Utility Regulator
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RP7 - NIE Networks Price Control 2025-2031

Final Determination Annex A
Overview of NIE Networks RP6 Performance
30 October 2024

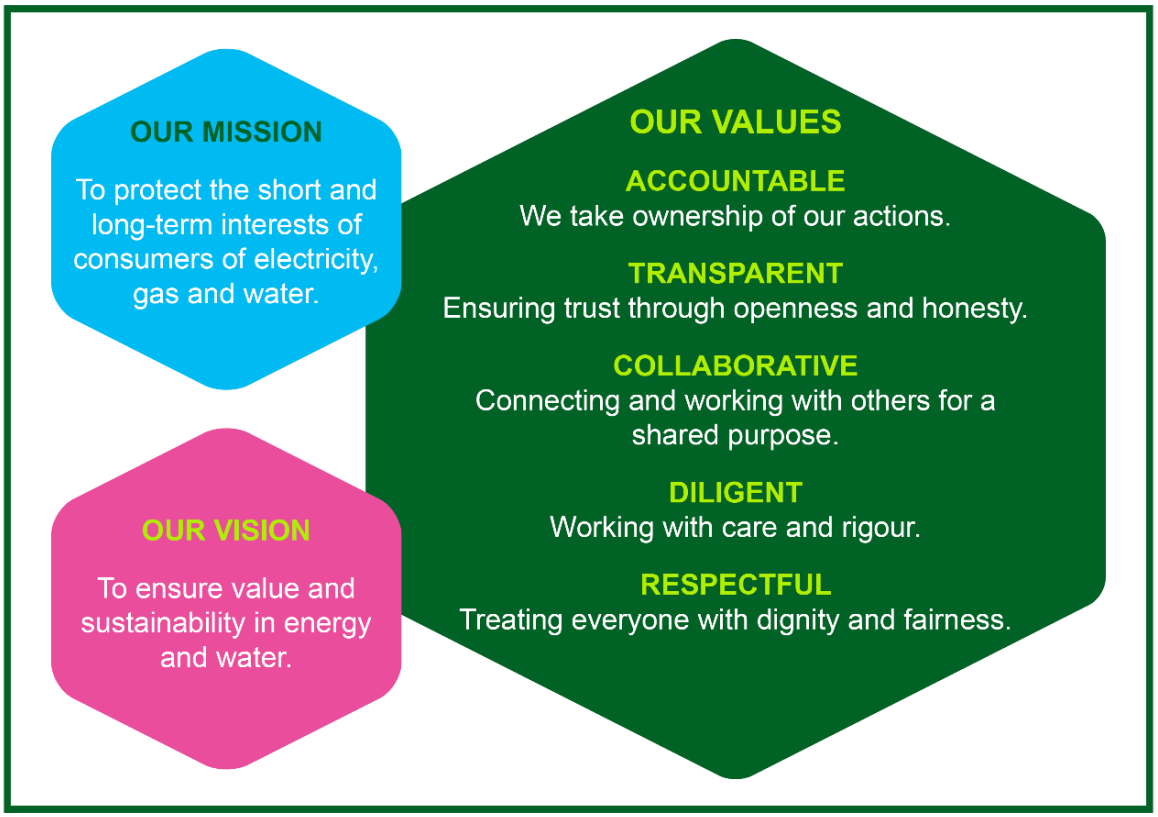
About the Utility Regulator

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

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

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

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



Abstract

This report reviews the performance of NIE Networks, against the previous price control targets that are set, subject to updating for the Uncertainty Mechanism and any additional projects that have been agreed during the price control for the period 1 October 2017 - 31 March 2025 (7 and a half years). It provides a summary of costs and performance for the first 5 and a half years of RP6.

Audience

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

Consumer impact

This analysis provides information on cost and performance to date within RP6 and establishes a base line and context for reviewing the RP7 Business Plan submission as presented by NIE Networks.

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Executive Summary

This Annex to the RP7 Final Determination provides an overview of NIE Networks' performance in RP6 up 31 March 2024 presenting information on Opex, Capex, network performance and the quantity of electricity consumer as summary indicators of NIE Networks performance in RP6. We have used NIE Networks' performance to inform our decisions for RP7.

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

Opex performance

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

Capex performance

The company's cumulative Capex to the end of 2023/24 was lower than the regulatory allowances. NIE Networks has explained that its delivery was impacted by COVID-19 both in terms of restrictions in availability of resource/material and because it had focussed our efforts on essential customer services. NIE Networks had anticipated increasing its outputs after the impact of COVID-19 to make up any shortfall arising within the RP6 period.

