# **Draft decision**

CitiPower, Powercor and United Energy electricity distribution determinations
1 July 2026 – 30 June 2031

Attachment 14 – Alternative control services

September 2025



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# 14 Alternative control services

This attachment sets out our draft decisions on prices CitiPower, Powercor and United Energy (CPU) are allowed to charge customers for the provision of the following alternative control services: ancillary network services (ANS) and public lighting services. Our draft decisions on metering services, which are also alternative control services, is set out separately in Attachment 15.

As the proposals from CPU for ANS and public lighting are largely similar, this attachment and the decisions and reasoning apply to all three businesses. Where there are differences in proposals, decisions or our reasoning we have explicitly set this out.

Alternative control services are customer specific, or customer requested services and so the

full cost of the service is attributed to a particular customer, or group of customers, benefiting from the service.

We set service specific prices to provide a reasonable opportunity to the distributor to recover the efficient cost of each service from customers using that service. This is in contrast to standard control services where costs are spread across the general network customer base.

#### Note on our draft decision price lists

Unlike previous distribution determinations for Victoria, we have not included our draft decision price lists for ANS and public lighting services in this document. Rather, our draft decision price lists are within the ANS models and public lighting pricing models, respectively, that we publish with this draft decision.

- AER MOD 11.07 Standardised ANS model Draft Decision CitiPower distribution determination 2026-31 - September 2025
- AER MOD 11.07 Standardised ANS model Draft Decision Powercor distribution determination 2026-31 - September 2025
- AER MOD 12.07 Standardised ANS model Draft Decision United Energy distribution determination 2026-31 - September 2025
- AER Public lighting PTRM Draft decision CitiPower distribution determination 2026-31 - September 2025
- AER Public lighting PTRM Draft decision Powercor distribution determination 2026 31 September 2025
- AER Public lighting PTRM Draft decision United Energy distribution determination 2026-31 - September 2025

In this attachment, we point to these models, including cell references, when discussing our draft decision price lists.

We have made this change to avoid transcription errors that can occur when replicating prices from the model in the document. We have been conscious to make the presentation of the price lists in the models easily accessible for stakeholders. We are open to receiving

feedback from stakeholders on the presentation of these price lists and any future improvements.

# 14.1 Ancillary network services

ANS are non-routine services provided to individual customers as requested. Our Framework & Approach (F&A) paper outlines several types of services that meet this broad definition.<sup>1</sup>

ANS are charged to customers on a user-pays approach, which are either charged on either a fee or quotation basis, depending on the nature of the service.

We determine price caps for fee-based services for the 2026–31 period as part of our determination, based on the cost inputs and the average time taken to perform each service. These services tend to be homogenous in nature and scope and can be costed in advance of supply with reasonable certainty, such as disconnections and special meter reads.

By comparison, prices for quoted services are based on the quantities of labour and materials required, with the quantities dependent on a particular task. Prices for quoted services are determined at the time of a customer's enquiry and reflect the individual requirements of the customer's service request.

For this reason, it is not possible to list prices for quoted services in our decision. However, our draft decision sets the maximum labour rates to be applied to quoted services.

#### 14.1.1 Draft decision

Our draft decisions do not accept CPU's proposal as submitted. Based on our analysis and updated inputs, our draft decisions are to:

- Accept CPU's proposed quoted services labour rates for the following labour categories as they are below the maximum benchmark labour rates:
  - Administrative officer (after hours)
  - Field worker (business hours for United Energy and after hours for CPU)
  - Technical specialist (after hours)
  - Engineer (business hours and after hours)
  - Senior engineer (business hours and after hours)
  - Engineering manager (after hours).
- Not accept the following labour rates as they are above our maximum benchmark labour rates (in some cases only slightly). As a result, we have substituted them with our benchmark labour rates:
  - Administrative officer (business hours)
  - Field worker (business hours for CitiPower and Powercor only)
  - Technical specialist (business hours)

See AER, Final framework and approach – AusNet Services, CitiPower, Jemena, Powercor and United Energy 2026–31, July 2024, p.8. Our F&A paper outlines several types of services that can be considered as meeting this broad definition such as network ancillary services, basic connection services and non-routine metering services.

- Engineering manager (business hours).
- Not accept CPU's proposal to reclassify the following quoted services to fee-based services:
  - Reserve feeder maintenance
  - Connection application service (for CitiPower and Powercor).
- Substitute CPU's nominal vanilla weighted average capital cost (WACC) used to
  calculate its diminishing value tax recovery rate with our draft decision nominal vanilla
  WACC, correct its depreciation rate so include first-year depreciation and write off the
  residual value of the asset at the end of its effective life.
- Substitute CPU's proposed price caps and year one (2026–27) prices for fee-based services with our draft decision price caps and prices for 2026–27 (see section 16.1.4.2 and our draft decision ANS models).<sup>2</sup>
- Substitute CPU's proposed X factors for years two to five with our draft decision X factors, based on our labour price growth forecasts (see our draft decision ANS models).<sup>3</sup>

Our draft decision ANS prices for 2026–31 and X factors are set out in the Draft Decision ACS Fee based and quoted services models. Our draft decision ANS prices for the 2026–31 period are, on average, -2.2%, -2.2% and -1.6% lower than CitiPower, Powercor and United Energy's proposed prices respectively.

As set out in Attachment 12, our draft decision is to maintain our final F&A position to apply price caps to ANS as the form of control.

Under a price cap form of control, we set a schedule of price caps for fee-based services and maximum labour rates for quoted services for the first year of the regulatory control period, 2026–27. For each year thereafter, we adjust the price caps and maximum labour rates for inflation, the X factor<sup>4</sup>, and any relevant adjustments. This mechanism is set out in greater detail in section 12.5.2 of Attachment 12.

As ANS have a high share of labour and labour-related inputs, we use labour price growth forecasts as the ANS X factor. Consistent with our previous decisions, we derived the X factor by averaging wage price index growth forecasts from Deloitte (provided by the AER)

AER, AER – MOD 11.07 Standardised ANS model - Draft Decision - CitiPower distribution determination 2026-31 - September 2025, Table 3 in excel tab 'AER Draft Decision - Services'.

AER, AER – MOD 11.07 Standardised ANS model - Draft Decision - Powercor distribution determination 2026-31 - September 2025, Table 3 in excel tab 'AER Draft Decision - Services'.

AER, AER – MOD 12.07 Standardised ANS model - Draft Decision - United Energy distribution determination 2026-31 - September 2025, Table 3 in excel tab 'AER Draft Decision - Services'.

AER, AER – MOD 11.07 Standardised ANS model - Draft Decision - CitiPower distribution determination 2026-31 - September 2025, Table 1 in excel tab 'AER Draft Decision - Labour'.

AER, AER – MOD 11.07 Standardised ANS model - Draft Decision - Powercor distribution determination 2026-31 - September 2025, Table 1 in excel tab 'AER Draft Decision - Labour'.

AER, AER – MOD 12.07 Standardised ANS model - Draft Decision - United Energy distribution determination 2026-31 - September 2025, Table 1 in excel tab 'AER Draft Decision - Labour'.

Under the CPI–X framework, the X factor can be a measure of the real rate of change in prices from one year to the next.

and BIS Oxford Economics (provided by the distributor).<sup>5</sup> Our draft decision X factors for ANS are set out in our draft decision ANS model.<sup>6</sup>

# 14.1.2 CPU's proposal

CPU proposed to maintain its list of fee-based services from the 2021–26 period. In addition, CPU proposed to reclassify two existing quoted services to fee-based services:<sup>7</sup>

- Connection application applicants are currently charged to cover administration and basic design costs, even if they do not accept a connection offer. To streamline the process, CitiPower and United Energy proposed to introduce nine pre-calculated charges covering a range of connection application services and proposes classifying them as fee-based services due to their fixed nature.
- Reserve feeder maintenance due to volatile charges year to year and difficulty in annual calculations, CPU proposed to derive maintenance costs from historical regulatory information and averaging them per kVA for low voltage, high voltage, and sub-transmission feeders.

CPU proposed to maintain its current five labour categories to reflect the different types of labour it uses in providing ANS (see Table 14.1 and Table 14.2).8 CPU also proposed introducing an additional labour category, the engineering manager, at a cost 20% higher than a senior engineer. It stated this was so that quoted service costs can be more accurately calculated. We note CitiPower, Powercor and United Energy proposed an average increase of 8.3%, 8.3% and 8.2% respectively in their labour rates across the labour categories compared to its approved 2025–26 rates.

CPU derived its proposed labour rates for the 2026–31 period, including 2026–27, by escalating the approved ANS labour rates in 2023-24 by inflation and labour price growth.<sup>9</sup> CitiPower, Powercor and United Energy's proposed labour rates for 2026–27 are on average 4.9% higher than its approved 2025–26 labour rates.

For more detail on the reasons for this decision, see the discussion in section 3.4.2 of Attachment 3 – Operating expenditure.

AER, AER – MOD 11.07 Standardised ANS model - Draft Decision - CitiPower distribution determination 2026-31 - September 2025, Table 1 in excel tab 'AER Draft Decision - Labour'; AER, AER – MOD 11.07 Standardised ANS model - Draft Decision - Powercor distribution determination 2026-31 - September 2025, Table 1 in excel tab 'AER Draft Decision - Labour'; AER, AER – MOD 12.07 Standardised ANS model - Draft Decision - United Energy distribution determination 2026-31 - September 2025, Table 1 in excel tab 'AER Draft Decision - Labour'.

<sup>&</sup>lt;sup>7</sup> CitiPower, *CP ATT 11.02 - Ancillary network services - Jan2025 – Public*, pp. 5-6. Powercor, *PAL ATT 11.02 - Ancillary network services - Jan2025 – Public*, pp. 5-6. United Energy, *UE ATT 11.02 - Ancillary network services - Jan2025 – Public*, p. 5.

<sup>&</sup>lt;sup>8</sup> CitiPower, *CP ATT 11.02 - Ancillary network services - Jan2025*, p.12. Powercor, *PAL ATT 11.02 - Ancillary network services - Jan2025*, p.12. United Energy, *UE ATT 11.02 - Ancillary network services - Jan2025*, p.11.

<sup>&</sup>lt;sup>9</sup> CitiPower, *CP ATT 11.02 - Ancillary network services - Jan2025*, p.11. Powercor, *PAL ATT 11.02 - Ancillary network services - Jan2025*, p.11. United Energy, *UE ATT 11.02 - Ancillary network services - Jan2025*, p.10.

For its quoted services, CPU included a 6% margin applied to the total of labour, contractor services and materials.<sup>10</sup> This is consistent with our control mechanism formulae for quoted services as set out in the F&A paper.<sup>11</sup>

CPU used the AER's standardised ANS model to escalate its approved 2023–24 fee-based prices to 2026–27 terms, applying inflation and labour price growth.<sup>12</sup> For those fee-based services that CPU identified as being capital in nature (connection services), a tax recovery component of 8.8%, based on a diminishing value method, was applied to the service cost.<sup>13</sup>

#### Stakeholder views

We did not receive any submissions in relation to CPU's ANS proposals.

# 14.1.3 Assessment approach

The regulatory framework for assessing alternative control services is less prescriptive than for standard control services. That is, there is no requirement to apply the building block model exactly as prescribed in Part C of the National Electricity Rules (NER).

