

Final Decision

Evoenergy Electricity Distribution Determination 2024 to 2029

(1 July 2024 to 30 June 2029)

Attachment 5 Capital Expenditure

April 2024

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List of attachments

This attachment forms part of the AER's final decision on the distribution determination that will apply to Evoenergy for the 2024–29 period. It should be read with all other parts of the final decision.

As a number of issues were settled at the draft decision stage or required only minor updates, we have not prepared all attachments. The final decision attachments have been numbered consistently with the equivalent attachments to our draft decision. In these circumstances, our draft decision reasons form part of this final decision.

The final decision includes the following documents:

Overview

Attachment 1 – Annual revenue requirement

Attachment 2 – Regulatory asset base

Attachment 4 – Regulatory depreciation

Attachment 5 – Capital expenditure

Attachment 6 – Operating expenditure

Attachment 7 – Corporate income tax

Attachment 8 – Efficiency benefit sharing scheme

Attachment 13 – Classification of services

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5 Capital expenditure

Capital expenditure (capex) refers to the money required to build, maintain or improve the physical assets needed to provide standard control services (SCS).¹ Generally, these assets have long lives and a distributor will recover capex from customers over several regulatory control periods. A distributor’s capex forecast contributes to the return of and return on capital building blocks that form part of its total revenue requirement.

Under the regulatory framework, a distributor must include a total forecast capex that it considers is required to meet or manage expected demand, comply with all applicable regulatory obligations, and to maintain the safety, reliability, quality, and security of its network and contribute to achieving emissions reduction targets (the capex objectives).²

We must decide whether or not we are satisfied that this forecast reasonably reflects prudent and efficient costs and a realistic expectation of future demand and cost inputs (the capex criteria).³ We must make our decision in a manner that will, or is likely to, contribute to the achievement of the National Electricity Objective (NEO).⁴

The *AER capital expenditure assessment outline* explains our and distributors’ obligations under the National Electricity Law and Rules (NEL and NER) in more detail.⁵ It also describes the techniques we use to assess a distributor’s capex proposal against the capex criteria and objectives. Where relevant we must also assess capex associated with emissions reduction proposals taking into account our *Guidance on amended National Electricity Objective*.⁶

Total capex framework

We analyse and assess capex drivers, programs and projects to inform our view on a total capex forecast. However, we do not determine forecasts for individual capex drivers or determine which programs or projects a distributor should or should not undertake. This is consistent with our *ex-ante* incentive-based regulatory framework and is often referred to as the ‘capex bucket’.

Once the *ex-ante* capex forecast is established, there is an incentive for distributors to provide services at the lowest possible cost, because the actual costs of providing services will determine their returns in the short term. If distributors reduce their costs, the savings are shared with consumers in future regulatory control periods. Our assessment of the *ex-ante* capex is consistent with the NEO, which in addition to providing for the lowest possible costs also recognises that services should be valued appropriately and adapt to changing circumstances to maintain efficiencies in the long term interest of consumers. This incentive-

¹ These are services that form the basic charge for use of the distribution system.

² NER, cl. 6.5.7(a).

³ NER, cl. 6.5.7(c).

⁴ NEL, ss. 7, 16(1)(a).

⁵ AER, [Capex assessment outline for electricity distribution determinations](#), February 2020.

⁶ AER, [Guidance on amended National Electricity Objectives](#), September 2023.

based framework provides distributors with the flexibility to prioritise their capex program given their circumstances and due to changes in information and technology.

Distributors may need to undertake programs or projects that they did not anticipate during the reset. Distributors also may not need to complete some of the programs or projects proposed if circumstances change, these are decisions for the distributor to make. We consider a prudent and efficient distributor would consider the changing environment throughout the regulatory control period and make decisions accordingly.

Importantly, our decision on total capex does not limit a distributor's actual spending. We set the forecast at a level where the distributor has a reasonable opportunity to recover its efficient costs. Distributors may spend more or less than our forecast in response to unanticipated changes.

Assessment approach

We provide guidance on our assessment approach in several documents, including the following which are of relevance to this decision:

- AER's *Expenditure Forecast Assessment Guidelines*⁷
- Regulatory Investment Test for Distribution and Transmission (RIT-D and RIT-T) Guidelines⁸
- AER's *Asset Replacement Industry Note*⁹
- AER's *Information and Communication Technologies (ICT) Guidance Note*¹⁰
- AER's *Guidance on amended National Electricity Objectives*.¹¹

We also had regard to the guiding principles in the AER's *Better Resets Handbook – Towards consumer centric network proposals* which encourages networks to develop high quality, well-justified proposals that genuinely reflect consumers' preferences.¹²

Our final decision has been based on the information before us, which includes:

- the distributor's regulatory proposal and accompanying documents and models
- the distributor's responses to our information requests
- stakeholder comments in response to our Issues Paper.