However, NIE Networks currently anticipates that it will complete some of its RP6 outputs in the first 24 months of RP7, but it will continue to strive to do all that it can to achieve the outputs within the original timeframe, and to minimise the level of carryover. NIE Networks has also noted that it expects costs to exceed allowances over the remaining years of RP6 due to above inflation cost pressures driven by contractor rates and material prices. We will continue to monitor the delivery of the RP6 programme and make appropriate adjustments under the licence for the deferral of RP6 investment into RP7.

Network performance

Network performance, as experienced by consumers, over the RP6 period:

- the reliability of the network as measured as faults per 100km of networks has increased from the start of RP6, returning to 2015 levels;
- however, customer interruptions (CI) due to both planned and unplanned interruptions have both continued to trend downwards; and,

- there has been a significant stepped reduction in the impact of interruptions on consumers, measured as customer minutes lost (CML), following the introduction of a CML incentive for RP7.

Electricity units distributed

The quantity of electricity units distributed in the RP6 period has reduced. NIE Networks has indicated that from 2020, social and economic factors played a more significant role in influencing the amount of electricity used by each market sector.

NIE Networks has forecast an increase in units distributed in the RP7 period based on its best view of low carbon technology (LCT) uptake in the period. For example, the company is forecasting 300,000 EVs and 120,000 heat pumps installed in Northern Ireland by 2031. We intend to monitor the level of LCT uptake during RP7 as well as the quantum of units distributed.

Cost and performance reporting

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

1. Introduction

1.1 The RP6 price control covers the period 1 October 2017 to 31 March 2025. To enable a better understanding of delivery, we compare determined allowances and outputs against actual performance. In addition, we examine the performance of the electricity system in RP6. By its nature, this analysis is high level, as RP6 is incomplete.

1.2 We will provide a full review of NIE Networks performance for the RP6 period in our cost reporting framework once we have received full period data. We expect this will be in the 2025-26 financial year.

2. Opex Performance in RP6

2.1 Operational expenditure (Opex) represents the on-going running costs of NIE Networks electricity system. Opex includes recurring maintenance costs, business rates, some IT and some staff costs.

2.2 An Opex allowance was included in our final determination for RP6. During the RP6 period, additional Opex allowances approved included Injurious Affection[1], the Apprenticeship Levy[2] and additional IT costs. The comparison below includes allowances approved to date; it is possible that further Opex allowances will be approved before the end of RP6.

2.3 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. The remainder (and majority) of Opex is subject to a cost risk sharing mechanism whereby the company retains 50% of any outperformance and bears 50% of any cost overrun. This cost risk sharing mechanism incentivises the company to out-perform its Opex allowance and reveals new levels of performance which become the baseline for its RP7 Business Plan.

2.4 RP6 Opex allowances and expenditure to date is compared in Figure 2.1 below. The company has out-performed its cumulative Opex allowance by 9.3% to 2023/24 and will retain half of this out-performance.

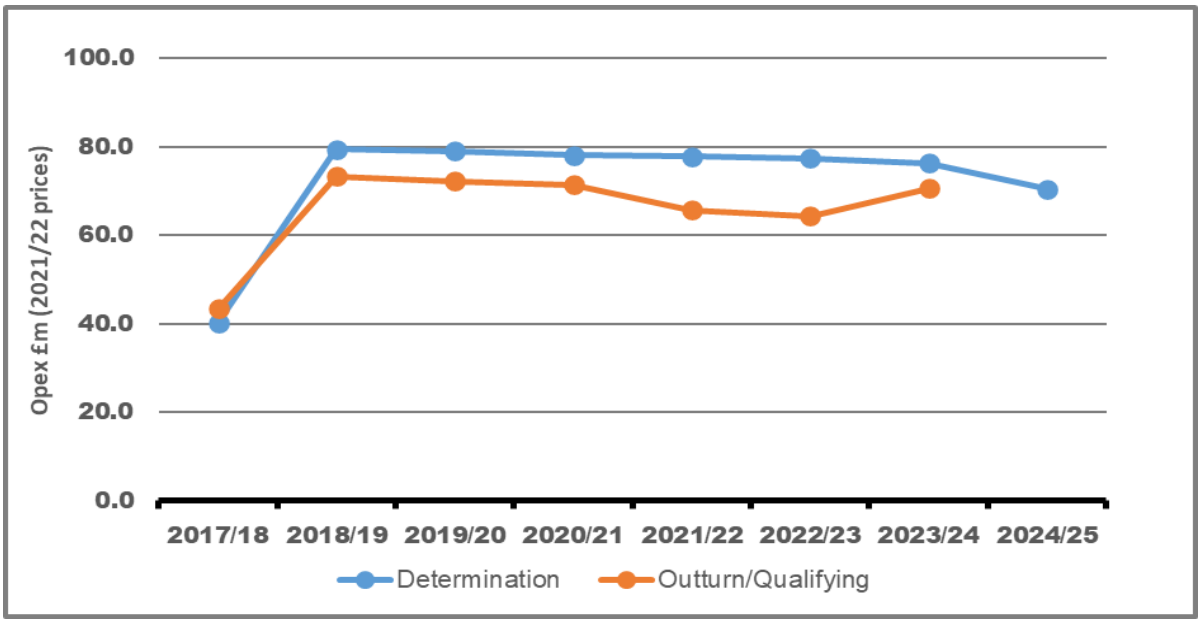


Figure 2.1 - RP6 OPEX performance

[1] Injurious Affections is the diminution in value to a property caused by the existence and/or use of public works carried out under, or in the shadow of, compulsory powers. It is an Opex allowance.

