



**Economic Regulation Authority**

# Determination on the proposed 2024/25 price list for the Western Power network

Submitted by Western Power

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# 1. Determination

On 28 March 2024, Western Power submitted a proposed 2024/25 price list for its electricity network services for approval under chapter 8 of the *Electricity Networks Access Code 2004*.

Western Power's proposed price list has been submitted in accordance with the amended access arrangement that applies to Western Power's electricity network for the fifth access arrangement period (2022/23 to 2026/27).

Western Power's proposed price list results in an average increase in prices of 9.49 per cent. Based on the target revenue approved in the ERA's final decision on Western Power's access arrangement published on 31 March 2023, prices were projected to increase between 7 to 8 per cent over the access arrangement period. The increase in prices above the level projected in March 2023 is due to an increase in the Tariff Equalisation Contribution and higher inflation.<sup>1</sup>

Apart from generators and some very large customers, the network charges are not directly charged to end users. The network charges are paid by retailers. The retailers decide how those charges will be passed on to end users along with wholesale electricity and other related costs.

Most households and small businesses are supplied by Synergy. The State Government sets Synergy's retail tariffs as part of the State Budget. The 2024/25 State Budget announced on 9 May 2024 indicated that regulated retail tariffs will increase by 2.5 per cent and regulated retail streetlight tariffs for the South West Interconnected System will increase by 4.26 per cent for the year 2024/25.

The ERA has assessed Western Power's proposed 2024/25 price list and considers that it generally complies with the requirements of Western Power's approved access arrangement (including the tariff structure statement) and the Access Code.

Two amendments have been required:

- A reduction to the proposed connection charge for distribution connected generators of \$0.2 million to address an issue that was identified after the price list was approved last year. See section 4.
- Amendments to the proposed tariff for the residential and business multi part time of use energy services (RT21 and RT22). The proposed prices for the overnight time period should not be higher than the off-peak period. See section 4.

In accordance with the provisions in section 8.3 of the Access Code and with the assistance of Western Power the ERA has amended the prices in the proposed price list. The amended price list has been published with this determination.

Details of the ERA's assessment and required amendments are set out in the following sections.

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<sup>1</sup> The AA5 final decision was based on TEC forecasts of \$173 million for 2023/24, and \$179 million for 2024/25. The gazetted TEC, published after the final decision and 2023/24 price list approval, was \$197 million for 2023/24 and \$199 million for 2024/25. The total difference between the AA5 forecast and gazetted TEC was \$44 million. Without these changes to the TEC, the average increase in tariffs for 2024/25 would have been 7.01 per cent.

Forecast CPI in the AA5 final decision was 2.58 per cent. Actual CPI was 4.1 per cent.

Consistent with the requirements of section 8.11, the approved amended price list will take effect from 1 July 2024.

## 2. Compliance with the Access Code

Chapter 8 of the Access Code sets out the process and requirements for the ERA to approve and publish the price list. The ERA must approve the price list if it is satisfied that:

- The price list complies with Chapter 7 and Chapter 8 of the Access Code and the service provider's access arrangement including the tariff structure statement.
- All forecasts associated with the price list are reasonable.

Chapter 8 of the Access Code details the required contents of the price list. The ERA has assessed the annual price list submitted by Western Power on 28 March 2024 to ensure it includes the following content requirements set out in section 8.12:

- The proposed reference tariffs, including the charging parameters and the elements of service to which each charging parameter relates, for each reference service included in the approved access arrangement.
- The nature of any variation or adjustment to the reference tariff that could occur during the course of the pricing year and the basis on which it could occur.
- Demonstration of compliance with the Access Code and the approved access arrangement and tariff structure statement.
- Demonstration how each proposed reference tariff is consistent with the forecast price change for that reference tariff as set out in the relevant reference tariff change forecast, or explanation of any material differences between them.
- A description of the nature and extent of change from the previous pricing year and demonstration that the changes comply with the Access Code and the approved access arrangement.

The ERA is satisfied that the proposed price list includes the required content.

The pricing requirements in Chapter 7 of the Access Code are incorporated in the tariff structure statement included in the approved access arrangement. Compliance with the access arrangement and tariff structure statement is considered in the following sections.

