



FINAL DECISION

Energex Distribution Determination 2020 to 2025

Attachment 15 Alternative control services

June 2020

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Note

This attachment forms part of the AER's final decision on the distribution determination that will apply to Energex for the 2020–25 regulatory control period. It should be read with all other parts of the final decision.

The final decision includes the following attachments:

Overview

Attachment 1 – Annual revenue requirement

Attachment 2 – Regulatory asset base

Attachment 3 – Rate of return

Attachment 4 – Regulatory depreciation

Attachment 5 – Capital expenditure

Attachment 6 – Operating expenditure

Attachment 7 – Corporate income tax

Attachment 8 – Efficiency benefit sharing scheme

Attachment 9 – Capital expenditure sharing scheme

Attachment 10 – Service target performance incentive scheme

Attachment 12 – Classification of services

Attachment 13 – Control mechanisms

Attachment 14 – Pass through events

Attachment 15 – Alternative control services

Attachment 18 – Tariff structure statement

Attachment A - Negotiating framework

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15 Alternative control services

This attachment sets out our final decision on the prices Energex is allowed to charge customers for the provision of alternative control services: ancillary network services, public lighting and metering.

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.

15.1 Final decision

For ancillary network services, our final decision is to largely accept Energex's revised proposal for fee-based services, including security lighting services, with minor modelling changes. In preparing this revised proposal Energex reviewed its input assumptions, made corrections raised in our draft decision (where we rejected all the proposed fees) and had an independent contractor review the accuracy of its model. Our final decision for quoted services is to accept Energex's proposed labour rate for para-professionals but to reject the proposed labour rate for administration and otherwise sustain our draft decision. The charges and labour rates for ancillary network services are listed in appendix A.

For public lighting, our final decision is to reject Energex's proposed LED asset life assumptions and operating expenditure but otherwise accept Energex's revised proposal with minor modelling changes to reflect updated return on debt and other similar inputs and to correct minor errors/omissions. Our final decision public lighting charges are listed in appendix B.

For metering, our final decision is to reject Energex's proposed operating expenditure but otherwise accept Energex's revised proposal with minor modelling changes to reflect updated return on debt and other similar inputs. Our final decision metering charges are listed in appendix C.

Consistent with our approach for standard control services, we have applied the trimmed mean inflation series from the most recent Reserve Bank of Australia (RBA) inflation forecasts¹ to relevant components of the alternative control services models. For further discussion of these issues see the Overview of this decision.²

¹ RBA, *Statement on Monetary Policy – May 2020*, May 2020, Forecast Table – May 2020, available at <https://www.rba.gov.au/publications/smp/2020/may/forecasts.html>

² Additional discussion of these issues can be found in Attachment 3 - Rate of Return and Attachment 6 - Operating Expenditure of this decision.

15.2 Energex's revised proposal

Ancillary network services

In response to our draft decision Energex reviewed its fee-based services model to correct errors and issues we identified in our draft decision, and to revise some service assumptions to ensure revenue recovery.³ This included combining some services, adding a new fee for a supply abolishment service, adjusting some service times based on historic data, adjusting contractor costs for updated data and otherwise correcting any inconsistencies.⁴

Energex also engaged an external contractor to ensure inputs between Energex and Ergon Energy were consistent, that formulas in its pricing model were consistent and accurate and that they reflected Energex's business logic.⁵ Any errors and inconsistencies were corrected. These changes resulted in the revised proposal prices looking substantially different (increases and decreases) compared to the August 2019 model we considered in our draft decision.

Consistent with our draft decision, Energex published a comparison to 2019–20 prices on its stakeholder engagement website.⁶

As part of its revised proposal, Energex resubmitted its proposed labour rates for the Administration and Para-professional labour categories, providing further evidence for its position.⁷ Energex also revised all of the labour rates that we accepted in our draft decision to reflect revised escalators.

Consistent with our draft decision, Energex proposed that security lighting be installed on a quoted basis, with ongoing costs charged on a fee basis.⁸ These ongoing costs were determined using a bottom-up methodology with recovery of both capital and non-capital components.⁹

Public lighting

Energex's revised proposal generally accepted our draft decision. However, in accepting our cap on overheads, Energex has reassessed the allocation of these costs and included some of them as operating expenditure. Energex also changed its assumed asset life for LEDs from 20 years to 10 years.

³ Energex, *Response to information request #070 - ANS - questions on revised proposal*, 13 January 2020.

⁴ Energex, *Response to information request #070 - ANS - questions on revised proposal*, 13 January 2020.

⁵ Energex, *Response to information request #070 - ANS - questions on revised proposal*, 13 January 2020.

⁶ Energex, *Response to information request #070 - ANS - questions on revised proposal*, 13 January 2020.

⁷ Energex, *Revised regulatory proposal 2020–25*, December 2019, p. 58.

⁸ Energex, *Revised regulatory proposal 2020–25*, December 2019, p. 59.

⁹ Energex, *Revised regulatory proposal 2020–25*, December 2019, p. 59.

Energex has submitted models that have also been updated to reflect actual results for the 2018–19 regulatory year, as well as an adjusted approach to calculating base operating expenditure.

Metering

Energex's revised proposal generally accepted our draft decision. However, in accepting our removal of capitalised non-network costs and our cap on overhead costs, Energex has reassessed the allocation of these costs and included some of them as operating expenditure. Energex's revised proposal also omitted operating expenditure adjustments for non-recurring costs, operational improvements, and forecast merger savings that we had accepted in our draft decision.

