



Northern Ireland Electricity Networks Ltd

Transmission and Distribution 7th Price Control (RP7)

Draft Determination - Main Report

November 2023



About the Utility Regulator

The Utility Regulator is the economic regulator for electricity, gas and water in Northern Ireland. We are the only multi-sectoral economic regulator in the UK covering both energy and water.

We are an independent non-ministerial government department and our main duty is to promote and protect the short- and long-term interests of consumers.

Our role is to 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.

We are based at Queens House in 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.

Our mission

To protect the short- and long-term interests of consumers of electricity, gas and water.

Our vision

To ensure value and sustainability in energy and water.

Our values

- Be a best practice regulator: transparent, consistent, proportionate, accountable and targeted.
- Be professional – listening, explaining and acting with integrity.
- Be a collaborative, co-operative and learning team.
- Be motivated and empowered to make a difference.



Abstract

The purpose of this document is to inform stakeholders of our draft determination for the seventh price control for Northern Ireland Electricity Networks Ltd (NIE Networks). This is the 7th Regulatory Price Control, or RP7. We are consulting and seeking feedback from stakeholders, consumers, and statutory bodies prior to our publication of our final determination in October 2024. The RP7 Price Control is due to be effective from 1 April 2025 to 31 March 2031. We are consulting on these proposals until 22 March 2024.

Audience

This document is likely to be of interest to the licence holder affected, consumers and consumer groups, other regulated companies in the energy industry, government and other statutory bodies.

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.

NIE Networks' costs are a material and controllable element of electricity tariffs, and RP7 investment decisions are expected to underpin improvements in service delivery for consumers. This draft determination would result in a £13 reduction in network charges for each domestic consumer when compared to the NIE Networks business plan submission.



Contents

Executive Summary.....	1
1. Introduction	5
Strategic context for RP7.....	5
Purpose of this Document	7
Our Statutory Duties and Regulatory Principles	8
The Electricity Industry in Northern Ireland.....	9
Overall Approach and Timelines for RP7	10
Structure of this Document	13
2. Price Control Submission and RP6 Performance.....	16
RP7 Business Plan Submission	16
Overview of NIE Networks RP6 performance.....	18
3. Network Costs.....	20
Overview.....	20
Efficiency Benchmarking	21
IMFT and Indirect Costs (IMFT&I)	22
Pensions.....	23
Other Costs	25
4. Direct Network Investment.....	27
Overview.....	27
UR Appraisal	27
D5 Projects	30
5. Frontier Shift	32
Overview.....	32
Real Price Effects	32
Productivity change	34
6. IT, DSO and Digitalisation	35
Overview.....	35
99 Projects and associated recurring opex.....	36
Other IT Opex requests and Market Operations IT	37
7. Metering Market Operations.....	40
Overview.....	40
Meter Reading	41



Metering Services.....	42
Other Costs	44
8. Innovation and Incentives	46
Overview.....	46
Innovation.....	46
Incentives	48
9. Consumer Measures and Consumer Engagement.....	51
10. Evaluative Performance Framework Guidance and Principles.....	53
Principles	53
Guidance	53
11. Environmental Action Plan.....	55
Overview.....	55
NIE Networks' Environmental Commitments Summary.....	55
Environmental Action Plan Monitoring.....	59
12. Price Control Design.....	60
Overview.....	60
Building on RP5 and RP6 price control designs	60
NIE Networks proposals for RP7	62
Other key design changes for RP7	63
Giving effect to the price control design.....	63
13. Financial Aspects.....	67
Overview.....	67
Treatment of inflation	67
Regulatory Asset Base and depreciation.....	69
Rate of return.....	69
Rate of return adjustment mechanism	74
Corporation tax	76
Financeability.....	76
RP7 revenues.....	78
Customer impact	80
14. Business Plan Assessment.....	83
NIE Networks Self-Assessment.....	83
UR Assessment.....	84
15. Next Steps for Consultation Responses and Further	



Issues.....86

Submission of Consultation Responses	86
Key Milestones	87
Process after DD publication	87



Annex	Annex Title
Annex A	Review of NIE Networks RP6 performance
Annex B	CEPA - Efficiency Modelling and Regional Wage Adjustment
Annex C	Frontier Shift (RPE's and productivity)
Annex D	Modelled and Non Modelled Costs
Annex E	RP7 expenditure summary
Annex F	Pensions
Annex G	GAD Report on Pensions
Annex H	RP7 Rate of Return Adjustment Mechanism
Annex I	RP7 Rate of Return Adjustment Mechanism Model (Excel)
Annex J	Rate of Return (First Economics)
Annex K	RP6 Financial Model (excel)
Annex L	RP7 Financial Model (excel)
Annex M	Incentives
Annex N	Innovation
Annex O	Metering
Annex P	Assessment of RP7 Network Investment Direct Allowances
Annex Q	Planned network Investment volumes and allowances
Annex R	RP7 Price Control Engineering Support and Asset Management Advice (GHD)
Annex S	Energy Strategy and Price Control Design
Annex T	NIE Networks RP7 Business Plan Assessment
Annex U	Stakeholder Engagement and Consumer Measures
Annex V	Evaluative Performance Framework Guidance and Principles
Annex W	RP7 Information Technology
Annex X	Gemserv - RP7 IT Projects
Annex Y	Glossary

List of Annexes



Executive Summary

Introduction

NIE Networks is responsible for building and maintaining 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 (UR) 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, which will run from April 2025 – March 2031.

The process for RP7 began with the publication and consultation of our Price Control Approach document (published in March 2022). NIE Networks then provided us with their Business Plan in March 2023, which set out their plans and expenditure requests for the RP7 price control period. We assessed the company's plans for the development, operation and maintenance of its networks in light of consumer needs. We also considered the value NIE Networks provides in the delivery of both the Northern Ireland Executive's Energy Strategy and the fulfilment of the targets set by virtue of the Climate Change Act (Northern Ireland) 2022.

During this price control period, energy usage is forecast to increase in line with the Northern Ireland Executive's Energy Strategy as homes and businesses adapt to the use of decarbonised power, heat and transport options, which includes heat pumps and electric vehicles. The Energy Strategy¹ sets out substantial investment requirements, of which RP7 is a small element of. We have provided information on the estimated cost 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 is about delivering investment to facilitate the energy transition, and our decisions within this draft determination will ensure NIE Networks are fully able to support the energy transition in Northern Ireland. Whilst this additional investment will increase the network cost for electricity consumers, we will ensure that the transition is affordable, fair, and inclusive for all.

RP7 and the road to net zero

RP7 is creating the foundation for Northern Ireland's journey towards net zero and will facilitate a more efficient use of the electricity transmission system. This includes

¹ Page 25 DfE energy strategy <https://www.economy-ni.gov.uk/sites/default/files/publications/economy/Energy-Strategy-for-Northern-Ireland-path-to-net-zero.pdf>



enabling electricity suppliers to purchase cheaper renewable energy for their customers. It will also provide households and businesses with the infrastructure that will allow them to make use of new greener technologies. The electrification of public transport and vehicles will also be supported. The journey towards net zero has started and requires a revolution in how we use and generate electricity.

Key numbers from the Draft Determination

Total expenditure (Totex)

NIE Networks proposed a Business Plan with a total expenditure (totex) of £2.55bn over the six-year price control period. Our draft determination reduces this to £2.21bn, a reduction of £0.34bn.

The total totex submitted included £0.49bn of investment in D5 (major transmission) projects which will be determined later. Therefore, when D5 investment is not included in the comparison, the reduction of our draft determination equates to 16% of the determined totex programme. Material reductions are summarised below with further explanation provided in the main body of the text.

Area	Totex delta £m
Real price effects and efficiency	-84
Direct capex and metering	-78
IMF&T and indirects	-78
IMF&T capex scaler	-57
Market operations (including meter reading)	-11
Innovation	-10
Other	-18
Total	-338

Rate of return on capital

Our draft determination includes a gearing of 55% and a vanilla Weighted Cost of Capital (WACC) of 4.79%. This area of the price control required extensive discussion and analysis, in part due to the changes to inflation and the projected cost of debt. Our decision was reached following the robust analysis of all relevant factors and the impact on NIE Network's financeability.

Adjusting for inflation

This Draft Determination uses March 2023 inflation forecasts from the Office for Budgetary Responsibility (OBR). Updated figures were provided on 22 November 2023, however using these figures would have delayed publication of our draft determination. We will update our final determination to take account of the latest



figures provided by OBR in March 2024. Inflation forecasts remain uncertain; therefore, we are proposing that we amend the existing Rate of Return Adjustment mechanism to adjust for actual inflation in line with past decisions. We are also updating our measure of inflation to CPIH (Consumer Prices Index including owner occupiers' housing costs), as we consider this is a better reflection of actual impact on consumers.

Capital expenditure (Capex)

Our proposals relating to capital expenditure (also referred to as capex), focus on three areas: D5, direct capex investment and metering capex.

Capex category	Ask £m	DD £m	Reduction £m
D5 capex – major transmission projects	493	493	0
Direct capex investment	895	818	-76
Metering capex	50	38	-12
Total	1438	1349	-88

D5 capex is an allowance for future investment to increase the capacity or capability of the transmission network as required by the System Operator for Northern Ireland (SONI). This will be determined as additional allowances during the price control period. We have included the estimate provided by NIE Networks for the purpose of determining tariffs, but the estimate is not approved within this determination. Further submissions will be provided by NIE Networks when they have more detailed information for our approval.

Direct capex investment covers direct investment in the distribution and transmission networks. Metering capex will cover NIE Networks metering work. These figures do not include smart metering costs.

NIE Networks Revenues

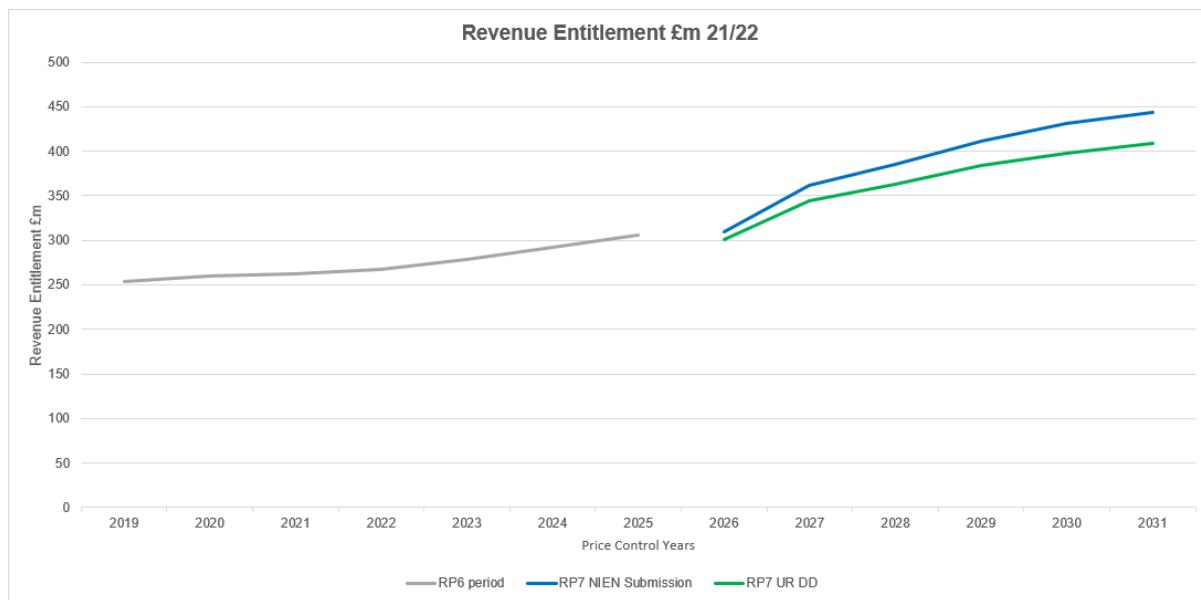
NIE Networks have requested a significant increase in revenue entitlement for RP7, when compared to the most recent/current price control, RP6. This is shown in the graph below in 2021/2022 prices, using CPIH inflation assumptions. We also show our proposed RP7 draft determination figures.

Customer impact

The sections above provide detail on the allowances we are proposing to approve within the RP7 Price Control. Whilst, on occasion, we have determined a lower figure than NIE Networks requested, we are not proposing that the company delivers less, or that this will affect the journey to net-zero. Our decisions within this draft



determination have been made to enable NIE Networks to deliver the investment to facilitate the energy transition.



The calculations below are based on a best view assumption on energy usage forecasts that are consistent with the planned investment. If energy usage assumption exceeds the forecasts, this will lower the impact on energy bills. However, if energy usage is lower than forecasts, as the majority of expenditure allowed for within the price control still needs to be paid for by customers, this would increase customer bills.