⁷ AER, [Expenditure Forecast Assessment Guideline 2013](#), August 2022.

⁸ AER, [RIT-T and RIT-D application guidelines \(minor amendments\) 2017](#), September 2017.

⁹ AER, [Industry practice application note for asset replacement planning](#), January 2019.

¹⁰ AER, [AER publishes guidance on non-network ICT capital expenditure assessment approach](#), November 2019.

¹¹ AER, [Guidance on amended National Electricity Objectives](#), September 2023.

¹² AER, [Better Resets Handbook – Towards consumer-centric network proposals](#), December 2021.

5.1 Final decision

Overall, we are satisfied that Evoenergy’s proposed total forecast capex of \$516.5 million (\$2023–24)¹³ reasonably reflects the prudent and efficient costs to maintain the safety, reliability and security of the network.

We determined an alternative estimate for capex of \$505.1 million because we did not accept Evoenergy’s proposed replacement expenditure (repex) uplift of \$14.3 million. Our alternative capex forecast (2.8% difference) is not materially different to Evoenergy’s total capex forecast. Therefore, we are satisfied that Evoenergy’s estimate reasonably reflects the capex criteria.

We consider this forecast will provide for a prudent and efficient service provider in Evoenergy’s circumstances to maintain the safety, reliability and security of electricity supply on the distribution network.

Table 5.1 outlines our final decision on Evoenergy’s proposed capex.

Table 5.1 AER’s final decision on Evoenergy’s total net capex forecast (\$ million, \$2023–24)

	2024-25	2025-26	2026-27	2027-28	2028-29	Total
Evoenergy’s revised proposal	101.0	105.1	99.4	109.4	104.5	519.4
AER’s final decision	100.4	104.5	98.8	108.8	104.0	516.5
Difference/Modelling adjustments	-0.6	-0.6	-0.6	-0.6	-0.6	-2.9

Source: AER analysis and Evoenergy’s proposal.

Note: Numbers may not sum due to rounding. Modelling adjustments relate to updates to the consumer price index (CPI) and real cost escalation assumptions (including the exclusion of external contract labour cost escalation).