On this basis, our approach involves an assessment of the efficient costs of providing ANS. Labour costs are the major input in the cost build-up of prices for ANS. Therefore, our assessment focuses on comparing CPU's proposed labour rates against AER's maximum total labour rates which we consider efficient.

Where CPU's proposed labour rates exceed our maximum efficient labour rates, we apply our maximum efficient labour rates to determine prices. We follow this assessment process for services provided on a fee or quotation basis. Given CPU determined its proposed feebased prices by escalating approved 2023-24 prices, rather than on a bottom-up basis, we have undertaken this assessment with reference to its previous prices which were developed on a bottom-up basis.

We also considered relevant stakeholder feedback raised throughout the consultation process and benchmarked CPU's proposed ANS prices against its prices for the 2021–26 period and the prices of other distributors.

Where necessary, we seek further information from CPU to reconcile specific cost drivers and often benchmark these against other distributors.

We will also make further adjustments to CPU's ANS prices where we consider it appropriate to do so.

CitiPower, CP ATT 11.02 - Ancillary network services - Jan2025, p. 12. Powercor, PAL ATT 11.02 - Ancillary network services - Jan2025, p. 12. United Energy, UE ATT 11.02 - Ancillary network services - Jan2025, p. 12.

AER, Final framework and approach – AusNet Services, CitiPower, Jemena, Powercor and United Energy 2026–31, July 2024, p.14.

CitiPower, CP ATT 11.02 - Ancillary network services - Jan2025, p. 3; Powercor, PAL ATT 11.02 - Ancillary network services - Jan2025, p. 3; United Energy, UE ATT 11.02 - Ancillary network services - Jan2025, p. 3.

CitiPower, CP ATT 11.02 - Ancillary network services - Jan2025, p.12; Powercor, PAL ATT 11.02 - Ancillary network services - Jan2025, p. 12; United Energy, UE ATT 11.02 - Ancillary network services - Jan2025, p. 11.

#### 14.1.4 Reasons for draft decisions

As stated above, we do not accept aspects of CPU's proposals, namely a number of proposed labour rates, although we consider CPUs proposals are largely reasonable.

Section 14.1.4.1 discusses the maximum labour rates we consider are appropriate for determining whether CPU's proposed labour rates are efficient.

Section 14.1.4.2 sets out how we assessed CPU's proposed fee-based prices and, where appropriate, adjusted them to derive our draft decision prices for 2026–27. This includes adjusting the fee-based prices for inflation and revised inputs used to calculate the tax rate. We also discuss CitiPower's proposal to add two new fee-based services for connection applications and reserve feeder maintenance.

#### 14.1.4.1 Labour rates

For ANS we typically review the key inputs in determining the price for the service. We focus on labour rates as these are the principal input.

Consistent with the 2021–26 period, we continue to categorise CPU's proposed labour rates into six different categories. This is on the basis that although distributors use different labour categories and descriptions, the types of labour used to deliver ANS broadly fall into the following categories: administration, technical specialists, field workers, engineers, and senior engineers. For Victoria, we also benchmark a sixth category: engineering manager.

This method is a continuation of Marsden Jacob's previous reports for the AER in relation to labour rates and ANS.<sup>14</sup>

In assessing the reasonableness of the proposed labour rates, we:

- derived salary ranges for our labour categories using Victoria salary data for various electricity distribution-related occupations from the most recent, publicly available Hays Salary Guide (Hays)<sup>15</sup>
- derived the raw hourly rate using the maximum salaries in each of the categories, dividing by number of weeks in a year and hours in a week
- escalated for on-costs (leave, superannuation, workers compensation, payroll tax)
- escalated for overheads we continue to use a maximum overhead rate of 61%, based on Marsden Jacob's analysis. We note the profit margin allocation is already included within the overall overhead allowance
- escalated for assumed inflation, labour rate escalators (reflecting the wage price index)
   and an allowance to account for salary stickiness in the Hays data
- added an hourly vehicle cost, where required.

Recent reports include Marsden Jacob Report – Review of Alternative control services for SA Power Networks Energex and Ergon Energy, June 2019; Marsden Jacob Associates – Review of Victorian distributors Alternative Control Services, June 2020.

<sup>&</sup>lt;sup>15</sup> Hays, Hays Salary Guide FY25/26 Australia and New Zealand, p. 41.

In aggregate, these elements are referred to as the 'maximum reasonable benchmark rate,' which is expressed as an hourly rate.

Compared to our 2021–26 period decision for AusNet, we have made the following changes to the way we derive our maximum reasonable benchmark rate. These reflect updated information that has become available over time and ensure consistency with the changes we have made in previous determination such as the NSW distribution businesses for the 2024–29 period. We explain some of these changes further below.

- Using a 38-hour week, rather than a 40-hour week, consistent with the latest Hays report.
- Excluding the 'Transmission line engineer' and 'Generator technician' occupations from our analysis.
- Uplifting the Engineer rate by 20% to obtain the Senior engineer rate.
- Using Hays 2022–23 data (instead of the most recent 2024–25 data) as the starting point for technical specialists and field worker labour categories.
- Use of real inflation (CPI) and X factors to convert labour rates and the vehicle allowance to \$2026–27.

#### Excluding occupations and the uplift for engineers

In considering labour rate benchmarks in the lead-up to our NSW distribution business decisions for the 2024–29 period, we benchmarked the distributors' proposed labour rates with the most recent (at the time) labour rates derived from the Hays 2022–23 data. We found that, under our methodology, engineers and senior engineers would have the same hourly rate.

We applied several changes in deriving the raw labour rates. Upon consultation with our internal technical experts, we removed the roles of 'Transmission line engineer' (categorised as engineer) and 'Generator technician' (technical specialist) from their respective benchmarks as they are not typically employed by distributors.

Further, we considered it was not appropriate to assign occupations to the senior engineer category because senior engineer salaries reflect time in role, not particular occupations. Instead, we applied a 20% uplift from engineer salaries as a reasonable premium for time in role.

We continue to apply the above approaches for the 2026–31 decisions.

#### **Changes to Hays Salary Guide**

In July 2025, Hays released its 2025–26 salary data. Like the Hays 2023–24 and Hays 2024–25 guides, there were some significant changes in its reporting when compared to the Hays 2022–23 Guide, with the report no longer including wage data for the technical specialist and field worker roles. To derive our benchmarks for these labour categories, we instead use the latest data that we have, which is the Hays 2022–23 data, as our starting point.

For the administration, project manager and engineer labour categories, we used the Hays 2025–26 data as the relevant rates are still available.

In addition, we note that the Hays 2025–26 data is based on a 38-hour week. <sup>16</sup> We have therefore derived our maximum reasonable benchmark rates using a 38-hour week as we consider the Hays data captures the conditions of the broad labour pool from which CPU draws its labour.

#### Determining labour rates in \$2026-27

Finally, we applied real inflation as appropriate and X factors to convert the 2022–23 and 2024–25 labour rates (respectively, depending on which was applicable) to \$2026–27. To convert \$2022–23 nominal rates into \$2026–27 nominal terms (where relevant), we used actual CPI consistent with the method applied during annual pricing proposals and consistent with our draft decisions on control mechanisms. To convert \$2025–26 nominal rates into \$2026–27 nominal terms, we applied forecast CPI from the Reserve Bank of Australia as a placeholder for these draft decisions. We will apply actual CPI consistent with our control mechanism for our final decisions.

We also used this approach to escalate the \$20 per hour vehicle allowance from our previous decisions for inflation only (i.e. no X factor) to \$25.17.18

To obtain the benchmark after hour rates (in Table 14.2), we continue to apply 1.75 times the business hourly rate (in Table 14.1), as recommended by Marsden Jacob.

Using this method, Table 14.1 includes our maximum benchmark hourly labour rate for the six labour benchmark categories and CPU's proposed prices for business hours. Table 16.2 contains the same information for after hours.

Table 14.1 AER maximum benchmark and CPU's proposed hourly labour rates for 2026–27 (business hours, including on-costs and overheads, \$2026–27)

CitiPower, Powercor and United Energy's Iabour category	AER Benchmark category	CitiPower proposed labour rate	Powercor proposed	United Energy proposed	AER maximum labour rate
Administrative Officer	Admin	\$121.06	\$121.06	\$121.06	\$120.34
Field Worker	Field Worker	\$224.24	\$224.24	\$217.30	\$222.05
Technical Specialist	Technical Specialist	\$224.24	\$224.24	\$224.24	\$211.79
Engineer	Engineer	\$196.75	\$196.75	\$196.75	\$253.35
Senior Engineer	Senior Engineer	\$257.27	\$257.27	\$257.27	\$304.02

Hays, Hays Salary Guide FY25/26 Australia and New Zealand, p. 41.

AER, Draft decision – CitiPower, Powercor and United Energy distribution determination 2026–31 - Attachment 12 - Control mechanisms, September 2025.

See for example AER, Draft decision - Ausgrid distribution determination 2024-29 - Attachment 16 - Alternative control services, September 2023, p. 10; Marsden Jacob Associates, Review of Victorian distributors Alternative Control Services, June 2020, p. 24.

CitiPower, Powercor and United Energy's labour category	AER Benchmark category	CitiPower proposed labour rate	Powercor proposed	United Energy proposed	AER maximum labour rate
Engineering manager	Engineering manager	\$308.73	\$308.73	\$308.73	\$304.02

Table 14.2 AER maximum benchmark and CPU's proposed hourly labour rates for 2026–27 (after hours, including on-costs and overheads, \$2026–27)

CitiPower, Powercor and United Energy's labour category	AER Benchmark category	CitiPower proposed labour rate	Powercor proposed	United Energy proposed	AER maximum labour rate
Field Worker	Field Worker	\$289.72	\$289.02	\$267.49	\$388.59
Technical Specialist	Technical	\$325.54	\$324.73	\$289.26	\$370.63
Engineer	Engineer	\$316.29	\$315.52	\$293.96	\$443.36
Senior Engineer	Senior Engineer	\$413.00	\$411.99	\$413.00	\$532.03
Engineering Manager	Engineering Manager	\$495.60	\$494.39	\$495.60	\$532.03

#### Outcomes of our benchmarking

As a result of our benchmarking, we do not accept CPU's proposed labour rates for the following labour categories (as they are higher than our benchmarks, in some cases only slightly) and have substituted them with our lower maximum labour rates:

- Administrative Officer (business hours)
- Field Worker (business hours) for CitiPower and Powercor only
- Technical Specialist (business hours)
- Engineering manager (business hours).

Our draft decision ANS models sets out our draft decisions on the labour rates CPU can utilise in the provision of quoted services.<sup>19</sup>

#### 14.1.4.2 Fee-based services

Our draft decision is to not accept CPU's proposed prices for fee-based services. This is because we have adjusted the following inputs in the calculation of CPU's prices for fee-based services:

AER, AER – MOD 11.07 Standardised ANS model - Draft Decision - CitiPower distribution determination 2026-31 - September 2025; AER, , AER – MOD 11.07 Standardised ANS model - Draft Decision – Powercor distribution determination 2026-31 - September 2025; AER, AER – MOD 12.07 Standardised ANS model - Draft Decision - United Energy distribution determination 2026-31 - September 2025.