Customer Group	Typical MWh/a	UR Draft determination			
		24/25	30/31	Delta (£)	Delta (%)
Domestic	3.4	173	170	-3	-2%
Small Business	16.4	718	742	24	3%
SME, LV	275	10762	11419	657	6%
SME, HV	1,593	38848	42242	3394	9%
LEU, HV	5,457	98095	108956	10861	11%
LEU, 33kV	31,075	295809	353044	57235	19%

Next steps

Our draft determination is being published for consultation. Stakeholder engagement plays an important part in our price control process. We encourage you to become part of this process, to ensure we are provided with a range of responses that will help us deliver the most robust, and informed decisions, when we finalise the price control. Your view will help shape a fair, affordable and just transition to net zero for all electricity consumers.

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 up 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 Northern Ireland Executive 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.
- 1.3 The strategy envisages renewable electricity and higher levels of electrification of energy supplies with increased demand, off-set in part by improved 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 systems' 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 locally-generated, 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.

- 1.4 In June 2022, this energy strategy, was 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 sector to achieve these targets and ensure that at least 80% of electricity consumption is from renewable sources by 2030.
- 1.5 How the strategy and the sectoral plans are developed and implemented remains to be decided. The Department of Agriculture, Environment and Rural Affairs (DAERA) has recently consulted on Northern Ireland's 2030 & 2040 Emissions Reduction Targets & First Three Carbon Budgets & 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.
- 1.6 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 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. And these changes will be affected by future changes in national policy such the decision to delay the ban on new diesel and petrol cars from 2030 to 2035 and 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 developments.
- 1.7 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 the connection of 300,000 electric vehicles and 120,000 heat pumps by 2030. This key assumption is a forecast, and it is likely that the outcome will be different. We would welcome feedback from consumers and stakeholders, on whether they consider this to be reasonable, or think that higher or lower connection assumptions should be accounted for within the final determination.
- 1.8 However, the assumptions 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 increased 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.
 - d) Additional refurbishment of an aging existing network.
- 1.9 Significant elements of this additional investment are not dependent on load growth assumptions or the energy transition assumptions.
- 1.10 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 2035, prompting increasing demand on electricity networks. The increased investment planned for RP7 is expected to continue for at least two further price control. The increasing level of investment necessary to upgrade electricity networks at local nation, 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 on-going 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.
- 1.11 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.

Purpose of this Document

- 1.12 On 6 July 2022 we published our final approach document to RP7 detailing our overall approach to the next price control for NIE Networks. This seventh price control is referred to as RP7. The price control will regulate the outputs and costs of NIE Networks from 1 April 2025 to 31 March 2031.

1.13 The purpose of this document is to provide our draft determination of RP7 for public consultation and to invite consultation responses by the 22 March 2024. It is our intention to make our final determination in October 2024.

Our Statutory Duties and Regulatory Principles

- 1.14 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.
- 1.15 UR 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; and
 - 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.
- 1.16 UR 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.
- 1.17 Subject to the duties already mentioned above, UR is required to carry out its respective electricity functions in the manner which it considers is best calculated:
- a) 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;

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

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

- 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; and
 - 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.
- 1.18 In performing the above duties, UR shall have regard shall also be had 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.
- 1.19 In carrying out its electricity functions, UR must not discriminate between persons whose activities include generating, supplying, or transmitting electricity.
- 1.20 We set overall limits on how network prices can rise, or are required to fall, through a process called price controls.
- 1.21 The price control process must therefore start with a business plan (including actual data for previous years), as submitted by NIE Networks, setting out their proposals for costs going forward. The information submitted will be scrutinised by us. In doing so, we seek to ensure NIE Networks deliver best value for money for all consumers.
- 1.22 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

- 1.23 Due to its natural monopoly position, the amount of revenue which NIE Networks earns is subject to a price control. This is set by the UR following consultation with stakeholders and the wider public.
- 1.24 The electricity network is made up of a transmission and a distribution component. NIE Networks has responsibility for the running of its distribution system. However due to EU requirements for the independence of certain activities, NIE Networks shares the responsibilities of running its transmission network.

- 1.25 Transmission related responsibilities are split between NIE Networks and a separate body; the System Operator for Northern Ireland (SONI). NIE Networks' own, finance and carry out the necessary maintenance and development of the transmission network.
- 1.26 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.
- 1.27 The various activities and responsibilities within the electricity industry in Northern Ireland are illustrated below⁴. This split in responsibilities, particularly between NIE Networks and SONI, should be kept in mind when reading this document and is highlighted below in diagrammatic representation.



Overall Approach and Timelines for RP7

- 1.28 The RP7 process began in mid-2021, when meetings were held individually and collectively with NIE Networks, identifying the key issues and challenges that faced RP7.
- 1.29 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.

⁴ Diagram sourced from NIE Networks RP7 business plan

- 1.30 From this initial feedback, we issued a draft Approach document⁵ for consultation for RP7 in March 2022. We received nine responses to this.
- 1.31 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). This would allow for a more significant period of engagement with UR, and other stakeholders, during 2022, which NIE Networks believed would lead to a better and more informed RP7 Business Plan submission.
- 1.32 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 the 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 to facilitate that delay.
- 1.33 In the interest of transparency and in line with best practice regulation, we considered it important to give NIE Networks appropriate notice of any licence modifications we intended to make, and to offer adequate opportunities for engagement on such proposals. We provided NIE Networks with details of the licence modifications, including advance sight of the proposed changes to its licences, while preparing the consultation on these licence modifications.
- 1.34 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.
- 1.35 In preparing the Decision Paper⁸ we considered the responses received from NIE Networks and other stakeholders, on the proposed licence modifications and considered whether any amendment to the proposals made in our consultation paper was merited.
- 1.36 Having considered the responses to the consultation, UR considered that the licence modifications⁹ set out in the document are those which are best

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>

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

⁸ [RP6 extension - Licence change Decision Paper.pdf \(uregni.gov.uk\)](#)

⁹ [Consultation and Notice on proposed licence modifications to reflect the RP6 price control extension | Utility Regulator \(uregni.gov.uk\)](#)

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, it came into effect on 24 May 2023.

- 1.37 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 after¹⁰.
- 1.38 At the end of March 2023, NIE Networks submitted their RP7 Business Plan¹¹, 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.
- 1.39 The RP7 business plan submission was followed by a phase of analysis, and an exchange of information requests and responses between ourselves and NIE Networks to clarify any issues and queries arising. We have considered the responses received from NIE Networks in arriving at our draft determination.
- 1.40 We will review our proposals for RP7 in light of the responses received to our consultation on this draft determination. We envisage that this will entail a further phase of bilateral engagement between ourselves and NIE Networks, as well as engagement with other key stakeholders between March and October 2024.
- 1.41 The publication of the RP7 final determination in October 2024 will be accompanied by a consultation on related licence modifications, with the consultation period scheduled to end in December 2024.
- 1.42 Following due consideration of the responses received to this consultation on licence modifications, we expect to publish our related decision in January 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 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

¹⁰ [RP7 Business Plan Templates | Utility Regulator \(uregni.gov.uk\)](#)

¹¹ [Investing For The Future: Our RP6 Business Plan | Northern Ireland Electricity Networks \(nienetworks.co.uk\)](#)

those licence holders, and/or CCNI to appeal the decision on the licence modifications to the Competition and Markets Authority (CMA).

- 1.43 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.
- 1.44 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.
- 1.45 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	March 2022
Consultation on approach closes	May 2022
UR publishes final approach to RP7	July 2022
Draft information requirements issued	March 2022
Final comments on the information requirements	August 2022
Final information requirements issued	August 2022
Business plan submission	March 2023
Publish the draft determination	November 2023
Consultation on the draft determination ends	March 2024
Publish Final Determination and proposals on licence modifications	October 2024
Close of representations on proposals	December 2024
Decision on licence modifications published	January 2025
Licence modifications come into effect	March 2025

Table 1.1: Price Control Process Key Milestones

Structure of this Document

- 1.46 This document is structured in a number of chapters as follows, each addressing different aspects of the price control:
 - a) The Executive Summary provides an overview of the key findings and proposed key decisions of this price control process.
 - b) Chapter 1, Introduction, provides an overview of: the purpose of this RP7 draft 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 of the price control process and submission as well as a discussion of NIE Networks RP6 performance to date.
- d) Chapter 3, Network Costs, summarizes the network expenditure allowances requested by NIE Networks, our assessment of these costs and our proposed allowances for the RP7 price control period.
- e) Chapter 4, Direct Network Investment, details our approach to network investment benchmarking, the roll-forward of any deferred capital expenditure under RP6 into RP7 and other optional investment planning.
- 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 a high-level assessment of NIE Networks planned IT, DSO and digitalisation expenditure.
- h) Chapter 7, Metering Market Operations, details our approach to setting an efficient level of expenditure for Metering Market Operations and other related costs.
- i) Chapter 8, Innovation and Incentives, is our view with respect to funding of innovation initiatives both in general as well as with respect to specific innovations proposed by NIE Networks including any appropriate incentives.
- j) Chapter 9, Consumer Measures and Consumer Engagement, deals with approaches to engagement after consideration of the proposals and direction of travel.
- k) Chapter 10, Evaluative Performance Framework Guidance and Principles, 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.
- l) Chapter 11, Environmental Action Plan, summarises NIE Networks' related proposals and commitments, along with our reporting expectations and monitoring plan.

- m) Chapter 12, Energy Strategy and Price Control design, details our review of the existing uncertainty mechanisms as well as our proposals for the RP7 uncertainty mechanisms, considering implications of the Northern Ireland Executive's Energy Strategy.
 - n) Chapter 13, Financial Aspects, discusses different aspects relating to the finance implications of the price control, including rate of return, depreciation, tax, profile adjustments and financeability.
 - o) Chapter 14, Business Plan Assessment, reviews the business plan submitted by NIE Networks and provides a summary, with a more detailed assessment contained in the Annexes.
 - p) Chapter 15, Next Steps for Consultation Responses and Further Issues, clarifies details relating to the consultation processes, provides an overview of the proposed next steps and summarises consequential changes as well as further issues we propose to address pursuant to the price control determination.
- 1.47 The main chapters in this draft determination provide a summary of our analysis and decisions with the detail of our assessment provided in supporting Annexes.

2. Price Control Submission and RP6 Performance

RP7 Business Plan Submission

- 2.1 NIE Networks submitted a comprehensive Business Plan on 31st March 2023. The Business Plan addresses various requirements as laid out by the Utility Regulator in our Business Plan Templates (BPT) and associated information requirements:
- 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, similar to those employed across the existing RP6 Regulatory Information Guidance (RIGs).
 - BPT Reporting Workbooks, where NIE Networks were expected to populate their historical and forecast projections alongside other data in support of their RP7 Business Plan.
 - BPT Commentary for Pensions, where NIE Networks had the option to populate in free text any special considerations worth drawing to the attention of the UR when using their data submission.
- 2.2 The company's [website](#) contains a summary report, their 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 the Utility Regulator for completion. These fulfilled our requirements on:
 - BPT Reporting Workbooks where NIE Networks populated spreadsheets with their historical and forecast projections alongside other data in support of the RP7 Business Plan; and

- BPT Commentary Templates where NIE Networks had the option to populate in free text any special considerations worth drawing to the attention of the Utility Regulator when using their data submission.
 - 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 In total, the RP7 submission files totalled over 575MB worth of data, spreadsheets, reports and annexes.
- 2.5 As with any network price control the UR established a query process to lodge new queries with NIE Networks on a weekly basis, with the expectation of a ten working day turnaround for response by the company.
- 2.6 Given the very comprehensive submission from the company and the degree of positive, working level engagement between respective teams across:
- pensions;
 - benchmarking;
 - network investment;
 - innovation;
 - outputs, incentives and uncertainty; as well as
 - all the various financial aspects to RP7.
- There were 458 general queries and 11 related to pensions. These were raised across an eight-month duration during which the team examined, assessed and tested the RP7 Business Plan submission.
- 2.7 The query process also augmented the positive working level engagement that took place throughout the draft determination stage. Important and material issues discussed in meetings were recorded formally as queries for NIE Networks consideration and subsequent submission to UR.
- 2.8 The regular engagement meetings also allowed both NIE Networks and ourselves to identify material differences of opinion and/or approach in the lead up to the draft determination publication. This has meant we have adjusted our approach in a number of important workstreams, including IT allowances and efficiency analysis.

- 2.9 Our aim over the successive months after the company submitted its RP7 Business Plan has been to engage in as transparent a manner as possible, to ensure our formal consultation benefits from early, pre-consultation engagement.

Overview of NIE Networks RP6 performance

- 2.10 Annex A provides an overview of the performance NIE Networks in RP6 up to and including the year to 31 March 2023. RP6 allowances, targets and projections for a number of key areas are compared with out-turns values. Performance to date in RP6 provides information on how NIE Networks has performed recently which informs our decisions for RP7.
- 2.11 Some of the cost allowances and targets included in the RP6 Final Determination are adjusted through an Uncertainty Mechanism to account for actual delivery (for example, undereaves). The Uncertainty Mechanism also takes account of other adjustments to the RP7 price control such as additional investment to facilitate low carbon technologies (LCT's) which were approved after the final determination.