Energex submitted models that have also been updated to reflect actual results for the 2018–19 regulatory year.

15.3 Assessment approach

The price cap control mechanism that we apply to assess the efficient costs of alternative control services may use elements of the building block model for standard control services, but there is no requirement to apply the building block model exactly as prescribed in Part C of the National Electricity Rules (NER).¹⁰ Full details of our final decision on the form of control mechanism and control mechanism formulae are set out in attachment 13 of this final decision.

Our final decision assessment approach is the same as for our draft decision. In terms of labour rates, in our draft decision we indicated that while our consultant, Marsden Jacob, had provided maximum reasonable labour rates, we considered them efficient for our purposes.¹¹ We maintain this view for our final decision.

In reaching our final decision, we considered additional information submitted by Energex, both with its revised proposal and in response to our information requests. We have also taken into account stakeholder submissions.

15.4 Ancillary network services

Ancillary network services share the common characteristic of being non-routine services provided to individual customers as requested. Ancillary network services are either charged on a fee or quotation basis, depending on the nature of the service.

We determine fee-based service price caps for the next (2020–25) regulatory control 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. By

¹⁰ NER, cl. 6.2.6(c).

¹¹ AER, *Draft Decision: Energex distribution determination 2020 to 2025 - Attachment 15 - Alternative Control Services*, October 2019, p.15-13.

comparison, prices for quoted services are based on quantities of labour and materials, 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 final decision sets out the labour rates to be applied.

15.4.1 Ancillary network services—Final decision

X Factors for ancillary network services

Consistent with our decision for standard control services, we accept Energex's methodology of calculating labour price growth forecasts using the average of two forecasts. A discussion of our decision to accept this method is set out in Attachment 6 – Operating Expenditure. We have updated the labour escalators calculated according to this methodology to incorporate revised forecasts.

As ancillary network services typically have a very high share of labour and labour-related inputs, we typically use a labour escalator as the general ancillary network services X factor. We have considered the security lighting prices proposed by Energex in its revised proposal, and note that capital charges account for a significant proportion of security lighting services charges. Accordingly, we have decided to adjust the X factor for these services by the average non-capital charge share for security lighting services (65.78 per cent).

Our final decision X factors are set out in Table 15.13 in appendix A.¹²

Fee-based services

Our draft decision rejected all of Energex's proposed fees and recommended that Energex undertake a review of its proposed fees and modelling and consult with stakeholders.¹³ We are satisfied that Energex has undertaken this review and made appropriate changes to its proposed fees. While we consider there are deficiencies in stakeholder consultation, this does not substantively change our position on the prices proposed. We therefore accept Energex's proposed fees as they provide a reasonable opportunity to recover efficient costs.

We also note that under Schedule 8 of the *Electricity Regulation 2006 (Qld)*, some ancillary network services are price-capped, and these prices take precedence over our decision.¹⁴

¹² For more information of the form of control applying to alternative control services, see Attachment 13 of this final decision.

¹³ AER, *Draft Decision: Energex distribution determination 2020 to 2025 - Attachment 15 - Alternative Control Services*, October 2019, p.15-5.

¹⁴ While there are only eight price-capped ancillary network services under the *Electricity Regulation 2006 (Qld)*, these flow through to the permutations of the ancillary network services Energex proposed.

Labour rates

Our draft decision rejected three of Energex's proposed labour rates – Administration, Para-professional and Tech/PW/Admin – and substituted our efficient labour rates. In its revised proposal Energex again argued for higher labour rates for Administration and Para-professional, at similar rates as its original proposal. Our final decision is to:

- Reject Energex's proposed Administration labour rate and sustain our draft decision. This leads to the rejection of the proposed Tech/PW/Admin labour rate that is calculated using the administration labour rate and sustaining our draft decision.
- Accept Energex's proposed Para-professional labour rate as once Energex provided details of what staff in this labour category do it became clear that it should be benchmarked against our maximum labour rate for an Engineer or Technical Specialist. Given the proposed labour rate is lower than these benchmarks, we accept the proposed labour rate as efficient.
- Sustain our draft decision on labour rates for all other labour categories that were subsequently accepted by Energex in its revised proposal (with minor updates to escalators).
- Otherwise sustain our draft decision on overtime rates, accepting those that fall below our maximum efficient benchmark.

Table 15.1 sets out our final decision maximum ordinary time labour rates (which include on-costs and overheads) that Energex should apply in calculating charges for ancillary network services provided on a quoted basis. Appendix A contains our final decision labour rates for overtime hours for ancillary network services provided on a quoted basis.

Table 15.1 AER final decision – hourly labour rates (incl. on-costs and overheads, \$2020–21)

Energex labour category	Energex total hourly rate (base plus on-costs plus overheads)	AER labour category ¹	AER final decision - maximum total hourly rate (base plus on-costs plus overheads)
Admin Employee	\$128.65	Admin	\$77.00
Professional Managerial	\$191.28	Project Manager	\$191.28
Power Worker	\$118.30	Field Worker	\$118.30
Technical Service Person	\$149.82	Technical Specialist	\$149.82
Electrical System Designer	\$140.42	Engineer	\$140.42
Supervisor	\$174.95	Project Manager	\$174.95

Energex labour category	Energex total hourly rate (base plus on-costs plus overheads)	AER labour category ¹	AER final decision - maximum total hourly rate (base plus on-costs plus overheads)
Para-Professional	\$165.02	Engineer / Field Worker	\$165.02
Apprentice	\$96.44	Field Worker	\$96.44
System Operator	\$206.56	Senior Engineer	\$206.56
Tech/PW	\$134.06	Tech/PW ⁴	\$134.06
Tech/PW/Admin ²	\$132.26	Tech/PW/Admin ⁴	\$115.04

Source: AER calculations; AER final decision model for Energex and Ergon Energy fee-based and quoted ancillary network services; Energex and Ergon Energy, 11.002 Revised fee-based and quoted services model - ACS Jan20 Public.

