proxies could provide a useful sense check in times of ILG market volatility or to help define the range within which the point estimate for the risk-free rate should be drawn."
- 13.56 Given the data shown in table 2, our conclusion is that the RP7 risk-free rate should be informed by a range of measures. The table makes it clear that ILGs are currently giving a very different reading from non-ILG instruments, and the reasons for this discrepancy are not well understood. In the circumstances, we do not feel sufficiently confident that we can place 100%

²⁸ The inflation assumptions within these calculations provide for OBR forecasts of RPI and CPI inflation over five years, then CPIH inflation of 2.0%, RPI inflation of 2.9% until 2030 and RPI inflation of 2.0% from 2030.

weight on a single proxy for the riskless asset and consider that it is necessary to take direction from the kind of cross-check that the UKRN guidance envisages.

13.57 We therefore set the risk-free rate at 1.9% in real CPIH-stripped terms, or roughly halfway between the ILG and non-ILG measures.

Expected market return.

- 13.58 The draft determination provided for an expected market return of 6.5%.Combined with the assumptions that we made about the risk-free rate and beta, the real cost of equity was 5.15%.
- 13.59 We were conscious when we published the draft determination that the cost of equity cannot plausibly be lower than the cost of debt. We checked that there was a meaningful gap between the cost of equity and cost of new debt figures, thus providing a level of remuneration to investors who take on equity risk.
- 13.60 The updates to the draft determination that we provide elsewhere in this report for the latest market/economic data now result in a bigger equity-debt differential.
- 13.61 In addition, we have noted that Ofwat and Ofgem have recently tabled small increases in their estimates of the total market return. The increases reflect data updates that have enabled the regulators to refine their estimates of the returns that investors have historically taken from stock market investments. Our assessment is that, in the interests of regulatory consistency, we should also update our estimate of the expected market return to the mid-point of Ofgem's range (i.e. 6.75%).
- 13.62 This moves the calculated cost of equity to 5.23%, as set out in Table 13.4.

	RP7
Gearing	0.55
Risk-free rate	1.90%
Market return	6.75%
Asset beta	0.35
Equity beta	0.69
Post -tax cost of equity	5.23%

Table 13.4 : Real cost of equity for RP7

13.63 An allowance of 5.23% sits above Ofwat's proposed PR24 allowed return and in the upper half of Ofgem's indicative range for the RIIO-3 return.

13.64 While it is difficult to come to a definitive view on what the differential between the cost of equity and the cost of debt 'should' be, we take comfort from this benchmarking and consider that it is unlikely that NIE Networks shareholder would view the return on offer in RP7 as unattractive, having regard to the returns that are going to be available elsewhere.

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Overall rate of return (vanilla WACC)

13.65 Bringing together the individual components set out above, the values that we propose for this RP7 final determination are set out in Table 13.5 below.

	RP7
Gearing	55%
Post-tax cost of equity	5.23%
Cost of debt	3.97%
Overall rate of return (vanilla WACC)	4.53%

Table 13.5: Real rate of return (vanilla WACC) for RP7

Rate of return adjustment mechanism (RRAM)

- 13.66 The draft determination provided for three of the components in the cost of capital calculation the risk-free rate, the cost of new debt, and the nominal-real inflation conversion within the allowed cost of debt to be subject to ex post adjustment.
- 13.67 NIE Networks objected to the inflation adjustment mechanism, principally on the grounds that it represented a departure from Ofgem's approach to setting allowed returns. However, in July 2024 Ofgem announced that there will be a fundamental change to its treatment of inflation starting from April 2026. There are aspects of Ofgem's new approach that are different to the approach that we proposed in the RP7 draft determination, but the effect of Ofgem's new methodology and UR's inflation adjustment mechanism are not dissimilar in that Ofgem and ourselves are both seeking to ensure that nominal debt costs are remunerated in full and that networks do not bear forecasting risk in respect of inflation.
- 13.68 This convergence of methodology means that NIE Networks main objection to the draft determination proposals falls away. However, we do note the Ofgem approach would bring revenues forward in an NPV neutral way and NIE Networks continue to argue against being treated differently.
- 13.69 We have engaged with NIE Networks on the final determination approach and made some changes to the method of true up for the RRAM. Risk free rate and the cost of new debt will be trued up via 'in period' adjustments

feeding directly into tariff reviews. Inflation will be an 'end of period' adjustment resulting in an adjustment to the regulated asset base.

