



RP7 - NIE Networks Price Control 2025-2031

Draft Determination Annex M
Incentives
November 2023



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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.

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



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Abstract

The objective of this annex is to explain the proposed targets and incentives to improve performance for NIE Networks in certain key areas. The reliability incentive aims to build on improvements to customer minutes lost (CML) made in RP6.

The 50:50 cost sharing mechanism encourages efficiency whilst retraining costs and the revenue services protection incentive ensure a focus on restricting electricity theft and its impact.

We set out proposed changes for the next price control as well as consider other issues raised by NIE Networks within its submission such as worst served customers.

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

If implemented successfully, the incentives should improve the level of reliability and performance provided by NIE Networks to its customers in a cost-effective way.



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Executive Summary

The purpose of this annex 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 Annex V.

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.

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.

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 high voltage (HV) overhead line works during RP7 provides sufficient funding and flexibility to allow the company to deliver its WSC aspirations. Further incentive for NIE Networks to address this can be considered within the Evaluative Performance Framework.

1. Introduction

- 1.1 The aim of this annex is to explore proposals to help incentivise NIE Networks to deliver efficiency and outstanding customer service.
- 1.2 In RP6 there are three financial incentive schemes that operate upon NIE Networks. These include the following:
- a) Reliability Incentive (*RI* licence term) – dealing with network performance in the form of planned and unplanned customer minutes lost (CML).
 - b) The 50:50 cost sharing mechanism on qualifying opex/capex allowances.
 - c) Revenue Protection Services Incentive (*RPSI* term) – dealing with recovery of income from theft or damages from illegal abstraction.
- 1.3 We propose to retain these three mechanisms in RP7 and add a further financial incentive linked to the Evaluative Performance Framework (EPF). Proposals around this new incentive is discussed separately in Annex V.
- 1.4 Excluding the 50:50 cost risk sharing mechanism, the potential financial upside and downside from these mechanisms in RP6 is of the order of c. +/- £3m per year.

Incentive	Upside £m/a	Downside £m/a
Reliability Incentive	3.0	(3.0)
Revenue Protection Services Incentive ¹	0.4	0.2
Total	3.4	(2.8)

Table 1.1: RP6 scale of financial incentives

- 1.5 The 50:50 cost sharing mechanism is quite extensive and provides a robust financial incentive to both control and outperform allowances. Presently it applies to most ex-ante allowances except for some pass-through cost categories such as licence fees, certain connection costs etc.
- 1.6 The reliability incentive (RI) is a symmetrical reward/penalty for performance against planned and unplanned CML targets. The scale of the incentive is dependent upon the value of lost load (VOLL), revenue exposure (1.5% of distribution revenue in RP6), weighting (66.7% unplanned: 33.3% planned) and performance against target.

¹ Based on experience as opposed to potential.

- 1.7 The Revenue Protection Services Incentive (*RPSIt* licence term) is where the customer and NIE Networks share certain revenue streams on a 50:50 basis. The revenue includes:
- a) Money recovered from theft of electricity.
 - b) Money recovered from third parties for the cost of network repairs associated with theft.
 - c) Income from third parties for revenue protection services.
- 1.8 The value of this incentive can fluctuate depending on the amount of revenue recovered. This incentive is asymmetric in that there is no downside risk or penalty.
- 1.9 This annex details the current position, company proposals for RP7 and our views on the incentives. Discussion of new targets is also covered, including a focus on the worst served customers (WSCs).