[2] The Apprenticeship Levy is an amount paid at a rate of 0.5% of an employer's annual pay bill. It is an Opex allowance.

3. Capex Performance in RP6

3.1 The term 'Capex' is used to refer to new assets installed on NIE Networks electricity system. For example, Capex includes: the purchase and installation of new assets; replacing old assets; and connecting customers to the electricity network.

3.2 The Capex allowances shown below in Figure 3.1 include the allowances determined in the RP6 final determination mechanisms and further allowances determined during RP6 under the D5[3], Change of Law and Low Carbon Technology (LCT[4]) re-opener mechanisms. This includes work on the “Green Recovery” initiative which will begin to provide the capacity necessary to deliver the Energy Strategy.

3.3 The allowances for the final year of RP6 show a down-turn and this is because of a separate determination for the extension of the price control. It is possible that the allowances for 2024-25 years could change if approvals are provided for further D5 projects in those years. D5 projects can carry material costs and therefore can significantly impact allowances.

3.4 Expenditure and outputs up to 2023/24 were 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 because it had focussed its efforts on essential customer services. NIE Networks stated it had anticipated increasing outputs after the impact of COVID-19 to make up any shortfall, however, because of factors such as global supply chain issues, it is increasingly unlikely that the shortfall will be recovered. Therefore, it is anticipated that there will be a level of carryover works in RP7. The company has stated that it will continue to strive to do all that it can to minimise the level of carryover.

3.5 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.

[3] The D5 mechanisms allows investment projects to increase transmission system capacity to be determined as the scope and timing is confirmed by SONI.
[4] The LCT (Low Carbon Technology) allowed the price control to be adjusted as the impact of LCT such as electrical vehicle and heat pump uptake developed.

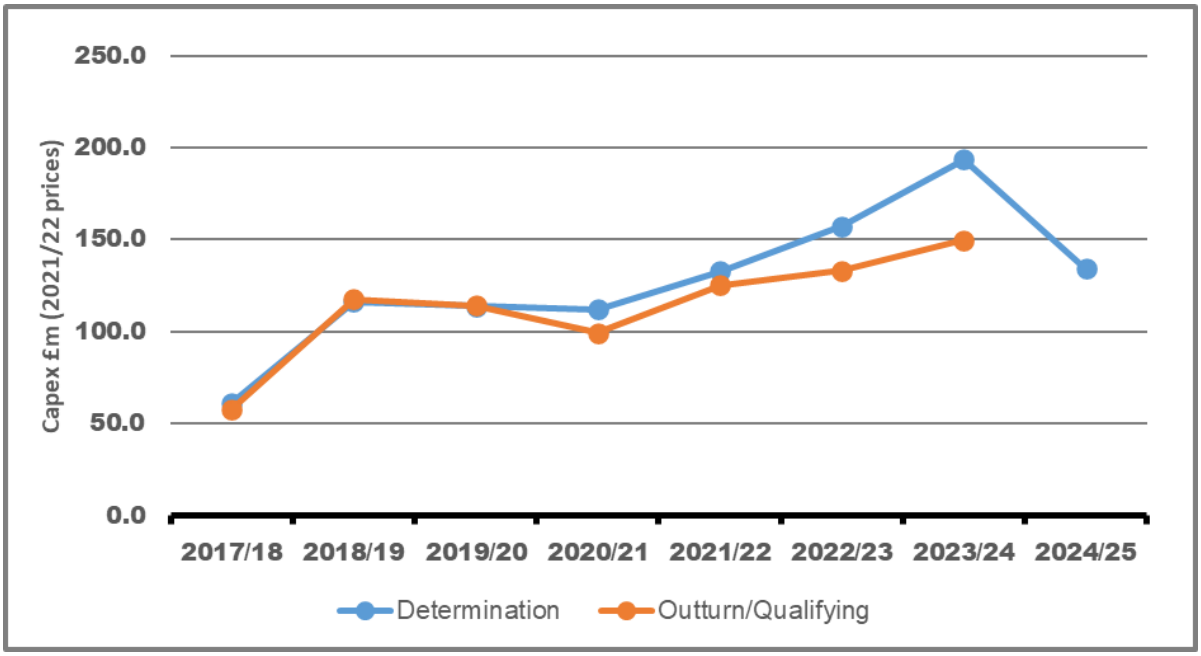


Figure 3.1: RP6 CAPEX performance

4. RP6 Network Performance

4.1 NIE Networks Distribution and Transmission licences direct the company to provide an annual system performance report which is the source of our monitoring data. The report is also published on the company's website[5].