13.70 Full detail on the methodology and calculations can be found in Annex H and I of this final determination.

Corporation tax

- 13.71 The real rate of return applied in RP7 is a post-tax (vanilla) WACC. An additional stream of revenue is determined through the price control in respect of corporation tax.
- 13.72 The calculation of a tax amount is included at paragraph 9 of Annex 2 of the current transmission and distribution licences. This calculation relies on various regulatory amounts calculated for the notional company and external parameters including:
 - a) The corporation tax rate applicable at the time.
 - b) The regulatory amounts for return and depreciation.
 - c) An interest cost calculated using the notional nominal cost of debt, the notional company gearing and the average RAB.
 - d) The value of regulatory capital allowances calculated in accordance with the licence.
- 13.73 We propose to maintain this approach in RP7.

Financeability

- 13.74 Article 12 of the Energy (Northern Ireland) Order 2003 requires us to carry out our functions in the manner we consider is best calculated to further our principal objective, having regard to the need to secure that licence holders are able to finance the activities which are the subject of licence obligations placed on them (amongst other things).
- 13.75 This duty is framed similarly to the financing duties of other UK regulators and can broadly be taken in practice to mean that the price control ought to be set at a level which would allow an efficient network company to finance the legally compliant aspects of its licensed activities. It is therefore necessary for us to consider financeability as an integral part of a price review.
- 13.76 In assessing whether this final determination leaves NIE Networks in a position where they will be able to finance its activities during the RP7

period, we have considered the ability that the companies will have to utilise both equity and debt finance.

- 13.77 The key determinant of the company's ability to access equity finance is the allowed return on equity. We have built returns by considering the level of returns that investors are likely to be able to get from other equity investments and by positioning the return offered by NIE Networks logically against these alternative investments. Accordingly, we are satisfied that NIE Networks ought to be capable of securing equity finance on an ongoing basis throughout the next six years.
- 13.78 As far as borrowing is concerned, it will be important for NIE Networks to maintain investment-grade credit quality. One determinant of the company's credit worthiness in the eyes of lenders will be the level of cash-flows that the business generates under our price controls. A second key factor will be the amount of borrowing that the company chooses to take on. We influence the first of these things, but the second is firmly in the hands of NIE Networks Board.
- 13.79 In Table 13.6 we present the results of modelling we undertook to test key financial ratios. When assembling these projections, we had to decide what a suitable opening level of gearing on 1 April 2025 would be. In our RP6 modelling, we assumed that NIE Networks would maintain a notional gearing of 45% and we therefore use this as a guide for the starting gearing amount for RP7. Our modelling shows the financeability metrics NIE Networks would exhibit if it borrows to finance new investment, while moderating dividend payments to 3% maximum dividend payout during the RP7 period which stretches gearing above the 55% notional gearing in the final three years of RP7.
- 13.80 For illustrative purposes we have also modelled on a maximum dividend of 1.5% as shown in Table 13.7 below. This improves the financeability ratios and maintains gearing at just below 55% at the end of RP7.
- 13.81 We have used these dividend yield values as they align with the recent Ofgem RIIO-3 methodology decision and compares to an average within the NIE Networks business plan submission of 1.9%.

	25/26	26/27	27/28	28/29	29/30	30/31
Adjusted interest cover	1.29	1.54	1.46	1.41	1.37	1.36
FFO interest cover	3.50	3.59	3.42	3.28	3.20	3.16
FFO to net debt (%)	13.22	13.86	12.98	12.37	12.20	12.04
Gearing (%)	48.90	51.85	54.39	56.24	56.96	57.33

Table 13.6: Financeability modelling results (3% Dividend Yield)

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	25/26	26/27	27/28	28/29	29/30	30/31
Adjusted interest cover	1.30	1.58	1.51	1.47	1.45	1.45
FFO interest cover	3.53	3.68	3.54	3.42	3.37	3.36
FFO to net debt (%)	13.48	14.38	13.68	13.22	13.24	13.26
Gearing (%)	48.12	50.39	52.33	53.62	53.75	53.52

Table 13.7: Financeability modelling results (1.5% Dividend Yield)

- 13.82 The evidence that we have seen in rating agency reports indicates that NIE Networks will need to maintain a Funds from Operations (FFO) to net debt ratio above 12% in order to maintain a its current rating of 'a-' on stand-alone credit profile²⁹.
- 13.83 The ratios in this modelling appear to be compatible with NIE Networks maintaining its existing credit rating.
- 13.84 We further note that the appropriate response to any rating pressures that the licensee encounters would be for the business to seek to finance more of its RP7 investments with equity capital and take on a smaller amount of new borrowing. The allowed rate of return in this determination is capable of supporting a range of capital structures, meaning that NIE Network's overall revenues need not be viewed as being dependent on any particular forecast on our part about NIE Networks future levels of gearing.
- 13.85 Our assessment, therefore, is that NIE Networks is capable of financing itself through the RP7 period with the revenues provided in this determination so long as it selects a prudent mix of equity and debt capital.