- 1: Based on Marsden Jacob report. These labour categories are for comparison purposes only.
2: The labour rates for this labour category is an average of the labour rates for the underlying labour categories. While the AER does not have a specific matching labour category we have taken a similar approach and applied the average of our final decision labour rates for the relevant categories.

Security lighting services

Consistent with our draft decision, we accept Energex's proposal to charge for installation of security lighting on a quoted basis, with the ongoing maintenance, operation and replacement and energy usage being charged on a fee basis.¹⁵

Subject to minor modelling updates we accept Energex's proposed fees for security lighting, which include separate prices for Small LED, Medium LED, Small Conventional, Medium Conventional and Large Conventional customers. We have made minor modelling adjustments to incorporate the updated weighted average cost of capital (WACC) and inflation forecast. As noted above, we have also set a separate X factor for security lighting.

New ancillary network services

Consistent with our draft decision, if new services arise during the 2019–24 regulatory control period with characteristics that are the same or essentially the same as other alternative control services,¹⁶ we consider that they should be priced as a quoted service until the next regulatory period. Any new ancillary network service and pricing methodology should be disclosed through each distributor's annual pricing process.

¹⁵ Energex, *Revised regulatory proposal 2020–25*, December 2019, p. 59.

¹⁶ Service classification is set out in attachment 13 of our final decision. We generally classify services in groupings rather than individually. This obviates the need to classify services one-by-one and instead defines a service cluster, such that where a service is similar in nature it would require the same regulatory treatment. This provides distributors with flexibility to alter the exact specification (but not the nature) of a service during a regulatory control period.

15.4.2 Ancillary network services—Reasons for final decision

Revised prices

Our draft decision rejected all of Energex's proposed fees due to deficiencies in the model, Energex's desire to review some of the service assumptions, and the difficulty stakeholders, and we, had in comparing to prices in the current (2015–20) regulatory period. The revised proposal did not directly address our concerns or convey that we had rejected all of Energex's proposed fees.¹⁷

In response to an information request, Energex provided evidence that its models were independently reviewed and confirmed that the issues we had raised in our draft decision had been addressed.¹⁸ Energex also advised that a price comparison between 2019–20 and 2020–21 was available on its public Talking Energy webpage. However we, and at least one stakeholder, did not know about this analysis. This document also did not provide any context as to why there were significant price rises for some services, despite our draft decision encouraging Energex to do so.¹⁹

Origin Energy raised its concern with the lack of information around price changes and difficulty in comparing prices in its submission. Origin Energy noted that while there appeared to be some price decreases compared to the initial regulatory proposal, there were also significant increases for de-energisation/re-energisation services and it was not clear why. Origin Energy therefore encouraged us to conduct a thorough review of the proposed fees.²⁰

We have reviewed the price movements between the model we considered for our draft decision and the revised proposal, focusing on any movements greater than 10 per cent in absolute terms. This included seeking further information from Energex. A summary of this analysis and Energex's responses is contained in Table 15.2.

Table 15.2 Price differences between draft decision model and revised proposal (> 10 per cent or < -10 per cent only), 2020–21

Reason for service price change	Magnitude of change	Service grouping affected ¹
Services decreasing in price		
Increased use of contractors / change in mix of contractors	-13% to -86%	De-energisation (EGX_1)

¹⁷ See page 54 of Energex's revised regulatory proposal.

¹⁸ Energex, *Response to information request #070 - ANS - questions on revised proposal*, 13 January 2020.

¹⁹ AER, *Draft Decision: Energex distribution determination 2020 to 2025 - Attachment 15 - Alternative Control Services*, October 2019, p.15-16.

²⁰ Origin Energy, *Submission on AER draft decision and revised regulatory proposals for Queensland electricity distributors 2020–25*, 15 January 2020, pp. 2-3.

Reason for service price change	Magnitude of change	Service grouping affected ¹
and internal labour		Re-energisation (EGX_13) Reseal (EGX_137)
Reduction in number of employees required	-20% to -50%	Temporary connection (EGX_49) Supply enhancement - underground (EGX_79)
Increased use of contractors and reduction in service time	-20% to -73%	Removal of a meter (EGX_105)
Reduction in service time/corrections to service time	-11% to -75%	Temporary disconnections and reconnections (EGX_42) Point of attachment relocation (EGX_87) Re-arrange connection assets at customer's request (EGX_96) Meter inspection and investigation on request - additional units (EGX_117) Call out fee (EGX_138)
Services increasing in price		
Increase in number of employees to meet safety requirements / Correction to number of employees (offset by increased use of contractors for some services)	+39% to +183%	De-energisation (EGX_3) Re-energisation (EGX_28) Temporary disconnections and reconnections (EGX_45) Meter test (EGX_107)
Correction of contractor rates	+54%	Meter reading (EGX_133)
Inclusion of consumables for overhead services	+13% to +38%	Supply enhancement - overhead (EGX_71)

1 Service numbers in brackets are examples only.

Source: AER Analysis; Energex, *Response to information request #070 - ANS - questions on revised proposal*, 13 January 2020; EGX ERG 11.002 Revised fee-based and quoted services model - ACS Dec19 CONFID.