### **3. Compliance with the access arrangement**

The access arrangement contains the price control that determines the target revenue Western Power can earn for the pricing year.

Western Power has set out its calculation of maximum target revenue in section 1.4 of the proposed price list. The ERA has reviewed the calculation and parameters Western Power has used and is satisfied that it is consistent with the requirements of clause 5.7 of the access arrangement.

The maximum target revenue that can be recovered through network charges in 2024/25 is \$1,960.3 million. Western Power's forecast revenue based on its proposed prices is \$1,960.37.

## 4. Compliance with the tariff structure statement

The tariff structure statement sets out the pricing methods that will be used during the access arrangement period including:

- The structure of each reference tariff.
- The charging parameters for each reference tariff.
- A description of the approach that will be taken in setting each reference tariff in each price list during the access arrangement period.

The ERA has compared the tariff structures and charging parameters included in the price list with the tariff structure statement and is satisfied that they are consistent.

Western Power's proposed forecast revenue and change in each tariff is summarised in Table 1 below.

**Table 1: Proposed forecast revenue and change in tariffs (\$ million nominal)**

	Forecast revenue	Change in tariff (%)
RT1 Anytime energy residential	348.46	9.53
RT2 Anytime energy business	80.07	9.20
RT3 Time of use energy residential (discontinued)	3.23	10.71
RT4 Time of use energy business (discontinued)	19.65	10.53
RT5 High voltage metered demand	45.36	9.33
RT6 Low voltage metered demand	136.3	9.11
RT7 High voltage CMD	206.57	8.43
RT8 Low voltage CMD	14.54	6.93
RT9 Streetlighting	50.55	5.78
RT10 Unmetered supplies	7.19	6.29
RT11 Distribution Entry	5.21	7.01
RT13 Anytime energy residential bi-directional	164.88	9.47
RT14 Anytime energy business bi-directional	3.17	8.74
RT15 Time of use residential bi-directional (discontinued)	5.05	10.99
RT16 Time of use business bi-directional (discontinued)	4.54	10.36
RT17 3 part time of use energy residential (discontinued)	89.49	10.12
RT18 3 part time of use energy business (discontinued)	60.76	11.96
RT19 Time of use demand residential (discontinued)	0.88	8.09
RT20 Time of use demand business (discontinued)	6.64	9.65



	Forecast revenue	Change in tariff (%)
RT21 Multi-part time of use residential (discontinued)	318.51	11.81
RT22 Multi-part time of use business (discontinued)	2.05	8.40
RT34 Super off-peak energy business (new)	148.88	9.57
RT35 Super off-peak energy residential (new)	7.74	9.25
RT36 Super off-peak demand business (new)	34.33	7.75
RT37 Super off-peak demand residential (new)	73.09	9.50
RT38 Low voltage distribution storage (new)	1.15	9.01
RT39 Low voltage distribution storage (new)	1.15	9.01
RT40 Low voltage electric vehicle charging service (new)	0.19	9.35
RT41 High voltage electric vehicle charging service (new)	0.12	9.32
TRT1 Transmission exit	56.66	6.95
TRT2 Transmission entry	62.64	6.62
TRT3 Transmission storage (new)	1.32	6.01
<b>Total</b>	<b>1,960.37</b>	<b>9.49</b>

Appendix A to the proposed price list includes information demonstrating Western Power has complied with the tariff structure requirements for setting each reference tariff. This includes:

- Demonstrating that the allocation of costs to each reference tariff is consistent with the method set out in the tariff structure statement (Tables A.5 to A.7)
- The results of the cost allocation for the 2024/25 year (Table A.2).
- Demonstrating that the forecast revenue for each reference tariff is in line with the cost allocation and that the sum of the forecast revenue for each tariff is equal to the total maximum target revenue (Table A.3).
- Demonstrating that the proposed reference tariffs are between the avoidable and stand-alone cost of service provision (Table A.1).
- Demonstrating that the incremental cost of service provision is recovered by tariff components that vary with usage or demand. (Table A.4).

The tariff structure statement approved as part of the ERA's decision fifth access arrangement describes how Western Power will set prices such that the revenue recovered from each tariff will move closer to the efficient cost target, avoids unacceptable bill impacts on end users and is between the standalone and avoidable cost of providing the service.