- Updated the inputs to reflect the most recent inflation and labour escalators.
- Updated the inputs used to calculate the tax rate and in particular updated the nominal WACC used to calculate the diminishing value tax recovery rate, corrected the depreciation rate to include first-year depreciation and written off the residual value of the asset at the end of its effective life.

These adjustments reduced CitiPower, Powercor and United Energy's proposed fee-based services by an average of -2.2%, -2.2% and -1.6% respectively compared to their initial proposals.

CPU used a top-down method to derive proposed prices for its fee-based services, escalating the approved ANS labour rates in 2023–24 by inflation and labour escalators. As these fees are not directly based on a bottom-up method, using labour costs, material costs, etc, it is more difficult for us to make any adjustments to reflect the benchmark labour rates we used in setting labour rates for quoted service (as in section 14.1.4.1). We generally consider it is appropriate to adjust fee-based services for any changes to reflect our benchmark labour rates as we understand CPU draws from the same labour pool to provide both fee-based and quoted services.

As set out in our 2021–26 decisions, CPU's fee-based services in the 2016–21 period were based on a bottom-up model and largely used two types of labour for most of its fee-based services, Administrative Officer and Field Worker.<sup>20</sup> In particular, the Administrative Officer contributed approximately 15% and the Field Work approximately 85% to the final fee-based prices. In our 2021–26 decisions, we used a weighted average of the difference between CPU's proposed labour rates for these labour categories and our, lower, benchmark rates, to adjust CPU's business-hour prices for fee based services.<sup>21</sup> This reflected the material differences between the proposed and benchmark rates (e.g. our benchmark was 18% lower for the Administrative Officer and 8% lower for the Field worker). This resulted in an 8.3% reduction to fee-based services.

We considered applying the same approach for these draft decisions. However, as set out in Table 14.1, the differences between CPU's proposed labour rates for the Administrative Worker and the Field officer are not material (0.6% for Administrative Worker and 1% for Field Worker). These would result in a weighted average adjustment of less than 1% as labour costs account for 90% of the fee-based service prices. As a result, for these draft decisions we have not made any adjustments to the proposed fee-based services for labour rates. Where differences are more material we consider the weighted average adjustment approach is appropriate.

However, we substitute CPU's proposed year one (2026–27) prices for fee-based services with our draft decision price caps for 2026–27 to reflect our updated draft decision inflation and labour escalators.

See for example AER, AER- Draft Decision – CitiPower distribution determination 2021-26 – Attachment 16 – Alternative control services, September 2020, pp. 13-14.

This adjustment also accounted for labour costs contributing approximately 90% to CPU's fee based service prices.

We have also amended CPU's approach and inputs used in its tax calculation (see section 14.1.4.3) and consider the resulting price movements to be reasonable.

Our draft decision ANS models sets out our draft decision prices for CPU's fee-based services incorporating these adjustments.<sup>22</sup>

CPU also proposed two new fee-based services for connection applications and reserve feeder maintenance. These are discussed in section 14.1.4.4.

#### 14.1.4.3 Tax allowance

In the final F&A paper for Victoria, the AER accepted the inclusion of tax component in the price cap formulae only for quoted ANS.<sup>23</sup>

In their 2026–31 regulatory proposals, all Victorian distributors proposed a tax component be applied to their fee-based ANS.

CPU and Jemena applied a diminishing value method to calculate the tax rate. CPU proposed a tax recovery of 8.8% and only applied the tax to basic connection fee-based ANS.

A tax component has previously been proposed for inclusion in ANS fee-based services by other distributors, specifically Essential Energy, Evoenergy and Power and Water Corporation. In our decisions for these distributors we did not accept its inclusion, including as supporting calculations and detail was not provided to demonstrate the derivation of the tax rates in their models.

For these draft decisions we accept that the inclusion of a tax component is reasonable for fee-based services that are capital intensive in nature, and specifically in these decisions for basic connection fee-based ANS. Given the nature of connection assets, and that distributors capitalise these costs for tax and accounting purposes, and incur a tax liability for the service on the revenue less depreciation over time, we consider it appropriate to include these as efficient costs.

We have accepted CPU's application of a diminishing value method to calculate the tax rate but have amended its approach to include first-year depreciation, write off the residual value of the asset at the end of its effective life and substituted our value for the nominal vanilla WACC. By applying this method, the tax rate for CPU decreased from 8.8% to 4.5%. The change in the tax rate resulted in a price decrease of 3.8% for connection fee-based services as compared to initial proposals (first-year price increases).

## 14.1.4.4 Proposed reclassification of quoted services to fee-based services

CPU proposed to reclassify its reserve feeder maintenance service from a quoted service to a fee-based service and CitiPower and Powercor proposed to reclassify its connection

AER, AER – MOD 11.07 Standardised ANS model - Draft Decision - CitiPower distribution determination 2026-31 - September 2025; AER, AER – MOD 11.07 Standardised ANS model - Draft Decision – Powercor distribution determination 2026-31 - September 2025; AER, AER – MOD 12.07 Standardised ANS model - Draft Decision - United Energy distribution determination 2026-31 - September 2025.

AER, Preliminary Position Paper – Victoria Framework and Approach Papers for 2026-31 - April 2024, p. 11.

application service from a quoted service to a fee-based service. For the draft decisions we do not accept these proposals as we are not satisfied that we have sufficient information to justify the proposed changes. We seek further information in the revised proposals as set out below. We are also interested in any stakeholder feedback in relation to these reclassifications and encourage stakeholders to review these and provide any views, including via any engagement CPU may undertake.

For its reserve feeder maintenance service, CPU stated it was impractical to calculate the actual reserve feeder maintenance cost on an annual basis for each reserve feeder, and this results in volatile charges from year to year.<sup>24</sup> Therefore, CPU proposed to charge a flat rate (\$/kVA) for its low voltage, high voltage and sub-transmission reserve feeders. This rate was proposed based on the average cost per kVA from its historical Regulatory Information Notices (RINs), using 2023–24 data.<sup>2526</sup>

We consider the reclassification of quoted services to fee-based services may provide some price certainty for customers, particularly if it can be volatile year to year. However, as set out below we require further information to determine if the proposed reclassification is reasonable and for the draft decision we have not accepted the proposals. In particular:

- We consider that reserve feeder maintenance for each of low voltage, high voltage and sub-transmission are likely to be relatively homogenous in nature, however, we seek further information from CPU in its revised proposal to demonstrate this is the case.
- We seek information about how the proposed services do not create unreasonable cross subsidisation within each of the low voltage, high voltage and sub-transmission categories.
- We consider CPU's reasons and approach to determining its reserve feeder maintenance cost is largely reasonable. It is appropriate that CPU applies a weighted average approach to calculate a flat rate for each of its reserve feeder types if it cannot reasonably calculate the actual reserve feeder maintenance cost. This appears to be the case as standard control service pole and line maintenance expenditure data does not appear to be collected on a low voltage, high voltage or sub-transmission basis. Therefore, weighting it by the total spans cut in each of these categories is likely to be a reasonable proxy, subject to the relevant span information being robust.
  - However, there has been a step change in total pole and line maintenance expenditure in 2023–24 for Powercor, with a general increase in this expenditure from 2020–21 to 2023–24. This, along with relatively stable demand, results in a material increase in the cost per kVA for this service and the proposed price.

CitiPower, CP ATT 11.02 - Ancillary network services - Jan2025, pp. 5-6. Powercor, PAL ATT 11.02 - Ancillary network services - Jan2025, pp 5-6. United Energy, UE ATT 11.02 - Ancillary network services - Jan2025, p. 5.

<sup>&</sup>lt;sup>25</sup> CitiPower, CP MOD 11.08 – Reserve feeder – Jan2025 – Public. Powercor, PAL MOD 12.08 – Reserve feeder – Jan2025 – Public. United Energy, UE MOD 12.08 – Reserve feeder – Jan2025 – Public.

CitiPower, CP ATT 11.02 - Ancillary network services - Jan2025, pp. 5-6. Powercor, PAL ATT 11.02 - Ancillary network services - Jan2025, pp 5-6. United Energy, UE ATT 11.02 - Ancillary network services - Jan2025, p. 5.

- Total pole and line maintenance expenditure for CitiPower and United Energy has been variable from 2020–21 to 2023–24 with increases and decreases across years.
- CPU have not provided justification as to why 2023–24 is the most appropriate year to use as a base for the calculation of the proposed prices. We consider that a historical average may be more accurate in estimating cost where there is variability in underlying costs. This is consistent with CPU's observation that an annual basis results in volatile charges from year to year. We seek further information from CPU in its revised proposal as to why it considers 2023–24 is the appropriate year for setting reserve feeder maintenance prices from 2026–27. Further, whether an average over the most recent years (e.g. from 2020–21 or 2021–22) would be more appropriate.

For its connection application service, CitiPower and Powercor stated this cost is recover the costs incurred when applicants apply for a negotiated connection.<sup>27</sup> This ensures that CitiPower and Powercor can recover the administration and design costs incurred if the applicant chooses not to accept its connection offer.<sup>28</sup>

To streamline the connection process and reduce administrative costs, CitiPower and Powercor proposed to introduce 9 different types of negotiated connection applications, based on the complexity/size of the required service. <sup>29</sup> For example, a connection application fee for less than 63kVA or less than 5 lots, 63 kVA to 200 kVA, etc. It stated that it had been applying these pre-calculated charges already in order to achieve these benefits. It determined the proposed prices based on the average time taken to complete the administration and design work for each of the nine different types of negotiated connection applications.

For CitiPower and Powercor's proposed reclassification of its connection application service we require further information to determine if it is reasonable. Therefore, for the draft decisions we have not accepted the proposals. We understand that CitiPower and Powercor may already be using the proposed nine service categories, and we support efforts to streamline processes and achieve efficiencies. However, before making decisions to reclassify these services as fee-based, we seek further information in relation to:

- Why these nine services can be standardised into the proposed categories, including the basis for these categories and why these are considered appropriate and relatively homogeneous and repeatable services.
- Within each of the nine services, what level of variation there is in the services provided and whether the proposed charges may result in customers paying more than is required for the specific service they receive within that service category. That is, justification for

<sup>27</sup> CitiPower, CP ATT 11.02 - Ancillary network services - Jan2025, p. 5. Powercor, PAL ATT 11.02 - Ancillary network services - Jan2025, p.5.

<sup>&</sup>lt;sup>28</sup> CitiPower, *CP ATT 11.02 - Ancillary network services - Jan2025*, p. 5. Powercor, *PAL ATT 11.02 - Ancillary network services - Jan2025*, p.5.

<sup>&</sup>lt;sup>29</sup> CitiPower, *CP ATT 11.02 - Ancillary network services - Jan2025*, p. 5. Powercor, *PAL ATT 11.02 - Ancillary network services - Jan2025*, p.5.

how the proposed services do not create unreasonable cross subsidisation within each service.

- Further to the bottom-up cost information provided for each of the nine services in the standardised ANS models, an explanation of, and justification for, the time taken for each of the Administrative and Technical Worker.
- Where possible we also encourage CitiPower and Powercor to provide NEM wide benchmarking analysis in relation to its proposed service prices that demonstrates the reasonableness of its proposal.
- Details on specific customer engagement that has been taken in relation to the proposed reclassification of the nine services, and how this has been taken into account.