RP7 revenues

- 13.86 The outcome of the price control is the determination of allowed values for capex and opex, some unit rate mechanisms for volume drivers (for example, meters) and re-opener mechanisms which will generate additional allowances as the need arises (for example, investment in large transmission projects) and a rate of return. The licence then sets out mechanisms and formulae which are applied to calculate future revenue. While revenue is not determined, we have developed the financial model to apply the licence and calculate revenue in collaboration with NIE Networks. We have used this model to estimate the impact of the determination on revenues and the impact on tariffs as well as financeability.
- 13.87 When we modelled revenues, we made reasonable allowance for the outworking of RP6 and for expenditure which might be determined later in

²⁹ S&P Global Rating – August 9 2023.

RP7, such as major transmission projects, volume drivers and other reopener mechanisms. The difference between total revenue for the RP7 period from the NIE Networks business plan and our final determination are shown in Table 13.8 below.

21/22 Prices	NIEN BP £m	UR FD £m	Difference £m
Transmission	495.9	446.9	(49.0)
Distribution	1,838.4	1,685.1	(153.3)
Total	2,334.3	2,132.1	(202.2)

Table 13.8: Total Revenues

- 13.88 However, the profile across the price control is more informative, as shown in Table 13.9 below, beginning with 2024/25, the last year of RP6.
- 13.89 Transmission revenue increases by 73% from the end of RP6, driven by the proposed D5 investment programme for large transmission projects. This emphasises the need for careful consideration of these projects within the Energy Strategy and demand forecast which underpins the need for the investment. While these projects will impose additional costs on consumers, the additional network reinforcement they provide should help reduce some market costs of energy (such as reduction in imperfection charges) which will benefit consumers.
- 13.90 Distribution revenue will increase by 23% over the period due to increased direct capex investment in the network and IT and additional operating costs. These increases make reasonable allowance for load growth and continuation of the existing metering policy. However, our projections do not allow for the cost of smart metering, the possible need for more load related expenditure being required, or any changes proposed as part of our review of connection charging, such as greater socialisation of connection costs.

21/22 Prices	24/25	25/26	26/27	27/28	28/29	29/30	30/31	Change 24/25 to 30/31
Transmission	55.2	54.2	64.4	71.3	79.5	86.5	91.1	65%
Distribution	247.6	244.5	269.8	279.6	290.0	297.4	303.8	23%
Total	302.8	298.6	334.2	350.9	369.6	383.9	394.9	30%

Table 13.9: Revenues

13.91 Figure 13.1 below shows the RP7 final determination compared to both the RP6 revenue entitlement and the NIE Networks requested RP7 revenue entitlement. This is shown in 2021/22 prices using CPIH inflation assumptions.



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Figure 13.1: RP7 FD revenue entitlement compared to RP6

Customer impact

- 13.92 Our assessment of the impact of the determination on consumer bills follows a methodology provided by NIE Networks which takes account of the detailed allocation of tariffs across different types of consumers. The data compares the impact on customer bills in 2024/25 (the final year of RP6) with bills in 2030/31 (the last year of RP7).
- 13.93 In this case, a typical bill is for a consumer who does not adopt new low carbon technologies, such as electric vehicles (EVs) and heat pumps (HPs). The bill impact is based on maintaining consumption levels forecast for 2024/25. Those who do connect EVs and HPs, and therefore increase their consumption, will pay more as a result. Those customers will benefit by offsetting reductions in fossil fuel consumption for home heating and transport.
- 13.94 The impact on a typical bill calculated by NIE Networks in line with its business plan is provided in Table 13.10.

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Customer Group	Turnical	NIE Networks Business Plan			
	MWh/a	24/25 173	30/31	Change (£)	Change (%)
Domestic	3.4	173	182	9	5%
Small Business	16.4	718	795	77	11%
SME, LV	275	10762	12222	1460	14%
SME, HV	1,593	38848	44983	6136	16%
LEU, HV	5,457	98075	115391	17296	18%
LEU, 33kV	31,075	295809	367751	71942	24%

Table 13.10: NIE Networks impact on customer bills for a typical customer

13.95 The impact of our final determination with all other assumptions remaining the same is provided in Table 13.11. The impact of our final determination is lower than the company business plan and this is consistent with the lower determined revenue. However, the same pattern of impact is apparent with the percentage increase in larger I&C being greater than small I&C and domestics.