We also reviewed the differences between the 2019–20 prices and the revised proposal prices for 2020–21 based on the information provided by Energex.²¹ There were a range of increases and decreases in price, so given the analysis above we

²¹ Energex, *Response to information request #070 - ANS - questions on revised proposal*, 13 January 2020

focused on increases greater than 20 per cent and sought further explanation from Energex. This information is summarised below in Table 15.3.²²

Table 15.3 Differences between 2019–20 prices and revised proposal 2020–21 prices (>20 per cent only)

Reason for service price change	Magnitude of change	Service grouping affected ¹
Increase in contractor rates	+34% to +80%	De-energisation (EGX_7) Meter reconfiguration (EGX_124) Meter reading (EGX_133)
Increase in service time based on review of historical data	+61% to +64%	Supply enhancement - underground (EGX_79)
Increase in crew size to properly reflect scope of job	+92% to +181%	Re-arrange connection assets at customer's request (EGX_95) Meter test (EGX_107)
Increase in crew to reflect Energex safe entry policy	+26% to 74%	De-energisation (EGX_5) Re-energisation (EGX_13)
Increase in contractor rates and increase in crew to reflect Energex safe entry policy	+182%	De-energisation (EGX_11)
Change in multiple service assumptions (contractors, crew, service time)	+21% to 92%	Re-energisation (EGX_19) Faults/emergency response (EGX_103)
Change to service to reflect full rather than incremental costs (and corresponding removal of expense from metering prices)	+177%	Removal of a meter (EGX_105)

1 Service numbers in brackets are examples only.

Source: AER Analysis; Energex, *Response to information request #077 - ANS - price changes since previous regulatory period*, 23 January 2020; Energex, *ACS fee-based service - indicative price comparison 19-20 to 20-21*, available at: <https://www.talkingenergy.com.au/33399/documents/123385> [accessed January 2020].

On balance, given the independent review of Energex's model, correction of errors, review of assumptions and the explanations provided, we consider that the proposed

²² Energex, *Response to information request #077 - ANS - price changes since previous regulatory period*, 23 January 2020.

fees provide Energex a reasonable opportunity to recover efficient costs, and therefore accept them subject to minor modelling updates.

A confidential stakeholder submission also raised concerns over the transparency of pricing for services. While we do not have broad stakeholder submissions on this matter, we encourage Energex, as part of maintaining good customer relationships, to be more transparent in billing for its services. This includes being transparent how actual quoted service prices are calculated. We note that our draft decision introduced requirements around the transparency of billing for quoted services, and that we have not changed this position in our final decision.²³

Administration and para-professional labour rates

Our draft decision reduced the Administration labour rate by around \$50 an hour to reach our efficient maximum.²⁴ Energex's revised proposal contended that its higher Administration labour rate should be accepted as it has upskilled its administration staff so that they can assess the more straightforward connection applications.²⁵ This allows administration staff to process some applications, limiting the workload of Paraprofessionals.²⁶ In response to our request regarding how the Administration labour rate would be used in practice, for instance, where there were administration duties for a non-connection service, Energex advised that the rate is effectively a weighted average of the duties its administration staff provide.²⁷

We do not consider that Energex has made a compelling case for its higher Administration rate. If administration staff are providing administration services then this time should be charged at the efficient labour rate for that service, rather than at a higher labour rate to take into account training for 'enhanced' administration services. We therefore sustain our draft decision and reject Energex's proposed labour rate for Administration. In practice, we expect that quoted services that need more specialised skills beyond administration will also utilise the other efficient labour rates we have approved.

In our draft decision we benchmarked Energex's proposed Para-professional labour rate against our Administration labour rate, consistent with our previous approach and in the absence of information from Energex on when it would apply this labour category.²⁸ Energex's revised proposal explains that its Para-professional labour category undertakes the assessment of technical information and network capacity and

²³ AER, *Draft Decision: Energex distribution determination 2020 to 2025 - Attachment 13 - Control Mechanisms*, October 2019, p.13-18; AER, *Final Decision: Energex distribution determination 2020 to 2025 - Attachment 13 - Control Mechanisms*, October 2019, p.13-18.

²⁴ AER, *Draft Decision: Energex distribution determination 2020 to 2025 - Attachment 15 - Alternative Control Services*, October 2019, p.15-10.

²⁵ Energex, *Revised regulatory proposal 2020–25*, December 2019, p. 58.

²⁶ Energex, *Revised regulatory proposal 2020–25*, December 2019, p. 58.

²⁷ Energex, *Response to information request #070 - ANS - questions on revised proposal*, 13 January 2020.

²⁸ AER, *Draft Decision: Energex distribution determination 2020 to 2025 - Attachment 15 - Alternative Control Services*, October 2019, p.15-17.

includes decision on connections and upgrades.²⁹ This means that we should benchmark against our Technical Specialist or Engineering labour category. As the proposed para-professional labour rate falls under the efficient maximums for both of these labour categories, we accept Energex's proposed labour rate.