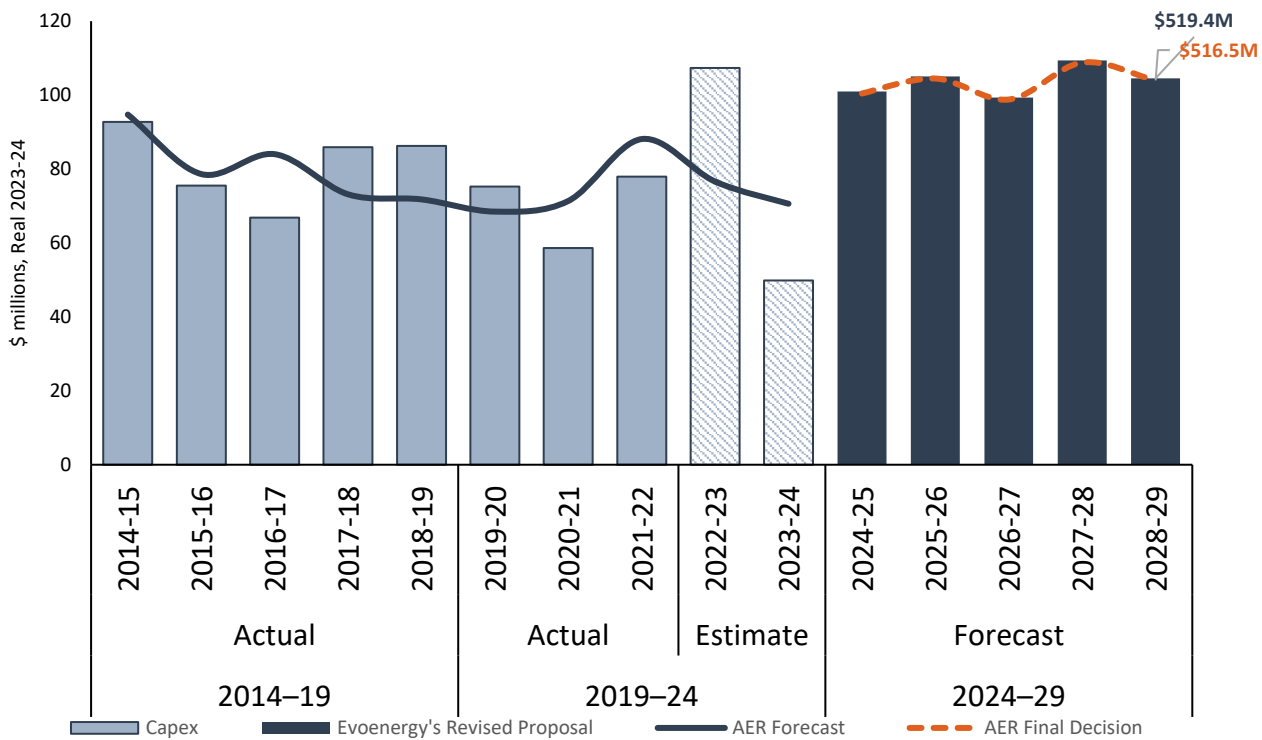
5.2 Evoenergy’s revised proposal

Evoenergy forecasts \$519.4 million (\$2023–24) capex over the 2024–29 regulatory control period.

Figure 5.1 outlines Evoenergy’s historical capex trend, its proposed forecast for the 2024–29 regulatory control period, and our final decision.

¹³ Evoenergy proposed \$519.4 million (\$2023–24) in its revised proposal and we have made modelling adjustments to update the consumer price index (CPI) and real cost escalation assumptions (including the exclusion of external contract labour cost escalation). This has resulted in a \$2.9 million reduction to the total capex forecast (\$516.5 million).

Figure 5.1 Evoenergy’s historical and forecast capex (\$ million, \$2023–24)



Source: AER analysis. Capex is net of asset disposals.

A key aspect of Evoenergy’s revised proposal is an increase in augmentation due to an increase in forecast demand, driven predominately by economic growth in the ACT and in part by the ACT Government’s policy on achieving a net zero emission target by 2045. Evoenergy has proposed a number of zone substation and low voltage feeder upgrade programs to meet the forecast increases in demand across the ACT.

The Consumer Challenge Panel (CCP26), in its submission on our draft decision and Evoenergy’s revised proposal, observed strong interest in EVs by Evoenergy’s Consumer Panel members and support for the direction that Evoenergy is taking, which is supported by recent EV sales data.¹⁴

5.3 Reasons for final decision

Evoenergy has broadly accepted our draft decision on capex and updated its demand forecast in line with our draft decision except for a few repex asset categories such as secondary systems, ground assets and zone substations.

In responding to our draft decision, Evoenergy has reduced its augmentation for EV driven projects from \$74.8 million in its initial proposal to \$25.1 million in the revised proposal. However, this has been largely offset by a \$42.6 million (or 121%) increase in forecast augmentation costs for 2 of its major non-EV demand driven projects, the Molonglo and Strathnairn Zone Substations, based on more recent market tendered prices it received in

¹⁴ Consumer Challenge Panel 26, *Advice to the AER, 2024–29 revised distribution determination and draft decision, Evoenergy*, January 2024, p. 17.

2023. Overall, the reduction in EV-demand driven projects has been offset by the increase in zone substation costs, resulting in a forecast that is similar to Evoenergy’s initial proposal.

Having assessed the revised repex, we have not included all of Evoenergy’s proposed repex in our alternative forecast of total capex. Our alternative forecast is \$94.7 million, which is \$14.3 million lower than Evoenergy’s revised repex proposal of \$109.0 million. In undertaking our assessment of Evoenergy’s repex, we also identified improvements to Evoenergy’s asset management practices that should be considered further, including enhanced condition based asset management practices and demonstrating expected asset performance service outcomes from its investment in repex.

As for the demand forecast, Evoenergy’s revised proposal substantially addressed our concerns raised in the draft decision, including modelling improvements and the updating of data. Our final decision is to accept Evoenergy’s revised proposal demand forecast.

For the augmentation expenditure, Evoenergy has reduced the scope of the EV projects and programs and our assessment focussed on the recent cost increases. We reviewed the appropriateness of the tendering process and its outcome, and the scope of the component projects for the cost increases for the Molonglo and Strathnairn Zone Substations. We consider that the revised substation costs are reasonable because these are based on recent market prices in Evoenergy’s circumstance. Our final decision is to accept Evoenergy’s augmentation capital expenditure of \$185.9 million (\$2023–24) in its revised proposal.

Table 5.2 sets out our final decision for Evoenergy by capex category.