2. Reliability Incentive

RP6 approach

- 2.1 It is necessary for us to set reliability standards for two main reasons:
- a) It is not feasible for customers to negotiate with their electricity distribution/transmission network operator directly with regards to their preferred level of reliability.
 - b) Focusing on reliability can help balance other regulatory objectives, most notably low prices for customers. While we expect NIE Networks to be efficient this could adversely encourage NIE Networks to reduce reliability. By introducing reliability standards and incentives we can ensure that NIE Networks manages the cost / reliability trade-off.
- 2.2 The reliability incentive was first established in RP6. For this incentive we calculated separate unplanned and planned CML targets, in line with the Ofgem approach. Severe weather events were excluded from CML as the occurrence of these incidents is outside the control of NIE Networks.
- 2.3 An event is classified as a severe weather event when a minimum verified, number of incidents affecting the distribution HV network linked to severe weather conditions has occurred within a 24-hour period. In NI, the “commencement threshold number” means 13 times the average daily fault rate experienced by the distribution HV network.
- 2.4 Transmission outages were also omitted from CML as we consider transmission outages that cause significant customer interruptions to be an exceptional event. This also assists with the comparability of network reliability data with GB DNOs.
- 2.5 The key decisions / parameters of the RP6 reliability incentive can be summarised as follows:
- a) The reliability incentive was structured as a symmetric incentive.
 - b) The unplanned CML target was set by applying a 75% weight to the benchmark CML and 25% to the historical average.
 - c) Given customer willingness-to-pay (WTP) for unplanned outages is greater than planned outages, we allocated two thirds (66.6%) of total distribution revenue exposure to unplanned CML.
 - d) Planned CML targets were based on a 5-year historical average.

- e) One third (33.3%) of distribution revenue exposure was allocated to the planned CML.
- f) Targets were applied over a glidepath and are updated automatically based on outturn performance.
- g) The value of lost load (VOLL) used to derive the cost of CML, was set at £15.3 per kWh (2015/16 prices).
- h) Risk/reward exposure was set at 1.5% of distribution revenue.
- i) Using the VOLL figures and total annual exposed revenue we calculated the CML cap and floor of approximately +/- 7.31 CML either side of the unplanned and planned CML targets.²

2.6 Within RP6 to date, NIE Networks has made significant progress and outperformed targets for both unplanned and planned CML.