# 14.2 Public lighting

Public lighting services include the provision, construction and maintenance of public lighting assets. This definition includes new technologies such as energy-efficient light emitting diode (LED) luminaires and emerging public lighting technologies such as smart-enabled luminaires.<sup>30</sup>

The main customers of public lighting services are local government councils and jurisdictional main roads departments.

There are a number of different tariff classes and prices for public lighting services. Factors influencing prices for a particular installation include which party is responsible for capital provision, and which party is responsible for maintaining and/or replacing installations.

#### 14.2.1 Draft decision

Our draft decision is to not accept CPU's initial public lighting proposals although we consider CPU's public lighting proposals are largely reasonable.

We updated the following inputs in CPU's proposed public lighting models:31

- PE cell replacement cycle for two light types (see section 14.2.4.3)
- Labour rates (see section 14.2.4.4)
- Hourly rates for elevated platform vehicles (EPV) and patrol vehicles (see section 14.2.4.5).

We also updated CPU's public lighting prices to account for several more mechanical changes (see section 14.2.4.6). These included to apply our draft decisions on the weighted average cost of capital (WACC), consumer price index (CPI) and labour escalators. We also updated the 2025–26 prices (that prices in the next period are escalated from) to include those we approved following CPU submitting their initial proposals and updated net capital

AER, Final framework and approach – AusNet Services, CitiPower, Jemena, Powercor and United Energy 2026–31, July 2024, p. 36.

CitiPower, CP MOD 11.05 - Public lighting PTRM - Jan2025; CitiPower, CP MOD 11.06 - Public lighting cost model - Jan2025; Powercor, PAL MOD 12.05 - Public lighting PTRM - Jan2025; Powercor, PAL MOD 12.06 - Public lighting cost model - Jan2025; United Energy, UE MOD 12.05 - Public lighting PTRM - Jan2025; United Energy, UE MOD 12.06 - Public lighting cost model - Jan2025.

expenditure (capex) inputs to be consistent with CPU's regulatory accounts. We entered these substitute inputs into the public lighting models, resulting in minor adjustments to CPU's public lighting prices.

Our draft decision public lighting prices for the 2026–31 period are set out in the Draft Decision Public Lighting post tax revenue models (PTRMs).<sup>32</sup> The prices for 2026–27 are:

- 2.0% lower compared to CitiPower's proposed prices for most light types.
- 2.1% lower compared to Powercor's proposed prices for most light types.
- 1.1% lower compared to United Energy's proposed prices for most light types.

As set out in Attachment 12, our draft decision is to maintain our final F&A position to apply price caps to public lighting as the form of control. Under a price cap form of control, we set a schedule of price caps for public lighting services for the first year of the regulatory control period, 2026–27, which we summarised above. For each year thereafter, we adjust the price caps for inflation, the X factor<sup>33</sup>, and any relevant adjustments. This mechanism is set out in greater detail in section 12.5.2 of Attachment 12.

Our draft decision X factors for public lighting are also set out in our Draft Decision Public Lighting PTRMs.<sup>34</sup>

In light of feedback from stakeholders, we encourage CPU in their revised proposals to incorporate its responses on the following matters, including as informed by its further engagement with stakeholders:

- Whether stakeholders have a preference to replace all streetlights with LED lights by the end of the 2026–31 period (accelerated LED rollout). This includes replacing lights with legacy technology before end of life.
- If CPU undertake accelerated LED rollouts, whether they should establish separate
  prices for customers who fund their own lighting upgrades to LED and for customers
  whose upgrades are CPU-funded.
- Creating a new tariff for corncob lights. This consultation should include discussion on the replacement periods of such lights among other relevant factors such as unit costs and customer impact.

AER, AER - Public lighting PTRM - Draft Decision - CitiPower distribution determination 2026-31 - September 2025, 'AER Draft Decision'C11:C31; AER, AER - Public lighting PTRM - Draft Decision - Powercor distribution determination 2026-31 - September 2025, 'AER Draft Decision'C11:C31; AER, AER - Public lighting PTRM - Draft Decision - United Energy distribution determination 2026-31 - September 2025, 'AER Draft Decision' C11:C31.

Under the CPI–X framework, the X factor can be a measure of the real rate of change in prices from one year to the next.

AER, AER - Public lighting PTRM - Draft Decision - CitiPower distribution determination 2026-31 - September 2025, 'AER Draft Decision'B3:F6; AER, AER - Public lighting PTRM - Draft Decision - Powercor distribution determination 2026-31 - September 2025, 'AER Draft Decision'B3:F6; AER, AER - Public lighting PTRM - Draft Decision - United Energy distribution determination 2026-31 - September 2025, 'AER Draft Decision'B3:F6.

- The opex savings resulting from its smart lighting rollout on major roads, particularly towards the end of the 2026–31 period. Where CPU do not incorporate such opex savings, they should provide reasons why they have taken this approach.
- High-level principles and processes to assist it, and councils, with transitioning legacy lighting schemes. We also require CPU to clarify that the costs of transitioning legacy lighting schemes are recovered through unregulated charges, rather than through its regulated public lighting prices.

We discuss these matters in more detail in section 14.2.4.7.

# 14.2.2 CPU's proposals

CPU proposed to continue offering largely the same public lighting services and tariffs as from the 2021–26 period, although they each proposed to remove a number of the tariffs for legacy lighting technologies in the transition to LEDs.

For 2026–27, the first year of the 2026–31 period:

- CitiPower proposed average price increases of 3.3% (nominal) across all public lighting tariffs, and then price increases of 3.2% (nominal) in each following year.
- Powercor proposed average price increases of 5.3% (nominal) across all public lighting tariffs, and then price increases of 5.1% (nominal) in each following year.
- United Energy proposed average price increases of 3.6% (nominal) across all public lighting tariffs, and then price increases of 3.5% (nominal) in each following year.

CPU stated the key focus areas of its public lighting proposal are:

- Continued transition to efficient LED lights and phasing out legacy lighting. It is not proposing to replace legacy technologies unless requested by a customer.<sup>35</sup>
- Implementing a basic Central Management System (CMS) for the 2026–31 period (which can be enhanced in future periods) which will enable basic smart lighting functionality such as improved fault restoration and dimming. CPU noted it will install some CMS before 2026 due to demand from councils.<sup>36</sup>
- Introducing a service to fit LED lamps onto non-standard lights, such as decorative lights.<sup>37</sup>
- Supporting council initiatives to manage public lighting schemes in areas generally inaccessible to standard public lighting maintenance vehicles.<sup>38</sup>

CitiPower, CP ATT 11.01 - Public lighting - Jan2025 - Public, pp. 3–5; Powercor, PAL ATT12.01 - Public lighting - Jan2025, pp. 3–5; United Energy, UE ATT12.01 - Public lighting - Jan2025 - Public, pp. 3–5.

CitiPower, CP ATT 11.01 - Public lighting - Jan2025 - Public, pp. 5–6; Powercor, PAL ATT12.01 - Public lighting - Jan2025, pp. 5–6; United Energy, UE ATT12.01 - Public lighting - Jan2025 - Public, pp. 5–6.

CitiPower, CP ATT 11.01 - Public lighting - Jan2025 - Public, pp. 6–7; Powercor, PAL ATT12.01 - Public lighting - Jan2025, pp. 6–7; United Energy, UE ATT12.01 - Public lighting - Jan2025 - Public, pp. 6–7.

CitiPower, CP ATT 11.01 - Public lighting - Jan2025 - Public, p. 7; Powercor, PAL ATT12.01 - Public lighting - Jan2025, p. 7; United Energy, UE ATT12.01 - Public lighting - Jan2025 - Public, p. 7.

# 14.2.3 Assessment approach

To determine efficient prices for CPU's public lighting services we assessed its public lighting models, considered historical data and benchmarked proposed costs and prices against other distributors, and against independent data and information as relevant. Specifically, we assessed proposed labour rates, luminaire prices, other input assumptions and stakeholder submissions to derive public lighting prices for this draft decision.

We also engaged CPU through information requests to clarify and potentially resolve outstanding issues.

We updated model parameters where appropriate after taking the factors described above into consideration.

## 14.2.4 Reasons for our draft decision

#### 14.2.4.1 Overall assessment

Overall, we consider CPU's public lighting proposals and proposed prices are generally reasonable.

We amended CPU's proposed public lighting prices only to be consistent with other aspects of our draft decision, namely on WACC and CPI, and to make relatively minor amendments to several inputs as we discuss in sections 14.2.4.3 to 14.2.4.6.

CPU's proposed prices also benchmark reasonably well against the other Victorian distribution network service providers (DNSPs) and other comparable DNSPs.<sup>39</sup> We consider this indicates CPU's modelling, including inputs and assumptions, and the proposed prices are generally reasonable.

#### 14.2.4.2 CPU's stakeholder consultation

We consider CPU's stakeholder engagement in relation to public lighting has been largely reasonable. As we discuss below, however, we do not consider CPU's initial proposal adequately describe these consultations and how they influenced their respective public lighting proposals. We also note that CPU has stated they will continue to engage with stakeholders to further refine their positions for the revised proposal. We therefore encourage CPU to describe how they incorporated feedback from this consultation into their revised proposals for public lighting.

CPU stated they consulted on their public lighting proposals in mid-July 2024 through a structured webinar with representatives from local councils and the Department of Transport and Planning. Prior to the webinar, CPU noted they distributed consultation papers<sup>40</sup> outlining the proposed timeline and key focus areas for public lighting in the 2026–31 period.

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<sup>39</sup> AER analysis.

CitiPower, CP ATT SE.33 - Public Lighting consultation paper - CitiPower - Jul2024; Powercor, PAL ATT SE.36 - Public Lighting consultation paper - Powercor - Jul2024; United Energy, UE ATT SE.34 - Public Lighting consultation paper - United Energy - Jul2024.

They considered this provided stakeholders an overview of the primary topics for discussion, enabling them to prepare questions and insights in advance.<sup>41</sup>

CPU's proposals did not provide details on the outcomes of these consultations, except to say customers supported the introduction of a CMS.<sup>42</sup> We sought further detail on the feedback CPU received during its consultation and how they incorporated this feedback into their public lighting proposals. CPU stated:<sup>43</sup>

- Councils were in general supportive of the indicative price path provided in the webinars.
- The Victorian Greenhouse Alliances (VGA) supported the roll-out of the CMS and smart cells and asked for the provision of application programming interfaces (APIs) to councils and other relevant third parties.
- The VGA and Urban Light Lab asked for wildlife-sensitive 2700/3000K lighting options and lighting fixtures across network areas and including features such as low colour temperature, timers, dimmers, sensors and shielding.

CPU stated they welcomed these initiatives around the CMS and wildlife sensitive lighting and were currently working with service providers to accommodate these requests.<sup>44</sup>

CPU stated councils requested that CPU adopt an equitable funding model that does not penalise councils who have already funded upgrades of their own public lighting assets. Relatedly, CPU stated the VGA asked for an accelerated LED rollout and did not support the current proposed approach to transition legacy lights at the end of serviceable life. CPU stated they did not propose an accelerated LED rollout in order to keep price increases moderate.<sup>45</sup> We discuss this issue further in section 14.2.4.7, including CPU's further consideration of an equitable funding model.