Table 5.2 AER’s final decision by capex category (\$million, \$2022–23)

Category	Evoenergy revised proposal and AER final decision
Augmentation ¹⁵	185.9
Replacement	109.0
Connections	124.0
Property	3.0
ICT	39.2
Fleet	13.9
Non-network capex - other	12.4
Capitalised overheads	89.7
Gross Total	577.1
Less Customer contribution connections	53.5
Less Disposals	4.2
Modelling adjustments	-2.9
Net Total	516.5

Source: Evoenergy’s capex model and AER analysis.

Note: Numbers may not sum due to rounding. Modelling adjustments relate to updates to the consumer price index (CPI) and real cost escalation assumptions (including the exclusion of external contract labour cost escalation):

Table 5.3 summarises our views on each of the capex categories, whether they are prudent and efficient, reflect the capex criteria, and the reasons for this. A number of capex categories were considered and accepted in our draft decision and are reflected in this table (noting these should be read in conjunction with our draft decision).¹⁶ Further detail and reasons on the remaining capex categories – repex, demand and augmentation (each of which we considered further in response to Evoenergy’s revised proposal are contained in Appendices A.1 to A.3).

Our findings on each capex driver are part of our broader analysis and should not be considered in isolation. We do not approve an amount of forecast expenditure for each individual capex driver or project/program. However, we use our findings on each capex driver to assess a regulated business’ proposal as a whole and arrive at a substitute estimate for total capex where necessary. Our decision on total capex does not limit a regulated business’ actual spending.

¹⁵ Augmentation expenditure of \$185.9 million includes Evoenergy’s revised proposal CER expenditure of \$4.7 million (\$2023–24).

¹⁶ AER, *Draft Decision, Evoenergy – Electricity Distribution Determination 2024 to 2029, Attachment 5 Capital Expenditure*, September 2023, pp. 27–32.

Table 5.3 Summary of findings and reasons, by capex category

Issue	Findings and reasons
Replacement	<p>We have not included Evoenergy’s proposed repex forecast of \$109 million in the total forecast capex.</p> <p>We consider there remains insufficient support for an uplift in repex from its historical average. We are not satisfied that Evoenergy has demonstrated any specific need for an increase in repex above historical averages. This reflects the maintenance of historical network performance and no substantive information to demonstrate that network performance is expected to deteriorate over the 2024–29 regulatory control period.</p> <p>Our alternative estimate for repex has removed \$14.3 million from the total revised forecast repex (for secondary systems, ground assets and zone substations).</p> <p>Although we have not accepted Evoenergy’s revised proposal repex, the impact of adjusting Evoenergy’s repex is not material (\$14.3 million or 2.8% of Evoenergy’s total revised capex forecast). The adjustment to the repex is our only amendment to Evoenergy’s proposed total capex program.</p> <p>In undertaking further assessment of Evoenergy’s repex, we consider there are a number of improvements to Evoenergy’s asset management practices that should be considered further in developing Evoenergy’s capex forecasts in the future.</p> <p>Our reasons for this are set out in Appendix A.1.</p>
Augmentation	<p>We have included Evoenergy’s augmentation expenditure (augex) of \$185.9 million (\$2023–24) in the total forecast capex.</p> <p>We have accepted the updated demand forecast proposed by Evoenergy taking into account more recent data. Evoenergy has addressed the concerns raised in our draft decision, revising its approach to demand forecasting, addressing the main modelling issues and incorporating the updated information available.</p> <p>We consider the scope of the revised augex programs to be reasonable based on the demand forecast, and accept the revised substation costs because these are based on recent market prices in Evoenergy’s circumstance.</p> <p>Our reasons for this are set out in Appendices A.2 (Demand) and A.3 (Augmentation).</p>
Connections	<p>We have included Evoenergy’s connections forecast of \$124 million in the total forecast capex. This was considered and accepted in our draft decision.¹⁷</p>
Property	<p>We have included Evoenergy’s proposed property forecast of \$3 million in the total forecast capex. This was considered and accepted in our draft decision.¹⁸</p>
ICT	<p>We have included Evoenergy’s proposed ICT forecast of \$39.2 million in the total forecast capex. This was considered and accepted in our draft decision.¹⁹</p>
Fleet	<p>We have included Evoenergy’s proposed fleet forecast of \$13.9 million in the total forecast capex. This was considered and accepted in our draft decision.²⁰</p>

¹⁷ AER, *Draft Decision, Evoenergy – Electricity Distribution Determination 2024 to 2029, Attachment 5 Capital Expenditure*, September 2023, p. 8.