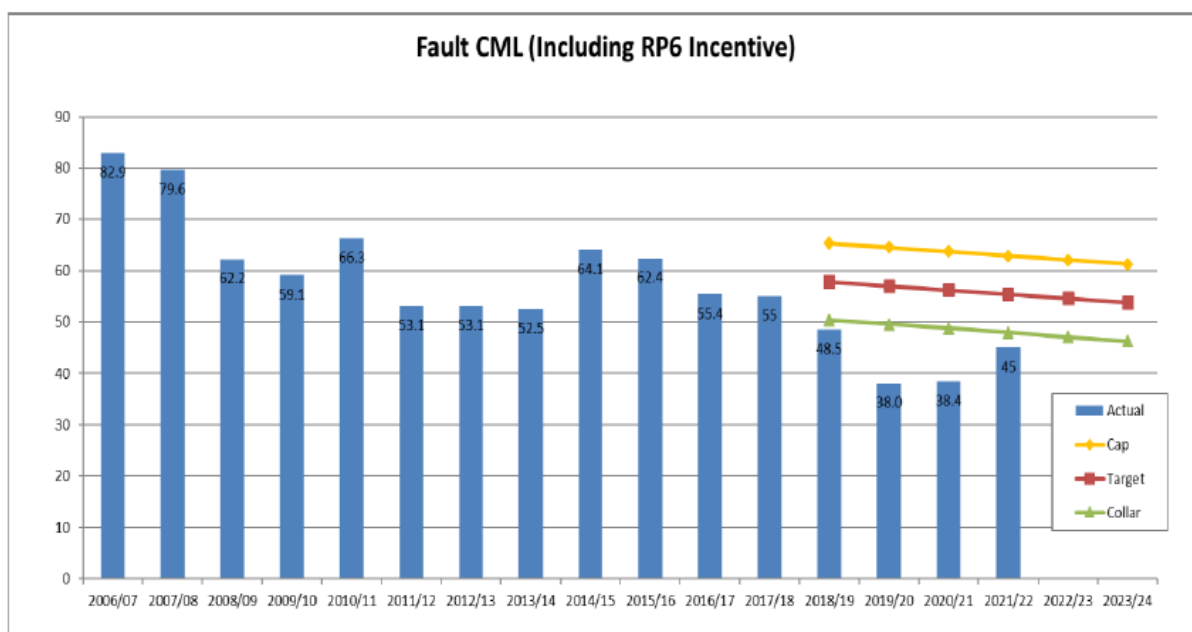


Figure 2.1: Unplanned CML performance against targets³

2.7 Whilst the performance is a welcome outcome, NIE Networks has benefitted from the full reward in each year of RP6. Consumers however have also benefitted as the company has outperformed the collar (meaning they have received the benefit without having to pay any additional monies for the improvement).

² See RP6 final determination, [Annex M](#), para 6.8 to 6.26, p38-42.

³ Source: NIEN Network Performance Strategy, EJP 1.801, Figure 1, p8.

2.8 A similar result can be observed for planned CML performance as detailed in Figure 2.2.

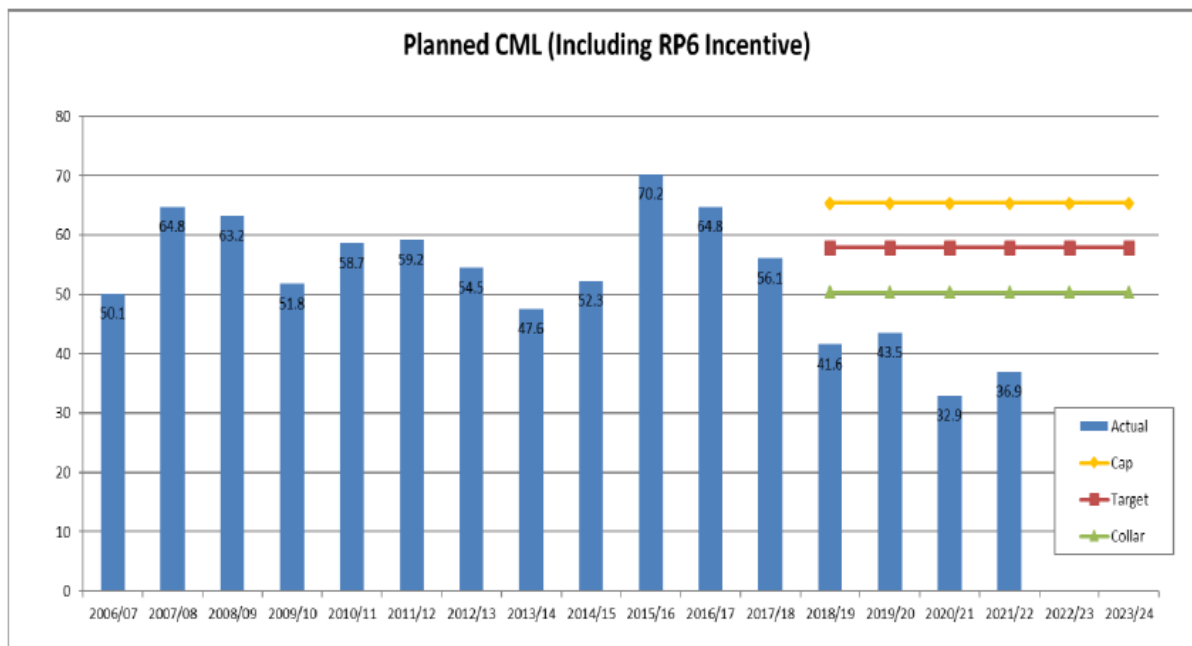


Figure 2.2: Planned CML performance against targets⁴

2.9 This outperformance has been maintained in the most recent results reported for 2022-23. The conclusion from RP6 is that the incentive has been successful with steady improvements.