4.2 We monitor a number of performance indicators across the entire distribution network, and these include:

a) Reliability: the number of faults per 100km of the distribution system

b) Security: the frequency of planned and unplanned Customer Interruptions (CI)

c) Availability: the duration of planned and unplanned interruptions per connected customer or Customer Minutes Lost (CML)

d) Quality of Service: The percentage of distribution unplanned faults restored within:

(i) 3 hours

(ii) 24 hours

Reliability

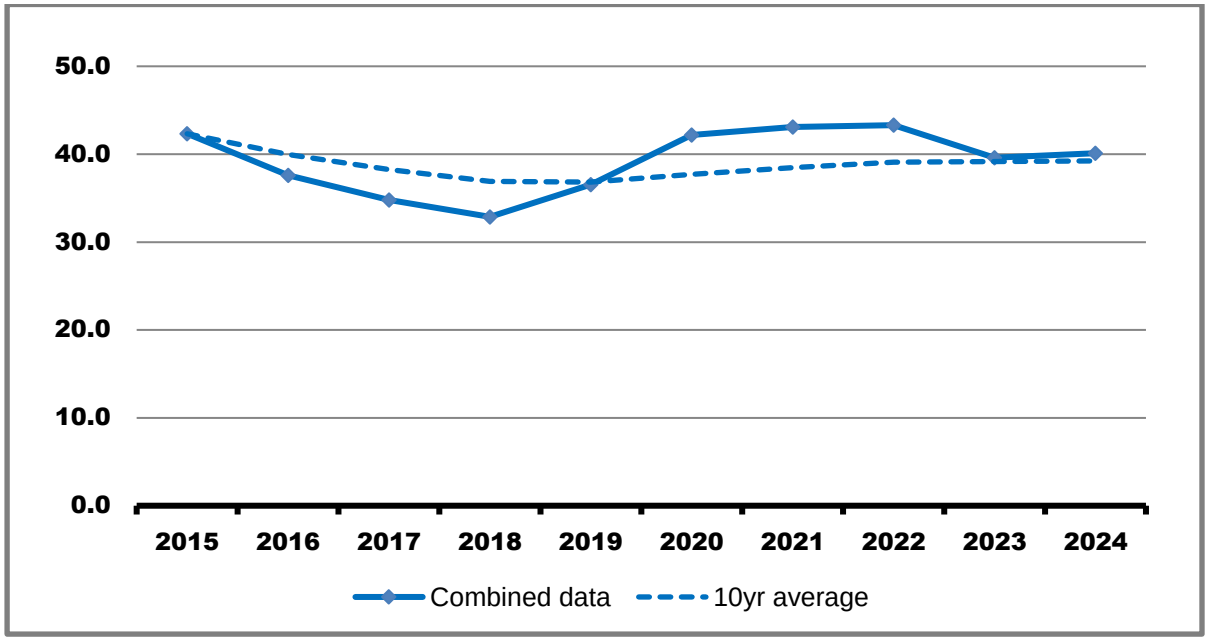


Figure 4.1: Faults per 100km (all voltages)

4.3 Faults per 100km (all voltages) performance in the RP6 period i.e. up to

[5] https://www.nienetworks.co.uk/about-us/regulation/system-performance-reports

2023-24 is shown in Figure 4.1. Faults per 100km provides a measure of the reliability of the electricity distribution network.