In addition, the tariff structure statement describes how Western Power will transition to more cost reflective tariffs if a significant price change is needed to recover the efficient costs. The tariff structure statement specifies that when an increase in the revenue allocation is required for a customer class to transition to its efficient allocation, to manage bill impacts, it will endeavour to limit the increase in revenue per end-user to two per cent on top of the baseline adjustment.

The ERA has reviewed the information provided by Western Power and considers that the proposed price list broadly complies with the matters listed above.

### **Streetlight tariffs**

As required in the 2023/24 price list determination, Western Power has reviewed and revised the cost allocation and price path for the streetlight asset charge. Based on that review, Western Power has proposed a price increase of 5.5 per cent for 2023/24 and similar increases for the remaining years of AA5. Details of the revised cost allocation and price path are included in Appendix 1. The ERA is satisfied that the revised cost allocation is reasonable, and the proposed price path minimises the effect on customer bills.

### **Discontinued time of use tariffs**

As set out in the AA5 final decision, new time of use tariffs have been introduced that include a super off-peak rate for the low demand period when distributed solar generation is at its maximum between 9 am to 3 pm. The pre-existing time of use tariffs have been closed to new users as they are based on time periods that no longer reflect network usage patterns.

Western Power's comparison of the proposed 2024/25 tariff increases with the forecast tariff increases included in last year's price list (Table 1.4 of the proposed 2024/25 price list) shows that the proposed increases to the old time of use tariffs are broadly in line with last year's forecast.

As was the case in 2023/24, the proposed increases to the old time of use tariffs are generally higher than the increases to the anytime energy and new time of use tariffs. Western Power has also applied differential increases to the individual elements of the old time of use tariffs to better align them with the new time of use tariffs.

Although tariffs for the old time of use tariffs have increased more than other tariffs, the customer effects analysis of typical consumption profiles provided by Western Power in the proposed price list (Table A8 to A21) shows that the new time of use tariffs will be cheaper. This should encourage users on the old time of use tariffs to transition to the new time of use tariffs.<sup>2</sup> This will incentivise more efficient use of the network.

### **Other tariffs**

In its tariff forecast last year, Western Power projected lower increases for other tariffs than it has now proposed. This is due to the increase in the Tariff Equalisation Contributions and inflation that has increased the total allowed revenue. As the increase to the old time of use tariffs was already relatively high, the increase in target revenue has been recovered over the new time of use and continuing tariffs.

Tariff increases for distribution connected customers have been set around the overall average increase of 9.5 per cent. Tariff increases for transmission connected customers are lower as the Tariff Equalisation Contribution does not apply to them.

### **Changes required**

The ERA has identified two small changes required:

- Residential and business multi part time of use energy services (RT21 and RT22)

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<sup>2</sup> Unlike the National Electricity Market, Western Power is not able to allocate users to specific tariffs.

- These discontinued tariffs include an overnight rate for the period between 11pm and 4am. In the past, Western Power has priced this period the same as the off-peak period (9pm to 11pm and 4am to 7am Monday to Friday and 4am to 11pm Saturday to Sunday and public holidays).
- For the 2024/25 price list, Western Power has proposed increasing the overnight rate and leaving the off-peak price unchanged. This results in the overnight rate being more expensive than the off-peak rate. This is counterintuitive as typically demand would be lower during the overnight period. It is also inconsistent with the structure of the new time of use tariffs.
- The proposed prices must be amended so that the overnight time period is not higher than the off-peak period.
- Distribution connected generators entry service (RT11)
  - Following approval of the 2023/24 price list, a customer queried this tariff. The 2023/24 price list stated the RT11 tariff had increased by 7.16 per cent and forecast revenue was \$4.97 million. On further investigation it was found that Western Power had missed a component of the tariff from the forecast calculation. The overall tariff had actually increased by 11.75 per cent and forecast revenue was \$5.12 million.<sup>3</sup>
  - The customer considers, and the ERA agrees, that the 2024/25 tariff should include an adjustment to bring the 2023/24 tariff in line with the price increase forecast in the 2023/24 price list and then apply the proposed 2024/25 forecast increase to that amount. The effect of this will be to reduce forecast revenue from the RT11 tariff by \$0.2 million and the increase in price for 2024/25 will reduce from the proposed 7.01 per cent to 2.89 per cent. As the adjustment is small, the effect on other customers is negligible.