NIE Networks RP7 business plan request

2.10 For RP7, NIE Networks has proposed several changes to the target setting methodology and the reliability incentive itself. Their plans can be summarised as follows:

- a) Move away from the RP6 methodology for determining unplanned CML targets as it results in a worsening objective due to the way in which customer interruptions (CIs) are used to normalise data.
- b) Propose to adopt the Ofgem ED-2 methodology. This mechanism applies a 0.5%, 2% or 4% year-on-year reduction based on past performance and utilises the current historic average as the starting point. Better performing DNOs are required to achieve a lower percentage improvement.
- c) NIE Networks expect that their RP6 performance would warrant the application of the 0.5% p.a. reduction.

⁴ Source: NIEN Network Performance Strategy, EJP 1.801, Figure 9, p21.

- d) In addition, the company proposes further unplanned CML reductions based on funded investments.
- e) Propose a VOLL of £18.35 per kWh and to retain the revenue exposure of 1.5% distribution revenue.
- f) Retain a symmetrical incentive with a cap/collar of +/- 7.59 CML.
- g) Propose that planned CML targets be removed from the reliability incentive. Instead, they suggest that planned CMLs, specifically customer perception of their impact, are incorporated into the EPF.

2.11 For the unplanned CML, the 0.5% p.a. reduction and the RP7 work programme impacts would result in the following targets:

Year	Start	25/26	26/27	27/28	28/29	29/30	30/31
0.5% Reductions	43.02	42.80	42.59	42.38	42.17	41.96	41.75
RP7 Programme		0.00	0.46	0.89	1.34	1.78	2.24
Unplan CML Target	43.02	42.80	42.13	41.49	40.83	40.18	39.51