Customer Group	Typical		UR Final de	ermination			
	MWh/a	24/25	30/31	Change (£)	Change (%)		
Domestic	3.4	171	165	-6	-4%		
Small Business	16.4	708	718	10	1%		
SME, LV	275	10,609	11,035	426	4%		
SME, HV	1,593	38,251	40,643	2,392	6%		
LEU, HV	5,457	96,465	104,341	7,876	8%		
LEU, 33kV	31,075	289,677	333,347	43,671	15%		

Table 13.11: UR FD impact on customer bills for a typical customer

- 13.96 The reason for this relates to the fact that revenue is distributed differently for transmission and distribution. For transmission tariffs, the allowances the company collects are spread equally across all units of electricity irrespective of where the customer is connected. The increase in transmission revenue is materially greater than the forecasted increase in demand. Therefore, all users will see an increase in their transmission network costs irrespective of whether they use more electricity or not.
- 13.97 For the distribution tariff the increase in revenue is more in line with the increase in forecast consumption, therefore those who do not change their consumption patterns will not see increased bills.
- 13.98 However, the allocation of distribution revenue to tariff is more cost reflective.



Larger users, connected at high voltage levels only pay costs of the network they are connected to. Therefore, their distribution network charges are a lower proportion of their total bill. Because transmission costs are increasing faster than distribution costs, large users see a proportionally greater increase in their overall bill as shown on Table 13.12.

Customer Group	Typical	UR Final determination – increase in tariff			
	MWh/a	D	Т	T&D	(%)
Domestic	3.4	-12	6	-6	-4%
Small Business	16.4	-18	27	10	1%
SME, LV	275	-33	458	426	4%
SME, HV	1,593	-46	2,438	2,392	6%
LEU, HV	5,457	-475	8,351	7,876	8%
LEU, 33kV	31,075	-3,322	46,992	43,671	15%

Table 13.12: UR impact on customer bills for a typical customer bytransmission and distribution

- 13.99 These relative change of charges to different types of consumers are indicative of a need to carefully consider the allocation of charges in a changing environment. For example, further work on tariff structures will be required as part of the development of smart metering. This might further impact on the distribution of network revenues and how this affects individual consumers and groups of consumers.
- 13.100 The calculations within Table 13.12 are based on NIE Networks view of increased consumption consistent with the proposed investment. NIE Networks has based its central estimate of new demand on 300,000 electric vehicles (EVs) and 120,000 heat pumps (HPs) by 2030. This key assumption is a forecast, and it is likely that the outcome will be different.
- 13.101 If the increase in EV and HP connections does not materialise and forecast consumption is lower than projected, NIE Networks will still recover the cost of investment made and bills would increase further as a result.
- 13.102 Because investment will be committed in anticipation of uptake of low carbon technologies such as EVs and HPs, the impact on tariffs will depend on actual uptake. To reflect this uncertainty, we modelled consumer impact on NIE Networks assumptions above and tested the sensitivity of bill impact assuming 75% of anticipated EV uptake and 50% of anticipated HP uptake as shown on Table 13.12

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Customer Group	Typical	UR Final determination – increase in tariff			
	MWh/a	D	Т	T&D	(%)
Domestic	3.4	174	178	4	2%
Small Business	16.4	717	760	43	6%
SME, LV	275	10,716	11,510	794	7%
SME, HV	1,593	38,629	42,346	3,717	10%
LEU, HV	5,457	97,470	109,091	11,621	12%
LEU, 33kV	31,075	292,998	350,675	57,677	20%

Table 13.13: UR impact on customer bills assuming 75% of the EV uptake and50% of the HP assumption

14. Business Plan Assessment

- 14.1 One of our aims for RP7 is that NIE Networks should produce a high quality, well evidenced business plan which can be accepted following limited scrutiny.
- 14.2 A draft business plan assessment structure was included in the initial approach document published in March 2022. This was followed with the same structure being included in the final approach document published in July 2022. A final version of the business plan assessment document was issued in August 2022 as Annex 4 of the Information Requirements.
- 14.3 The assessment considers how NIE Networks has performed in relation to the established criteria. This section of the document is our assessment of the business plan as part of our draft determination.
- 14.4 Our approach consists of areas which we will review ('themes') and categories we will consider. Our view on the quality of NIE Networks' business plan is based upon this.