Security

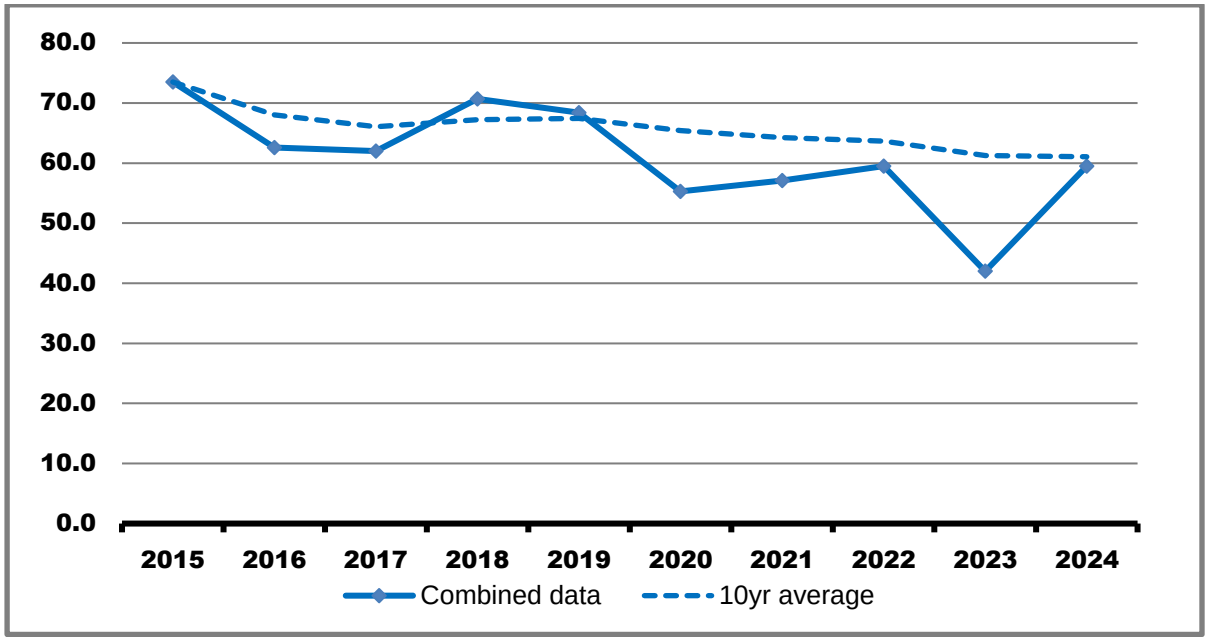


Figure 4.2: Unplanned customer interruptions per 100 customers (all voltages)

4.4 Customer Interruptions is a measure per 100 connected customers, that are interrupted on NIE Network's electricity network over the course of a year. For example, 50 customers interrupted out of a total of 100 connected customers would result in a C.I. of 0.5. Customer Interruptions performance in the RP6 period i.e. up to 2023-24 is shown in Figure 4.2.

4.5 CI due to Planned Outages performance in the RP6 period i.e. up to 2023-24 is shown in Figure 4.3. This provides a measure of the impact of planned outages on the distribution network and therefore an indication of the security of supply.

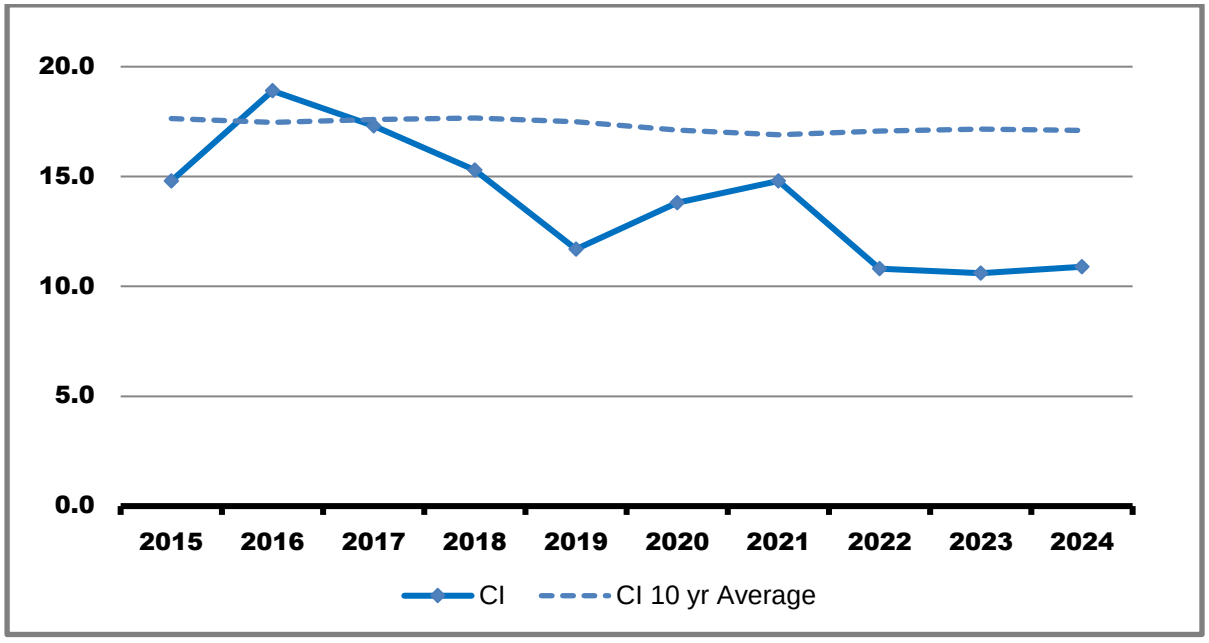


Figure 4.3: CI Due to planned outages

Availability

4.6 For the RP6 Price Control the CML was the average minutes lost per customer, per year, where an interruption to electricity supply lasts for one minute or longer.