Table 2.1: NIE Networks proposed unplanned CML targets

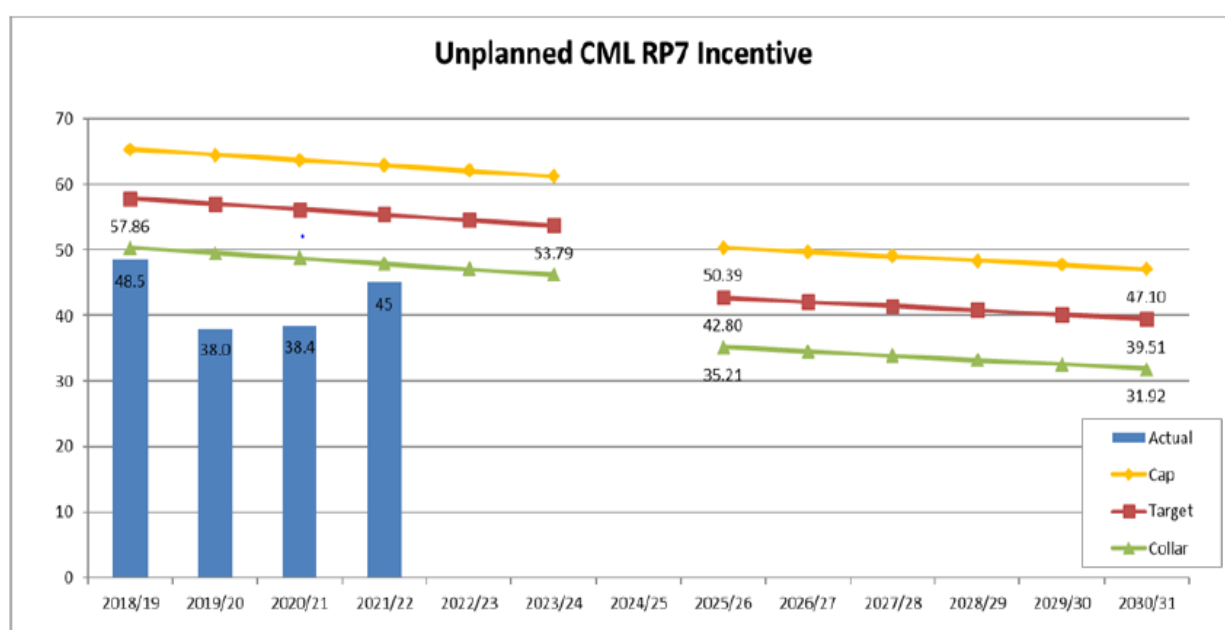


Figure 2.3: NIEN proposed unplanned CML targets with cap/collar⁵

2.12 For planned CMLs, NIE Networks suggest that this be removed from the incentive altogether. Their rationale can be summarised as follows:

⁵ Source: NIEN Network Performance Strategy, EJP 1.801, Figure 8, p19.

- Significant elements of the RP7 capital programme are subject to uncertainty mechanisms which will impact the planned CML level.
- There is significant uncertainty around the impact of the HV rebuild.
- This uncertainty also extends to connections, EV charge points and small-scale generation growth.
- Stakeholder engagement demonstrated a willingness to accept / expect a rise in planned CMLs to deliver the capital programme.

2.13 NIE Networks has estimated the impact of known projects and mitigation measures from live line working as detailed in Figure 2.4 below:

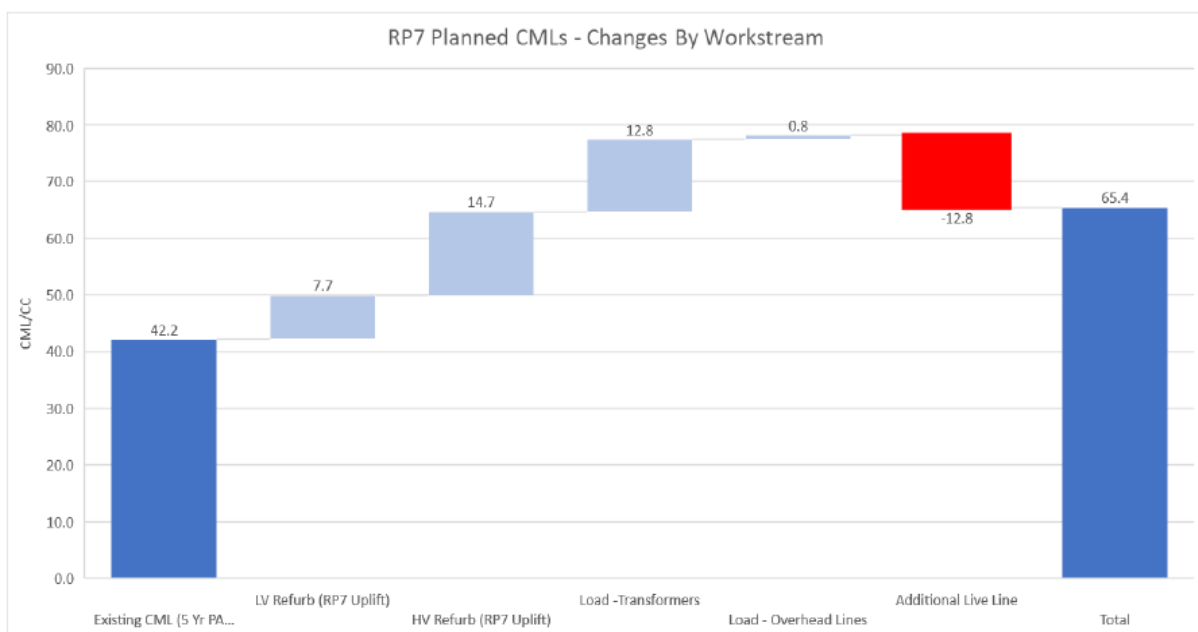


Figure 2.4: Planned CML changes by work programme⁶

2.14 NIE Networks proposed target of 65.4 planned CMLs represents a material increase from the current 5-year average of 38.5 CMLs.