¹⁸ AER, *Draft Decision, Evoenergy – Electricity Distribution Determination 2024 to 2029, Attachment 5 Capital Expenditure*, September 2023, p. 8.

¹⁹ AER, *Draft Decision, Evoenergy – Electricity Distribution Determination 2024 to 2029, Attachment 5 Capital Expenditure*, September 2023, p. 8.

²⁰ AER, *Draft Decision, Evoenergy – Electricity Distribution Determination 2024 to 2029, Attachment 5 Capital Expenditure*, September 2023, p. 9.

Issue	Findings and reasons
Other Non-network capex, including spares	We have included Evoenergy's other non-network capex forecast of \$12.4 million in the total forecast capex. This was considered and accepted in our draft decision. ²¹
Capitalised overheads	We have included Evoenergy's capitalised overheads forecast of \$89.7 million in the total forecast capex. This was considered and accepted in our draft decision. ²²
Customer contributions	We have included Evoenergy's customer contribution forecast of \$53.5 million in the total forecast capex. This was considered and accepted in our draft decision. ²³
Contingent project	Evoenergy has not proposed a contingent project in its revised proposal in response to our draft decision. ²⁴
Disposals	We have included Evoenergy's asset disposal forecast of \$4.2 million in the total forecast capex. This was considered and accepted in our draft decision. ²⁵

²¹ AER, *Draft Decision, Evoenergy – Electricity Distribution Determination 2024 to 2029, Attachment 5 Capital Expenditure*, September 2023, p. 9.

²² AER, *Draft Decision, Evoenergy – Electricity Distribution Determination 2024 to 2029, Attachment 5 Capital Expenditure*, September 2023, p. 9.

²³ AER, *Draft Decision, Evoenergy – Electricity Distribution Determination 2024 to 2029, Attachment 5 Capital Expenditure*, September 2023, p. 9.

²⁴ AER, *Draft Decision, Evoenergy – Electricity Distribution Determination 2024 to 2029, Attachment 5 Capital Expenditure*, September 2023, p. 9.

²⁵ AER, *Draft Decision, Evoenergy – Electricity Distribution Determination 2024 to 2029, Attachment 5 Capital Expenditure*, September 2023, p. 9.

A Reasons for decision on key capex categories

This appendix sets out our assessment of key capex categories and programs/projects within Evoenergy’s total revised capex forecast and the reasons for our decision. This appendix includes:

- Replacement expenditure (A.1)
- Demand forecast (A.2)
- Augmentation expenditure (A.3).

A.1 Replacement expenditure

Repex must be set at a level that allows a distributor to meet the capex criteria. Replacement can occur for a variety of reasons, including when:

- an asset fails while in service or presents a real risk of imminent failure
- a condition assessment determines that it is likely to fail soon or degrade in performance, such that it does not meet its service requirement and replacement is the most economic option²⁶
- the asset does not meet the relevant jurisdictional safety regulations and can no longer be safely operated on the network
- the risk of using the asset exceeds the benefit of continuing to operate it on the network.

The majority of network assets will remain in efficient use for far longer than a single five-year regulatory control period (many network assets have economic lives of 50 years or more). As a result, a distributor will only need to replace a portion of its network assets in each regulatory control period.

A.1.1 AER’s final decision

We have not included all of Evoenergy’s proposed repex in our alternative forecast of total capex. Our alternative forecast is \$94.7 million or \$14.3 million lower than Evoenergy’s revised repex proposal of \$109 million.

A.1.2 Evoenergy’s revised proposal

Evoenergy proposed \$109 million replacement capex in its revised proposal in response to our draft decision of \$94.4, down from \$117.6 million in the initial proposal.²⁷

²⁶ A condition assessment may relate to assessment of a single asset or a population of similar assets. High-value/low-volume assets are more likely to be monitored on an individual basis, while low value/high volume assets are more likely to be considered from an asset category wide perspective.

²⁷ AER, *Draft Decision, Evoenergy electricity distribution determination 2024 to 2029, September 2023*, p. 27; We considered Evoenergy did not sufficiently demonstrated the need for an uplift in replacement expenditure above the historical trend. The reduction brought Evoenergy’s expenditure for the 2024–29 regulatory control period in line with its historic average levels of replacement expenditure.

Evoenergy has broadly accepted our draft decision except for a few repex asset categories such as secondary systems, ground assets and zone substations. These repex components total \$14.3 million in additional expenditure in response to our draft decision. Evoenergy considered that uplifts on these components of repex are still required to address specific risks to reliability and safety.²⁸

A.1.3 Reasons for decision

Our assessment focused on the asset categories that made up the increase in the revised forecast in repex, that is secondary systems, ground assets and zone substations.