As we discuss further in section 14.2.4.7, we consider there are some aspects of CPU's proposals that require further consultation with its stakeholders, such as whether stakeholders have a preference for an accelerated LED rollout and funding options for this rollout.

In their revised proposals, we encourage CPU to describe the outcomes of these consultations, such as areas that public lighting customers supported and areas of concern. Importantly, we encourage CPU to describe how they incorporated feedback into their revised proposals for public lighting. Similarly, CPU should provide reasons where they do

CitiPower, CP ATT 11.01 - Public lighting - Jan2025 - Public, pp. 2–3; Powercor, PAL ATT12.01 - Public lighting - Jan2025, pp. 2–3; United Energy, UE ATT12.01 - Public lighting - Jan2025 - Public, pp. 2–3.

CitiPower, CP ATT 11.01 - Public lighting - Jan2025 - Public, p. 6 Powercor, PAL ATT12.01 - Public lighting - Jan2025, p. 6; United Energy, UE ATT12.01 - Public lighting - Jan2025 - Public, p. 6.

CitiPower, CitiPower - IR033 - public lighting – 20250526 - public, p. 4; Powercor, Powercor - IR033 - public lighting – 20250526 - public, p. 4; United Energy, United Energy - IR030 - public lighting – 20250526 - public, p. 3.

<sup>&</sup>lt;sup>44</sup> CitiPower, CitiPower - IR033 - public lighting – 20250526 - public, p. 4; Powercor, Powercor - IR033 - public lighting – 20250526 - public, p. 4; United Energy, United Energy - IR030 - public lighting – 20250526 - public, p. 3.

CitiPower, CitiPower - IR033 - public lighting – 20250526 - public, p. 4; Powercor, Powercor - IR033 - public lighting – 20250526 - public, p. 4; United Energy, United Energy - IR030 - public lighting – 20250526 - public, p. 3.

not incorporate requests from public lighting customers into their revised proposals and the reasons why this is the case.

# 14.2.4.3 PE cell replacement and MV lamp replacement

In the draft decision we amend CPU's replacement period for PE cells for MV80 and T5 (2x14W) lights from 8 years to 10 years.<sup>46</sup> This is consistent with CPU's PE cell replacement period for high-pressure sodium and LED lights.<sup>47</sup>

CPU stated it supported amending the PE cell replacement cycle for T5 (2x14W) luminaires from eight to ten years. CitiPower stated it did not expect this change to have a material impact on prices, as the T5 (2x14W) luminaires will be progressively replaced with LED due to inclusion in the Minamata Convention.<sup>48</sup>

CPU stated they have made significant progress to replace or remove all MV80 luminaires prior to the commencement of the 2026–31 period.<sup>49</sup> We note they forecast zero volumes for this light type in its public lighting models.<sup>50</sup> CPU stated they included a price for this light type in the unlikely event their planned replacements do not proceed as expected due to unforeseen circumstances.<sup>51</sup> We amended the PE cell replacement period for MV80 to 10 years for consistency with other light types.

We note the Essential Services Commission Victoria (ESCV) is currently reviewing the Public Lighting Code. The ESCV has proposed to remove the current standard to replace PE cells at least every eight years and require DNSPs to replace the PE cells in accordance with 'industry best practise' or as otherwise required by the public lighting standards. This is set out in its consultation paper released in August 2025, with a final decision in November 2025 and changes to take place on 1 January 2026.<sup>52</sup>

AER, AER - Public lighting cost model - Draft Decision - CitiPower distribution determination 2026-31 - September 2025, 'Opex\_Inputs'C50 and C120; AER, AER - Public lighting cost model - Draft Decision - Powercor distribution determination 2026-31 - September 2025, 'Opex\_Inputs'C50 and C120; AER, AER - Public lighting cost model - Draft Decision - United Energy distribution determination 2026-31 - September 2025, 'Opex\_Inputs'C50 and C120.

<sup>&</sup>lt;sup>47</sup> CitiPower, *CP MOD 11.06 - Public lighting cost model - Jan2025*, 'Opex\_Inputs'C79, C100, C148 and C173; Powercor, *PAL MOD 12.06 - Public lighting cost model - Jan2025*, 'Opex\_Inputs'C79, C100, C148 and C173; United Energy, *UE MOD 12.06 - Public lighting cost model - Jan2025*, 'Opex\_Inputs'C79, C100, C148 and C173.

CitiPower, CitiPower - IR046 - public lighting – 20250702 - public, p. 4; Powercor, Powercor - IR049 - public lighting – 20250702 - public, p. 5; United Energy, United Energy - IR042 - public lighting – 20250702 - public, p. 5.

<sup>&</sup>lt;sup>49</sup> CitiPower, CitiPower - IR046 - public lighting – 20250702 - public, p. 4; Powercor, Powercor - IR049 - public lighting – 20250702 - public, p. 5; United Energy, United Energy - IR042 - public lighting – 20250702 - public, p. 5.

CitiPower, CP MOD 11.05 - Public lighting PTRM - Jan2025, 'PTRM input'G563:K563; Powercor, PAL MOD 12.05 - Public lighting PTRM - Jan2025, 'PTRM input'G563:K563; United Energy, UE MOD 12.05 - Public lighting PTRM - Jan2025, 'PTRM input'G563:K563.

CitiPower, CitiPower - IR033 - public lighting – 20250526 - public, p. 2; Powercor, Powercor - IR033 - public lighting – 20250526 - public, p. 2; United Energy, United Energy - IR030 - public lighting – 20250526 - public, p. 2.

Essential Services Commission Victoria, *Public Lighting Code of Practice Review, Consultation Paper*, 20 August 2025, p. 8.

We also note advice from our internal technical experts that PE cells generally have an effective life of circa 15 years. Furthermore, our internal technical experts consider it may be more cost efficient to run a reactive replacement program for non-traffic route lighting (i.e. replacing PE cells on failure) rather than proactively replacing PE cells every 8 to 10 years, as currently proposed by the Victorian DNSPs, including CPU. While there is a safety concern regarding the need to maintain sufficient lighting for traffic routes (major roads), it is not clear the same requirement is necessary for non-traffic roads. We consider the reactive approach may be more cost effective as both CPU and the councils would remotely receive real time data that the PE cell has failed.

For our draft decision we have adjusted CPU's PE cell replacement cycle to 10 years as described above. We note this is a placeholder, including as we will seek to take into account any updates the ESCV makes to the Public Lighting Code later in the year. We also encourage CPU to consider the possibility of adopting a reactive replacement program for non-traffic route lighting (supported by financial analysis and modelling).

In its submission, the VGA also recommended confirming the lamp replacement period for MV lights. The VGA stated manufacturer recommendations are to replace lamps every 5 years, which would align with PE cell replacement cycle of 10 years and luminaire useful life of 20 years (see also our discussion on corncob lights at section 14.2.4.7).<sup>53</sup>

CPU considered 5 years for LED corncobs might be conservative for high-quality products as premium LED corncobs from reputable manufacturers often claim lifespans of 25,000–50,000 hours translating to 6–12 years at average operating hours. Due to limited long-term performance data of retrofit LED corncobs, however, CPU proposed a 5-year replacement cycle which align with its other program maintenance activities.<sup>54</sup> We encourage CPU to include the replacement cycles of lights and PE cells in their consultation with stakeholders for their revised proposals as we discuss in section 14.2.4.7, including for potential new tariffs for corncob lights. We will also seek to take into account any updates the ESCV makes to the Public Lighting Code later in the year.

#### **14.2.4.4 Labour rates**

In the draft decision we amend the labour rate in CPU's public lighting models from \$149.53 per hour to \$118.17 per hour to be consistent with our benchmark labour rate for field workers.

Essential Services Commission Victoria, *Public Lighting Code of Practice Review, Consultation Paper*, 20 August 2025, p. 8.

CitiPower, CitiPower - IR046 - public lighting – 20250702 - public, p. 8; Powercor, Powercor - IR049 - public lighting – 20250702 - public, p. 9; United Energy, United Energy - IR042 - public lighting – 20250702 - public, p. 9.

CPU used a labour rate of \$149.53 (real \$2025–26) per hour for 2026–27 in its modelling.<sup>55</sup> This does not correspond to any of the labour rates CPU included in their initial proposals for ANS.<sup>56</sup>

CPU stated their public lighting labour rate is based on the actual base labour cost incurred from its public lighting service providers. Further, that it then applies a detailed cost build-up, incorporating overheads and vehicle costs separately, to provide a more transparent and accurate reflection of total labour costs for public lighting. CPU stated this is different from their approach for ANS labour rates where they applied the regulatory-approved rates for 2025–26 and escalated them over the regulatory period.<sup>57</sup>

Consistent with other distribution determinations, we consider our field worker benchmark labour rate is the appropriate benchmark for assessing CPU's public lighting labour rate.<sup>58</sup>

For an appropriate comparison with CPU's labour rate, we exclude the vehicle and overhead component from our benchmark rate in Table 14.3 and converted it to real \$2025–26. This derives the \$118.17 rate that we use in our Draft Decision Public Lighting Cost Models (which input into our Draft Decision Public Lighting PTRM, which in turn calculate our draft decision prices for public lighting services). <sup>59</sup> Similar to our approach for ANS labour rates, we use our benchmark rate of \$118.17 because CPU's proposed rate of \$149.53 exceeds it.

## 14.2.4.5 Hourly rates for elevated platform vehicles and patrol vehicles

In its submission to our issues paper, the VGA pointed out that some inputs in the Victorian DNSPs' public lighting models "are unusually varied" as shown in Table 14.3.<sup>60</sup>

<sup>&</sup>lt;sup>55</sup> CitiPower, CP MOD 11.06 - Public lighting cost model - Jan2025 - Public, 'Opex\_Inputs'C12; Powercor, PAL MOD 12.06 - Public lighting cost model - Jan2025, 'Opex\_Inputs'C12; United Energy, UE MOD 12.06 - Public lighting cost model - Jan2025 - Public, 'Opex\_Inputs'C12.

CitiPower, CP MOD 11.07 - Standardised ANS model - Jan2025; Powercor, PAL MOD 12.07 - Standardised ANS model - Jan2025; United Energy, UE MOD 12.07 - Standardised ANS model - Jan2025.

<sup>&</sup>lt;sup>57</sup> CitiPower, CitiPower - IR046 - public lighting – 20250702 - public, p. 1; Powercor, Powercor - IR049 - public lighting – 20250702 - public, p. 1; United Energy, United Energy - IR042 - public lighting – 20250702 - public, p. 1.

For example, see AER, AER - Final Decision Attachment 16 - Alternative control services - Ausgrid - 2024–29 Distribution revenue proposal - April 2024, p. 15; AER, AER - Final Decision Attachment 16 - Alternative control service - Endeavour Energy -2024–29 Distribution revenue proposal - April 2024, p. 7.

AER, AER - Public lighting cost model - Draft Decision - CitiPower distribution determination 2026-31 - September 2025, 'Opex\_Inputs'C12; AER, AER - Public lighting cost model - Draft Decision - Powercor distribution determination 2026-31 - September 2025, 'Opex\_Inputs'C12; AER, AER - Public lighting cost model - Draft Decision - United Energy distribution determination 2026-31 - September 2025, 'Opex\_Inputs'C12.