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<sup>3</sup> Western Power was still within the allowed revenue for 2023/24

## 5. Reasonableness of forecasts

Western Power's price control is a modified revenue cap. When Western Power updates its tariffs each year, it must ensure that the forecast revenue from those tariffs is equal to the target revenue determined by the price control formula.

Unlike a standard revenue cap, the price control does not include an adjustment for any under-recovery or over-recovery of actual revenue compared with forecast revenue from previous years. In addition, forecast customer numbers and energy volumes must be consistent with the demand forecast approved in the access arrangement decision. This ensures Western Power is exposed to demand risk rather than guaranteeing it a fixed level of revenue and passing on the costs (or returning revenue) to users.

The forecast customer numbers and energy volumes that Western Power must use are set out in Table 47 of the approved access arrangement. Western Power's proposed price list is consistent with those forecasts.

While staying within the overall customer and volume forecasts, Western Power must estimate the charging quantities for each reference tariff.

To inform its forecast for each tariff, Western Power has used hourly metering data extracted from 500,000 advanced meters. This has enabled it to estimate the average customer volumes and demand profiles for customers currently on each tariff.

As the new time of use tariffs have only been available since 1 July 2023, there is limited data to inform the rate of take up the new tariffs. Unlike the National Electricity Market, Western Power is not able to allocate users to specific tariffs. Consequently, Western Power needs to predict the tariffs users will select in its revenue forecast. Western Power has used the demand profile information from the metering data noted above to estimate the number of customers that are likely to switch to a different tariff during 2024/25.

The ERA has reviewed the data and forecasts and considers they are reasonable based on the data available. However, there will need to be careful monitoring and updates throughout the access arrangement period as new data becomes available, particularly in relation to the take-up of the new tariffs.

## Appendix 1 Streetlight asset charge cost pool and price path

Using a “building block” approach to establish the streetlight cost pool was first introduced in AA4 and applied for the 2019/20, 2020/21 and 2021/22 price lists. The AA5 period is the first time a roll forward of the asset base and update of costs has been undertaken for streetlight asset costs.

As set out in the ERA’s determination, the building block method Western Power used to derive the cost of streetlights for its 2023/24 proposed price list was consistent in principle with the tariff structure statement. However, the access arrangement determination only sets a single target revenue figure for all services. The model used by the ERA to set target revenue for the access arrangement period is not designed to provide information for cost allocations to specific tariffs. More granular detail is needed for the purposes of allocating costs to specific tariffs.

Following completion of the price list review process Western Power extracted more granular data from its accounting records and forecast cost information to inform the cost allocation to the streetlight asset charge. In addition, a review of the assumptions and methods used to allocate the costs was undertaken.

A comparison of the approach to calculating the proposed and updated costs is set out in the table below.

Category	Proposed for 2023/24 Price List	Updated for 2024/25 Price List
AA4 actual capital expenditure (used to derive the opening regulatory asset base for AA5)	<ul style="list-style-type: none"> <li>The values generated in the AA5 target revenue model which are based on a % allocation that is applied to the capex by investment driver to allocate to asset classes.</li> <li>Resulted in an increase to the opening asset base of \$44 million for streetlights.</li> </ul>	<ul style="list-style-type: none"> <li>Used actual expenditure from the regulatory accounts and underlying accounting records.</li> <li>Used the direct cost of streetlights only as indirect costs would be incurred regardless of whether the streetlight service was provided or not.</li> <li>Did not include streetlight luminaire replacement capex because it was classified as opex in the AA4 forecast and therefore recovered in the AA4 tariff.</li> <li>Ensured the actuals did not include expenditure that would be met by a customer contribution.</li> <li>Resulted in an increase to the opening capital base of \$9 m.</li> </ul>
AA5 forecast capital expenditure (used to forecast the regulatory asset base during AA5)	<ul style="list-style-type: none"> <li>Same approach as AA4 capital expenditure.</li> <li>Resulted in an increase to the forecast asset base of \$73 million.</li> </ul>	<ul style="list-style-type: none"> <li>Used forecast streetlight direct capex from the AA5 capex model of \$57 m.</li> <li>Ensured the forecasts did not include expenditure that would be met by a customer contribution.</li> </ul>