We sought further information from Evoenergy through information requests and discussions on additional supporting material to justify the uplift.²⁹ Having reviewed this further information, we consider there remains insufficient support for an uplift in repex from its historical average.³⁰ We are not satisfied that Evoenergy has demonstrated any specific need for an increase in repex above the historical average to maintain network performance of its network. Evoenergy did not provide substantive information to demonstrate that its network performance is expected to deteriorate over the 2024–29 regulatory control period. For these reasons, we are satisfied that Evoenergy’s historical level of investment is sufficient to efficiently maintain network performance.

Our alternative estimate for repex has removed \$14.3 million from the total revised forecast repex. This equates to 2.8% of Evoenergy’s revised forecast total capex.

In undertaking our assessment of Evoenergy’s repex, we consider there are a number of improvements to Evoenergy’s asset management practices that should be considered. We have observed that Evoenergy’s current asset management practices appear to be an asset age-based practice. Currently good industry practice includes risk based practices based on asset condition that demonstrates expected network service outcomes from proposed repex. We consider application of the principles of ISO 55001 Asset Management and ISO 31000 Risk Management, including quantitative methods based on data driven and evidence-based approaches as good practice in the management of network service level performance. This is consistent with the AER’s Industry practice application note for asset replacement planning.³¹

Evoenergy’s approach to asset management should also include considerations of the network service level performance and customer impact. This relationship is important as it demonstrates the network need and efficiency in relating the proposed investment cost to the consumer cost of deteriorated service outcomes. Without this we consider it is difficult to make an informed decision on the need for investment.

²⁸ Evoenergy, *Revised Regulatory Proposal, Evoenergy electricity distribution determination 2024 to 2029*, 30 November 2023, p. 30.

²⁹ AER, *Information request #053 - Replacement Capital Expenditure*, 12 January 2024.

³⁰ AER, *Draft Decision, Evoenergy – Electricity Distribution Determination 2024 to 2029, Attachment 5 Capital Expenditure*, September 2023, p. 27.

³¹ AER, *Industry practice application note - Asset replacement planning*, January 2019.

A.2 Demand forecast

Maximum demand forecasts are fundamental to a distributor's forecast capex and operating expenditure (opex), and to our assessment of that forecast expenditure. This is because we must determine whether the capex and opex forecasts reasonably reflect a realistic expectation of forecast demand for services. Reasonable demand forecasts based on the most current information are important inputs to ensuring efficient levels of investment in the network.

A.2.1 AER's final decision

Our final decision is to accept Evoenergy's revised proposal demand forecast. We found that Evoenergy had responded well to our draft decision and addressed our key concern of duplication in the modelling of the demand forecast.

In reviewing and updating Evoenergy's revised proposal demand forecast, we have made a few adjustments, including:

- reducing the 25% peak day uplifting factor for EV blockloads to 15% for winter peak and zero uplifting for summer to account for seasonal differences in the ACT
- updating input assumptions using AEMO's latest revised charging profile data from the Draft 2024 Forecasting Assumptions Update released in December 2023
- removing a small blockload adjustment at the system wide level (Campbell Business Park (7MVA)).

When applying the above adjustments, we found that this had little impact on the demand forecast and our alternative forecast is not materially different from Evoenergy's revised proposal. For these reasons, we consider Evoenergy's revised forecast will allow it to meet or manage the expected demand for standard control services over the 2024–29 regulatory control period.³²

Evoenergy has addressed the concerns raised in our draft decision,³³ revising its approach to demand forecasting, addressing the main modelling issues and incorporating the updated information available.

The key changes in the revised proposal demand forecast include:

- adding new data points from the 2022–23 seasons in the demand modelling.
- for EV driven demand, adopting the CSIRO's EV load profile developed for the AEMO's 2024 Integrated System Plan (ISP), which reflects changes in EV charging behaviour due to the roll-out of time-of-use tariffs and adoption of managed charging.
- applying a 25% uplift to AEMO's charging profile to account for the difference between an average demand day and a peak demand day in the season.
- for non-EV driven demand, addressing the potential duplications between the baseline trend and blockload adjustments for new connections. As a result, new residential and

³² NER, cl. 6.5.7(a)(1).

³³ AER, *Draft Decision, Evoenergy – Electricity Distribution Determination 2024 to 2029, Attachment 5 Capital Expenditure, September 2023*, pp. 19–20.

commercial developments are excluded from the blockload adjustment for demand forecast at the system and zone substation levels.