VGA, Victorian Greenhouse Alliances - Submission - Victorian electricity distribution proposals 2026-31 -May 2025, p. 11.

Table 14.3 VGA comparison of public lighting inputs (\$2025–26)<sup>61</sup>

	Jemena	AusNet	CitiPower	Powercor	United Energy
Elevated platform vehicle (per hr) – urban MV, urban T5	\$36.71	\$50.18	\$55.45	\$62.25	\$61.45
Elevated platform vehicle (per hr) – rural MV, rural T5, S-HP	\$36.71	\$63.64	\$78.60	\$78.60	\$55.20
Patrol vehicle (per hour)	\$6.54	\$34.37	\$34.99	\$42.64	\$15.20

We explored with CPU these variances and whether it could amend its hourly rates for EPVs (urban and rural) and patrol vehicles to equal the minimum across the three CPU networks.

- For CitiPower, this means lowering its hourly rates for rural EPVs and patrol vehicle to equal those of United Energy's.<sup>62</sup>
- For Powercor, this means lowering its hourly rate for urban EPVs to equal those of CitiPower and lowering its hourly rates for rural EPVs and patrol vehicle to equal those of United Energy's.
- For United Energy, this means lowering its hourly rate for urban EPVs to equal those of CitiPower.

CPU stated EPVs are not uniform in size or hourly cost. Powercor, specifically, requires a larger average size EPV to repair the varying lantern mix over a large geographical area. There are also scenarios where a specialist EPV is required due to extremely high mounting height.<sup>63</sup>

CPU stated it can utilise smaller EPVs effectively for CitiPower and United Energy due to the higher volume of lanterns over a smaller geographical area, with larger EPVs required only in specific circumstances. As a result, it noted the average hourly EPV rate for Powercor will be higher than for CitiPower (and United Energy).<sup>64</sup>

CPU agreed that patrol vehicle costs should be the same for all networks, but considered the Jemena rate is unrealistically low.<sup>65</sup>

VGA, Victorian Greenhouse Alliances - Submission - Victorian electricity distribution proposals 2026-31 -May 2025, p. 11.

AER, CitiPower EDPR 2026-31 – information request #052 – VGA submission on public lighting unit rates – 20250801 – [PUBLIC].

<sup>&</sup>lt;sup>63</sup> CitiPower, CitiPower - IR052 - Public lighting – 20250806, p. 2; Powercor, Powercor - IR055 - Public lighting - 20250806, p. 2; United Energy, United Energy - IR049 - Public lighting - 20250806, p. 2.

<sup>&</sup>lt;sup>64</sup> CitiPower, CitiPower - IR052 - Public lighting – 20250806, p. 2; Powercor, Powercor - IR055 - Public lighting - 20250806, p. 2; United Energy, United Energy - IR049 - Public lighting - 20250806, p. 2.

CitiPower, CitiPower - IR052 - Public lighting – 20250806, p. 2; Powercor, Powercor - IR055 - Public lighting - 20250806, p. 2; United Energy, United Energy - IR049 - Public lighting - 20250806, p. 2.

CPU reviewed all EPV and patrol vehicle rates and proposed new rates as shown in Table 14.4.66

Table 14.4 CPU new proposed rates (\$2025–26)<sup>67</sup>

	Original proposal			New proposal		
	CitiPower	Powercor	United Energy	CitiPower	Powercor	United Energy
EPV (per hour) - urban/small	\$55.45	\$62.25	\$61.45	\$56.38	\$62.25	\$56.38
EPV (per hour) - rural/large	\$78.60	\$78.60	\$55.20	\$73.13	\$78.60	\$73.13
Patrol vehicle (per hour)	\$34.99	\$42.64	\$15.20	\$34.99	\$34.99	\$34.99

We acknowledge CPU's responses to the VGA's concerns regarding the variation in rates in the Victorian DNSPs' public lighting models. However, we do not consider CPU provided sufficient justification for its new proposed rates, especially for CitiPower and United Energy as we discuss below.

#### CitiPower

In the draft decision, we maintain CitiPower's original proposal rate for urban EPVs but lowered the rates for rural EPVs and patrol vehicles to equal United Energy's original proposal rates (\$55.20 and \$15.20, respectively).

We consider the minimum rate would represent the most efficient rate across the CPU networks unless a particular network's circumstance or characteristics justify a departure.

It is not clear why CitiPower's hourly rate for urban EPVs should increase from \$55.45 to \$56.38. CitiPower's original proposal rate of \$55.45 was the lowest among CPU, but still higher than those of Jemena and AusNet Services as Table 14.3 shows. We therefore consider the original proposed rate for CitiPower should remain (\$55.45).

While CitiPower's new proposal rate for rural EPVs (\$73.13) is lower than the original proposal rate (\$78.60), CitiPower did not explain why it should not equal the original proposal rate for United Energy of \$55.20. As noted above, CPU distinguished CitiPower and United

<sup>66</sup> CitiPower, CitiPower - IR052 - Public lighting – 20250806, p. 2; Powercor, Powercor - IR055 - Public lighting - 20250806, p. 2; United Energy, United Energy - IR049 - Public lighting - 20250806, p. 2.

CitiPower, CitiPower - IR052 - Public lighting – 20250806, p. 2; Powercor, Powercor - IR055 - Public lighting - 20250806, p. 2; United Energy, United Energy - IR049 - Public lighting - 20250806, p. 2.

Energy from Powercor because they have higher volumes of lanterns over a smaller geographical area and so can use smaller EPVs compared to Powercor. However CitiPower's new proposal rate of \$73.13 is closer in value to Powercor's (as well as its own) original proposal rate of \$78.60, than to United Energy's original proposal rate of \$55.20. We therefore lowered CitiPower's rate for rural EPVs to equal United Energy's original proposal, as it is the most efficient rate among the CPU networks.

Similarly, CitiPower did not explain why it maintained its rate for patrol vehicle at \$34.99 rather than lowering it to equal United Energy's rate of \$15.20. The latter rate is still well above Jemena's proposed rate of \$6.54, which CitiPower considered was 'unrealistically low'. 68 As noted above, CPU agreed that patrol vehicle costs should be the same for all networks. 69 Given United Energy's original proposal rate of \$15.20 is the most efficient among the CPU networks, we have applied this rate to CitiPower in our draft decision.

#### Powercor

In the draft decision, we maintain Powercor's original proposal rate for urban EPVs and rural EPVs but lowered the rate for patrol vehicles to equal United Energy's original proposal rate of \$15.20.

We accept Powercor would require a larger average size EPV. As noted above, Powercor stated it requires a larger average size EPV to repair lights over a large geographical area and there are scenarios requiring specialist EPV due to extremely high mounting height.<sup>70</sup>

As we discussed for CitiPower, however, we were not provided with reasons as to why Powercor's hourly rate for patrol vehicles should be lowered to equal CitiPower's rate, rather than United Energy's rate. We therefore lowered Powercor's hourly rate for patrol vehicle to equal United Energy's rate of \$15.20.

#### **United Energy**

In the draft decision, we maintain United Energy's original proposal rates for rural EPVs and patrol vehicle but lowered the rate for urban EPVs to equal CitiPower's original proposal rate of \$55.45.

As we stated previously, we consider the minimum rate would represent the most efficient rate across the CPU networks unless a particular network's circumstance or characteristics justify a departure.

United Energy's original proposal rates for rural EPVs and patrol vehicle were already the lowest among the CPU networks. Further, as we discussed in the CitiPower section above, CPU did not provide reasons for its new proposal rates for rural EPVs and patrol vehicle. We therefore maintain United Energy's original proposal rates for these inputs.

<sup>&</sup>lt;sup>68</sup> CitiPower, CitiPower - IR052 - Public lighting – 20250806, p. 2; Powercor, Powercor - IR055 - Public lighting - 20250806, p. 2; United Energy, United Energy - IR049 - Public lighting - 20250806, p. 2.

CitiPower, CitiPower - IR052 - Public lighting – 20250806, p. 2; Powercor, Powercor - IR055 - Public lighting - 20250806, p. 2; United Energy, United Energy - IR049 - Public lighting - 20250806, p. 2.

CitiPower, CitiPower - IR052 - Public lighting – 20250806, p. 2; Powercor, Powercor - IR055 - Public lighting - 20250806, p. 2; United Energy, United Energy - IR049 - Public lighting - 20250806, p. 2.

Similarly, as we discussed above, it is not clear why CitiPower's hourly rate for urban EPVs should increase from \$55.45 to \$56.38. CitiPower's original proposal rate of \$55.45 was the lowest among CPU. We therefore consider the original proposed rate for CitiPower should remain (at \$55.45) and should apply to United Energy in our draft decision.

#### 14.2.4.6 Updates for more mechanical issues

We have amended the following inputs into CPU's public lighting models. These amendments are consistent with our respective draft decisions on other relevant aspects of CPU's proposals and with aspects of their distribution determinations for the 2021–26 period.

#### Rate of return

We substituted the rate of return inputs in CPU's public lighting models to be consistent with our respective draft decisions on CPU's rate of return (see the Overviews for CitiPower, Powercor and United Energy, section 2.2).

#### Inflation

We substituted the forecast inflation inputs for the 2026–31 period in CPU's public lighting models with placeholder values in this draft decision. We will update this for actual inflation in our final decision consistent with our final decision on CPU's control mechanisms.

#### Labour

As we discussed in section 14.2.4.4, we substituted the labour rates in CPU's public lighting models to be consistent with our draft decision on ANS.

We also substituted the labour escalators, based on updated labour price growth forecasts, in CPU's public lighting models to be consistent with our respective draft decisions on CPU's opex (see Attachment 3).

# Approved public lighting prices for the 2025-26 year

We amended the public lighting prices for 2025–26 in CPU's public lighting models<sup>71</sup> to match the public lighting prices in their approved pricing proposals for the 2025–26 regulatory year.<sup>72</sup> The public lighting prices for 2025–26 in CPU's public lighting models did not match the public lighting prices in its approved pricing proposal for the 2025–26 regulatory year. This is because CPU finalised their public lighting models in their initial

CitiPower, CP MOD 11.05 - Public lighting PTRM - Jan2025 - Public, 'PTRM input'F532:F550; CitiPower, CP MOD 11.06 - Public lighting cost model - Jan2025 - Public, 'PTRM\_Inputs'C40:C58; Powercor, PAL MOD 12.05 - Public lighting PTRM - Jan2025, 'PTRM input'F532:F550; Powercor, PAL MOD 12.06 - Public lighting cost model - Jan2025, 'PTRM\_Inputs'C40:C58; United Energy, UE MOD 12.05 - Public lighting PTRM - Jan2025 - Public, 'PTRM input'F532:F550; United Energy, UE MOD 12.06 - Public lighting cost model - Jan2025 - Public, 'PTRM\_Inputs'C40:C58.