OPEX performance

- 2.12 The company has out-performed its cumulative OPEX allowance by 9.6% to 2022/23 and will retain half of this out-performance. A small element of the operating allowances in the RP6 price control is subject to a pass-through mechanism which allows NIE Networks to recover the costs incurred. But for the remainder (and 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

- 2.13 In relation to the period up to the 2022-23 year capex expenditure (and outputs) was lower than expected. NIE Networks has explained that its delivery was impacted by COVID 19 both in terms of restrictions in availability of resource / material and also because it had focussed our efforts on essential customer services. NIE Networks had anticipated increasing their outputs after the impact of COVID 19 to make up any shortfall arising.
- 2.14 However, NIE Networks is currently anticipating that there will be a level of carryover to complete its outputs in the 24 months following March 2025, and that 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 significant, and above inflation cost pressures driven by contractor rates and material prices, which will impact particularly in the delivery of the remainder of the RP6 Direct Capex programme.

Network Performance

- 2.15 NIE Networks has made significant improvements in performance in RP6 as measured by both planned and unplanned Customer Minutes Lost (CML). Performance in relation to supply interruptions also improved over the RP6 period.

Electricity Units Distributed

- 2.16 There has been a decline in electricity units distributed in the RP6 period. NIE Networks has highlighted that in the first few years of RP6, the annual variations in electricity consumption by domestic and business customers were minimal, with monthly fluctuations generally attributed to weather conditions and public holidays. NIE Networks consider that from 2020, social and economic factors played a more significant role in influencing the amount of electricity used by each market sector.
- 2.17 NIE Networks has forecast an increase in units of electricity supply in the RP7 period based on their best view of low carbon technology (LCT) uptake in the period for example a forecast of 300,000 EV's 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 Report

- 2.18 RP6 ends 31 March 2025 and the costs and performance report, along with the Uncertainty Mechanism, will be updated when actual results are available for the period 1 April 2023 and 31 March 2025.

3. Network Costs

Overview

- 3.1 A significant proportion of NIE Networks costs are subject to efficiency benchmarking. These include network operating costs (NOCs) which incorporates inspections, maintenance, faults, and tree cutting (IMFT).
- 3.2 The indirect spend known as business support costs (BSC) and closely associated indirects (CAI) also form part of benchmarked expenditure. Collectively this is known as IMFT&I.
- 3.3 The typical use of efficiency analysis is to determine whether a catch-up target should be imposed on future costs. NIE Networks summarise their understanding of the UR process as follows:
- Stage 1 - UR 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 - UR will apply the determined efficiency gap to base year expenditure. This gives a starting point for allowances.
 - Stage 3 - UR 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 - UR will roll forward the allowances determined at Stage 3 year-on-year, applying adjustments for real price effects (RPEs) and productivity improvements.
- 3.4 This is a reasonable summation of our approach. However, NIE Networks consultants has assessed the distribution operator as being more efficient than the upper quartile (UQ).
- 3.5 NIE Networks has assumed this outperformance not only represents efficiency but scope differences. As a consequence, NIE Networks has used the findings to support an uplift to indirect and IMFT costs. The uplift consists of two parts:
- a) There is a negative efficiency gap of up to 24% to the upper quartile. NIE Networks has assumed all this gap is due to scope differences. Applying a 24% uplift to the IMFT&I baseline cost in 2021/22 of £76m results in a new baseline of £94m per annum (i.e., £76m x 1.24).

- b) NIE Networks suggest that a 10% increase in direct capex will lead to a 1.5% increase in indirect costs. During RP7, capex is forecast by the company to increase by £545m. This suggests gross indirect and IMFT costs will increase by £82m over the six years of RP7, or £14m per annum.
- 3.6 Adding the £14m to the £94m gives a total “top-down” assessment for indirect and IMFT costs of £108m per annum. NIE Networks consider this to be in-line with their bottom-up assessment of £110m per annum. The request represents a material uplift from existing IMFT&I spend.

Efficiency Benchmarking

- 3.7 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.
- 3.8 The efficiency scores and the potential uplift to get to UQ spend (as per the NIE Networks approach) is set out in Table 3.1 below.

Model Number	NIEN Efficiency Score	Upper Quartile Score	% Uplift to UQ
2.1 = IMFT&I (inc. connection costs)	0.865	0.970	12.1%
2.2 = IMFT&I (inc. connection costs)	0.881	0.998	13.3%
2.3 = IMFT&I (inc. connection costs)	0.820	0.942	14.9%
2.1 = IMFT&I (excl. connection costs)	0.814	0.974	19.7%
2.2 = IMFT&I (excl. connection costs)	0.830	0.992	19.5%
2.3 = IMFT&I (excl. connection costs)	0.754	0.949	25.9%
2.4 = NOCs	0.875	0.889	1.6%
2.5 = NOCs	0.896	0.906	1.1%
2.6 = NOCs	0.773	0.889	15.0%
Totals			13.7%

Table 3.1: CEPA alternative model efficiency scores¹²

- 3.9 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.

¹² A score below 1 represents efficiency whilst a score above 1 represents inefficiency against the average performance.

IMFT and Indirect Costs (IMFT&I)

- 3.10 In order to determine IMFT&I allowances for the draft determination, we have considered spend from both a top-down and bottom-up basis.
- 3.11 For the top-down analysis we have used the CEPA findings for the efficiency gap. In the absence of better information, we have assumed that 50% of the gap is due to scope differences between Northern Ireland and GB.
- 3.12 In terms of the indirect scalar uplift to account for the changing capital programme, we agree that some addition is justified. However, whilst we agree with the principle, there are material differences in the calculation of the impact. These differences are focused on three areas:
- a) We have assessed a lower level of direct capital increases as being required in the draft determination. This restricts the proportional increase required for indirect spend.
 - b) Whereas NIE Networks has used a scalar of 0.15, Ofgem has adopted a comparable value of 0.108. We have accepted the Ofgem position, as no justification has been provided for the higher figure.
 - c) NIE Networks has applied the uplift to gross indirects. In contrast, Ofgem has determined that it should only apply to CAI and not business support costs. We have adopted the Ofgem approach.
- 3.13 For the bottom-up assessment we have again applied the indirect scalar uplift. However, we have also assessed additional IMFT and property costs based on company submissions. Results of the IMFT&I deliberations are set out in Table 3.2 as follows:

	NIEN Request	UR Top-Down	UR Bottom-Up
Total IMFT&I	£108.6m/a	£88.8m/a	£86.4m/a

Table 3.2: NIE Networks request and UR allowance for IMFT&I

- 3.14 For the draft determination, our allowance is based on the **£88.8m/a** top-down calculation. However, we do consider that all cost uplifts should be justified and would welcome further detail from NIE Networks in respect of scope differences. We would ask NIE Networks to provide further information on bottom-up costs to allow a more robust assessment.
- 3.15 In terms of the base uplift, NIE Networks has identified factors that will increase spend but not provided bottom-up justification for the additional

costs. We have concluded that there is further work to do on this area between draft and final determination.

- 3.16 Whilst the efficiency results are something to be welcomed, it might also point to a couple of underlying issues. For instance, NIE Networks has highlighted that its current cost base does not include activity being undertaken by GB DNOs to move to net zero.
- 3.17 Furthermore, the improvement in efficiency between price controls has not been fully accounted for. The scale of outperformance may be due to both scope and cost allocation issues. It is noticeable that the performance gap falls when considering gross costs including connections and just assessing Network Operating Costs (where no indirect adjustments are made).
- 3.18 We are of the opinion that there would be merit in NIE Networks explaining in detail the following:
 - a) Why it considers the efficiency performance has improved over the course of RP6.
 - b) How it undertakes allocating indirect costs to both connections and metering work.

Pensions

- 3.19 We have reviewed the NIE Networks RP7 material, concerning the Northern Ireland Electricity Pension Scheme (NIEPS), that was submitted in response to our Information Requirements. The results of this review are summarised in more detail in Annex F. We reviewed funding of historical Pension Deficit Repair, the Investment Strategy, costs, expenses and proposed allowances, assisted by the Government Actuary's Department (GAD).
- 3.20 The NIEPS, 'Focus' scheme is a 'Defined Benefit' scheme, closed to new members from 1998. From 1998, NIE Networks created the 'Options' scheme, which is a Defined Contribution scheme.
- 3.21 No major concerns were flagged by the Utility Regulator's (UR) analysis; however, we wish to highlight the following issues:
- 3.22 Total employer contributions to the Focus scheme were nearly £27 million in 2022. Employer contributions were just over £6 million in 2022 for the Options scheme. The contribution rates offered for the Options Defined Contribution scheme are not significantly out of line with typical UK schemes.
- 3.23 Costs of ongoing service accrual in the NIEPS have increased significantly (52% of salaries, at an annual cost of c.£5-6 million). This appears to be due

to strengthening of financial assumptions in the 2022 triennial valuation, and the decision to move to a lower-risk, lower-returning investment strategy (broadly in line with other UK private sector schemes). This only affects a small number of mature members (213 members), limiting the impact on overall cost, but NIE Networks should explore if they can provide these benefits in future, at a lower upfront cost. NIEPS expense costs also appear high when compared to schemes of similar size, and at the suggestion of GAD, the UR will engage further with NIE Networks to understand the reasons why.

- 3.24 We will also consider whether recent developments for other regulators may also be relevant in seeking ways to ensure that the scheme is being operated as efficiently as possible.
- 3.25 The NIE Networks submission reflects that, due to deficit repair payments (c.£19-20m a year paid over the period 31 March 2020 to 30 September 2023) and improvements in market returns, the historic deficit will be eliminated by the commencement of the RP7 period. In the RP7 Business Plan, the company has proposed a refund in pension allowances during the first year of the RP7 period (split between £19.8 million distribution, and £6.1million for transmission, a c.75%/25% split, which the UR is content with). There is no amount requested for Early Retirement Deficit Contributions (ERDC) disallowance (compared to a £30 million request for RP6). We do not believe this approach is unreasonable, or have reason to review further, at this stage.
- 3.26 We believe that, if necessary, over the RP7 period, NIE Networks should indicate to UR in a timely manner the scheme is in surplus, or that it is considered it could be in the foreseeable future. If doing so, they should accompany this with appropriate proposals to benefit the consumer.
- 3.27 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 UR when it is clear (at a triennial valuation) there has been a substantial fall in the NIEPS funding position.
- 3.28 We also believe it is reasonable to retain the 30% allocation for ERDCs, and to accept NIE Networks’ proposal to simplify the Regulatory Fraction to 100%, from the current Regulatory Fraction of 102.96%.

- 3.29 We will review the Pensions recommendations in light of responses to our RP7 consultation and will consider further matters where GAD has highlighted this would be beneficial.

Other Costs

- 3.30 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.
- 3.31 The company has included a provision of £5.6m (£0.93m per annum) within the ex-ante business plan. However, it has requested that these costs be removed from the 50:50 mechanism and be treated as a pass-through.
- 3.32 Our approach proposes to retain an ex-ante allowance with 50:50 risk sharing. This will maintain an incentive to restrain costs but will limit the impact if events are more frequent than expected.
- 3.33 We note that the NIE Networks request of £0.93m/a is well in excess of the RP6 run rate by some 44%. We do not consider this justified. Our proposal is to adopt the average cost run-rate of the last 11 years (from 2013 to 2023) of available data. This is £0.64m/a or £3.84m over the RP7 period.
- 3.34 Use of the historic run-rate also aligns with NIE Networks own proposals in RP6. It could be argued that allowance on historic rates do not recognise the increasing frequency of severe weather events. However, there is little discernible increase in spend to merit any uplift. For instance, the 5-year average from 2013-2017 = £630k p.a., whereas the 6-year average from 2018-2023 = £647k p.a.
- 3.35 For business rates, NIE Networks has forecast spend of £93m over RP7 across the distribution and transmission business. We forecast an allowance of £87m for the draft determination. This is based on the actual 2023-24 NIE Networks business rates. However, we have accepted that these be treated as a pass-through.
- 3.36 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 of licence fees across the RP7 price control period. This reflects the UR's expanded role in relation to energy transition and delivery of the Northern Ireland Executive's energy strategy.
- 3.37 The business plan forecasts income rising from £5.5m per year in RP6 to an average of £5.6m in RP7. Some of the forecasts seem somewhat conservative given the outturn in 2022-23, and the forecast provided by NIE

Networks for the last couple of years of RP6. However, for the draft determination, we have accepted the business plan proposals.

4. Direct Network Investment

Overview

- 4.1 In this section of the draft determination, we assess NIE Networks proposals for direct network investment which forms part of the overall capital investment proposed by the company for RP7.
- 4.2 Direct investments 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. Other strands of investment not covered in this section include indirect expenditure and metering.

UR Appraisal

- 4.3 NIE Networks proposed direct investment in the distribution and transmission networks in RP7 of £1,388.2m in 2022/23 prices, prior to the application of real price effects and on-going efficiencies. This included an estimate of major transmission maintenance projects of £493.4m, which will be assessed under the D5 mechanism explained further in Annex S. Taking account of this, we have identified £894.8m of planned direct network investment in the company's submission for which we have determined an ex-ante allowance of £814m (before the application of frontier shift). These figures include NIE Networks' innovation proposals which are discussed in detail in Annex N. This movement from the NIE Networks business plan submission to the draft determination is shown in Figure 4.1, Figure 4.2 and Table 4.1 below.