Security lighting services

Our draft decision accepted Energex's proposal to charge for the installation of security lights on a quoted basis and for ongoing costs on a fee basis. However, our draft decision did not include any fees as we did not receive a pricing model or any proposed fees from Energex.³⁰

Security lighting was previously charged as an unregulated service, and this is the first period that it will be charged as an alternative control service. Energex has around 1,350 customers and previously charged all of these customers the same rate (irrespective of lamp type) which included installation, maintenance, operation and estimated energy usage.³¹ It considered that these prices were not cost-reflective.³²

In its revised proposal, Energex proposed shifting the installation component to quoted services. We accepted this in our draft decision. For ongoing costs, Energex proposed five different fees: Small LED, Medium LED, Small conventional, Medium conventional and Large conventional.³³ These were calculated using a bottom-up pricing methodology aimed at recovering costs, which means most prices are higher than the 2019–20 price. Almost all customers currently have conventional lamps, which means they would see price rises of 23 to 29 per cent. Energex advised that it intended to shift current security lighting customers to the new prices (subject to contractual obligations).³⁴

We have reviewed the proposed prices and consider that they provide Energex with a reasonable opportunity to recover its efficient costs. We accept these proposed prices, with minor modelling updates to reflect our final WACC and inflation forecast. We note the model includes the recovery of LED lights over 10 years, which is different to our decision for public lighting; however, we are satisfied that pricing for security lighting should be different given it is a different kind of service.

15.5 Public lighting

Public lighting services include the operation, maintenance, repair, replacement, alteration, relocation, and provision of public lighting assets. Energex owns and

²⁹ Energex, *Revised regulatory proposal 2020–25*, December 2019, p. 58.

³⁰ AER, *Draft Decision: Energex distribution determination 2020 to 2025 - Attachment 15 - Alternative Control Services*, October 2019, pp.15-11, 15-12.

³¹ Energex, *Revised regulatory proposal 2020–25*, December 2019, p. 58; Energex, *2020-25 TSS Explanatory Notes*, January 2021, p.63.

³² Energex, *2020-25 TSS Explanatory Notes*, January 2021, p.63.

³³ Energex, *2020-25 TSS Explanatory Notes*, January 2021, p.63.

³⁴ Energex, *2020-25 TSS Explanatory Notes*, January 2021, p.63.

operates over 325 000 public lights servicing local government authorities (councils), the Department of Transport and Main Roads, and other Government entities.³⁵ This asset base includes 175 000 public lighting assets 'gifted' to Energex by customers; Energex now owns, maintains, and operates these lighting assets.³⁶ There are an additional 40 000 public lighting units that are owned and operated by customers; Energex provides the electricity supply only for these units.³⁷

15.5.1 Public lighting—Final decision

Our final decision is to:

- Reject Energex's proposed LED asset life
- Reject Energex's proposed operating expenditure
- Accept Energex's proposed capital expenditure and public lighting asset base
- Apply our final decision rate of return, labour escalators and inflation forecasts consistent with standard control services.³⁸

Our final decision public lighting price caps are listed in appendix B. Consistent with our draft decision, X factors for public lighting are set at zero for years 2 to 5 of the regulatory control period.³⁹

15.5.2 Public lighting—Reasons for final decision

LED asset life

In its revised proposal, Energex adjusted the standard asset life of LED assets to 10 years.⁴⁰ This change results in accelerated depreciation over 10 years instead of 20 years, and therefore creates higher annual depreciation charges. LED tariffs increase as a result of this change, reducing the incentive for public lighting customers to adopt LED lighting.

Our final decision is to reject this change in LED standard asset life. We have adjusted the post-tax revenue model (PTRM) to reflect a standard asset life of 20 years for LED assets, in line with our draft decision. This is also consistent with LED asset lives for public lighting across other jurisdictions.

³⁵ Energy Queensland, *Energex Alternative Control Services 2020–25*, January 2019, p. 11.

³⁶ Energy Queensland, *Asset Management Plan - Public Lighting*, October 2018, p. 5.

³⁷ Energy Queensland, *Asset Management Plan - Public Lighting*, October 2018, p. 5.

³⁸ For further information, see Overview, Attachment 3 - Rate of Return and Attachment 6 - Operating Expenditure of this decision.

³⁹ AER, *Draft Decision: Energex distribution determination 2020 to 2025 - Attachment 15 - Alternative Control Services*, October 2019, p.15-21. For more information of the form of control applying to alternative control services, see Attachment 13 of this final decision.

⁴⁰ Energex, *PTRM - ACS public lighting LED*, December 2019; Energex, *PTRM - ACS public lighting CON*, December 2019.

Operating expenditure

Energex accepted our draft decision to adjust operating expenditure overheads to 31.9 per cent, in line with the base level of operating expenditure overheads before adjustments. In response to this, Energex revised the allocation of these expenses, resulting in some expenses now being considered as operating expenditure, rather than overheads.⁴¹

Energex also provided a more detailed approach to its operating expenditure. In its revised proposal, Energex calculated its forecasts based on actual 2018–19 operating expenditure, apportioned into maintenance and material costs for luminaires and poles.

Our final decision is to accept Energex's approach to calculating operating expenditure, but reject its operating expenditure forecasts. In calculating its operating expenditure forecasts, Energex updated the 2018–19 base year figures to reflect actual results. However, these values used do not reflect those reported by Energex in its annual reporting Regulatory Information Notices (RINs). We have corrected Energex's model to reflect the values reported in the annual reporting RINs. We have also updated labour cost escalators in line with our decision for standard control services. These changes have resulted in total operating expenditure for the 2020–25 of \$118.3m, 17 per cent higher than Energex's revised proposal.