CitiPower, CitiPower 2025-26 - Final - ACS Pricing Model - 31 March 2025, 'Public Lighting'H7:H37;
Powercor, Powercor 2025-26 - Final - ACS Pricing Model - 31 March 2025; 'Public Lighting'H7:H28; United Energy, United Energy 2025-26 - Final - ACS Pricing Model - 31 March 2025, 'Public Lighting'H7:H35.

proposals prior to preparing their 2025–26 pricing proposals (which we approved) due to the required timelines in the NER.<sup>73</sup>

## **Actual net capex figures**

In the draft decision we amended the net capex inputs for the years from 2020 to 2023–24 in CPU's public lighting models<sup>74</sup> to match the net capex they reported in their regulatory accounts.<sup>75</sup>

CPU agreed that the net capex in their public lighting models for the years from 2020 to 2023–24 should match the net capex they reported in their regulatory accounts.<sup>76</sup>

We also expect CPU's public lighting models in its revised proposal to have net capex figures for the 2024–25 year consistent with those reported in their regulatory accounts, once available.<sup>77</sup>

# 14.2.4.7 Issues for further consultation by CPU

In light of feedback from stakeholders, including from the VGA, we consider CPU should consult further on the matters set out below to inform their revised proposals. As noted in section 14.2.4.2, we encourage CPU to describe in their revised proposals the outcomes of this consultation. Importantly, CPU should describe how they incorporated feedback into their revised proposals and where they have not, the reasons why.

#### **Accelerated LED rollout**

We encourage CPU to consult further with stakeholders on replacing all streetlights with LEDs by the end of the 2026–31 period (accelerated LED rollout).

In its submission, the VGA recommended the Victorian DNSPs complete an accelerated LED rollout by the end of the 2026–31 period. The VGA recommended CPU integrate local government perspectives into project and design decisions so the LED replacement program could be delivered to enhance community safety and lower environmental impact.<sup>78</sup>

CitiPower, CitiPower - IR033 - public lighting – 20250526 - public, p. 1; Powercor, Powercor - IR033 - public lighting – 20250526 - public, p. 1; United Energy, United Energy - IR030 - public lighting – 20250526 - public, p. 1.

CitiPower, *CP MOD 11.06 - Public lighting cost model - Jan2025 - Public*, 'Roll Forward'D25:D29 and D79:D83; Powercor, *PAL MOD 12.06 - Public lighting cost model - Jan2025*, 'Roll Forward'D25:D29 and D79:D83; United Energy, *UE MOD 12.06 - Public lighting cost model - Jan2025 - Public*, 'Roll Forward'D25:D29 and D79:D83.

Specifically, DNSPs' regulatory accounts for these years were captured each year through an 'Annual reporting RIN' (where RIN stands for 'regulatory information notice'), which are available on our website up to the 2023–24 year.

CitiPower, CitiPower - IR055 - public lighting - 20250825, p. 2; Powercor, Powercor - IR057 - public lighting - 20250825, p. 2; United Energy, United Energy - IR050 - public lighting - 20250825, p. 2.

From 2024–25 onward, DNSPs' regulatory accounts will be captured each year through 'Annual information orders'. Annual information orders capture largely the same public lighting information as the Annual reporting RINs but with some refinements.

VGA, Victorian Greenhouse Alliances - Submission - Victorian electricity distribution proposals 2026-31 -May 2025, pp. 9–10.

CPU stated their consultation with councils prior to their proposals on this matter had revealed a mixed preference for the expedited replacement of all high-pressure sodium (HPS) lights with LED alternatives.<sup>79</sup> As a result, their initial proposals continued with replacements at the end of each HPS light's serviceable life, with councils having the option to self-fund the accelerated replacement of their HPS lights. CPU stated this approach was intended to ensure a fair and equitable outcome and to keep price increases moderate. They noted that if they were to opt for accelerated LED rollouts, councils who already paid for accelerated replacement of their HPS lights would partially fund the accelerated replacement of HPS lights for the remaining councils.<sup>80</sup>

However, CPU acknowledged the VGA's submission implies council support for accelerated LED rollouts. CPU noted this would have a material impact on both capital and operating expenditures, and consequently on proposed public lighting prices. CPU stated they are planning further consultation on this issue, including cost recovery (discussed further in the next section), prior to its revised proposal.<sup>81</sup>

#### Separate prices for customer-funded and DNSP-funded assets

We also encourage CPU to consult with stakeholders on separate pricing for customers who have funded their own lighting upgrades to LED and for customers whose upgrades are DNSP-funded.

In its submission, the VGA noted that in most jurisdictions DNSPs provide a lower tariff when customers fund the capital component of public lighting upgrades. The VGA noted in its initial proposal Jemena proposed to use this approach by establishing a new Regulatory Asset Base (RAB) for customer funded capital upgrades, with corresponding maintenance prices being much lower for the relevant councils. The VGA recommended that all Victorian DNSPs replicate Jemena's approach to ensure councils who have fully funded their public lighting assets are not subsidising DNSP-funded roll outs.<sup>82</sup>

CitiPower, CitiPower - IR046 - public lighting – 20250702 - public, p. 1; Powercor, Powercor - IR049 - public lighting – 20250702 - public, p. 2; United Energy, United Energy - IR042 - public lighting – 20250702 - public, p. 2. With no accelerated LED rollout, CPU's modelling assumes HPS lights (150W and 250W) will be the only non-LED lights in its network by the end of the 2026-31 period. CitiPower, CP MOD 11.05 - Public lighting PTRM - Jan2025, 'Forecast revenues'F14:K32; Powercor, PAL MOD 12.05 - Public lighting PTRM - Jan2025, 'Forecast revenues'F14:K32; United Energy, UE MOD 12.05 - Public lighting PTRM - Jan2025, 'Forecast revenues'F14:K32.

CitiPower, CitiPower – IR033 – public lighting – 20250526, p. 4; CitiPower, CitiPower - IR046 - public lighting – 20250702 - public, p. 1; Powercor, Powercor – IR033 – public lighting – 20250526, p. 4; Powercor, Powercor - IR049 - public lighting – 20250702 - public, p. 2; United Energy, United Energy – IR030 – public lighting – 20250526, p. 3; United Energy, United Energy - IR042 - public lighting – 20250702 - public, p. 2.

CitiPower, CitiPower - IR046 - public lighting – 20250702 - public, p. 1; Powercor, Powercor - IR049 - public lighting – 20250702 - public, p. 2; United Energy, United Energy - IR042 - public lighting – 20250702 - public, p. 2.

VGA, Victorian Greenhouse Alliances - Submission - Victorian electricity distribution proposals 2026-31 - May 2025, p. 10.

Similarly, CPU clarified that in their consultation prior to their initial proposals, councils requested that CPU 'adopt an equitable funding model and does not penalize councils who have already funded upgrades of their own public lighting assets'.<sup>83</sup>

CPU were of the view it is only where there is an accelerated LED rollout that equity issues arise under the current pricing arrangements.<sup>84</sup> As noted in the previous section, they considered councils who already paid for accelerated replacement of their HPS lights would partially fund the accelerated replacement of HPS lights for the remaining councils if CPU were to opt for accelerated LED rollouts.

CPU stated they proposed to continue assessing the available options, including customer impact, and further engage with councils, the Department of Transport and Planning, and other relevant stakeholders to understand their preferences and to inform the revised proposal.<sup>85</sup>

#### **Corn cob lights**

We also encourage CPU to engage with stakeholders on creating a new tariff for LED corncob lights. This consultation should include discussion on the replacement periods of such lights among other relevant factors such as unit costs and customer impact.

In its submission the VGA stated CPU proposed to convert a small number of legacy lights to replacement LED lamps (corncobs). The VGA stated it was withholding support for this change pending further information. Specifically, the VGA recommended:<sup>86</sup>

- Creating a new "LED Corncob" tariff so customers understand what is installed and the related cost variations. This tariff should then be represented in transition numbers across the 2026–31 period.
- Confirming the lamp replacement period. The VGA stated manufacturer recommendations are to replace lamps every 5 years, which would align with CPU's proposed PE cell replacement cycle of 10 years and luminaire useful life of 20 years.

CPU stated they supported the idea of creating a new Category P LED Lamp (corncob) tariff. They noted that although the volume of these LED lamps is small, they may obscure cost differences from standard LED technologies and potentially lead to cross-subsidisation, where customers using more durable LED products subsidise those with shorter-lived retrofit

CitiPower, CitiPower – IR033 – public lighting – 20250526, p. 4; Powercor, Powercor – IR033 – public lighting – 20250526, p. 4; United Energy, United Energy – IR030 – public lighting – 20250526, p. 3.

CitiPower, CitiPower - IR046 - public lighting – 20250702 - public, p. 3; Powercor, Powercor - IR049 - public lighting – 20250702 - public, p. 4; United Energy, United Energy - IR042 - public lighting – 20250702 - public, p. 4.

CitiPower, CitiPower - IR046 - public lighting – 20250702 - public, p. 3; Powercor, Powercor - IR049 - public lighting – 20250702 - public, p. 4; United Energy, United Energy - IR042 - public lighting – 20250702 - public, p. 4.

VGA, Victorian Greenhouse Alliances - Submission - Victorian electricity distribution proposals 2026-31 -May 2025, p. 15.

solutions. They considered a dedicated Cat P LED lamp (corncob) tariff will allow for more accurate cost recovery and price signals.<sup>87</sup>

However, CPU also stated introducing a new tariff for LED lamps will impact many councils. CPU stated they are willing to further consult with stakeholders and consider including a new tariff in their revised proposals.<sup>88</sup>

On replacement cycles, CPU broadly agreed with a 5-year replacement period. We have set out our draft decision position on this in section 14.2.4.3.

#### **Smart lighting rollout**

We note CPU confirmed that their public lighting proposals assume they will install smart lighting across all major road LEDs in the 2026–31 period as the VGA recommended. We encourage CPU to factor into their revised proposals the opex savings due to the decreasing need for patrols resulting from this program, particularly as increasingly more areas have full penetration of smart lighting towards the end of the 2026–31 period. Where CPU do not incorporate such opex savings, CPU should provide reasons in its revised proposal. We encourage CPU to engage with their stakeholders on this issue.

In its submission the VGA stated councils support smart lighting service as it is energy efficient and does not require physical patrolling for inspections which is a significant cost saving. The VGA therefore recommended that smart lighting be installed in all major road lights to support operating expenditure (opex) reductions, which should be accounted for in the modelling for the relevant years of the 2026–31 period. Similar to the LED rollout, the VGA recommended that CPU support local government input via the MAV streetlighting support program with customers to be consulted on the smart lighting roll-out program.<sup>89</sup>

In their proposals, CPU stated they started replacing legacy luminaires on major high-traffic roads in 2017, including introducing smart controllers (PE cells).<sup>90</sup> We note a key focus in CPU's public lighting proposal for the 2026–31 period is implementing a basic CMS to enable smart lighting capabilities, which the Department of Transport and Planning supported (see also section 14.2.2).<sup>91</sup>

CitiPower, CitiPower - IR046 - public lighting – 20250702 - public, pp. 7–8; Powercor, Powercor - IR049 - public lighting – 20250702 - public, pp. 8–9; United Energy, United Energy - IR042 - public lighting – 20250702 - public, p. 9.

CitiPower, CitiPower - IR046 - public lighting – 20250702 - public, p. 8; Powercor, Powercor - IR049 - public lighting – 20250702 - public, p. 9; United Energy, United Energy - IR042 - public lighting – 20250702 - public, p. 10.