UR views

Methodology

2.15 Having considered the business plan arguments, we agree that certain changes to the reliability incentive are required.

⁶ Source: NIEN Network Performance Strategy, EJP 1.801, Figure 13, p25.

- 2.16 It is clear that the RP6 methodology should not be carried forward. The method of data normalisation would lead to a softening of the unplanned target, which would be unacceptable.
- 2.17 We agree with NIE Networks that there is benefit in adopting a simplified Ofgem type approach. However, our RP7 draft determination target setting methodology differs in a couple of key ways. These include:
- a) We have updated the start point to account for the latest available year data (2022-23).
 - b) We propose use of a 4-year average to calculate the start point.
 - c) We recommend year-on-year reductions of 2% per annum.
- 2.18 Using the latest available data is uncontroversial. This just represents a timing difference between the draft determination and the business plan submission.
- 2.19 For calculation of the start-point we recommend use of a 4-year average. This has the benefit of using the most recent and pertinent data, whilst avoiding the risks of an atypical year performance. We would also note that unplanned CML performance has been relatively consistent in this period.
- 2.20 The most significant departure from the company proposal is the year-on-year reductions. Whilst it is accepted that NIE Networks has outperformed in RP6, in absolute terms the company performance in unplanned CMLs still lags that compared to most GB DNOs.
- 2.21 This might be expected to some extent given the higher proportion of overhead lines (OHL) and greater risk of adverse weather impacts. However, the absolute performance suggests scope for improvement still exists. This is also demonstrated by GB DNOs⁷ who have a comparable proportion of OHL but much lower levels of unplanned CMLs.

Risk and reward

- 2.22 We are content to accept NIE Networks proposals for VOLL which simply reflects the RP6 value uplifted to 2021-22 prices. In terms of risk exposure the 1.5% revenue is worth simplifying as this figure is subject to change.
- 2.23 For the purpose of the draft determination we are recommending a fixed cap/collar of +/-£2.5m per annum in 2021-22 prices. This simplifies the

⁷ Western Power Distribution (South Wales) and (South West) both meet the criteria of high proportion of OHL yet lower CMLs than NIE Networks. Scottish Hydro Electric Power Distribution has worse performance but has been tasked with 4% year-on-year reductions.

calculation and is not dissimilar to NIE Networks own forecast of +/-£2.4m for unplanned CML allowances.

2.24 Given the uncertainty around planned CMLs, we also recommend adjusting the revenue allocation on an 80:20 split (£2m / £0.5m) between unplanned and planned CMLs respectively. The impact of this decision is a cap/collar of +/- 6.32 CMLs around the unplanned target.

2.25 The outworking of the new approach can be summarised in Table 2.2 and Figure 2.5 as follows:

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 2.2: UR proposed unplanned CML targets

