



# Jemena Electricity Networks (Vic) Ltd

## 2026-31 Electricity Distribution Price Reset

Public Lighting

Consultation paper



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## Overview

Jemena Electricity Networks (JEN) is an electricity distribution network service provider subject to economic regulation administered by the Australian Energy Regulator (AER) under the National Electricity Rules.

Our electricity network is one of five electricity distribution networks operating in Victoria. We are the sole distributor of electricity in north-west greater Melbourne. Every day we help deliver electricity to over 387,000 homes and businesses across north and western Melbourne, including Melbourne Airport.

The AER approves our prices and price adjustment approach every five years. In the build-up to each new cycle, we submit a proposal to the AER that outlines our plans for the five years from 1 July 2026 to 30 June 2031 (next regulatory period) and how we expect to fund them. We are currently preparing a proposal (Plan) that we will provide to the AER in January 2025 for its consideration.

On 22 August 2024, we released the draft of our Plan (Draft Plan).<sup>1</sup> We set out our proposed services for the next regulatory period, the costs of implementing those services and how we expect to fund them. For public lighting, we set out in the Draft Plan the emerging challenges about public lighting, our public lighting customers' feedback and our plan to replace all our T5 luminaries with light emitting diode (LED) lights over the next regulatory period.

## Our public lighting services and our customers

Currently, we provide the following public lighting services to 13 local councils and VicRoads in the areas we service in the northwest of Melbourne:

- operation, maintenance, repair and replacement of public lighting assets in line with the Public Lighting Code (Code) or the relevant legislation<sup>2</sup>
- alteration and relocation of our public lighting assets
- provision of new public lights, including in greenfield sites
- provision, construction and maintenance of emerging public lighting technology.

The AER recently consulted on the services we will provide to customers in the next regulatory period through its Framework and Approach service classification process.<sup>3</sup> In its recent final decision, the AER approved JEN to provide these services in the next regulatory period.

## The customers we provide public lighting services to

We outline in Table 1.1 the customers we provide public lighting services to:

**Table 1.1 – Our public lighting customers**

| Local council                                                             | Local council                                                                |
|---------------------------------------------------------------------------|------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Banyule City Council</li> </ul>  | <ul style="list-style-type: none"> <li>• Maribyrnong City Council</li> </ul> |
| <ul style="list-style-type: none"> <li>• Brimbank City Council</li> </ul> | <ul style="list-style-type: none"> <li>• Melbourne City Council</li> </ul>   |
| <ul style="list-style-type: none"> <li>• City of Whittlesea</li> </ul>    | <ul style="list-style-type: none"> <li>• Melton City Council</li> </ul>      |

<sup>1</sup> JEN, [2026-31 Draft Plan](#), August 2024.

<sup>2</sup> Essential Services Commission, Public Lighting Code, Version 2, December 2015.

<sup>3</sup> AER, [Framework and approach, AusNet Services, Citipower, Jemena, Powercor and United Energy 2026-31](#), July 2024.

| Local council                                                                  | Local council                                                                |
|--------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>Darebin City Council</li> </ul>         | <ul style="list-style-type: none"> <li>Merri-bek City Council</li> </ul>     |
| <ul style="list-style-type: none"> <li>Hobsons Bay City Council</li> </ul>     | <ul style="list-style-type: none"> <li>Moonee Valley City Council</li> </ul> |
| <ul style="list-style-type: none"> <li>Hume City Council</li> </ul>            | <ul style="list-style-type: none"> <li>Yarra City Council</li> </ul>         |
| <ul style="list-style-type: none"> <li>Macedon Ranges Shire Council</li> </ul> | <ul style="list-style-type: none"> <li>VicRoads</li> </ul>                   |

## The purpose of this consultation paper

This consultation paper seeks further feedback on several issues and recommendations raised by some of our public lighting customers over the past twelve months. Your feedback on this consultation paper will further inform our public lighting strategy and assist us in developing a program that we will include in our proposal to the AER for submission on 31 January 2025 (Plan).

## Have your say!

We invite you to share your thoughts, including responding to our questions. You may send your feedback via email: [GridTalk@jemen.com.au](mailto:GridTalk@jemen.com.au). Submissions and feedback close on **23 September 2024**

## 1. We seek your feedback on our proposed approach to public lighting services for the next regulatory period

In our May 2024 engagement with our local councils (most of which are our public lighting customers), we heard about their challenges and priorities in relation to public lighting. We also received a submission from Green Alliances which provided some suggestions on our approach to public lighting and consultation on these services.<sup>4</sup> In our Draft Plan, we set out the key challenges or drivers facing public lighting in the next regulatory period and committed to undertaking further consultations.

