



# REPLACEMENT POLES ADDENDUM

UE RRP BUS 3.4.01 – PUBLIC 2026–31 REVISED PROPOSAL

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### 1. Overview

This business case addendum sets out our response to the AER's draft decision on our poles program and presents the key updates made since our regulatory proposal. It should be read in conjunction with the following documents:

- our regulatory proposal business case<sup>1</sup>
- our revised wood pole condition forecast model.<sup>2</sup>

We have carefully considered the AER's draft decision and provide responses to the AER's concerns regarding our modelling, cost assumptions and justification of volumes. These include:

- updates to our pole decay modelling that support an increase in volumes from the current period
- · clarification of historical defect and intervention data
- · application of updated unit rates.

These changes reflect the latest available information and support intervention volumes above those included in the AER's draft decision. Our revised proposal, however, is lower than our regulatory proposal.

Our revised forecast for our poles program is presented in table 1. The forecast supports a sustainable, long-term asset management approach that balances safety, cost efficiency and customer service.

TABLE 1 REVISED PROPOSAL: POLES (\$M, 2026)

CATEGORY	REGULATORY PROPOSAL	DRAFT DECISION	REVISED PROPOSAL
LV pole replacement	55.5	39.4	49.9
HV pole replacement	57.0	40.5	49.6
Wood pole reinforcement	7.9	5.6	5.6
TOTAL	120.4	85.5	105.1

<sup>&</sup>lt;sup>1</sup> UE BUS 4.01 – Poles, January 2025

<sup>&</sup>lt;sup>2</sup> UE RRP MOD 3.4.01 – Wood pole condition forecast, December 2025

## 2. Background

Poles are essential to an overhead electricity distribution network. Their basic function is to support overhead electrical conductors and other pole mounted assets and to provide safe clearance from the ground and other objects (including vegetation).

This section provides an overview of our poles asset class, including our regulatory proposal and the AER's draft decision.

#### 2.1 Our regulatory proposal

In our regulatory proposal, we used a condition-based methodology to develop forecasts for pole interventions in the 2026–31 regulatory period. Specifically, we used observed sound wood thickness decay rates, and current asset condition from the most recent inspection, to model future condition. This approach is consistent with the AER's industry practice application note:<sup>3</sup>

Analysis at the subpopulation level is very similar to the analysis involved in making a retirement decision for a single specific asset or an entire fleet of assets. Such retirement decisions are similarly based on risk assessments that set and are implicit in asset inspection standards. For example the decision to condemn a wooden pole is based on a "safe" thickness that takes into account the probability and consequences of failure compared to the cost of pole staking or replacement.

Our model informed our forecast of unserviceable and limited-life poles expected to be identified during inspections, which indicated an increasing volume of poles requiring intervention (particularly among lower durability classes). Without intervention, the risk of failure and associated safety consequences would escalate.

An increasing volume forecast was also consistent with unassisted wood pole failures having increased steadily since 2017, with high-priority defects (especially P2) similarly rising.

Energy Safe Victoria (ESV) recognised that low failure rates do not justify low intervention volumes, particularly when the underlying condition of the asset population is deteriorating. From its review of our wood pole management practices, the ESV's feedback validated our approach and reinforced the need for sustainable proactive interventions.

#### 2.2 AER draft decision

In its draft decision, the AER did not accept our proposed capital expenditure for our poles program and instead allowed a materially lower substitute estimate (as shown previously in table 1).

The AER noted that we did not provide sufficient evidence to justify the proposed increase in pole replacement volumes, given our strong historical performance and the mismatch in defect and intervention volumes.

Based on initial conclusions made by EMCa, the AER determined that:

- our decay model volumes did not reconcile with the actual and forecast intervention volumes in our proposal and lacked transparency around input data
- we did not test alternative volume scenarios to justify our proposed uplift in volumes

<sup>3</sup> AER, Industry practice application note – Asset replacement planning, July 2024, pp. 61–62

- we did not provide sufficient evidence that there had been an increase in historical defect volumes and did not explain discrepancies between historical defect and intervention volumes
- our historical pole failure rate is already low and stable.

Our response to each of these AER points is set out in section 3.1 below.

## 3. Our revised proposal

In response to the AER's draft determination, we have updated inputs to our decay modelling, resulting in minor reductions to our pole volumes in the revised proposal. We have also updated our unit rates to capture the latest available data and used an average over the last four years. These updates have resulted in a reduction in our proposed expenditure.

Overall, we maintain that increasing pole interventions is prudent and necessary to manage asset population condition and ensure network safety.

#### 3.1 Response to AER draft decision

The following sections summarise our response to the key issues raised by the AER on our poles program as well as additional changes we have made to the calculation of our unit rates.

#### 3.1.1 Updated decay modelling inputs

The AER noted that our decay model volumes did not reconcile with the historical actual and forecast intervention volumes in our proposal and our model lacked transparency around input data.