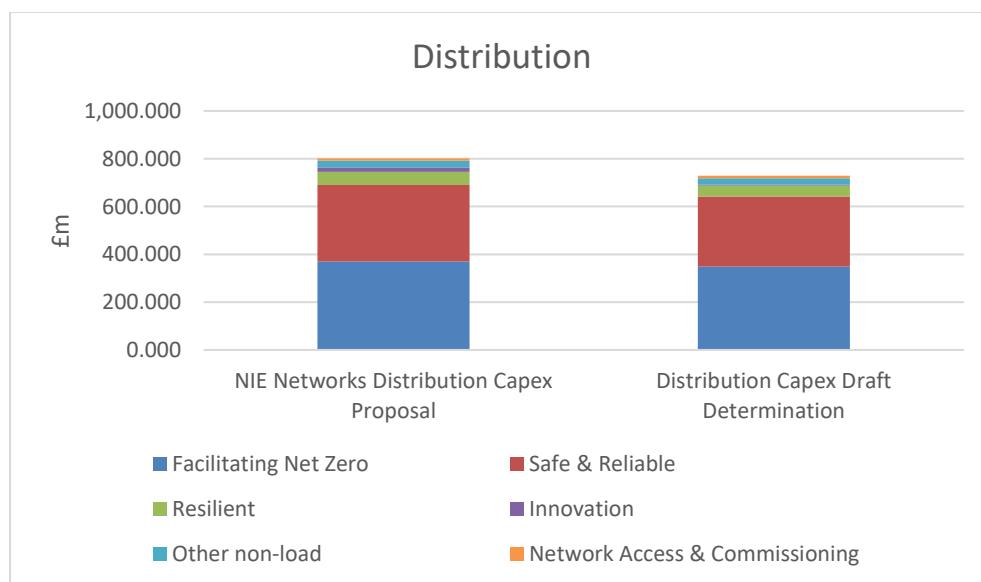


Figure 4.1: Distribution Proposal & Draft Determination

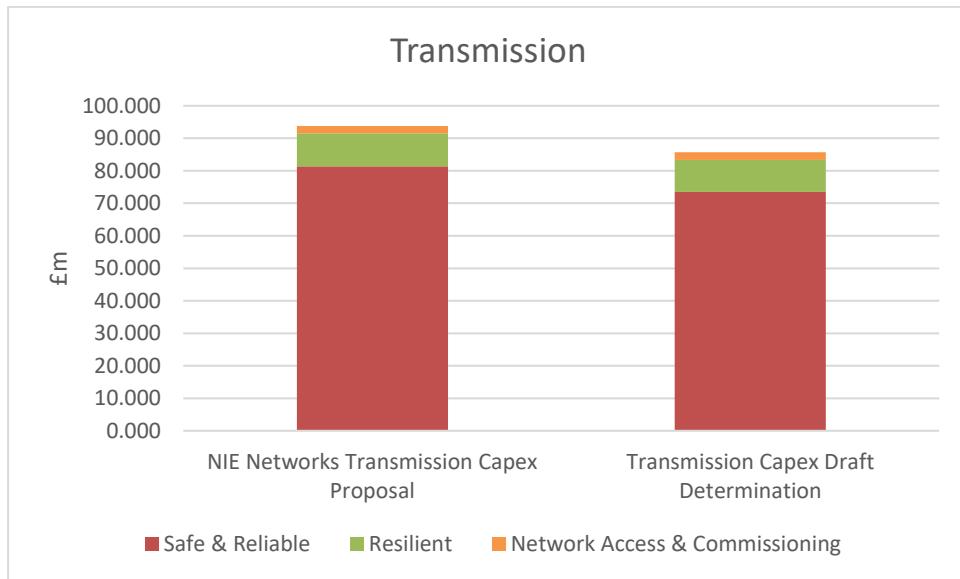


Figure 4.2: Transmission Proposal & Draft Determination¹³

	Distribution (£k)	Transmission (£k)	Total (£k)
NIE Networks Business Plan Submission	800,952	587,225	1,388,177
Less D5 estimates included in the business plan	0	-493,400	-463,400
Business plan core investment net of estimates	800,952	93,825	894,777
UR adjustments to core investment plan	-72,560	-8,174	-80,735
Draft determination of core investment plan	728,392	85,651	814,042
Add back D5 estimates	0	493,400	493,400
Draft determination including D5 estimates	728,392	579,051	1,307,442

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

4.4 The summary information above is prior to the application of a frontier shift which takes account of the impact of real price effects on the rate of inflation experienced by NIE Networks and the potential for on-going productivity efficiencies, consistent with the presentation of proposals in the company's business plan.

¹³ Excludes D5 expenditure estimates which have not yet been determined

- 4.5 Our detailed analysis is described in Annex P whilst a summary of RP7 allowances and volumes are contained in Annex Q. The following section summarises key points from the appraisal.

Variance in run-rate of investment from RP6

- 4.6 We compared the average annual rate of direct network investment in RP6 with that planned for RP7. Average annual distribution expenditure in RP6 was estimated at £66.9m, increasing to £121.4m in RP7 (an increase of £54.5m or 81.5%).
- 4.7 For transmission annual RP6 expenditure was estimated at £21.0m increasing to £96.5m¹⁴ in RP7 (an increase of £75.5m or 359%).
- 4.8 Much of the variance in expenditure from RP6 can be explained by seven key areas, which are identified in Table 4.2.

	Annual Average Variance (£m)	Notes
11kV OHL	19.7	Due to new 11kV rebuild specification which includes removal of low-capacity conductor and transformers. Also includes significant new allowance for bird fouling. Includes contractor cost uplifts
ESQCR	11.4	Significant volume increases in LV OHL refurbishment. Includes contractor cost uplift
Load Related Expenditure	17.5	Significant increases on primary and secondary networks to cover growth in LCT related demand
HV Active Network Management	1.8	New allowance to promote better fault restoration
Transmission substation ancillaries	1.2	Includes improved security systems and substation services
Transmission OHL	2.9	Increased foundation assessments, conductor inspections and conductor replacement
Transmission reinforcement	69.3	Includes key projects such as North-South Interconnector and 275kV substation redevelopment
Total	123.9	

Table 4.2: Variance in annual average investment from RP6 to RP7

- 4.9 The remaining £6.2m not shown in Table 4.2 includes smaller variances in the annual rate of expenditure and include:

¹⁴ Includes D5 expenditure estimates which have not yet been determined

- Increased volumes necessary to maintain the overall stability of the network.
- Increased expenditure on operational telecoms due to the need to communicate with remotely controlled network devices.
- Increased lump sums due to revealed outturn expenditure during RP6.
- Increased transmission protection costs.

Increased Contractor Costs

- 4.10 In the second half of 2022, NIE Networks negotiated new overhead line labour contracts. The new contract costs represent a major uplift in certain overhead line programmes such as 11kV rebuild and LV refurbishment. In our RP6 extension determination we allowed a [XXX] uplift on the contractor driven elements of these programmes. For RP7, we are taking cognisance of a positive ~4% frontier shift and have adjusted the contractor uplift to [XXX] to account for this.

D5 Projects

- 4.11 Our treatment of transmission projects which increase capacity and/or capability of the network is explained in Annex S.
- 4.12 The company has estimated costs in the region of £493m to undertake a number of significant projects which include the North-South Interconnector (estimated at £200m) and 275kV substation redevelopments (estimated at £76m).
- 4.13 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)
- 4.14 These projects do not add capacity or capability but are deemed to have sufficient uncertainty regarding scope of work, and therefore cost, to warrant including them within the D5 category.
- 4.15 While we recognise the uncertainty associated with D5 investment, we considered it prudent to estimate how this type of investment might affect

tariffs in RP7 so that consumers could be aware of its impact. We have taken account of the list of projects and estimates of potential investment provided by NIE Networks. Based on this, we concluded that it is appropriate to assess tariffs in RP7 for £493m of additional investment under the D5 mechanism.

5. Frontier Shift

Overview

- 5.1 This chapter gives detail of our analysis and considerations around frontier shift assumptions for RP7.
- 5.2 Taken together, real price effects (RPEs) and productivity (or ongoing efficiency) when adjusted for general inflation gives the frontier shift. This can be represented as:

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

- 5.3 The various components of the calculations are assessed in turn before drawing draft determination conclusions. Full details and considerations are provided in Annex C.

Real Price Effects

- 5.4 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 make no separate provision for specialist labour. We have also updated ‘other costs’ for the latest estimates of inflation.
- 5.5 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.
- 5.6 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 growth over the last 12 years, we further see that some specialist salaries are growing slightly below the OBR average hourly earnings index. Specialist provision does therefore not seem necessary.
- 5.7 The indices we have used in the draft determination can be summarised in Table 5.1 as follows:

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 5.1: UR input indices and weightings

- 5.8 For materials and plant/equipment costs we accept NIE Network's idea to utilise a glidepath for these indices. However, we disagree with their plan to use it for five years. Rather we recommend maintaining the GD23 approach which assumes a glidepath for two years. We have assumed a return to the long-term average from year 2025-26.
- 5.9 Over the nine-year period, the opex RPE is estimated at an average of +0.5% per annum. This is a downward shift from an average of +0.8% per annum submitted by NIE Networks in their business plan.
- 5.10 The methodology for opex and capex for the most part is very similar. The capex RPE is estimated at an average of +1.5% per annum. This is below the average of +1.9% per annum in the NIE Networks business plan.
- 5.11 The main differences from business plan to draft determination 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.
- 5.12 Differences between UR and NIE Networks figures for 2022-23 materials and Plant and Equipment simply reflect later data, not a revised methodology.

Productivity change

- 5.13 A company can become more efficient over time and so close the gap between its efficiency level and that of the frontier performer. Equally, the industry's overall efficiency or frontier can change over time. It is possible the most efficient company in an industry can find new or improved ways of using less input volumes to maintain current output levels.
- 5.14 NIE Networks provided estimates of productivity improvement to apply in RP7. These proposals are shown in Table 5.2 below.

	Opex	Capex
NIE Networks productivity challenge	0.80%	0.80%

Table 5.2: Annual efficiency improvements proposed by NIE Networks

- 5.15 We considered various pieces of evidence to support our analysis. This included review of historic productivity by industry, regulatory precedent, labour and regional productivity.
- 5.16 Given our analysis and review of NIE Networks submission, we are minded to adopt a 1% p.a. productivity target. This has been determined for both opex and capex.

	Opex	Capex
UR productivity challenge	1.0%	1.0%

Table 5.3: RP7 productivity target (%) at draft determination

- 5.17 It is our view that this target is supported by both the quantitative evidence and regulatory precedent. It is also at the top of the range suggested by NIE Networks own consultants. We are not minded to adopt the lower figure of 0.8% as set out in the NIE Networks Business Plan.
- 5.18 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.

6. IT, DSO and Digitalisation

Overview

- 6.1 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. The electricity market will see significant change in the RP7 price control period, the NIE Networks Digital & IT plan is built upon a number of assumptions which may change over time. The ways in which market and customer requirements evolve may change the way in which projects are ultimately scoped, costed, benefited from and ultimately delivered, therefore, the current projections of the costs and benefits of a number of the projects may change.
- 6.2 Through our analysis of NIE Networks IT Non-Operational IT & Telecoms investment plan submission (covering the RP6 extension and RP7 periods) it became evident that NIE Networks will be facing significant IT challenges during the RP7 period.
- 6.3 In addition to the S/4HANA implementation requirement, there is a need to simultaneously digitally transform the business, build DSO capability, and deliver appropriate cyber security initiatives. Delivering against all of these requirements has resulted in a complex RP7 IT programme of unprecedented size and scope for the organisation and this has created a resource and deliverability challenge for NIE Networks.
- 6.4 It became clear to the UR that NIE Networks, and Northern Ireland's electricity consumers would benefit from a longer period to mature the planning of its large, highly complex but also highly relevant RP7 IT programme.
- 6.5 Therefore, we asked NIE Networks to replan its IT programme, after their initial IT business plan submission. NIE Networks subsequently developed a revised investment plan for a rescheduled programme (RP6 Extension and RP7 period). We asked NIE Networks to identify projects that in their view must be progressed during the RP6 Extension year, and the first two years of the RP7 period (Phase 1), for example projects that would have to adhere to vendor end-of-support dates, S/4HANA activities required to progress the migration and meet the SAP end-of-support date or foundational projects which facilitate critical IT projects that are proposed to begin towards the end of the price control. We also asked NIE Networks to re-plan projects that could potentially start in the years 3-6 of the price control (phase 2). These

projects may not be time pressured to begin with or may benefit from further analysis, refinement, and time to develop confidence in timely and within-budget delivery. This will enable a bottom-up determination of cost to be assessed at the end of year 2.

6.6 We have separated NIE Networks IT submission into the following sections in Annex W;

- RP6 Extension year;
- 99 projects and associated recurring opex;
- SAP 4 Hana Implementation; and
- IT Opex Business as Usual (BAU) and Market Operations.