We set out below our proposed approach to providing public lighting services for your feedback. There are also several discussion topics which we hope to address prior to finalising our Plan.

### 1.1 Standardisation to lamps with low energy usage, as much as possible

Our view is that increased standardisation to lights with low energy usage, such as light-emitting diode (LED), will be beneficial to our public lighting customers, their communities and our environment. LEDs use about 75 per cent less energy than halogen lamps and they could last 5 to 10 times longer – resulting to lower replacement costs and number of lamps ending up in the landfill in the long term.<sup>5</sup> It is also reported that the up-front cost of LEDs generally has a payback time of less than one year.<sup>6</sup>

During our engagement with our public lighting customers in May 2024, we heard them say that:

- there should be greater standardisation of lighting levels
- we should replace old inefficient public lights with LEDs in the next regulatory period to realise energy savings.

Our forecast lights for the period FY24 to FY31 (Figure 2.1) reflect our strategy developed in response to the recommendations made by our public lighting customers in May 2024. At the end of the next regulatory period, LEDs will make up around 76 per cent of our forecast total public lights. We expect that this share will further increase in the 2031-36 regulatory period.

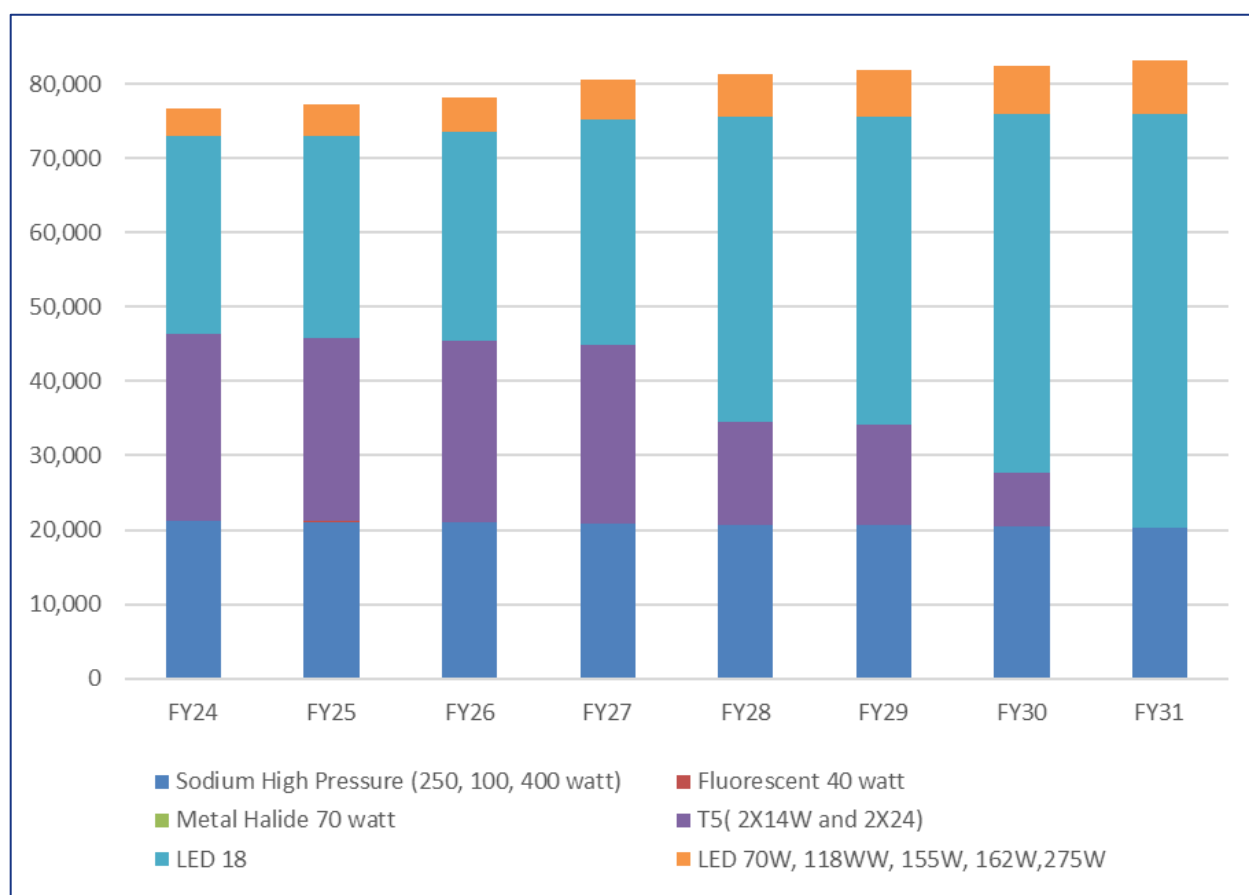
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<sup>4</sup> JEN, [2026-31 Draft Plan](#), August 2024, pp.134-136.