Table 15.4 shows the movement in total operating expenditure between Energex's proposal and our final decision.

Table 15.4 Operating Expenditure (\$2019–20)

Operating Expenditure	2020–21	2021–22	2022–23	2023–24	2024–25	Total
Energex Proposal - Conventional	16.42	15.80	14.53	13.01	11.21	70.97
Energex Proposal - LED	0.73	1.25	2.08	3.16	4.39	11.61
AER Draft Decision - Conventional	12.22	11.76	10.78	9.62	8.26	52.64
AER Draft Decision - LED	0.42	0.63	0.92	1.29	1.71	4.97
Energex Revised Proposal - Conventional	21.12	20.06	18.23	16.17	13.83	89.41
Energex Revised Proposal - LED	0.56	1.10	2.08	3.29	4.74	11.76
AER Final Decision - Conventional	24.61	23.40	21.29	18.90	16.20	104.40
AER Final Decision - LED	0.66	1.30	2.45	3.87	5.58	13.85

Source: Energex, *15.012 Opex forecast - ACS public lighting CON JAN19*; Energex, *15.014 Opex forecast - ACS public lighting LED JAN19*; AER, *Draft Decision - Energex distribution determination 2020–25 - Public Lighting Opex CON - October 2019*; AER, *Draft Decision - Energex distribution determination 2020–25 - Public Lighting Opex LED - October 2019*; Energex, *11.008 Opex forecast - ACS public lighting DEC19*; AER, *Final Decision - Energex distribution determination 2020–25 - Public Lighting Opex - May 2020*.

⁴¹ Energex, *Energex Revised Regulatory Proposal 2020–25*, December 2019, p. 55.

Capital expenditure

Energex provided revised capital expenditure models to support its forecasts for the 2020–25 period. Energex made some revisions to its direct capital expenditure, based on actual 2018–19 results, and reflecting further experience of the costs involved in the rollout of LED assets. Energex accepted the 35 per cent cap on overhead costs that was implemented in our draft decision.⁴²

Our final decision is to accept this revised capital expenditure. We consider it is reasonable that evolving information about the costs of rolling out LED assets is incorporated in these forecasts. As usual, actual capital expenditure will be incorporated into the asset base in our determination for the 2025–30 regulatory control period.

Table 15.5 shows the movement in capital expenditure between Energex's proposal and our final decision.

Table 15.5 Capital Expenditure (\$2019–20)

Capital Expenditure (Total Gross)	2020–21	2021–22	2022–23	2023–24	2024–25	Total
Energex Proposal - Conventional	9.75	9.76	9.44	9.14	7.89	45.99
Energex Proposal - LED	23.54	25.40	27.61	29.68	32.25	138.49
AER Draft Decision - Conventional	5.54	5.76	5.96	6.08	5.50	28.84
AER Draft Decision - LED	25.63	27.65	29.99	32.13	34.75	150.16
Energex Revised Proposal - Conventional	3.27	3.32	3.15	3.21	2.90	15.85
Energex Revised Proposal - LED	25.56	27.61	30.00	32.19	34.86	150.22
AER Final Decision - Conventional	3.28	3.33	3.16	3.21	2.91	15.89
AER Final Decision - LED	25.61	27.66	30.06	32.26	34.95	150.53

Source: Energex, *15.031 Capex forecast - ACS public lighting CON JAN19*; Energex, *15.033 Capex forecast - ACS public lighting LED JAN19*; AER, *Draft Decision - Energex distribution determination 2020–25 - Public Lighting Capex CON - October 2019*; AER, *Draft Decision - Energex distribution determination 2020–25 - Public Lighting Capex LED - October 2019*; Energex, *11.004 Capex forecast - ACS public lighting CON DEC19*; Energex, *11.005 Capex forecast - ACS public lighting LED DEC19*; AER, *Final Decision - Energex distribution determination 2020–25 - Public Lighting Capex CON - May 2020*; AER, *Final Decision - Energex distribution determination 2020–25 - Public Lighting Capex LED - May 2020*.

Note: Total gross capital expenditure is shown, which includes overheads and other asset classes, but does not reflect disposals and customer contributions.

⁴² Energex, *Capex forecast - ACS public lighting LED*, December 2019; Energex, *Capex forecast - ACS public lighting CON*, December 2019.

Submissions

In our draft decision, we commented that Energex's proposal lacked transparency and discussion around key components of public lighting expenditure, as well as including errors that caused confusion and contention among stakeholders.⁴³ We consider that Energex has made an effort to engage stakeholders to improve understanding of its proposal and to work with stakeholders to a mutually beneficial outcome. However we consider that Energex's revised proposal would have benefited from additional depth and discussion. We encourage Energex to continue to engage with stakeholders throughout the next regulatory control period and in advance of its 2025–2030 regulatory proposal.

We likewise encourage councils and other public lighting customers to engage with network businesses, including through providing submissions to our regulatory determinations. We considered stakeholder submissions when reviewing Energex's revised proposal.

Logan City Council provided a submission that was mostly supportive of our draft decision.⁴⁴ However, Logan City Council suggested that the NPL4 rate should be further incentivised relative to conventional lighting tariffs. While we agree there are merits in incentivising LED pricing, we also note that prices should still be calculated based on, and reflective of, the actual costs of providing these services. We consider the approved tariffs appropriately reflect this balance.