4.7 The Customer Minutes Lost is a measure of reliability as it considers the number of interruptions and the length of those interruptions. A network which is inadequately maintained will degrade and, after a time, have more frequent and lengthy faults which will be reflected in CML performance.

4.8 A degrading trend should not be assumed in the short term due to annual fluctuations in fault data and therefore it would not be prudent to give weight to the CML data at this time. We will, however, monitor the CML trend annually in order to identify potential links between under-investment and degrading network performance.

4.9 The Reliability Incentive model in RP6 set targets for unplanned and planned customer minutes lost (CML) and provided a symmetrical incentive for performance against target, subject to a cap and collar where an estimated 1.5% of annual distribution revenue is exposed to the incentive. Detailed information on the current Reliability Incentive Model was published as Annex M of the RP6 final determination.[6]

4.10 The company has made significant improvements in performance in RP6 as measured by both planned and unplanned CML. It has consistently out-

[6] Annex M - Reliability Incentive.pdf (uregni.gov.uk)

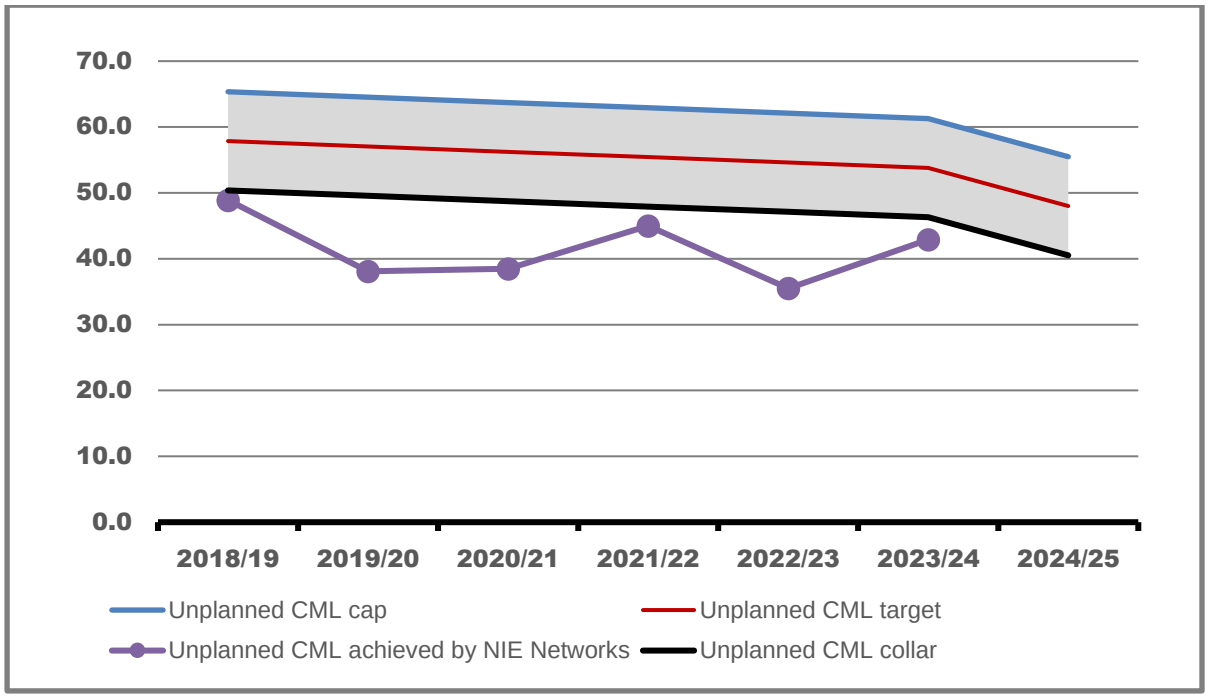
performed the 'collar' for each measure.

4.11 In the RP6 Extension Decision Paper[7] no changes to the structure or the key parameters of the model were made other than to amend the central target for Unplanned CML.

4.12 We revised the Unplanned CML target for the RP6 extension year to 48 CML which represent a reduction of circa 6 CML from the 2023/24 target to recognise the out-performance achieved by the company to date.

4.13 We did not change the existing RP6 Planned CML target as we recognised the increasing profile of planned work on the network over the period to March 2024, which will further ramp up in the RP6 extension year taking account of Green Recovery and LCT related investments. This could result in an increase in planned CML compared with performance in RP6 to date.