Evoenergy’s change in approach has resulted in a lower EV driven demand forecast than it initially proposed but higher than the placeholder demand forecast in our draft decision.³⁴ This is due to the higher number of EV’s than previously forecast by the ACT Government for the modelling it used to inform public charging stations.

Relative to the initial proposal, the revised system peak demand is forecast to start at a higher level but increases at a lower rate. Data updates to incorporate the 2022–23 higher demand in the modelling have resulted in higher starting point and higher baseline trend growth being projected forward. This is offset by the assumed flatter EV charging load profile, resulting in a lower growth rate.

A.2.2 Reasons for decision

Evoenergy’s revised proposal substantially addressed our concerns raised in the draft decision. We consider the revised approach to demand forecasting has adequately addressed the main modelling and forecasting issues raised in our draft decision, and adopted the most updated data or information it had available.

We consider Evoenergy’s updated EV forecasting is more robust and is built largely using publicly available information and independent sources. However, in reviewing Evoenergy’s revised proposal demand forecast, we identified a few refinements in the demand forecast. These are considered further below.

EV blockloads - 25% peak adjustment

For EV blockloads, we consider the 25% uplift Evoenergy applied for a peak day adjustment³⁵ should be removed due to insufficient evidence to justify its application.

We sought further information from Evoenergy.³⁶ Having reviewed the material provided and examined the impacts,³⁷ we consider there is some basis to assume higher peaks for EV charging in winter. However, we consider 25% to be too high and instead we have replaced Evoenergy’s 25% uplifting factor with a zero uplift for the summer EV load and a 15% uplift for the winter EV load, to account for seasonal differences in the ACT.

When we updated the demand forecast, we found the impact on peak demand at the system, zone substation and feeder levels is not material, although the impact varies across locations depending on the relative share of EV blockloads to peak demand.

³⁴ Evoenergy, *Revised regulatory proposal, Evoenergy electricity distribution determination 2024 to 2029*, 30 November 2023, p. 14.

³⁵ Evoenergy, *Attachment 1: Augmentation expenditure, Revised regulatory proposal for the Evoenergy electricity distribution determination 2024 to 2029*, November 2023, p. 46.

³⁶ AER, *Information request #049 - Demand forecast*, 19 December 2023.

³⁷ Evoenergy, *Response to AER information request (IR#049)*, 19 January 2024, p. 3.

EV blockload – AEMO’s latest charging profiles

Evoenergy has applied the AEMO charging profile assumed in the 2023 ISP released in September 2023 in response to our draft decision.³⁸ However, AEMO has now released further draft updates to the charging profiles in December 2023 (which includes reduced peak usage). We have updated Evoenergy’s charging profile input assumption using AEMO’s latest draft charging profiles. However, when we updated the demand forecast for the latest AEMO charging profiles, we found the impact on peak demand at the system, zone substation and feeder levels is not material.

Non–EV demand forecast

In response to our draft decision Evoenergy:

- adopted a revised forecasting methodology that included a 5-step transformation process³⁹ we consider provides better documentation and improved transparency in determining the non-EV blockloads
- refined its blockload adjustment approach for forecasting demand at different levels of the network to ensure no duplication between the baseline trend and new connection adjustments.

Evoenergy also updated diversity factors at different network levels recognising different load profiles and constraints occurring at different times and updated peak time assumptions. We accept that the updated assumptions align more closely with the nature of peaks at each network level.

However, we have removed a small blockload forecast for the Campbell Business Park commercial development due to our concern that this blockload has already been captured in the demand forecast baseline trend. Nevertheless, when we removed this blockload from Evoenergy’s revised demand forecast, we found the impact on peak demand at the system, zone substation and feeder levels is not material.

To improve the accuracy of the forecast data, we also consider that Evoenergy should test alternative modelling using daily data, instead of annual data to cross-examine the estimated relationship between weather and maximum demand in its demand forecast modelling.

A.3 Augmentation expenditure

Augmentation is capital expenditure required to build or upgrade the network to address changes in demand and network utilisation to enable the network service provider to comply with quality, safety, reliability and security of supply requirements. Evoenergy’s augmentation consists of expenditure on demand driven, secondary systems and reliability and quality improvement projects.

³⁸ Evoenergy, *Attachment 1: Augmentation expenditure, Revised regulatory proposal for the Evoenergy electricity distribution determination 2024 to 2029*, November 2023, p. 8; AER, *Draft Decision, Evoenergy – Electricity Distribution Determination 2024 to 2029, Attachment 5 Capital Expenditure*, September 2023, p. 17.