6.7 Having analysed NIE Networks IT Non-Operational IT & Telecoms investment plans and NIE Networks subsequent replan of their IT programme we have structured the draft determination as follows:

RP6 Extension year

6.8 We have assessed NIE Networks total request of £7.03m (21/22 prices) for the RP6 extension year and have allowed a total of £4.7m (21/22 prices). More detail on these allowances and the analysis of the NIE Networks submission is provided in Annex W.

99 Projects and associated recurring opex

RP7 Phase 1 Projects

6.9 UR have included proposed investment to cover a planned series of works for the 99 IT projects and associated recurring opex, up to the end of Year 2 of the price control (Phase 1), this will be subject to NIE Networks considering the benefits and outputs of these projects. We have provided proposed investment for the recurring opex associated with these projects for phase 1 of RP7.

6.10 There are projects that NIE Networks has proposed to begin in Phase 1 of RP7 that we have not provided allowances for at the draft determination stage, we consider that these projects require greater consideration and/or supporting evidence.

6.11 In response to this draft determination, we invite NIE Networks to provide further information on these projects for RP6 extension and RP7 in advance of the final determination, some of which will be in relation to observations

provided in Annex X. At this point we will re-assess any further information NIE Networks has provided in relation to Phase 1 projects. Therefore, we are not proposing to provide any disallowances in relation to the 99 projects in this draft determination.

- 6.12 We have provided allowances for the extension year and the first two years in line with the investment requested by NIE Networks in its Business Plan submission and this is reflected in our tariff, and financeability calculations for RP7. We have reprofiled this in line with the approach outlined above.

IT projects beginning in Phase 2 of RP7

- 6.13 As part of the IT replan, NIE Networks has proposed various projects beginning in Phase 2 of RP7. We will include a mechanism which will confirm the scope and cost for the remainder of the IT programme in advance of the start of Year 3 of the price control.

SAP 4 Hana Implementation

- 6.14 UR has proposed to include the investment requested by the company to begin its planned implementation of SAP 4 Hana in the first two years of the price control. This will be reviewed as the programme develops with the intention of confirming funding for subsequent years. The determination of future funding will take into account the actual expenditure by the company within the first two years accounting for any underspend against the provided allowance in the first two years of RP7.

Other IT Opex requests and Market Operations IT

- 6.15 There are other elements of NIE Networks IT submission that are not associated with the 99 projects or recurring opex (including SAP), these submissions were not subject to the NIE Networks re-plan nor the phased approach to IT. These areas of IT include Business as Usual IT & Telecoms costs, changes driven by Network IT projects, new IT Opex since base year 2021/22 and NIE Networks Market Operations (the Enduring Solution and Market Operations Business as usual for IT and Telecoms).
- 6.16 A high-level view of the UR's proposed IT draft determination allowances has been provided in Table 6.1. The total value of NIE Networks request for the complete RP6 extension and RP7 IT programme is £264.7m (excluding connections). The total value of UR allowances for this period is £262.29m (excluding connections), this represents 99% of NIE Networks request which has been accounted for, within the tariffs and financeability as a placeholder as this represents the best current information on the scale of the future NIE Networks submission. The 1% difference equates to £2.41m which is

disallowed in relation to opex costs associated with Business as Usual IT & Telecoms costs, and New IT Opex that we consider inappropriate with further detail provided in Annex W.

RP6 Extension Year– 99 projects	Amount (£m)
NIE Networks Request	£7.03
UR Allowance	£4.7
RP7 – 99 projects	
NIE Networks Request (RP7 total)	£131.73
NIE Networks Request (Years 1 and 2)	£55.9
UR Allowance (Years 1 and 2)	£47.5
IT Business as usual – (Transmission and Distribution)	
NIE Networks Request Transmission and Distribution (RP7 total)	£68.4
UR Allowance	£48.8
Enduring Solution (Market Services)	
NIE Networks Request	£41.7
UR Allowance	£38.3
Market Operations BAU IT and Telecoms	
NIE Networks Request	£13.82
UR Allowance	£9.91
Total for NIE Networks request for the 99 projects for Phase 1 (RP6, RP7 years 1 and 2) and IT BAU.	
NIE Networks Request BAU IT and 99 projects RP6 Extension, Year 1 and 2)	£185.6
UR Allowance	£149.2
Total for NIE Networks IT request (includes 99 projects for RP6 Extension, RP7 and IT BAU).	
Total NIE Networks IT request	£264.7m
UR value of UR Allowance	£262.29m

Table 6.1: UR draft determination totex allowances (excluding connection allocations)

- 6.17 For the costs associated with the 99 projects and recurring opex associated with these projects for year 1 and 2 of the price control that we are not proposing to approve allowances at the draft determination stage, NIE Networks can provide further information to demonstrate the need for these projects before costs are finalised. We have accounted for this proposed expenditure for both opex and capex within both tariffs and financeability as

a placeholder as this represents the best current information on the scale of the future NIE Networks submission.

- 6.18 We are also developing a draft digitalisation licence condition for NIE Networks which we expect will support accountability and transparency in this area, and we will consult separately in due course.

7. Metering Market Operations

- 7.1 This chapter summarises the metering market operations expenditure proposed by NIE Networks in its business plan and sets out our initial 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 draft determination.
- 7.2 NIE Networks' proposals for the market services element of its market operations functions are assessed in the Information Technology sections of the draft determination. Market services includes the operation of IT systems and provision of data, including metering data, that supports retail and wholesale electricity markets.

Overview

- 7.3 Metering constitutes a range of activities including meter reading, meter installations/changes, meter recertifications and others that support NIE Networks' market operations functions.
- 7.4 In GB, DNOs do not perform these activities. As a result, we exclude NIE Networks' metering costs from our top-down benchmarking and conduct a bottom-up cost analysis. NIE Networks' current metering activities are well established, and we have multiple years of outturn costs which we consider provide a good benchmark for the future costs to guide our assessments.
- 7.5 NIE Networks set out its proposals for RP7 metering related expenditure, and overhead costs allocated to metering, within its market operations submission document. Table 7.1 below details its proposals and the allowances included in the draft determination following our assessment.

Metering £m 2021/22 prices	NIE Networks' Proposal	Draft Determination	Change +/-	Change %
Meter Reading	25.56	23.99	-1.56	-6.1%
Metering Services	50.09	38.03	-12.06	-24.1%
Other Metering Costs	4.12	2.53	-1.60	-38.8%
Fault and Overhead Costs	47.81	41.31	-6.50	-13.6%
Total Metering	127.58	105.86	-21.72	-17.0%

Note 1. Figures may not sum due to rounding.

Table 7.1: NIE Networks' metering proposals versus draft determination

- 7.6 As requested in the UR's published RP7 business plan requirements, NIE Networks' submission was based on existing metering arrangements and

obligations. Following both the RP7 business plan requirements publication and NIE Networks' subsequent submission, DfE¹⁵ on 28 June 2023 that it will develop a plan for the implementation of electricity smart meters and systems. However, smart metering proposals and developments have been excluded from our assessment of metering for RP7 and will be dealt with under a reopener mechanism when required.

Meter Reading

- 7.7 NIE Networks collect and process meter reading data for all its c.930,000 customer premises throughout Northern Ireland. While data can be obtained remotely via telecommunication links from meters at c.13,000 commercial and industrial premises, the vast proportion of meters are read manually by its meter reading staff. 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 NIE Networks proposed c£4.26m annual average meter reading expenditure over RP7, with a flat annual expenditure profile, despite a projected 1% annual increase in its customer base. It anticipates continued development and exploration of more efficient meter reading methods via various digital channels, as well as increased cooperation with suppliers will enable it to keep expenditure consistent.
- 7.9 In our RP7 assessment, we reviewed NIE Networks' historic outturn costs for meter reading and found its proposed annual average to be a 6.5% increase over the RP6 annual average. For the RP6 determination an incrementally increasing allowance was set to reflect the forecast increase in customers, but outturn costs have not trended with customer growth, and have remained flat through RP6.
- 7.10 Given the historical trends, and the company's stated intention to continually develop more efficient meter reading methods, we see no reason to increase meter reading expenditure for RP7. We have therefore set our draft determination allowance using the RP6 annual average to March 2023, £3.99m. Our draft determination compared to NIE Networks' submission is set out in Table 7.2 below.

¹⁵ <https://www.economy-ni.gov.uk/articles/smart-meters-update>

Meter Reading Expenditure £m	2026	2027	2028	2029	2030	2031	RP7 Total
NIE Networks Proposal	4.27	4.27	4.26	4.26	4.25	4.25	25.56
Draft Determination	3.99	3.99	3.99	3.99	3.99	3.99	23.99
Change +/-	-0.27	-0.27	-0.26	-0.26	-0.25	-0.25	-1.56

Note 1. Figures may not sum due to rounding.

Table 7.2: Meter reading draft determination

Metering Services

- 7.11 Metering services consists of two metering capital expenditure programmes:
- Meter installs/changes - primarily fulfilment of requests from customers and suppliers to install, exchange and alter electricity meters.
 - Meter recertification and replacement - fulfilment of obligations to ensure metering assets are within their certified period or recommended lifespan.
- 7.12 Both programmes consist of a direct costs element and indirect costs element. Direct costs include the cost for the meter and/or onsite direct labour for completing an individual metering services task, and only the unit cost determined for allowance purposes, which gets multiplied by the actual volume of activity. Indirect costs are primarily incurred through the employment of staff who manage and administer the metering services programmes and meter stock, and the full allowance is determined.
- 7.13 For direct costs, NIE Networks' proposed unit costs included estimated increases to account for changes in material costs. It is currently in the process of procuring meters and anticipates that material costs will be higher than in the past due to recent industry electronic component cost increases and the reduced availability of non-smart meter suppliers. NIE Networks also requested a mechanism be made available to review determined unit costs within the RP7 period due to these issues.
- 7.14 We excluded NIE Networks proposed uplifts. We are not convinced that potential material cost increases would fall outside the scope of frontier shift adjustments, and we have not been provided with evidence and detailed costs beyond NIE Networks' estimations and commentary.
- 7.15 NIE Networks also proposed three new metering categories, to capture LCT related metering specifications, such as multi-rate and multi element meters. We are not minded to include the new LCT meter categories. Additional unit cost categories, and cost rate, for these specialised configurations may

prove necessary when we complete our review¹⁶ of the connection charging methodology or as smart metering is implemented. However, pending the outcome of that work, we do not intend to make any specific provision for these changes in the RP7 price control. The existing licence already makes provision for additional meter categories and unit cost rates to be added as the need arises through a decision by UR.

- 7.16 For the high-volume direct cost metering services activities, we set our draft determination unit rate at the RP6 average outturn, excluding the 2021 reporting year (April 2020 to March 2021). We found the 2021-year outturn costs to be an outlier, and NIE Networks had stated that COVID-19 restrictions had severely disrupted the efficient delivery of this metering work programme. For the lower volume activities, such as the bespoke metering at power stations and high voltage customers, we accepted NIE Networks proposed unit costs as they were largely in line with or lower than RP6 outturn.
- 7.17 We reallocated the forecast volumes of the new LCT metering categories to the existing metering categories based on outturn data provided and applied our draft determination unit rates across all the existing metering category volume forecasts. Our draft determination compared to NIE Networks' submission, for metering services direct costs, is set out in Table 7.3 below.

Direct Costs £m	2026	2027	2028	2029	2030	2031	RP7 Total
NIE Networks Proposal	6.41	5.05	5.15	5.34	5.26	6.17	33.38
Draft Determination	5.13	4.01	4.09	4.24	4.15	4.88	26.49
Change +/-	-1.28	-1.05	-1.06	-1.11	-1.11	-1.29	-6.90

Note 1. Figures may not sum due to rounding.

Table 7.3: Metering services direct costs draft determination

- 7.18 For metering services indirect costs, NIE Networks' proposals were a significant increase over current expenditure, going from an annual average of £1.47m in RP6 to date, to a proposed annual average of £2.8m in RP7, an 89% increase. It stated that forecast increases in the volume and complexity of the direct activities would require increased indirect support.
- 7.19 We assessed RP6 outturn indirect costs and the volume of direct activity and found the RP7 forecast to be only a 22% rise, and therefore did not justify the level of increase. To set an allowance to account for the 22% rise, we

¹⁶ <https://www.uregni.gov.uk/consultations/call-evidence-electricity-connection-policy-framework-review>

calculated the RP6 average outturn indirect cost per job and multiplied by NIE Networks RP7 forecast direct activity.

- 7.20 Our draft determination compared to NIE Networks' submission, for metering services indirect costs, is set out in Table 7.4 below.

Indirect Costs £m	2026	2027	2028	2029	2030	2031	RP7 Total
NIE Networks' Proposal	2.77	2.82	2.72	2.68	2.86	2.85	16.70
Draft Determination	2.11	1.85	1.81	1.83	1.86	2.08	11.55
Change +/-	-0.66	-0.98	-0.91	-0.84	-0.99	-0.77	-5.16

Note 1. Figures may not sum due to rounding.