4.14 Unplanned customer minutes lost (CML) performance in the RP6 period up to 2023-24 is shown in Figure 4.4.

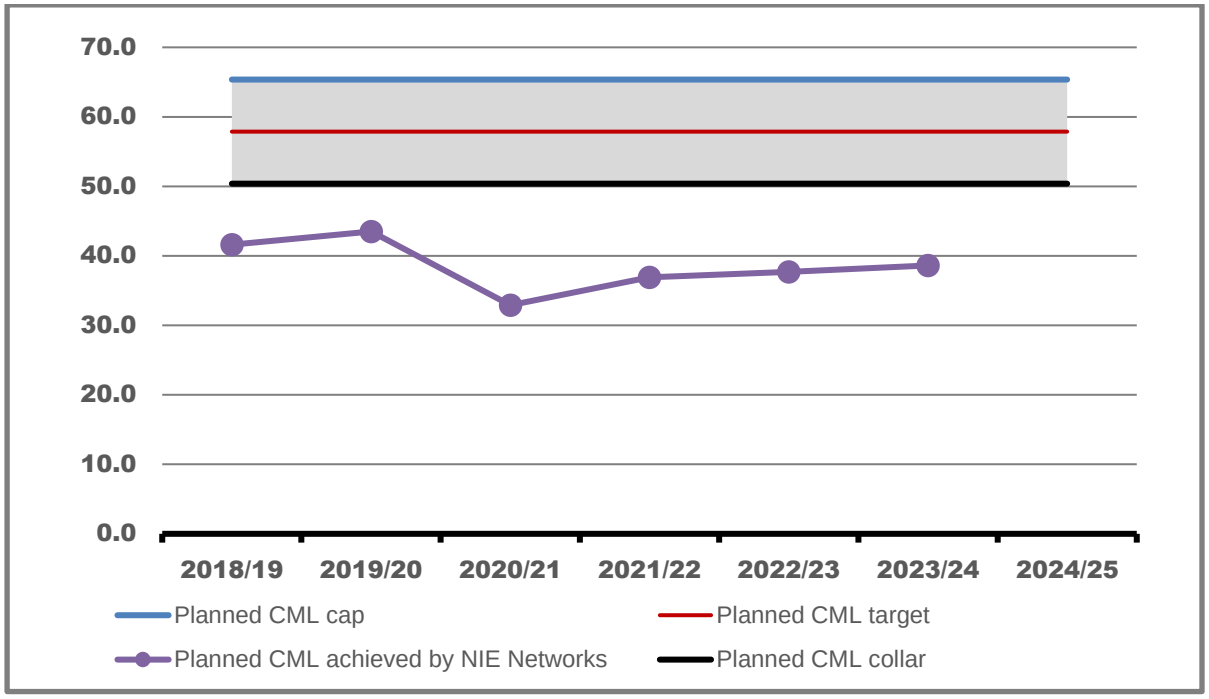


Note 1: measured as an average, per customer, per year

Figure 4.4: Unplanned customer minutes lost (CML) 2019 to 2024

4.15 Planned Customer Minutes Lost (CML) performance in the RP6 period i.e. up to 2023-24 is shown in Figure 4.5.

[7] https://www.uregni.gov.uk/news-centre/decision-paper-published-modifications-nie-networks-transmission-and-distribution



Note 1: measured as an average, per customer, per year

Figure 4.5: Planned customer minutes lost (CML) 2019 to 2023

Quality of service

4.16 One way to measure the quality of service received by NIE Networks customers is to measure the percentage of customers restored within 3 hours and 24 hours when unplanned faults occur.

4.17 Table 4.1 shows that NIE Networks performance in this area has marginally declined over the RP6 period in relation to restoration within 3 hours but remained constant for restoration within 24hours. The data provided in this section on customer interruptions, customer minutes lost and quality of service exclude the impact of any major storms in the RP6 period.

Performance Criteria (3hrs)	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
LV	71.8%	73.2%	72.4%	69.1%	66.5%	67.3%
HV	93.8%	94.5%	94%	92.5%	94.1%	92.6%
EHV	99.4%	99%	99.7%	99.2%	98.7%	99.8%
Fault Total	93.8%	94.2%	94.3%	92.6%	92.5%	92.3%
Performance Criteria (24hrs)	**2018/19**	**2019/20**	**2020/21**	**2021/22**	**2022/23**	**2023/24**
LV	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%
HV	100%	100%	100%	100%	100%	100%
EHV	100%	100%	100%	100%	100%	100%
Fault Total	100%	100%	100%	100%	100%	100%

Table 4.1: Percentage of customer restored (within 3 hours and 24 hours)

5. Electricity Units Distributed

5.1 Figure 5.1 shows the volume of units distributed to each customer group. Electricity units distributed are measured in units of GWh. Actual units for each customer group are shown over the period 2018-19 to 2023-24. All years thereafter are forecasts.

5.2 NIE Networks has forecast an increase in units of electricity supply in the RP7 period based on their best view of LCT uptake in the period for example a forecast of 300,000 EV's and 120,000 heat pumps installed in NI homes by 2031. We intend to monitor the level of LCT uptake during RP7 as well as the quantum of electricity units.