VGA, Victorian Greenhouse Alliances - Submission - Victorian electricity distribution proposals 2026-31 -May 2025, pp. 9–10.

OitiPower, CP ATT 11.01 - Public lighting - Jan2025, p. 3; Powercor, PAL ATT 12.01 - Public lighting - Jan2025, p. 3; United Energy, UE ATT 12.01 - Public lighting - Jan2025, p. 3.

<sup>&</sup>lt;sup>91</sup> CitiPower, *CP ATT 11.01 - Public lighting - Jan2025*, p. 6; Powercor, *PAL ATT 12.01 - Public lighting - Jan2025*, p. 6; United Energy, *UE ATT 12.01 - Public lighting - Jan2025*, p. 6.

CPU subsequently confirmed that their public lighting proposals assume they will install smart lighting across all major road LEDs in the 2026–31 period, as the VGA recommended.<sup>92</sup>

However, CPU stated significant opex savings can only be achieved by eliminating the need to patrol major road lighting. This is only possible when all luminaires within a defined area have been upgraded to LED and equipped with smart PE cells essential for remote operation of the lighting. CPU anticipates this level of conversion can be achieved toward the end of the 2026–31 period. Hence, meaningful opex savings would only be expected to materialise in the subsequent regulatory period.<sup>93</sup>

We acknowledge patrols will be required for areas that do not yet have full penetration of LED with smart PE cells, particularly at the beginning of the 2026–31 period. However, we would expect the need for patrols to decrease as more and more areas see full penetration of LED with smart PE cells as the 2026–31 period progresses.

We therefore encourage CPU to factor into their revised proposals these transitional opex savings due to decreasing need for patrols as more areas have full penetration of smart lighting towards the end of the 2026–31 period. Where CPU does not incorporate such opex savings, due to materiality for example, CPU should provide reasons in their revised proposals. We also consider there would be benefit in CPU consulting their stakeholders on these savings.

#### 4000K luminaires

In response to the VGA's submission, we note CPU offers customers the option to use 4000K luminaires (as well as 3000K luminaires) under its proposed suite of tariffs.

The VGA stated in its submission that it supported DNSPs' proposals to have 3000K luminaires as standard for residential areas, particularly as a measure to protect nocturnal animals. However, the VGA also stated there are specific locations where 4000K luminaires would result in improved safety outcomes (e.g. at traffic signals and pedestrian crossings). The VGA therefore requested that the DNSPs enable councils to choose 4000K for specific locations.<sup>94</sup>

CPU confirmed they will offer customers the option to select either 3000K or 4000K luminaires during the 2026–31 regulatory period. CPU stated they will implement this through

<sup>&</sup>lt;sup>92</sup> CitiPower, CitiPower - IR046 - public lighting – 20250702 - public, p. 2; Powercor, Powercor - IR049 - public lighting – 20250702 - public, p. 3; United Energy, United Energy - IR042 - public lighting – 20250702 - public, p. 3.

CitiPower, CitiPower - IR046 - public lighting – 20250702 - public, p. 2; Powercor, Powercor - IR049 - public lighting – 20250702 - public, p. 3; United Energy, United Energy - IR042 - public lighting – 20250702 - public, p. 3.

<sup>94</sup> VGA, Victorian Greenhouse Alliances - Submission - Victorian electricity distribution proposals 2026-31 -May 2025, p. 15.

a formal policy, applied consistently across all councils and stakeholders to an ensure equitable and transparent access.<sup>95</sup> Under this policy:

- Major roads managed by Department of Transport and Planning will continue to have 4000k luminaires as per current requirements.
- Minor roads managed by councils will have the option of either 3000k or 4000k
   luminaires, with 3000k being the standard installation.

CPU stated they did not anticipate that offering a choice of colour temperature would affect the proposed suite of tariffs. However, they will recover costs to bring forward the replacement of existing luminaires to change colour temperature as a quoted service. CPU stated they will continue to engage with councils and Department of Transport and Planning to accommodate their preferences.<sup>96</sup>

We encourage CPU to include the outcomes of this further engagement in its revised proposal.

#### **Transitioning legacy lighting schemes**

The VGA noted in its submission that CPU proposed to give councils management and control of public lighting in non-trafficable parks, gardens and laneways to help ensure safety and access (transitioning legacy lighting schemes).<sup>97</sup> The VGA requested further detail and the potential for council input into the transition process for these assets before confirming its support for this transition.

In response to the VGA's submission, we encourage CPU to develop high-level principles and processes to assist them and councils with transitioning legacy lighting schemes and to consult with councils in relation to these principles. Further, that CPU clarify that the costs of transitioning legacy lighting schemes are recovered through unregulated charges, rather than through 'OMR&R services' (Operation, Maintenance, Repair and Replacement).

In response to information requests, CPU stated they consulted with public lighting customers on the opportunity to transfer the management and control of public lighting in non-trafficable parks, gardens and laneways to help ensure safety and access back to councils. 98 CPU noted they have been approached in the past to assist with improving lighting within parks and gardens. Due to the difficulty with access and limitations with standard suite of pole and luminaires, many councils are exploring the opportunity to take

OitiPower, CitiPower - IR046 - public lighting – 20250702 - public, p. 5; Powercor, Powercor - IR049 - public lighting – 20250702 - public, p. 6; United Energy, United Energy - IR042 - public lighting – 20250702 - public, p. 6.

GitiPower, CitiPower - IR046 - public lighting – 20250702 - public, p. 5; Powercor, Powercor - IR049 - public lighting – 20250702 - public, p. 6; United Energy, United Energy - IR042 - public lighting – 20250702 - public, p. 6.

VGA, Victorian Greenhouse Alliances - Submission - Victorian electricity distribution proposals 2026-31 - May 2025, p. 15; CitiPower, CP ATT 11.01 - Public lighting - Jan2025, p. 7; Powercor, PAL ATT 12.01 - Public lighting - Jan2025, p. 7; United Energy, UE ATT 12.01 - Public lighting - Jan2025, p. 7.

<sup>&</sup>lt;sup>98</sup> CitiPower, CitiPower - IR046 - public lighting – 20250702 - public, p. 6; Powercor, Powercor - IR049 - public lighting – 20250702 - public, p. 7; United Energy, United Energy - IR042 - public lighting – 20250702 - public, p. 7.

greater responsibility in these areas. CPU proposed to assist in this transition at the request of councils.<sup>99</sup>

CPU stated transferring management and control of such public lighting would be voluntary. However, exact details of the process and applicable standards will be defined on a case-by-case basis between the relevant council and CPU network. 101

We acknowledge the transfer of management and control of such public lighting would be unique to each request. Hence, it may be appropriate to develop the exact process and standards on a case-by-case basis. However, it may be useful to have some high-level principles and processes that would assist CPU and the relevant council to develop the exact process and standards for each request. We therefore encourage CPU to develop these high-level principles and process with the relevant stakeholders (such as councils and the VGA).

We also note that CPU's proposals stated costs related to transitioning legacy lighting schemes 'would be recovered though proposed OMR&R services.' CitiPower stated it recovers costs associated with its ACS public lighting services through OMR&R tariffs. 103

However, CPU clarified in response to an information request that they proposed that the costs of transitioning legacy lighting schemes be borne only by those specific customers involved through an unregulated charge agreed between the parties. 104 CPU stated they did not include the costs associated with the transfer of management and control of public lighting in these areas in their modelling. 105

In their revised proposals, we therefore require CPU to clarify that the costs of transitioning legacy lighting schemes are recovered through unregulated charges, rather than through 'OMR&R services'.

<sup>&</sup>lt;sup>99</sup> CitiPower, CitiPower - IR046 - public lighting – 20250702 - public, p. 7; Powercor, Powercor - IR049 - public lighting – 20250702 - public, p. 8; United Energy, United Energy - IR042 - public lighting – 20250702 - public, p. 8.

CitiPower, CitiPower - IR046 - public lighting – 20250702 - public, p. 6; Powercor, Powercor - IR049 - public lighting – 20250702 - public, p. 7; United Energy, United Energy - IR042 - public lighting – 20250702 - public, p. 7.

CitiPower, CitiPower - IR046 - public lighting – 20250702 - public, pp. 6–7; Powercor, Powercor - IR049 - public lighting – 20250702 - public, pp. 7–8; United Energy, United Energy - IR042 - public lighting – 20250702 - public, pp. 7–8.

CitiPower, CP ATT 11.01 - Public lighting - Jan2025, p. 7; Powercor, PAL ATT 12.01 - Public lighting - Jan2025, p. 7; United Energy, UE ATT 12.01 - Public lighting - Jan2025, p. 7.

CitiPower, CP ATT 11.01 - Public lighting - Jan2025, p. 2; Powercor, PAL ATT 12.01 - Public lighting - Jan2025, p. 2; United Energy, UE ATT 12.01 - Public lighting - Jan2025, p. 2.

CitiPower, CitiPower - IR046 - public lighting – 20250702 - public, p. 7; Powercor, Powercor - IR049 - public lighting – 20250702 - public, p. 8; United Energy, United Energy - IR042 - public lighting – 20250702 - public, p. 8.

CitiPower, CitiPower - IR046 - public lighting – 20250702 - public, p. 7; Powercor, Powercor - IR049 - public lighting – 20250702 - public, p. 8; United Energy, United Energy - IR042 - public lighting – 20250702 - public, p. 8.

# 14.2.4.8 Introducing new services during a regulatory control period

Our draft decision is that CPU must price any new public lighting services they introduce during the 2026–31 period according to their respective control mechanisms for quoted services. CPU should only introduce new services because customers want them (customer driven). In proposing new services, we require that CPU demonstrate customer support for such prices and services.

We consider this is consistent with our previous distribution determinations. We stated new alternative control services introduced during a regulatory control period with characteristics that are the same, or essentially the same, as other alternative control services should be priced as a quoted service until the next regulatory control period (see Attachment 12).

It is worth considering that quoted services generally apply to one-off services. The control mechanism poses no administrative issues where, for example, a council agrees to pay for the installation of new technologies up-front.

However, some councils may prefer to pay for new technologies over their economic or useful life. We consider this is possible under the control mechanism for quoted services. This could involve determining the up-front costs based on the control mechanism formula as a first step. The distributor would then calculate an annual fee using a method appropriate to the service.

Further information about quoted services and introducing new prices within the 2026–31 period is set out in Attachment 12.

# **Shortened forms**

Term	Definition
ACS	Alternative Control Services
AER	Australian Energy Regulator
ANS	Ancillary network services
API	Application programming interface
Capex	capital expenditure
CMS	Central management system
CPI	Consumer Price Index
CPU	CitiPower, Powercor and United Energy
DNSP	distribution network service provider
EPV	Elevated platform vehicle
ESCV	Essential Services Commission Victoria
F&A	Framework and approach
HPS	High pressure sodium
LED	Light emitting diode
NEL	National electricity law
NEM	National electricity market
NER or the rules	National electricity rules
Opex	Operating and maintenance expenditure
PE cell	Photoelectric cell
PTRM	Post-Tax-Revenue-Model
RAB	Regulatory asset base
RBA	Reserve Bank of Australia
RIN	Regulatory information notice
VGA	Victorian Greenhouse Alliances
WACC	Weighted average cost of capital