A.3.1 AER’s final decision

Our final decision is to accept Evoenergy’s augex of \$185.9 million (\$2023-24) in its revised proposal.

A.3.2 Evoenergy’s revised proposal

Evoenergy’s revised proposal for augex is \$185.9 million, a 78.9% increase from our draft decision and 2.4% increase from its initial proposal.

In responding to our draft decision, Evoenergy has reduced its EV driven projects from \$74.8 million in its initial proposal to \$25.1 million in the revised proposal. However, this has been largely offset by a \$42.6 million (or 121%) increase in forecast augmentation costs for 2 of its major non-EV driven projects, the Molonglo and Strathnairn Zone Substations, based on more recent market tendered prices it received in 2023.⁴⁰ Evoenergy’s revised proposal did not include any capex linked to emissions reduction targets or actions under the NEO.

In respect of the EV-demand driven projects, Evoenergy found that investment is still required, but to a lesser extent than it initially proposed, which is supported by the ACT Council of Social Service Inc’s (ATCOSS) submission on Evoenergy’s capex.⁴¹ Our draft decision had accepted all of Evoenergy’s non-EV demand driven projects except for the second transformer at Molonglo Zone Substation.

A.3.3 Reasons for decision

Our final decision is to accept the scope of the revised augex programs.

Our draft decision on augex was mainly driven by the reduction in the demand forecast.⁴² We considered a number of Evoenergy’s proposed projects could be deferred and are no longer required in the 2024–29 regulatory control period when applying our alternative demand forecast.

As outlined in the earlier section, we are satisfied that Evoenergy’s revised demand forecast is reasonable. On the basis of our draft decision and our consultant’s, (Energy Market Consulting associates or EMCa) advice that the scope and unit costs of the initial proposal were reasonable⁴³ our review focussed on the increased augmentation costs.

Evoenergy has updated its forecast for the Molonglo and Strathnairn Zone Substations, with substantially higher external design and construct contract prices. The tendering process for the Molonglo substation resulted in a price increase with the same supplier to a similar

⁴⁰ Evoenergy’s initial proposal was based on a tendered market price in late 2021 for a similar project at Harman Zone Substation. The tendering process for Molonglo concluded in December 2023 and resulted in a 120% price increase with the same supplier. The prices for Molonglo have then been used as basis to forecast the Strathnairn substation; Evoenergy, *Revised regulatory proposal, Evoenergy electricity distribution determination 2024 to 2029*, 30 November 2023, p. 18.

⁴¹ ACTCOSS, *Submission on Evoenergy’s revised proposal and draft decision 2024–29*, January 2024, p. 11.

⁴² AER, *Draft Decision, Evoenergy Electricity Distribution Determination 2024 to 2029 – Attachment 05 – Capital expenditure*, September 2023, p. 21.

⁴³ AER, *Draft Decision, Evoenergy – Electricity Distribution Determination 2024 to 2029, Attachment 5 Capital Expenditure*, September 2023, p. 22; EMCa, *Evoenergy 2024 to 2029 Regulatory Proposal - Review of proposed expenditure on DER and Augex*, September 2023, pp. 31, 34, 43, 49, and 54.

project (Harmon Zone Substation). The contract prices for Molonglo were then used as the basis to forecast the Strathnairn Zone Substation.

Our assessment of the revised project costs for the Molonglo Zone Substation involved review of the appropriateness of the tendering process and outcome, scope of the component projects for the Molonglo Zone Substation, and the reasonableness of the price changes between when the Harman Zone Substation and Molonglo Zone Substation went to tender.

We found that:

- there is no change in the scope of the capital program for the Molonglo Zone Substation
- there is no evidence of non-arms length interactions between Evoenergy and the tender respondents
- Evoenergy’s tendering processes are consistent with good industry practice
- the tendered prices were all within a reasonable range of each other.

For these reasons, we consider that the revised substation costs for each of the Molonglo Zone Substation and the Strathnairn Zone Substation are reasonable.

Shortened forms

Term	Definition
ACS	alternative control services
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulatory
augex	augmentation expenditure
capex	capital expenditure
CCP26	Consumer Challenge Panel, sub-panel 26
CER	Consumer Energy Resources
DNSP or distributor	Distribution Network Service Provider
EV	electric vehicle
ICT	information and communication technologies
ISP	AEMO's Integrated System Plan
NEL	National Electricity Laws
NEM	National Electricity Market
NEO	National Electricity Objectives
NER	National Electricity Rules
opex	operating expenditure
RAB	regulated asset base
repex	replacement expenditure
SCS	standard control service
WACC	Weighted average cost of capital