We have updated our decay model to reflect the most recent available data

We have updated our decay model to reflect the latest point in time of our pole population condition. This includes updating inputs related to limited life pole intervention rate and the sound wood thickness decay rates.<sup>4</sup>

Unlike unserviceable poles which require immediate intervention, we consider several factors before deciding to intervene on limited life poles. We therefore include a limited life pole intervention rate in our decay model to represent only the proportion of limited life poles that will require intervention.

We previously used an 85 per cent limited life pole intervention rate based on three years of historical data to FY21. Since our regulatory proposal, we have reviewed the latest four years of actual data, which showed a 69 per cent limited life pole intervention rate (i.e. from FY22–FY25, we have intervened on 69 per cent of all limited life poles). We have therefore updated our decay model with the latest, lower limited life pole intervention rate.

We have also updated our sound wood thickness decay rates with the latest rates derived from actual measurements up to FY25. In our regulatory proposal, we had used actual measurements up to August 2023.

These updated decay rates included in our modelling have been reviewed by an independent wood pole expert, who has provided an associated report in support of our decay rates and methodology.<sup>5</sup> The independent wood pole expert found the following:

Overall, the decay rates used in service life predictions are well-founded, statistically robust, and corroborated by independent research, making them a reliable basis for asset management and replacement planning.<sup>6</sup>

<sup>&</sup>lt;sup>4</sup> UE RRP MOD 3.4.01 – Wood pole condition forecast, December 2025

<sup>5</sup> UE RRP ATT 3.4.01, Factors affecting sound wood wall thickness of timber poles and implications for service life prediction, December 2025

<sup>&</sup>lt;sup>6</sup> UE RRP ATT 3.4.01, Factors affecting sound wood wall thickness, December 2025, p. 1

The report also considered that our own decay rates reflect 'realistic degradation patterns influenced by timber species, preservative treatment, environmental exposure, and biological activity'.

We consider that this provides robust justification for the updated decay rates included in our modelling and have attached the full independent report.

#### Decay model volumes reconciled with actual volumes once inputs were updated

Following these updates we have re-run our model for the last five financial years to see what the forecast interventions based on the most recent actual data would have predicted. Once the modelling inputs are updated, the historical forecast from our decay model reconciled with our actual intervention volumes, with our actual interventions three per cent higher across the last five years (FY21 to FY25). This is shown in table 2 below with forecast interventions set out in the following model.<sup>8</sup>

TABLE 2 ACTUAL VS MODELLED INTERVENTIONS (FY21–FY25)

CATECODY

CATEGORI	TOTAL INTERVENTIONS
Forecast interventions	9,287
Actual interventions	9,581

This provides evidence that our asset management practices are accurately represented by the decay rate modelling and therefore that our proposed forecast volumes, which are calculated based on the same inputs, will continue to reflect our asset management practices over the 2026–31 regulatory period. Based on the updates to our decay rates and limited life pole intervention rates, we note that our forecast interventions for the 2026–31 regulatory period have decreased slightly from our regulatory proposal.

#### We seek clarity on the lack of transparency of input data

With regard to transparency, we have reviewed our model submitted as part of our regulatory proposal and remain unclear of the basis of the AER's comments on the lack of input data transparency. We note that calculations and formulae are used throughout the model to arrive at our proposed interventions.

We welcome further feedback from the AER on the inputs that are creating transparency concerns.

#### 3.1.2 Testing alternative volume scenarios to justify volumes

The AER raised concerns that our proposed pole interventions were not tested against alternative volume scenarios.

Our proposed pole intervention volumes are the direct result of the current condition of our assets, their current decay rates and our industry-standard practices for managing pole safety and reliability. We are simply forecasting the volume of assets coming to the end of the life. Providing alternative volume estimates would require us to ignore the current condition and deterioration rates of the population of assets and the AER's industry practice note on how to assess the risk of high volume low value assets.<sup>9</sup>

Our asset management approach is built on a structured understanding of asset condition, risk and lifecycle performance. The forecast volumes reflect the level of intervention required to maintain safety

TOTAL INTERVENTIONS

UE RRP ATT 3.4.01, Factors affecting sound wood wall thickness, December 2025, p. 1

<sup>8</sup> UE RRP MOD 3.4.02 – Backcast wood pole condition forecast, December 2025

<sup>&</sup>lt;sup>9</sup> AER, Industry practice application note – Asset replacement planning, July 2024, pp. 61–62

obligations and manage the ageing pole population. Suggesting alternative volumes outside this framework, particularly volumes below what we are currently forecasting, would undermine the integrity of our pole safety.

Findings from the recent ESV review of our wood pole management practices also identified several key risks that support our proposed increase in pole interventions. ESV concluded that we had not yet demonstrated that current practices minimise safety risks as far as practicable.