Logan City Council also provided comments regarding asset ownership, and more specifically the ability for customers to negotiate with Energex regarding transferral of ownership. Specifically, Logan City Council suggests that provisions be documented that allow for negotiation between customers and Energex in relation to the transfer of ownership of assets, or transition to other tariffs at the end of asset life, or earlier at an 'exit fee'. Any such provisions are at the discretion of Energex, and as such we encourage stakeholders to engage with Energex about the possibility of future implementation.

We require Energex to maintain an asset base, which is adjusted for capital expenditure and disposals, depreciation, and other related adjustments. The recovery of costs of this asset base is smoothed across all relevant customers. If Energex opted to change a customer's tariff during or at the end of the life of the asset, then the same allowable revenue would be charged across fewer assets, causing prices to be higher. Energex is still allowed to recover the revenue calculated off the same asset base (which does not include assets which are past their asset lives), and this will come from higher prices applied to those assets still within their 20 year life.

⁴³ AER, *Draft Decision: Energex distribution determination 2020 to 2025 - Attachment 15 - Alternative Control Services*, October 2019, p.15-26.

⁴⁴ Logan City Council, *Submission on Energex's draft decision and revised proposal 2020–25*, January 2020.

The Council of the City of Gold Coast (CCGC) provided a submission that updated its response to Energex's original proposal to take into account our draft decision and Energex's revised proposals.⁴⁵ This submission indicated which previously raised issues had been settled, and otherwise provided further comments and recommendations. Table 15.6 sets out the issues the CCGC has provided further comments on, and our responses. We have removed issues where the CCGC acknowledge our response or Energex's response in its revised proposal (or both) and provided no further comment, but have maintained the same numbering for issues as in the draft decision.

Table 15.6 Council of the City of Gold Coast submission - key issues and AER considerations

CCGC Issue	Discussion
CCGC Issue - AER 1	Energex stated it owns and operates 325 000 public lights, being the quantity of lights of both NPL1 and NPL2 tariffs, which includes those gifted to Energex by customers.
AER draft decision	Those assets gifted to Energex are considered Energex 'owned', allowing them to operate and maintain these assets. While not technically incorrect, we have included mention of the quantity of these assets that have been gifted by customers.
CCGC response	Noted Energex 'owned' assets and those gifted to Energex (on NPL2 tariffs) should be differentiated and suggests Energex provides for the different approaches within their portfolio and improving reporting as such.
AER final decision	The AER notes this, and encourages stakeholders to continue discussions with Energex.
CCGC Issue - AER 3	CCGC does not consider asset costs attributed to Energex's shared assets (poles and wires) should be borne by the customer.
AER consideration	Energex is entitled to recover the costs of these assets. ⁴⁶ This recovery can be apportioned between standard control services and public lighting services, as alternative control services, in a way that reflects the shared usage. We support CCGC's recommendation that Energex provides more transparency around the cost breakdown of capital expenditure, demonstrating how much - if any - of the poles and wires costs are recovered through public lighting tariffs.
CCGC response	Request that Energex provide transparency between public lighting asset costs and poles and wires on these public lighting assets. Commented that Energex are unable to differentiate between asset types and shared assets and therefore cannot accurately determine the number of dedicated and shared poles in its portfolio to ensure appropriate and accurate management and charging are being applied.
AER final decision	Energex noted that no shared pole and wire assets are assigned to the public lighting asset base. ⁴⁷ The AER encourages Energex engages stakeholders to demonstrate this to provide assurance that they are being charged appropriately.
CCGC Issue - AER 5	CCGC is concerned that Energex's monopolistic framework prevents alternative technology, and suggested that NPL2 assets are returned to customers to provide opportunities for customers to deliver alternative technology such as solar/battery

⁴⁵ Gold Coast City Council, *Submission on Energex's draft decision and revised proposal 2020–25*, January 2020.

⁴⁶ NER, cl. 6.5.1(a).

⁴⁷ Energex, *Energex Revised Regulatory Proposal 2020–25*, December 2019, p. 55.