Category	Proposed for 2023/24 Price List	Updated for 2024/25 Price List
AA5 forecast operating expenditure	Not part of information provided with AA5 decision.	<ul style="list-style-type: none"> <li>Used actual streetlight asset expenditure for 2021/22 of \$13 million from the underlying accounting records as base operating expenditure. Used direct cost of streetlights only as indirect costs would be incurred regardless of whether the streetlight asset service was provided or not.</li> <li>Included \$4.5 m step change from AA5 final decision offset by 2% per annum efficiency as per the AA5 final decision.</li> <li>Inflated annually by CPI.</li> </ul>
Roll forward of asset base	Annual indexation of the asset base.	Used nominal values so no indexation required. This approach does not affect the level of capital charges but makes it easier to track the expenditure added to the asset base.
Number of streetlights by type	Pro rata allocation of forecast total.	Updated to reflect latest billing information. This doesn't change the level of costs but affects the starting point and the increase needed to match revenue with the cost pool.

The amendments to capital expenditure described above led to changes in the forecast capital charges (i.e. depreciation and return on the regulated asset base) between the proposed and updated costs. This amounted to a reduction in the annual cost by 2026/27 of \$4.7 million.

The amendments to operating expenditure described above led to changes in forecast operating expenditure. This amounted to a reduction in the annual cost by 2026/27 of \$8.1 million. The updated cost allocation is consistent with the LED replacement strategy proposed by Western Power in its AA5 proposal. A comparison of the initial proposed cost allocation and updated cost allocation is shown in the table below.

\$ million nominal	2023/24	2024/25	2025/26	2026/27
Initial proposed cost allocation:				
Capital charges	20.42	21.69	23.01	24.31
Opex	25.84	26.05	26.51	27.09
<b>Total costs</b>	<b>46.26</b>	<b>47.75</b>	<b>49.53</b>	<b>51.41</b>
Updated cost allocation:				
Capital charges	17.6	18.34	18.98	19.62
Opex	18.95	19.42	19.61	19.80
<b>Total costs</b>	<b>36.54</b>	<b>37.76</b>	<b>38.59</b>	<b>39.42</b>

## Price path

The updated costs are lower than those included in the 2023/24 proposed price list but there is still a gap between the updated allocated costs and revenue recovered through the 2023/24 tariffs.

As can be seen in the table below, a price increase of 18.9 per cent in 2024/25 would be required to match revenue and the updated allocated cost. Transitioning to the full cost over the 2024/25 to 2026/27 period would require annual increases of around 5.5 per cent.

The 2024/25 proposed price list adopts the transitional price path.

	2023/24	2024/25	2025/26	2026/27
Updated cost allocation	36.54	37.76	38.59	39.42
Forecast number of streetlights	293,180	297,685	302,467	307,357
<b>Smoothed evenly to reach cost reflective price in 2026/27:</b>				
Forecast revenue from tariff \$m	31.28	34.29	36.50	39.42
Weighted Average \$/streetlight	106.68	115.18	121.54	128.26
Increase to asset charge (%)		5.5	5.5	5.5
<b>One-off increase:</b>				
Forecast revenue from tariff \$m	31.28	37.76	38.59	39.42
Weighted Average \$/streetlight	106.68	126.84	127.60	128.26
Change in price (%)		18.9	0.6	0.5

#### Increase from AA4

The updated costs are less than was forecast in the proposed 2023/24 price list but are still an increase compared to AA4 (annual cost of \$29.8 million in 2021/22). This is due to:

- Higher capital expenditure than forecast during AA4 due to seasonal contractual variations and unit rates increases and higher than anticipated cable fault rates. This increased the opening capital base for AA5.
- Higher WACC and inflation in AA5.
- Operating expenditure step change in AA5 for the LED replacement program.
- Increases are offset by a 2 per cent efficiency target for operating costs and growth in the expected number of streetlights.

The effect on prices due to the increase in costs was compounded by the need for “catchup” because there was no change to prices in the first year of AA5 (2022/23) due to the access arrangement review process being deferred by one year. Consequently, the increase in costs has had to be recovered over four years rather than five.