Table 7.4: Metering services indirect costs draft determination

Other Costs

- 7.21 For other market operations costs and overheads, we have largely adopted the RP6 run rate as increases have not been explained. The exception to this is IT spend which has been allowed almost in its entirety.
- 7.22 Other metering costs consist of keypad meters, revenue protection services and transactional charges/income. For the purposes of the draft determination, we have simply applied the RP6 average run rates (to date) to forecast RP7 costs. The results are detailed in the table below.

Other Metering Costs £m	2026	2027	2028	2029	2030	2031	RP7 Total
NIE Networks' Proposal	0.69	0.69	0.68	0.69	0.68	0.69	4.12
Draft Determination	0.42	0.42	0.42	0.42	0.42	0.42	2.53
Change +/-	-0.27	-0.27	-0.26	-0.27	-0.26	-0.27	-1.60

Note 1. Figures may not sum due to rounding.

Table 7.5: Other metering costs draft determination

- 7.23 Faults, business support, and other overheads, make up the remainder of the market operations request. The activities can be summarised as follows:
- a) Faults and emergency costs – the direct cost of repairing metering faults which present a risk to safety or result in a supply interruption.
 - b) Control centre and customer contact centre – market operations allocation of these activity costs to reflect their role in the management of metering faults.

- c) Other overheads – market operations allocation of costs associated with general overheads such as HR, finance, stores, training etc.
- 7.24 The request with respect to these activities sum to £47.8m over RP7. For other general overhead cost lines, we have adopted the current RP6 run rate. However, to this we have added almost the full £13.7m allowance for additional IT spend. This provides a total allowance of £41.3m.
- 7.25 The draft position represents a £6.5m reduction on the business plan request. The majority of this disallowance is focused on the metering overheads which are unexplained and are forecast to be materially above current levels.
- 7.26 As with other reductions, NIE Networks would be expected to justify cost increases if we are to reconsider our position for these expenses.

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 funding 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:
 - a) 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.
 - b) Focused on innovations that would defer or avoid network reinforcement by deploying alternative flexible solutions, due to the benefits they offer.¹⁷
- 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 allowances of £4.7m which is equivalent to 53.5% 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.

¹⁷ Innovation funding design and benchmarking paper, WSP, p3.

Innovation Project	NIEN 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	£0.39m
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	£4.70m

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 propose an initial ex-ante allowance of £4.7m based on a bottom-up assessment of the business cases.
 - c) The innovation uncertainty mechanism will be put in place, and we expect this to outturn at £4m for the RP7 period, though no formal cap is proposed.
 - d) Only one window of opportunity for innovation application can be made at the mid-point of the price control.
 - e) Business cases in line with NIE Networks criteria for submissions should be provided to support cost requests.
 - f) Annual reporting by project should become a part of the regulatory reporting process.
 - g) Overspend against collective innovation allowances will be subject to 50:50 cost sharing.

- h) Underspend against collective allowances should offset future cost submissions. Spend against allowance will need to be considered against any future cost requests.
 - i) An Innovation Council is not mandated by UR, but NIE Networks will need to consider how it engages with consumers and other stakeholders to support any submissions.
- 8.7 We consider that the draft determination provides sufficient flexibility whilst not exposing consumers to unnecessary risk.

Incentives

- 8.8 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.
- 8.9 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.
- 8.10 In summary we propose 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 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 (£2m / £0.5m) between unplanned and planned CMLs respectively.
 - Retain the value of lost load (VOLL) as at RP6 but just adjusting for inflation.
 - Retain the planned CML in the reliability incentive but reduce the reward/penalty associated with it.
 - Retain planned CML targets but move to rolling 3-year average with a 2-year lag to set objectives.
- 8.11 The outworking of the new reliability incentive approach for unplanned CMLs can be summarised as follows in Table 8.2:

Year	Start	25/26	26/27	27/28	28/29	29/30	30/31
2.0% Reductions	39.23	38.44	37.67	36.92	36.18	35.46	34.75
RP7 Programme		0.00	0.46	0.89	1.34	1.78	2.24
Unplan CML Target	39.23	38.44	37.21	36.03	34.84	33.68	32.51

Table 8.2: UR proposed unplanned CML targets

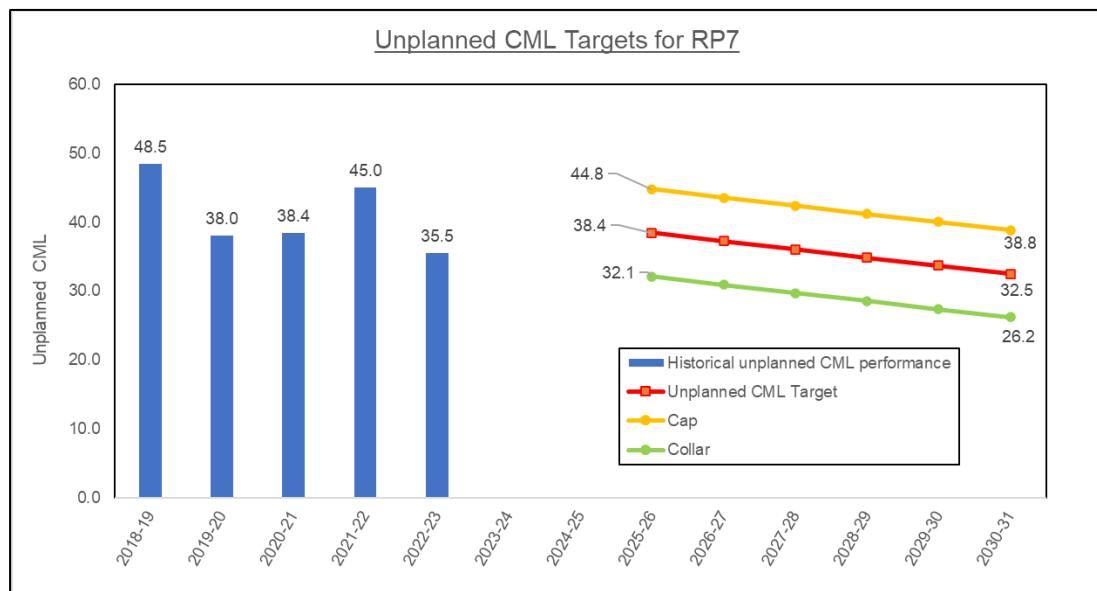


Figure 8.1: UR proposed unplanned CML targets with cap/collar

- 8.12 For RP7 we are suggesting that the Ofgem approach be adopted for planned CML target setting. This will mean targets being calculated annually using the 3-year rolling average with a 2-year lag. This only allows for the setting of a specific target for the first year of RP7.

Year	2025/26
Planned CML Target (with cap/collar)	35.83 (+/- 6.32 CML)

Table 8.3: UR proposed planned CML target

- 8.13 Given the level of uncertainty, we are however recommending that the percentage of revenue exposed to this target is lowered to 20%. This reduces the risk faced by the company for declining performance.
- 8.14 For the 50:50 cost sharing mechanism, the incentive remains largely unchanged. The only difference relates to certain cost exclusions such as business rates and innovation funding.
- 8.15 We also plan to retain the revenue protection service incentive unchanged from RP6. We welcome NIE Networks proposals to address worst served

customers (WSCs). However, we do not consider it necessary to provide a specific ex-ante fund. It is our view that allowance for HV overhead line works during RP7 provides sufficient funding and flexibility to allow the company to deliver its WSC aspirations.

9. Consumer Measures and Consumer Engagement

- 9.1 This Section provides a summary of our proposals in respect of Consumer Measures and Consumer Engagement (for the full detail please refer to Annex U of this report). It examines NIE Network's Business Plan proposals for Consumer Measures and Consumer Engagement. Where no measures or targets have been set out by NIE Networks, UR has proposed the collection and reporting of data for a number of Consumer Measures. This will be until the development of appropriate formal measures and subsequent targets during the course of RP7 through the Consumer Engagement Advisory Panel (CEAP).

Consumer Engagement

- 9.2 NIE Networks undertook an extensive programme of engagement with consumers throughout the RP6 delivery period. This engagement was overseen by the CEAP. CEAP is a working group made up of representatives from NIE Networks, UR, DfE and CCNI which UR chairs.
- 9.3 NIE Networks has stated that this consumer engagement programme has been used as a basis for the development of the RP7 Business Plan. It is the intention that this proactive form of consumer engagement will continue throughout the period of RP7.
- 9.4 As part of the price control process, we are developing updated Terms of Reference for CEAP. This will ensure that they are 'fit for purpose' in the context of RP7 so that CEAP can function in the right way and provide positive contribution during the price control delivery period.

Consumer Measures

- 9.5 A summary of the full set of proposed consumer measures along with an identified target (where relevant) is provided in Table 9.1. Detailed discussion of each of the measures is provided in Section 1. It is intended that NIE Networks will be incentivised to go beyond any identified measure through the Evaluative Performance Framework. UR seeks to ensure that NIE Networks can be demonstrated to be Best in Class in terms of customer service quality. Further detail on the Evaluative Performance Framework can be found in Annex V.

Measure	Target	Source
Supporting Vulnerable Customers		
UR Proposed Measures for data collection and reporting		
BS ISO 22458 on Consumer Vulnerability - the design and deliver of inclusive services.	Certification	UR Best Practice Framework
Enhancing Customer Service		
NIEN Proposed Measures and Targets for Customer Contacts		
Enquiries: response within 2 days	90%	NIEN
Enquiries: response within 5 days	100%	NIEN
Complaints to be resolved Day +1 (24hrs)	80%	RIIO ED2
Complaints to be resolved Day +31	95%	RIIO ED2
All Calls answered	99%	NIEN
% Calls answered within service level- 20 seconds	93%	NIEN
UR Proposed Measures for data collection and reporting		
Net Promoter Score (NPS)		UR – NI Water Precedent
First Point of Contact Resolution (FPOCR)		UR – NI Water Precedent
Customer Satisfaction Surveys	8.2	RIIO ED2
Communication Channels		RIIO ED2
Enhancing Connections Service & Supporting Competition in Connections		
UR Proposed Measures for data collection and reporting		
Time to Connect & Time to Quote		RIIO ED2
Customer Satisfaction Surveys		RIIO ED2
Supporting Customers with Energy Transition		
UR Proposed Measures for data collection and reporting		
Customer Satisfaction Surveys		UR

Table 9.1: Summary of proposed Customer Measures

10. Evaluative Performance Framework Guidance and Principles

- 10.1 The Evaluative Performance Framework (EPF) has been proposed as part of the NIE Networks RP7 price control. 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.

Principles

- 10.3 The following principles have been developed to incentivize 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 de-carbonisation;
 - engage with stakeholders in a balanced way that aims to hear and consider the best ideas from all voices.
- 10.4 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

- 10.5 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 operate independently to NIE Networks. To provide appropriate assurance in this UR will retain the ability to veto any appointment.

- 10.6 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.
- 10.7 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 UR. 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.
- 10.8 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 UR. UR will then take full account of this recommendation as part of their 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.
- 10.9 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 ‘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 its RP7 Environmental Action Plan (EAP) in its suite of RP7 submission documents to address 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 this draft 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 reopen mechanism that can be triggered at any time during the price control by either the company or UR. 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 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.
- 11.9 NIE Networks has committed to 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.

- 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. For the reporting year 2021/22, the proportion of energy lost was 7.4%.
- 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, however we will 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, then targets and a monitoring and reporting process.
- 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 and we are supportive of both

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 NIE Networks 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 their operational life, as well as reducing the use of non-recyclable materials.
- 11.18 We welcome both 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 We are not proposing any incentives or introducing any further licence conditions specific to NIE Networks' environmental action plan commitments.
- 11.24 NIE Networks currently provide data on network losses, SF6 emissions and oil leakages annually. However, we will amend the annual regulatory instructions and guidance submission (RIGs) templates to capture business carbon footprint data. We requested this data as part of the RP7 business plan submission, and future annual data will be in a similar format.
- 11.25 We are aware 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. However, we believe NIE Networks' existing regulatory and legislative reporting requirements to be sufficient, particularly with the addition of Streamlined Energy and Carbon Reporting legislation from 2019¹⁸.
- 11.26 NIE Networks developed its environmental action plan commitments in conjunction with stakeholders. We would therefore welcome views from stakeholders during the consultation period on whether the requirement to publicise an annual environmental report should be introduced as a reputational incentive. We consider the actions NIE Networks propose are in line with consumer expectations. We also acknowledge the ability for NIE Networks to deliver above and beyond what has currently been identified. If they aim and evidence Best in Class in this area, there is the option for this to be recognised within the Evaluative Performance Framework.

¹⁸ https://assets.publishing.service.gov.uk/media/5de6acc4e5274a65dc12a33a/Env-reporting-guidance_inc_SECR_31March.pdf

12. Price Control Design

Overview

- 12.1 Annex S to the RP7 draft 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 to amend existing uncertainty mechanisms or introduce new mechanisms which allow funding to be amended or determined during the course of the price control. It provides a summary of other modifications we propose to make to the distribution and transmission licences to give effect to our decisions on the RP7 price control or address other matters.
- 12.2 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).
- 12.3 The price control allows for some uncertain costs which NIE Networks cannot control to be passed through to consumers, although these are limited.