<sup>5</sup> Department of Climate Change, Energy, the Environment and Water, [Lighting](#) (accessed on 31 August 2024).

<sup>6</sup> Department of Climate Change, Energy, the Environment and Water, [Lighting](#) (accessed on 31 August 2024).

Figure 1–1: Estimate (FY24 to FY26) and forecast lights (FY27 to FY31)



## 1.2 Transitional or accelerated LED rollout

In our meeting with Green Alliances and Hume City Council on 28 August 2024, they expressed support for the accelerated rollout of LEDs, as well as a council-funded rollout. Green Alliances have also suggested that we include other light types (such as HPS lamps) through an equitable, coordinated bulk replacement program. They also noted a preference for local councils to elect to lead the procurement of materials and project management services in the changeover to new light types.<sup>7</sup>

Our proposal is to transition the LED rollout by not including High Pressure Sodium in the bulk re-lamping program for the next regulatory period. We consider that our transition approach to replace HPS with LEDs on normal maintenance cycles will help reduce costs. The downside is that the LED rollout could take longer. There might also be a supply risk. For example, in the European Union, HPS (with a few exceptions) – will continue to be approved according to the Restriction of Hazardous Substances directive and will be available on the European market until February 2027 at least.<sup>8</sup> Increasing preference for LED might influence manufacturers to phase out HPS in the future.

We would like to hear your views about the LED rollout including your local council's interest to fund the accelerated LED rollout.

1. What are your views on our proposed approach to transition the LED rollout in the next regulatory period?
2. Does your council prefer to accelerate the LED rollout in the next regulatory period by also including HPS in the bulk re-lamping program, and why?

<sup>7</sup> Green Alliances, Jemena funding details for transition from MV, MH and CFL to LED, 2 August 2024.

<sup>8</sup> [Radium, Fact check: High pressure discharge lamps ban](#) (accessed on 10 September 2024); [SGS, Exemption of RoHS Directive Updated](#), (accessed on 10 September 2024).

3. If you answer yes to question 2, does your council intend to fund (either full or partial) the accelerated LED rollout? Or do you prefer that we undertake and fund the accelerated rollout and recover costs from our public lighting customers through the operation and maintenance charges that we propose to the Australian Energy Regulator (AER)?

We are not aware if all or only some local councils have the funds to replace HPS with LEDs in the next regulatory period. This may have implications on our public lighting charges, such that a separate pricing arrangement may have to apply to those local councils which funded their own HPS bulk re-lamping, in order to prevent any cross-subsidisation.

4. If you answer yes to question 2, how do you propose to manage the accelerated LED rollout in the next regulatory period?
5. Do you have other concerns you want us to consider?

### 1.3 Approach to investing in smart public lighting technologies

In the Draft Plan, we noted that our approach to public lighting is customer-driven and that we would work with local councils and VicRoads to ensure that we embrace technological developments that meet our customers' needs.<sup>9</sup> We also noted that we would work closely with our public lighting customers to understand their preferences for adopting smart technologies and take these into account in our proposed programs and plans for the next regulatory period.

During our engagement with our public lighting customers in May 2024, we heard them say:

- keep up with new technologies
- implement smart lighting and controls (i.e. shifting from a default-on approach to task-based lighting) to improve local council's electricity network management
- Implementing 360-degree lighting that can embed solar panels, PA warning systems, CCTV (including with AI) and Electric Vehicle chargers to help improve options local councils have to contribute to public safety and meet community needs
- explore pilot funding or grants for smart public lighting/controls (i.e. a shift from a default-on approach to task-based lighting) and consider partnering with council parks departments and capital works teams to explore opportunities
- work with councils to develop a 'smart light operating policy' to help them manage the operation of the smart lighting system.<sup>10</sup>

We support smart lighting technologies and believe that they can bring significant efficiencies to our public lighting customers and in turn to their respective communities. The AER considers that the regulatory framework can accommodate smart public lighting technologies, noting in its final decision for Essential Energy said that:

*Essential Energy must price any new smart lighting services it introduces during the 2024–29 period according to the control mechanism for quoted services. Essential Energy should only introduce new services because customers want them (customer driven). In proposing new services, we require that Essential Energy be able to demonstrate customer support for such prices and services.<sup>11</sup>*

Below are further excerpts from the AER's final decision for Essential Energy.