NIE Networks Self-Assessment

- 14.5 We asked NIE Networks to complete a self-assessment as part of its business plan submission, including:
 - A brief statement setting out how NIE Networks has approached delivering an exceptional business plan in each theme area.
 - A reference to the key documentation in the business plan, which provides the supporting evidence to these statements.
- 14.6 From a presentational perspective, NIE Networks opted for a range of file formats to present the information, from spreadsheet to MS Word based.
- 14.7 This in turn provided for a range of lengths, amounts of detail and background and associated text in the self-assessment submissions.
- 14.8 For future price control processes, we are open to discussing the pros and cons of different approaches to the self-assessment area with the NIE Networks. For example, continuing with the current approach which gives NIE Networks some flexibility in presentation, or in agreeing a more uniform approach across the industry.
- 14.9 NIE Networks was asked to make a self-assessment of its business plan. It was not clear within its business plan assessment submission how they had rated each Test Area. Test Areas 1 and 2 were rated 'Exceptional', ratings



for Test Areas 3 to 6 were clarified within the subsequent query process. NIE Networks has indicated that every area of its respective plan was at the Exceptional level.

UR Assessment

- 14.10 We have reviewed the NIE Networks business plan including the selfassessment and have made our own assessment of the submission made to us. Included is an Annex, Annex U, which provides a more thorough summary of our assessment.
- 14.11 NIE Networks was asked to make a Self-Assessment of its business plan and indicated that every area of the plan was 'Exceptional'.
- 14.12 NIE Networks' business plan provided well-evidenced rationale with 134 supplementary papers that set out its proposed services and activities for RP7 in an accessible way.
- 14.13 The value this work will generate for consumers could be clearer within the business plan. Further information would be required to justify the proposed services, with more reason for the proposed increases in expenditure, and importantly, what value it will all generate for consumers.
- 14.14 This has led to a number of queries being issued to NIE Networks as part of our analysis of the submitted business plan.
- 14.15 The plan proposes a step change in network investment with an increase in these costs of over £500m in RP7. The plan also details delivery of an increase to Digital and IT staff resources, as well as an explanation of how workforce resilience will be improved.
- 14.16 NIE Networks' level of external engagement has been extensive, and it has demonstrated how it has covered off views from a wide variety of stakeholders. The business plan gives good detail on the feedback NIE Networks has received from ongoing engagement activities, and how this feedback has informed its plans for RP7. The plan could have been strengthened with more clarity on how engagement with consumers and stakeholders has influenced its business plan submission.
- 14.17 NIE Networks has provided explanations of how they will ensure that their services deliver the right outcome, or where enhancements could be made, and have made clear where sections of their business plan have been shaped by their stakeholder and consumer engagement.
- 14.18 Reasonable endeavours have been made to forecast for key activities and considerations have been made for specific market indicators that will affect

opex and capex forecasts.

- 14.19 NIE Networks' RP6 performance report was clear and succinct, providing a strong overview of the key outcomes from the RP6 period. NIE Networks' public facing document was professionally presented and of good quality.
- 14.20 NIE Networks also submitted their Data Assurance Plan which describes the arrangements in place to ensure that the data and reports used by the company are managed and assessed in terms of data quality and assurance.
- 14.21 Within our lessons learnt process we will review the questions asked for the business plan assessment process.
- 14.22 To receive a future equivalent rating for the next Price Control Business Plan we would expect to see further improvements.
- 14.23 Overall, the NIE Networks business plan was rated as Good.

15. Next Steps

Consultation on related licence modifications

15.1 The publication of the RP7 final determination is accompanied by a consultation on related licence modifications which will give effect to the decisions within the final determination. This consultation will close on 2 December 2024. We will consider all responses to the licence modification consultation and then make a final decision of the licence modifications to be published in January 2025.

Lessons Learnt

- 15.2 In line with good regulatory practice, we plan to conduct a lessons learnt process to take place within the first year of the licence modifications coming into effect, after the RP7 price control process has been completed.
- 15.3 As part of this lessons learnt process, we intend to seek feedback from NIE Networks and a range of other key stakeholders on key aspects of the price control process.
- 15.4 We intend to utilise this information to implement improvements to the way in which we conduct price controls and apply any reasonable improvements to future price control processes.

Further Issues

15.5 As part of the RP7 final determination we have identified some issues, which we consider to be beyond the scope of the RP7 price control determination. We plan to continue work on these areas where appropriate.