Building on RP5 and RP6 price control designs

- 12.4 The design of the RP7 price control builds on the design of the RP5, and RP6 price controls.
- 12.5 First, it continues key design features included in the RP5 price control including:

- a) 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.

12.6 The high-level design for RP5 formed the basis of 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.
- d) 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.
- 12.7 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

- 12.8 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 Section 4 of Annex S.
- 12.9 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.
- 12.10 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.
- 12.11 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

- 12.12 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

- 12.13 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 Annex S, we have provided detailed information on how we intend to amend Annex 2 of the NIE Networks licences (the Charge restriction condition) in line with these proposals.
- 12.14 We will consult on licence modifications to give effect to the price control when we publish our final determination. In Annex S, we have set out our initial thinking on the licence modifications which will be necessary. In doing so, our intention is to provide clarity which will inform our on-going engagement with NIE Networks on these issues.

Uncertainty/Risk	RP6 Framework	Proposal for RP7	UR determination
Primary Network – Forward Power Flow	Ex-ante allowance with 50/50 mechanism	Ex-ante plus reopener	Accepted in principle subject to review of the allowance on underspend.
Primary Network – Reverse Power Flow	Reopener	Ex-ante plus reopener	Accepted in principle subject to review of the allowance on underspend.
Secondary Network Investment	Ex-ante allowance with 50/50 mechanism	Ex-ante plus volume driver with mid-point review	Volume driver for all expenditure.
Low rated cut outs	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
Net zero	n/a	Reopener	
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
	DSO Operation Telecoms		Reopener (2-stage)
	OTN Comms conditional investment		Reopener
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 to be determined.
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.
Capex asset replacement (Asset requirements may change as needs arise)	Limited substitution offered in RP6 50/50 Mechanism	Broader use of substitution mechanism	Not accepted

Uncertainty/Risk	RP6 Framework	Proposal for RP7	UR determination
Transmission capacity and capability projects (For projects brought forward by SONI)	Reopener: the 'D5 mechanism'	Refinement to the D5 mechanism	Accepted
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 reopeners. 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 determined.
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. New licence modifications would be considered, if and 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)	Not accepted. 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
IT Systems (New requirements)	Some opportunity for additional allowances through the NES ^t 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 reopeners 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

Uncertainty/Risk	RP6 Framework	Proposal for RP7	UR determination
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	Not accepted in principle, determined values to apply.

Table 12.1: Amendments proposed by NIE Networks and UR draft determination.

13. Financial Aspects

Overview

- 13.1 This chapter of the draft 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; and,
 - 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 J - Rate of Return Report;
 - d) Annex K - RP6 Financial Model (spreadsheet); and,
 - e) Annex L - RP7 Financial Model (spreadsheet).

Treatment of inflation

- 13.3 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.
- 13.4 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. The methodology used to adjust for inflation is carried over from RP7.

- 13.5 In RP6, RPI was used as the general measure of inflation. In RP7, we propose to adopt CPIH as the general measure of inflation. We explored this issue when we set out our Approach to RP7¹⁹. We noted the UK Statistics Authority's:
- a) view that the 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.
 - b) intention to bring the methods and data sources of the Consumer Prices Index including owner-occupiers' housing costs (CPIH) into RPI shortly after 2030.
- 13.6 Using CPIH as the general measure of inflation will align with the approach being adopted by UR 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.
- 13.7 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 (see Annex C);
 - b) calculated the frontier shift on a CPIH basis; and
 - c) ensured that the opening Regulatory Asset Base for RP7 continued to take account of RPI throughout the RP6 price control period.
- 13.8 In our draft 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 inflation forecasts published by the Office of Budget Responsibility's (OBR) in its Economic and fiscal outlook – March 2023²⁰.

¹⁹ [UR RP7 Approach](#)

²⁰ [OBR economic-and-fiscal-outlook-March-2023](#)

- 13.9 OBR issued new inflation forecasts on 22 November 2023, in parallel with the UK Government Autumn Statement²¹. These updated forecasts came too late to be incorporated into this draft determination. These new forecasts suggest that inflation will remain higher for longer and will not dip significantly below the Bank of England target of 2%, as previous forecast. This continues a trend of forecasters under-estimating future inflation since the beginning of recent surge in inflation in 2021.
- 13.10 We will update inflation forecasts for the final determination using the latest available OBR forecasts.

Regulatory Asset Base and depreciation

- 13.11 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.
- 13.12 The detail of how individual RABs are amended for additions and depreciation is set out in Annex 2 of the transmission and distribution licences with more detail provided in Annex L - RP7 Financial Model.
- 13.13 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

- 13.14 The UR's regulatory model provides for the 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)).
- 13.15 The rate of return applied in the price control is:
 - a) A real rate of return (net of inflation), consistent with the on-going inflation of the RAB.

²¹ [OBR economic-and-fiscal-outlook-November-2023](#)

- b) A post tax (vanilla) rate of return. As a result, a separate revenue stream is provided in respect of corporation tax.
- 13.16 In carrying out its functions, the Utility Regulator is 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.
- 13.17 In reaching this draft determination, we have paid careful attention to the representations that NIE Networks made in its Business Plan submission. We have also taken account of advice received from our consultant and we have published their report in Annex J.
- 13.18 We have assessed the rate of return and tested financeability on a notional company basis. We estimate the rate of return independently of NIE Network's ownership arrangements so that the return on offer through the price control is capable of supporting any reasonable and efficient investor set. 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.
- 13.19 The vanilla WACC is calculated from gearing (g), real cost of debt (K_d) and real cost of equity (K_e) using the equation below.

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

Gearing

- 13.20 As a matter of economic and regulatory principle, the WACC should not be especially sensitive to the choice of gearing ratio. For the sake of computational simplicity,²² we therefore calculate the cost of capital using a constant debt-to-RAB ratio of 55%. This is the maximum level of gearing that we have applied when we modelled financeability.

Real cost of debt

- 13.21 Our allowance for NIE Networks cost of debt is built around our current best estimate of the interest rates that NIE Networks will pay over the RP7 period, plus an allowance for transaction costs.

²² The choice of a 55% gearing aligns to the average gearing ratio of the comparator companies which our consultant used in its analysis of beta.

- 13.22 The calculations start with the interest that NIE Networks will pay on existing debts. We add an annualised amount of the fees that the company incurred when entering into this borrowing, giving an all-in embedded cost of debt of 5.9% in nominal terms.
- 13.23 In making a ‘placeholder’ estimate of the cost of new debt, we assume that current market rates are the best available predictor of future market rates. This means that we have allowed for interest rates to remain elevated throughout the RP7 period.
- 13.24 These calculations exclude certain premia that NIE Networks claimed for in its business plan submission, such as the cost of carry and CPIH basis mitigation risk. This is on the basis that NIE Networks has not evidenced that it has incurred such costs in the past and/or there is no reason to think that the company will need to incur such costs in the future.
- 13.25 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	6.1%
Average interest costs	5.8%	Forward rate adjustment	nil
Transaction costs	0.1%	Transaction costs	0.1%
Embedded debt	5.9%	Cost of new debt	6.2%
30:70 weighted average			
Weighted average cost of debt = 6.11%			

Table 13.1: Forecast average cost of debt for RP7.

- 13.26 We convert the nominal costs of debt in Table 13.1 into their real equivalents by adjusting for forecast average RP7 CPIH inflation of 1.55%. This gives the real cost of debt allowances shown in Table 13.2.

	RP7
Nominal cost of debt	6.11%
Inflation forecast	1.55%
Real cost of debt	4.49%

Table 13.2: Real cost of debt for RP7

- 13.27 CPIH inflation forecasts are based on March 2023 OBR forecasts and a longer term forecast of 2.0%. The final determination will take account of more up to date forecasts available at that time.

- 13.28 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

- 13.29 In calculating the allowed cost of equity, the UR, like most economic regulators, uses 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 (R_f), the expected return on the market portfolio (R_m) and a firm-specific measure of risk (the equity beta (β_e) as follows:

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

Risk-free rate and expected market return.

- 13.30 Our approach to estimating the risk-free rate involves taking readings of the yields on 20-year index-linked gilts and on AAA non-government bonds of 10-15 and 10+ year maturities. The risk-free rate calculation provided to us by our consultant in their latest report uses yield data over the month to September 2023 so as to give an up-to-date snapshot of the risk-free rate of return following a period of significant market movements. Our proposed RP7 risk-free rate value aligns to this recommended value of 2.2% in real terms.
- 13.31 The expected market return has been considered at length in recent UK price reviews. Our chosen value is 6.5%, in line the recommendations made in a 2018 report for UKRN and with Ofgem's estimate in its RIIO-2 reviews.

Equity beta

- 13.32 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.

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

- 13.33 The betas of listed firms can be estimated empirically using stock market data. In this price review, however, we are concerned with a company that does not have a stock market listing. We have therefore sought to

understand the betas that regulators have factored into other companies' allowed rates of return. We have also taken advice on the asset beta revealed for network-dominated companies who retain a UK stock market listing. We have attempted to position NIE Network's asset beta logically against these comparators.

- 13.34 We have placed particular weight on the 0.35 asset beta value that Ofgem used in its RIIO-GD2 decision. NIE Networks has not sought to distinguish its risk profile in any way from the GB energy networks. We consider that there is no reason to think that NIE Networks is exposed to lower or higher risks. We therefore consider that a 0.35 is equally as appropriate in Northern Ireland as it is in GB.
- 13.35 At gearing of 55%, and assuming a debt beta of 0.075, the calculated equity beta is 0.69.

Overall cost of equity

- 13.36 Table 13.3 brings our proposed figures for the risk-free rate, expected market return, beta and gearing into an overall calculation of the allowed cost of equity.

	RP7
Gearing	0.55
Risk-free rate	2.2%
Market return	6.5%
Asset beta	0.35
Equity beta	0.69
Post -tax cost of equity	5.15%

Table 13.3: Real cost of equity for RP7

- 13.37 The allowed cost of equity of 5.15% is within the range submitted by NIE Networks. It is also broadly in line with Ofgem's RIIO-2 rate of return. We note that this rate of return has been sufficient to attract proposals from the GB transmission and distribution networks for significant increases in investment as part of the transition to net zero.

Overall rate of return (vanilla WACC)

- 13.38 Bringing together the individual components set out above, the values that UR proposes for this RP7 draft determination are set out in Table 13.4 below.

	RP7
Gearing	55%
Post-tax cost of equity	5.15%
Cost of debt	4.49%
Overall rate of return (vanilla WACC)	4.79%

Table 13.4: Real rate of return (vanilla WACC) for RP7

Rate of return adjustment mechanism

- 13.39 A Rate of Return Adjustment Mechanism (RRAM) was introduced into the RP6 price control following an approach first used in the GD17 price control for gas distribution companies. The mechanism adjusted for the benchmark nominal cost of debt at the time the company raised new debt finance. Under the GD17 and RP6 mechanisms, companies retained 20% of the change from determined to actual benchmark rate of debt and all outperformance (or under-performance) against the benchmark.
- 13.40 We propose continuing the RRAM in RP7 but propose amending it to:
- a) To remove the 80:20 sharing mechanism against benchmark debt.
 - b) Adjust for risk free rate.
 - c) Adjust for inflation as well as benchmark debt.

80:20 sharing mechanism against forecast cost of debt rates

- 13.41 The Rate of Return Adjustment Mechanism for the RP6 period included a sharing of any movement in the value of the iBoxx reference index at the time of refinancing relative to our placeholder assumption. The sharing factor was 80% to consumers and 20% to the company. The use of a spot rate of in determinations exposes a weakness of this sharing mechanism. NIE Networks and consumers carry a risk against a choice of a benchmark by the Utility Regulator for the final determination and a benchmark rate at the time of refinancing – neither of which they can influence. In our recent GD23 we decided to remove this sharing factor for the GDNs, so that the full value of any change in the iBoxx benchmark, up or down, is passed to consumers. We also consider it appropriate that the sharing mechanism is removed from the RP7 adjustment mechanism and that NIE Networks incentive is limited to out-performance against the iBoxx benchmark.

Adjusting for risk-free rate

- 13.42 We propose to introduce an adjustment to remove the forecasting risk in respect of risk-free rate.

- 13.43 Ofgem operates a risk-free rate adjustment mechanism in its RIIO-2 framework for the GB energy networks. We understand that the mechanism has been welcomed by both consumer representatives and by network companies as a way of reducing exposures to exogenous, interest rate driven changes in the cost of capital. Based on this experience we included a similar mechanism in our GD23 decision for the GDNs. We now propose to introduce the same mechanism for NIE Networks as part of its RP7 price control arrangements.