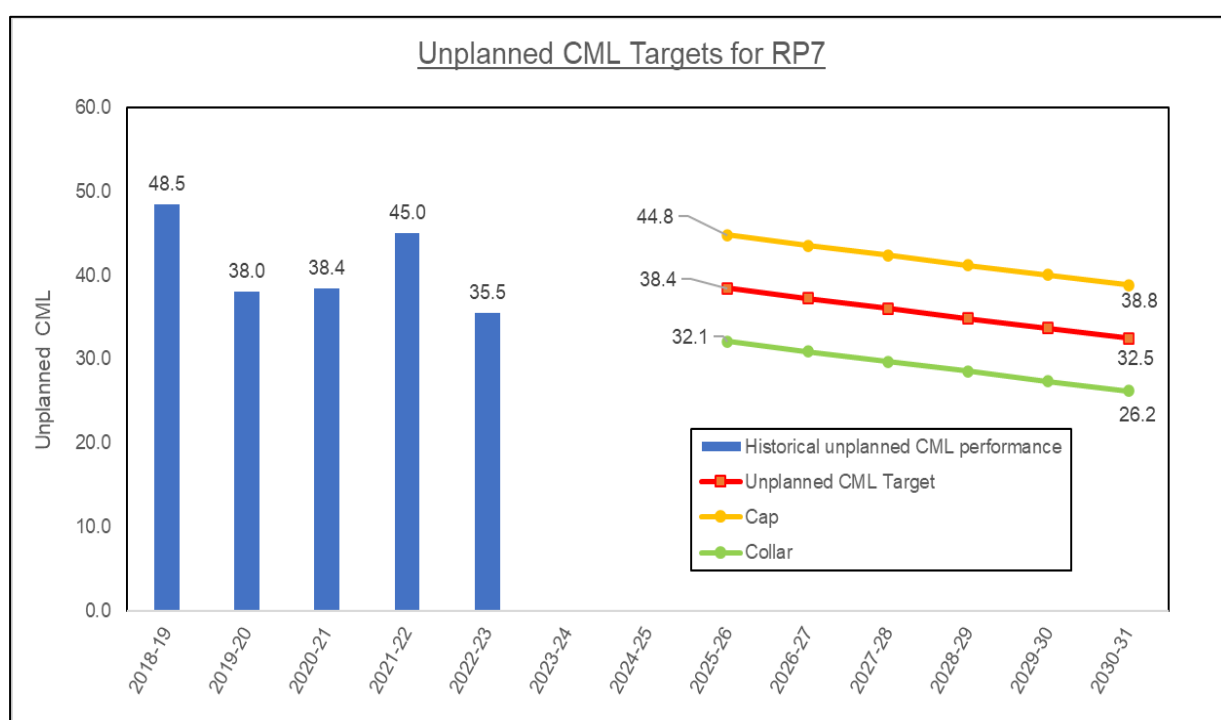


Figure 2.5: UR proposed unplanned CML targets with cap/collar

2.26 It is our view that the proposals represent a challenging but achievable improvement in reliability. The financial parameters for calculation of the CML cap/collar are detailed in Table 2.3 below.

Variable	Figure	Unit of Measurement
Annual electricity consumption	8,533,695,568	kWh
Total hours in a year	8,760	Hours
Number of meters	894,977	Number
Customer numbers used for CML	950,000	Number
Average consumption per hour	1.088	kWh per customer
Value of Lost Load (VOLL)	£18.35	£/kWh
Cost per hour per customer	£19.97	£/kWh
Cost of customer hour lost	£18,973,124	£
Cost of unplanned CML	£316,219	£
Cost of planned CML	£79,055	£
RP7 revenue exposure (annual)	+/- £2,500,000	2021/22 prices
Unplanned CML allowance (4/5)	+/- £2,000,000	2021/22 prices
Planned CML allowance (1/5)	+/- £500,000	2021/22 prices
CML Cap/Collar	+/- 6.32	CMLs

Table 2.3: Assumptions used to calculate the CML cap / collar

Planned CML Targets

- 2.27 We accept NIE Networks logic that the larger capital programme could negatively impact planned interruptions and CMLs. We also accept that creating fixed 6-year targets is not appropriate with the proposed changes.
- 2.28 On the other hand, these same challenges are being faced by GB DNOs. In their final determination Ofgem state,
- “The target will be set using the RIIO-ED1 approach, which is based on a rolling three-year average with a two-year lag, as per our SSMD position. We consider that this approach ensures that DNOs cannot allow their performance to deteriorate without facing a penalty and that it is sufficiently flexible to reflect changes in work programmes.”⁸
- 2.29 Use of the 3-year rolling average takes account of historical performance and imposes penalties for deterioration. Given this, it seems evident that the GB DNOs are not anticipating the same decline in planned CML performance as NIE Networks. The reason for this difference is unclear.
- 2.30 We do not think the RP6 methodology of a fixed price control target is feasible. Furthermore, we consider this metric adds value for consumers and therefore we believe it important that NIE Network continues to focus on

⁸ Source: Ofgem Final Determination, Core Methodology [Document](#), para 6.125, p183.

minimising this impact for consumers. Having reviewed the NIE Network submission we do not consider the NIE Networks proposal of an increase to 65.4 planned CMLs to be an appropriate target.