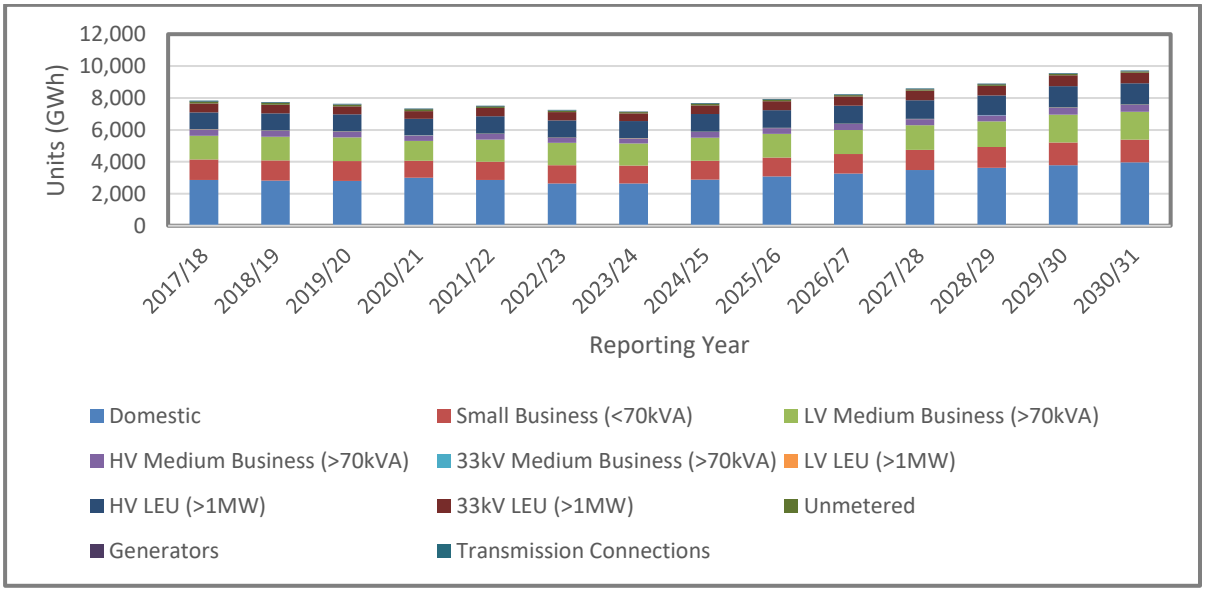


Figure 5.1: Actual and forecast units

5.3 Table 5.1 shows the annual change in total electricity units distributed in the RP6 period up to and including the 2023-24 year.

RP5/6 2017/18	RP6 2018/19	RP6 2019/20	RP6 2020/21	RP6 2021/22	RP6 2022/23	RP6 2023/24
Actual						
0.68%	-1.01%	-1.46%	-3.88%	2.54%	-3.60%	-1.22%

Table 5.1: Annual percentage change in units distributed (GWH)

5.4 NIE Networks made the following comments regarding the volume of units distributed:

a) 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. From 2020 social and economic factors played a

more significant role in influencing the amount of electricity used by each market sector.

b) From late March 2020 variations in electricity usage became more extreme with COVID-19 Government restrictions leading to increased consumption by domestic customers (monthly increases of up to 15%) and significant electricity reductions within all business sectors (monthly reductions of up to 31%[8]). Electricity sales to small commercial businesses were most notably affected by COVID-19 restrictions, while large energy users (LEUs) generally recovered more quickly from Government imposed closures.

c) Following on from COVID-19, a cost-of-living crisis then hit Northern Ireland households and businesses from late 2021. There has been a noted downturn in electricity sales to domestic and business sectors in 2022 and again in 2023. High energy prices may have influenced both business and domestic choice of fuel and efficiency in electricity usage. With the rising costs, electricity suppliers increased their domestic tariffs, e.g. Power NI increased their domestic tariff rates twice in 2022 and with the second increase in July 2022, domestic prices were more than 50% higher than those in the previous year.

5.5 Table 5.2 shows NIE Networks' forecast annual percentage changes in total electricity units distributed for the last year of RP6 and for the RP7 period.

RP6 2024/25	RP7 2025/26	RP7 2026/27	RP7 2027/28	RP7 2028/29	RP7 2029/30	RP7 2030/31
Forecast						
7.20%	3.42%	3.73%	4.33%	3.67%	7.30%	1.80%

Table 5.2: Annual percentage change in units distributed (GWH)

[8] This is the average of monthly variations in electricity sales

6. Future Reporting

6.1 We expect to review the performance of NIE Networks for the entire RP6 period and produce a Cost and Performance report in the 2025/26 year. We expect that the report will review NIE Networks' performance on opex, capex and network performance for the RP6 period.

6.2 Going forward into the RP7 period we intend to review the scope of annual reporting for NIE Networks. For example, we consider it may be appropriate to develop information requirements which more fully captures the extent of NIE Networks carbon emissions.