Adjusting for inflation

- 13.44 A general measure of inflation is applied through the licence to determined tariffs in nominal prices. It is also applied to the RAB to maintain the real value of the residual asset base as a means of securing inter-generational equity.
- 13.45 The GD17 and RP6 RAMM did not adjust for inflation. In practice, it protected for consumers and companies against forecasting errors in respect of the nominal cost of debt as opposed to the real cost of debt.
- 13.46 In the price control, we use forecast inflation to determine a real rate of interest, to determine real price effects and test financeability. The future trajectory of inflation remains uncertain. The OBR forecasts (March 2023) show CPI falling to zero by 2025 and only rising to 2% by the beginning of 2028. New forecasts published by OBR on 22 November 2023 show forecast inflation remaining higher for longer.
- 13.47 We made our decisions on GD23 at the peak of the inflationary spike and when the future trajectory for inflation remained uncertain. While we based our final determination on OBR forecasts, we adjusted the cost of debt mechanism to correct for the forecasting error in inflation.
- 13.48 We believe there is merit in extending this approach to the RP7 price control. If it is appropriate to protect companies and consumers against forecasting risk for debt, it seems equally appropriate to protect against forecasting risk in inflation. Consumers will bear additional costs from forecasting risk in respect of inflation in RP6. It is likely that, given the current low forecasts for inflation, consumers might also bear additional costs of forecasting errors in respect of inflation in RP7 as well.
- 13.49 We are aware that this is an issue that is also under consideration by both Ofgem and Ofwat. We will consider the outcome of these processes as we make decisions for the RP7 final determination.

Corporation tax

- 13.50 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.
- 13.51 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 a 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 costs calculated using the notional nominal cost of debt, the notional company gearing and the average RAB; and
 - d) the value of regulatory capital allowances calculated in accordance with the licence.
- 13.52 We propose to maintain this approach in RP7.

Financeability

- 13.53 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).
- 13.54 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 its licensed activities. It is therefore necessary for us to consider financeability as an integral part of a price review.
- 13.55 In assessing whether this draft determination leaves NIE Networks in a position where they will be able to finance their activities during the RP7 period, we have considered the ability that the companies will have to utilise both equity and debt finance.
- 13.56 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. Our proposed equity returns are in line with the returns that Ofgem factored into its recent RIIO-GD2 price control calculations. Accordingly, we are satisfied that NIE Networks ought to be capable of securing equity finance on an ongoing basis throughout the next six years.

- 13.57 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.
- 13.58 In Table 13.5 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. In our RP6 modelling, we assumed that NIE Networks would maintain gearing of 45% consistent with the notional company gearing used in RP6. Our modelling shows the financeability metrics NIE Networks would exhibit if it borrows to finance new investment, while moderating dividend payments to the later years of the RP7 period to hold gearing at no higher than 55%.

	25/26	26/27	27/28	28/29	29/30	30/31
Adjusted interest cover	1.90	1.68	1.64	1.57	1.51	1.47
FFO interest cover	4.07	3.79	3.72	3.56	3.41	3.30
FFO to net debt (%)	17.37	15.69	15.20	14.21	13.64	13.16
Gearing (%)	46.50	47.90	49.09	52.01	53.66	54.82

Table 13.5: Financeability modelling results

- 13.59 The evidence that we have seen in rating agency reports indicates that NIE Networks will need to maintain an FFO to net debt ratio above 12% in order to maintain its current rating of 'a-' on stand-alone credit profile²³.
- 13.60 The ratios in this modelling appear to be compatible with NIE Networks maintaining its existing credit rating.
- 13.61 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's overall revenues

²³ S&P Global Rating – August 9 2023

need not be viewed as being dependent on any particular forecast on the UR's part about NIE Networks future levels of gearing.

- 13.62 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

- 13.63 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.
- 13.64 When we modelled revenues, we made reasonable allowance for the outworking of RP6 and for expenditure which might be determined later in RP7, such as major transmission projects, volume drivers and other re-opener mechanisms. The difference between total revenue for the RP7 period from the NIE Networks Business Plan and our draft determination are shown in Table 13.6 below.

21/22 Prices	NIEN BP £m	UR DD £m	Difference £m
Transmission	491.8	485.1	-6.7
Distribution	1823.2	1715.1	-108.1
Total	2315.0	2200.2	-114.8

Table 13.6: Total Revenues

- 13.65 However, the profile across the price control is more informative as shown in Table 13.7 below, beginning with 2024/25, the last year of RP6.
- 13.66 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.

- 13.67 Distribution revenue will increase by 24% 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	56.8	58.3	70.4	77.8	86.5	93.6	98.5	73%
Distribution	250.6	243.1	273.8	285.1	297.5	304.6	311.0	24%
Total	307.4	301.4	344.2	362.9	384.0	398.2	409.5	33%

Table 13.7: Revenues

- 13.68 Figure 13.1 below shows the RP7 draft 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.

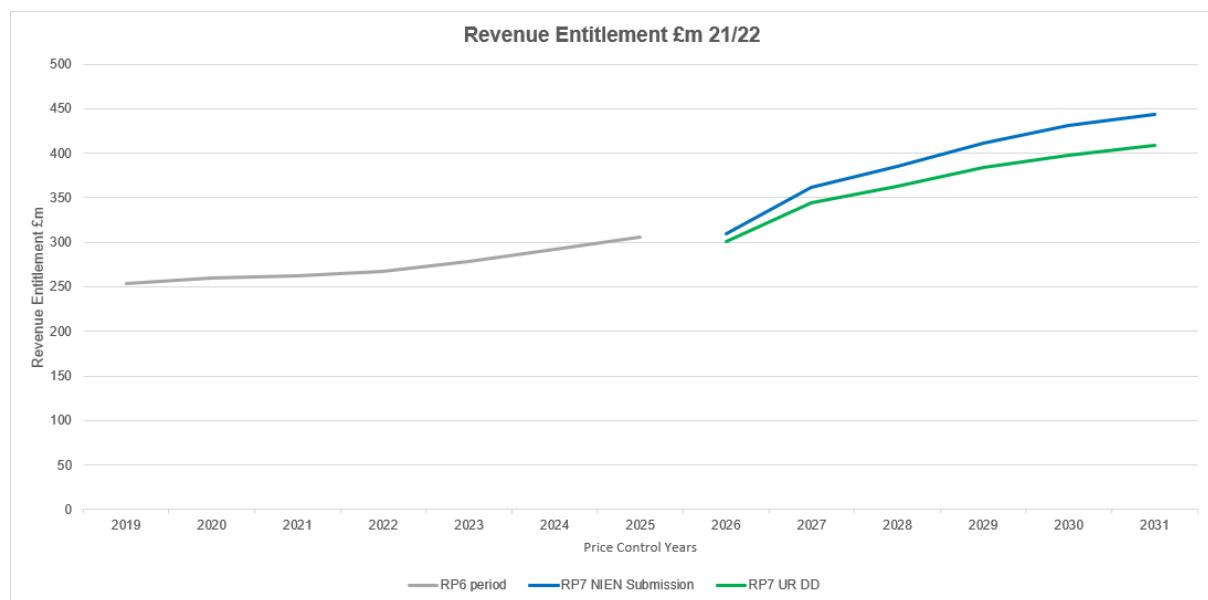


Figure 13.1: RP7 DD revenue entitlement compared to RP6

Customer impact

- 13.69 Our assessment of the impact of the determination on consumer bills follows a detailed 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).
- 13.70 In this case, a typical bill is for a consumer who does not adopt new 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.
- 13.71 The impact on a typical bill calculated by NIE Networks in line with its Business Plan is provided in Table 13.8.

Customer Group	Typical MWh/a	NIEN Business Plan			
		24/25	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 13.8: NIE Networks impact on customer bills for a typical customer

- 13.72 The impact of the UR draft determination with all other assumptions remaining the same is provided in Table 13.9. The impact of the UR draft 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 MWh/a	UR Draft determination			
		24/25	30/31	Change (£)	Change (%)
Domestic	3.4	173	170	-3	-2%
Small Business	16.4	718	742	23	3%
SME, LV	275	10762	11409	647	6%
SME, HV	1,593	38848	42206	3358	9%
LEU, HV	5,457	98095	108868	10774	11%
LEU, 33kV	31,075	295809	352823	57014	19%

Table 13.9: UR DD impact on customer bills for a typical customer

- 13.73 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.
- 13.74 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.
- 13.75 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 13.10.

Customer Group	Typical MWh/a	UR Draft determination – increase in tariff			
		D	T	T&D	(%)
Domestic	3.4	-10	7	-3	-2%
Small Business	16.4	-10	34	24	3%
SME, LV	275	82	575	657	6%
SME, HV	1,593	337	3057	3394	9%
LEU, HV	5,457	389	10472	10861	11%
LEU, 33kV	31,075	-1697	58932	57235	19%

Table 13.10: UR impact on customer bills for a typical customer by transmission and distribution

- 13.76 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.
- 13.77 The calculations within Table 13.10 are based on NIE Networks view of increased consumption consistent with the proposed investment. If the increased in EV and HP connections does not materialise and forecasts consumption is lower than projected, NIE Networks will still recover the cost of investment made and bills would increase further as a result.

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 their 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 were asked to make a Self-Assessment of their business plan. It was not clear within their 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 their respective plan was at the Exceptional level.

UR Assessment

- 14.10 We have reviewed the NIE Networks Business Plan including the self-assessment 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 UR 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 & 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 their 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, 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 learned 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 by us as **Good**.

15. Next Steps for Consultation Responses and Further Issues

Submission of Consultation Responses

- 15.1 We invite stakeholders to express a view on any particular aspect of the paper or any related matter. Responses should be received on or before 12 noon on 22 March 2024 and should be addressed to:

Alan Craig

Finance and Network Assets

Queens House

14 Queen Street

Belfast

BT1 6ED

Tel: 028 9031 6327 Email: Electricity_Networks_Responses@uregni.gov.uk
with cc to Alan.Craig@uregni.gov.uk

- 15.2 Our preference would be for responses to be submitted by e-mail.
- 15.3 Your response may be made public by us. If you do not want all or part of your response or name made public, please state this clearly in the response by marking your response as 'CONFIDENTIAL'.
- 15.4 If you want other information that you provide to be treated as confidential, please be aware that, under the FOIA, there is a statutory Code of Practice with which public authorities must comply and which deals, amongst other things, with obligations of confidence. In view of this, it would be helpful if you could explain to us why you regard the information you have provided as confidential.
- 15.5 Information provided in response to this consultation, including personal information, may be subject to publication or disclosure in accordance with the access to information regimes (these are primarily the Freedom of Information Act 2000 (FOIA) and the Data Protection Act 2018 (DPA)).
- 15.6 As stated in the GDPR Privacy Statement for consumers and stakeholders, any personal data contained within your response will be deleted once the matter being consulted on has been concluded though the substance of the response may be retained.

- 15.7 This document is available in other accessible formats, such as large print, Braille, audio cassette and a variety of relevant minority languages if required. Please contact Alan Craig on either 028 9031 6327 or email: Electricity_Networks_Responses@uregni.gov.uk with cc to Alan.Craig@uregni.gov.uk to request this.
- 15.8 It is also envisaged that work will continue with key stakeholders, during the consultation phase to ensure that all areas are made clear, on how decisions have been reached.
- 15.9 If appropriate, we can have individual discussions with interested parties. Please contact us if you consider this to be more suitable.

Key Milestones

- 15.10 Table 15.1 provides an overview over the key milestones and associated timelines for the RP7 price control process.

RP7 Key Milestones	Revised timeline
Issue draft approach to RP7	March 2022
Consultation on approach closes	May 2022
UR publishes final approach to RP7	July 2022
Draft information requirements issued	March 2022
Final comments on the information requirements	August 2022
Final information requirements issued	August 2022
Business plan submission	March 2023
Publish the draft determination	November 2023
Consultation on the draft determination ends	March 2024
Publish Final Determination and proposals on licence modifications	October 2024
Close of representations on proposals	December 2024
Decision on licence modifications published	January 2025
Licence modifications come into effect	March 2025

Table 15.1: Price Control Process Key Milestones

Process after DD publication

Final Determination and Licence modifications

- 15.11 We will reconsider our determination in light of the responses received to our consultation on the RP7 draft determination document. We envisage that this will entail a further phase of bilateral engagement between ourselves

and NIE Networks, as well as engagement with other key stakeholders between March to October 2024.

- 15.12 Our RP7 final determination is due to be published in October 2024, and will account for our findings from consideration of the consultation responses received and comments made as part of this engagement.
- 15.13 The publication of the RP7 final determination will be accompanied by a consultation on related licence modifications, of which we will consider any response and then make a final decision of the licence modifications to be published in January 2025.

Lessons Learnt

- 15.14 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.
- 15.15 As part of this lessons learnt process, we intend to capture feedback from the NIE Networks, key stakeholders as well as internally from our colleagues on key aspects of the price control process.
- 15.16 We wish to use this information to implement improvements to the way in which we conduct price controls and apply them to future price control processes, where reasonable and possible.

Further Issues

- 15.17 As part of this RP7 draft determination we have identified some issues, which we consider to be beyond the scope of the RP7 price control determination. We would plan to continue work on these areas were appropriate and identify broadly the key issues for the RP7 final determination.