- 2.31 We are unclear what is meant by the company statement that, “we propose that planned CMLs, specifically customer perception of their impact, are incorporated into the newly proposed Evaluative Performance Framework”. It is uncertain how this would be measured and incentivised.
- 2.32 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 ensures that focus on this metric continues but allows flexibility for changing capital programmes.
- 2.33 However, this approach only allows for the setting of a specific target for the first year of RP7. Targets will automatically be recalibrated each year thereafter depending on outturn performance.

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

Table 2.4: UR proposed planned CML target

- 2.34 We recommend that performance against targets be reported on an annual basis. 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.
- 2.35 We consider this proposal a reasonable approach. It lowers the risk associated with the planned element of the reliability incentive but ensures that focus on this important metric is not lost.
- 2.36 We are however willing to engage further on the new planned CML target setting methodology. We would welcome feedback from NIE Networks as to why their planned CML deterioration is not expected to be matched in GB.

3. Cost Sharing Mechanism

Summary

- 3.1 In terms of the 50:50 cost sharing mechanism, NIE Networks are not proposing any major structural changes. The only material consideration is what items currently included might be subject to future exclusion i.e. business rates, innovation costs, severe weather etc.
- 3.2 We agree with NIE Networks that this incentive still represents an important tool in encouraging efficiency and restraining cost. Consequently, no major change to the structure of the incentive is suggested.
- 3.3 For severe weather, it is our intention to retain these costs as part of the cost sharing mechanism. Our rationale is set out in Annex D. We have accepted NIE Networks arguments around business rates and propose to remove these costs from the 50:50 mechanism. Commentary is set out in Annex S.
- 3.4 Innovation costs are expected to be removed from the mechanism as this is not an area where underspend is to be incentivised. We do however expect overspend to still be subject to cost sharing. Proposals around this issue is set out in Annex N.

4. Revenue Protection Services Incentive

Summary

- 4.1 The Revenue Protection Services Incentive (*RPSIt* licence term) is where the customer and NIE Networks share certain revenue streams on a 50:50 basis. The revenue includes:
- a) Money recovered from theft of electricity.
 - b) Money recovered from third parties for the cost of network repairs associated with theft.
 - c) Income from third parties for revenue protection services.
- 4.2 The value of this incentive can fluctuate depending on the amount of revenue recovered. This incentive is asymmetric in that there is no downside risk or penalty.
- 4.3 NIE Networks are not proposing any change to the working of this incentive. We agree and have not suggested any further changes.

5. Worst Served Customers

Summary

- 5.1 Although not a financial incentive for NIE Networks, Ofgem has a fund for the worst served customers (WSCs) who may not benefit from the reliability incentives.
- 5.2 For RP7, NIE Networks has proposed an ex-ante allowance of £3m to address some of the issues by targeting some of the worst performing circuits. The investment includes:
- Automatic sectionalising links
 - Network reconfiguration
 - Undergrounding overhead line sections
 - Targeted tree cutting (beyond the scope of existing tree cutting specification)
 - Fitting of bird diverters
 - Fitting shrouded conductor
 - Use of other innovative technologies
- 5.3 Full discussion of this issue is detailed in Annex P. In summary, we are supportive of the plans to address WSC issues. However 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.
- 5.4 Consequently, we do not propose a separate ex-ante allowance or WSC fund. We do however think that the WSC numbers should be monitored and reported against as part of the annual cycle, either via the RIGS or the system performance report.
- 5.5 Further consideration can be given by NIE Networks to ensure they deliver best-in-class service for these customers within the Evaluative Performance Framework incentive.