In summary, our proposed volumes are prudent and efficient because they are grounded in a robust, evidence-based asset management methodology. They represent the minimum level of interventions required to sustainably manage safety, reliability and compliance risks across our pole population. Given this, we consider any alternative volume scenarios could only lead to additional interventions.

#### 3.1.3 Evidence of historic defect and intervention volumes

The AER considered we did not provide sufficient evidence that there had been an increase in historic defect volumes and that our historical interventions and defect volumes did not align.

Our intervention volumes align to defects over the long-term

The AER identified specific years in which our interventions appeared to exceed the identified defects. We attribute this to the delay period between a defect notification and the time of the actual intervention which can lead to year-on-year variations between defects and interventions.

For example, to remove this timing vagary, we have totalled interventions and defects from FY19 to FY25. Based on this longer term comparison, we can confirm we have intervened on 13,475 poles against 13,718 pole defect notifications. We consider these figures to be extremely well aligned with a discrepancy of less than two per cent over seven years.

Our forecast volumes reflect a deterioration in condition, not defects and failures

We disagree that the number of interventions should be linked to changes in historical defects, as implied by the AER in its draft decision. To the contrary, as our pole program maintains our levels of service, we would not expect to see historical defects and failures increasing (i.e. these are lagging indicators).

We reiterate that our forecast method is consistent with the AER's Industry practice application note for asset replacement. This note primarily references our current asset condition (sound wood thickness), our actual observed condition degradation and our compliance obligations to model individual conditions for our assets, as well as applying wear-out curves to develop failure curves. <sup>10</sup> Furthermore, the AER's suggestion that the observed increase in failures during 2018–20 is likely due to natural volatility reinforces that failure rates are not a reliable indicator of future risk.

Our approach does not mean that intervention volumes will be stable. Our condition-based methodology appropriately aligns with our historical data, with corroborating back-casting and independent reports clearly demonstrating that our change in volumes is associated with a change in the underlying condition of our pole population over time.

Stated alternatively, the absence of a defect or failure trend should not be conflated to imply the absence of any need for growing intervention volumes. Particularly in the face of strong evidence to the contrary.

#### 3.1.4 We should maintain our historical pole failure rate

The AER noted that our historical pole failure rate of 0.4 per 10,000 poles per annum is below the industry benchmark of 1 per 10,000.

AER, Industry practice application note – Asset replacement planning, July 2024, pp. 61–62

Benchmarking failure rates does not consider the level of service customers expect in different networks, nor the objectives in the National Electricity Rules (the Rules) to maintain reliability. <sup>11</sup> Neither does it consider localised safety risks associated with failures, where a failure in a built up or populated environment is likely to present far more public safety risk than in an isolated non-accessible area.

We note that we are one of the highest performing networks in the National Electricity Market (NEM) for customer reliability. Our customers value this service level, and when tested during the development of our regulatory proposal, they explicitly rejected any concept of trading off reliability for lower prices. It is therefore critical that we are funded to maintain this level of reliability, rather than decrease our level of service to match NEM wide averages.

Our historic performance validates our current approach, and our proposed volumes are required to maintain this level of reliability and safety.

#### 3.1.5 We have updated our unit rates to reflect the most recent data

The unit rates included in our regulatory proposal were based solely on FY24 data. We have now updated our unit rates to reflect a four-year average, incorporating the latest available data up to FY25. This approach provides a unit rate trend over time, smoothing out any anomalies that may occur in a single financial year.

Notwithstanding the above, our unit rates are relatively unchanged from our regulatory proposal.

#### 3.2 Revised proposal forecast

This section outlines our updated forecast volumes and revised proposal expenditure as shown in table 3 and table 4, respectively. These are consistent with our revised decay rate modelling. 12

Overall, we have reduced our forecast volumes from our regulatory proposal. Along with minor changes to unit rates, this has led to a corresponding decrease in expenditure.

TABLE 3 REVISED FORECAST VOLUMES

CATEGORY	FY27	FY28	FY29	FY30	FY31	TOTAL
LV pole replacement	923	923	924	925	925	4,620
HV pole replacement	560	560	560	560	560	2,800
Wood pole reinforcement	1,299	1,299	1,299	1,299	1,299	6,495
TOTAL	2,782	2,782	2,783	2,784	2,784	13,915

<sup>&</sup>lt;sup>11</sup> Clause 6.5.7(a)(3)(iii)

UE RRP MOD 3.4.01 – Wood pole condition forecast, December 2025

TABLE 4 REVISED FORECAST EXPENDITURE (\$M, 2026)

CATEGORY	FY27	FY28	FY29	FY30	FY31	TOTAL
LV pole replacement	10.0	10.0	10.0	10.0	10.0	49.9
HV pole replacement	9.9	9.9	9.9	9.9	9.9	49.6
Wood pole reinforcement	1.1	1.1	1.1	1.1	1.2	5.6
TOTAL	21.0	21.0	21.0	21.0	21.1	105.1

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