<sup>9</sup> JEN, [2026-31 Draft Plan](#), August 2024, p.135.

<sup>10</sup> JEN, [2026-31 Draft Plan](#), August 2024, pp.47, 135.

<sup>11</sup> AER, Final decision: [Essential Energy Electricity Distribution Determination 2024 to 2029 \(1 July 2024 to 30 June 2029\). Attachment 16 Alternative control services. June 2024](#), p.18.

*We understand “smart lighting” or “smart technologies” are catch-all terms for technologies with a variety of applications. These include metering individual lights, as well as dimming based on ambient lighting levels or pedestrian/vehicle activity. Distributors and public lighting customers therefore need to engage on the types of smart lighting solutions appropriate to their needs.*

*Given its status as an emerging technology, the industry is also deliberating on regulatory issues regarding aspects of these applications such as individually meter lighting installations.*

*We understand that distributors are at different stages in their deployment of smart technologies. Essential Energy informed us it is running a trial of smart lighting. Essential Energy stated it has communicated to councils that it could introduce smart lighting in the future, pending the outcome of this trial.*

*We are open to Essential Energy introducing regulated pricing for smart lighting during the 2024–29 period where there is demand for such technologies. We consider Essential Energy can price smart lighting in accordance with the control mechanism formula for quoted services should it introduce such services during the 2024–29 period (see attachment 14 section 14.5.1).<sup>12</sup>*

We are interested in hearing your views about implementing smart public lighting technologies in the next regulatory period.

6. What specific smart public lighting technologies do you need or are appropriate to your local council needs?

Jemena will consider seeking public lighting funding through the price reset process to implement new technologies, noting that this will form part of the public lighting OM&R charges for the next regulatory period.

## 1.4 Other matters

Our public lighting customers have also made some suggestions about decorative poles, wild-life friendly lightings and public lightings for level crossing removals. We discussed them below.

During our engagement with our public lighting customers in May 2024, they suggested that we:

- provide a ‘more workable’ solution to decorative lighting, including a better process for replacing damaged lights.
- offer additional ‘standard’ options for more wildlife sensitive lightings (such as possibility of using 3000 Kelvin as default on local roads) and lighting for level crossing removals.

### 1.4.1 Decorative poles

Decorative poles are non-standard lighting equipment. In our engagement with local councils for the 2021-26 electricity distribution price reset, we asked whether we should incorporate decorative poles in our standard public equipment list. The feedback received at that time indicated that each council would prefer to make its own decisions regarding the particular circumstances and the replacement options. For that reason, it was concluded that the incremental costs of decorative poles should be recovered directly from those councils using them.

We are keen to understand whether your preference remains the same, that is, should decorative poles continue to remain non-standard lighting equipment and that local councils pay the incremental costs of decorative poles or should they form a part of the OM&R charge and recover costs from all public lighting customers. Decorative

<sup>12</sup> AER, Final decision: [Essential Energy Electricity Distribution Determination 2024 to 2029 \(1 July 2024 to 30 June 2029\). Attachment 16 Alternative control services](#), June 2024, pp. 18-20.

poles are much more expensive than the standard public lighting poles that we use and would lift prices across all councils if they become a standard item.

#### 1.4.2 Wildlife sensitive lighting options

Currently, local councils can apply to us for the installation of wildlife-sensitive lighting as part of our approval process for public lighting luminaires. Currently, we do not stock non-standard luminaires, but our customers provide replacement luminaires if required. If we include 3000k as a standard option, it will result in doubling our stock of luminaires (our existing stocks of 4000k luminaires plus new stocks of 3000k). Our initial view is that the current arrangement of treating 3000k lighting as non-standard is reasonable, but we are open to hearing your views on how we can improve our approval process for public lighting luminaires.

#### 1.4.3 Lightings for level crossing removals

We are interested in understanding local councils' specific concerns and recommendations in relation to lighting for level crossing removal projects so we can consider them in developing our proposal to the AER. We are particularly keen to understand the public lighting volumes and the complexity of the works involved in installing and maintaining these light types.

7. Should decorative poles remain non-standard?
8. Do you have suggestions on how we can improve our application process for public luminaires including for wildlife sensitive lighting options?
9. What are your specific concerns and suggestions about public lighting for level crossing removal, and why?
10. Do you have other concerns that we should consider in relation to lightings for level crossing removals?