CCGC Issue	Discussion
	solutions.
AER consideration	We welcome further discussion between Energex and CCGC regarding this, noting that alternative technologies could be best suited to the NPL3 tariff.
CCGC response	CCGC continues to suggest NPL2 assets should be returned to customers at the end of the asset's life, particularly if the LED upgrade implementation is funded by the customer.
AER final decision	We encourage Energex and CCGC to discuss this further. We note our earlier response, as well as the comments made above in relation to Logan City Council's submission.
CCGC Issue - AER 6	CCGC has concerns around the impact of the building block approach, and how the LED rollout will impact the revenue Energex is allowed to recover.
AER consideration	Energex proposed separate models for conventional and LED lighting. This allows for appropriate costs to be recovered from the relevant customers. The conventional lighting asset base will continue to be recovered from conventional lighting customers until the asset base is depleted. At that point, all customers will be using LED lighting, or will be paying a lower charge, net of capital costs (to be addressed in a future regulatory determination). There is no need for Energex to revalue any assets, and the value capitalised at the beginning of the asset will remain. We recommend further discussion between Energex and CCGC to offer further transparency.
CCGC response	CCGC suggests the AER and Energex have not considered the tax implications surrounding customer funded LED upgrades to Energex 'owned' assets, where the balance of the asset remains a part of the conventional asset base after the LED upgrade. CCGC has suggested the AER conduct future costs modelling to ensure appropriate considerations have been made for the next regulatory proposal.
AER final decision	<p>The AER has accepted Energex's proposed treatment of conventional lighting and LED lighting asset bases as separate to maintain a consistent and pragmatic approach. We consider that trying to incorporate adjustments to tariffs to reflect balances of asset life/value when transitioning across the asset bases would complicate the charging structure of these services, as well as eradicate some of the incentive for customers to adopt LED lighting.</p> <p>The AER will continue to consider the costs of LED lighting and the transition from conventional lighting to LED lighting as more data becomes available, and as businesses propose new approaches.</p>
CCGC Issue - AER 9	Energex's proposal is silent on its expectation of funding responsibility to achieve its target of 47 per cent LED penetration by 2025.
AER consideration	Energex provided details of its LED rollout strategy in its Public Lighting Asset Management Plan. This included removal of mercury vapour lamps and luminaires from use, replacement of failed/life-expired lights, and new lights. This document also mentions approaches to minimising costs. We recommend further discussion between Energex and CCGC to offer greater transparency, and recommend Energex addresses this further in its revised proposal, including clarity around who bears responsibility for the LED changeover. We note that LED tariffs are lower than conventional lighting tariffs, and that where a customer gifts the asset (or the LED only for NPL4), there should always remain a fiscal incentive due to decreased operating expenditure incurred with LED lighting.
CCGC response	CCGC suggested that Energex's revised proposal did not adequately incentivise customers to fund LED implementation, and that the AER's draft decision should be considered instead to ensure LED rollout expectations are met.
AER final decision	The AER notes these comments, and we have given weight to this in considering the incentives offered by LED tariffs in our final decision.
CCGC Issue - AER 10	Energex has not provided information to customers on request regarding the makeup of the public lighting asset base.
AER consideration	Energex has advised that it has since provided an asset register to CCGC.

CCGC Issue	Discussion
CCGC response	CCGC notes that Energex has provided an asset register which indicates over 50% of poles exceed the asset life of 20 years, and that the asset register does not sufficiently determine true value, age, luminaire, etc. CCGC suggests that the public lighting asset base may also be incorrect because of this, and that Energex conducts a full audit of the public lighting network. CCGC notes that poles that have been fully depreciated are still charged at the same price.
AER final decision	The AER encourages Energex to engage with stakeholders around concerns about the appropriate documentation of assets. The AER requires Energex to maintain an asset base, which is adjusted for capital expenditure and disposals, depreciation, and other related adjustments. The recovery of costs relating to this asset base is smoothed across all relevant customers and over time. If Energex opted to change a customer's tariff at the end of the 20-year life of the asset, then it would still be entitled to recover the same amount of revenue, which would result in higher tariffs being applied to those assets still within their 20 year life.
CCGC Issue - AER 14	Prices for conventional NPL2 to LED NPL2 is inadequate to support customer funding.
AER consideration	There is no charge or exit fee for customers to transition to LED. Prices are lower than conventional, providing incentive to change, and providing long-term benefits.
CCGC response	In response to Energex's revised proposal comments, CCGC suggests Energex provide a pathway to support the transition of NPL2 to NPL3 at the end of the life of the asset.
AER final decision	We note our earlier response, and note the comments made above in relation to Logan City Council's submission.
CCGC Issue - AER 16	Energex is silent on the process for customer funded assets at end of life.
AER consideration	Where customers contribute assets on the NPL2 (or NPL4) tariff, these assets are gifted to Energex and then maintained by Energex, and are therefore retained by Energex. Where Energex replaces the asset at end-of-life, the customer remains on the NPL2 tariff, where they are responsible for only a fraction of the capital expenditure involved. Where customers intend to use the asset past the end-of-life, or upgrade the asset in any way, we recommend the NPL3 tariff be used.
CCGC response	CCGC suggest that Energex create a pathway for customers who intend to use the asset past the end of its life, or upgrade the asset in any way, to move to the NPL3 tariff in line with the AER recommendation.
AER final decision	We note our earlier response, as well as the comments made above in relation to Logan City Council's submission. We also note that our recommendation was intended for customers to take up options on the NPL3 tariff where they intend to upgrade their asset. We encourage Energex and stakeholders to negotiate any possible pathways to allow transitions to be possible.

Source: AER, *Draft Decision, Energex distribution determination 2020–25*, October 2019; Gold Coast City Council, *Submission on Energex's draft decision and revised proposal 2020–25*, January 2020.

Price movements

In reaching our decision we have considered price movements between regulatory control periods, as well as LED price incentives. We note that price movements between the current (2015–20) regulatory control period and the next will incorporate changes due to the alignment of processes and tariff strategies between Energex and Ergon Energy following their merger. Price movements from 2019–20 to 2020–21 are shown in Table 15.7.

In making our final decision, we note that both Energex and stakeholders have expressed interest in promoting the rollout of LED technology. We have therefore given consideration to LED price incentives in our decision. We consider that the LED price incentives below will encourage the uptake of this new technology, while supporting public lighting customers to fund the rollout of LED lighting.

Table 15.7 Price Movements (\$ nominal \$/day)

				2019– 20	2020– 21	% change	LED incentive ⁴⁸
Energex Proposal	Conventional	NPL1	Major	0.866	0.618	-28.6%	
			Minor	0.398	0.375	-5.8%	
		NPL2	Major	0.301	0.317	5.4%	
			Minor	0.146	0.208	42.3%	
	LED	NPL1	Major	0.866	0.545	-37.1%	-11.9%
			Minor	0.398	0.328	-17.7%	-12.7%
		NPL2	Major	0.301	0.257	-14.6%	-18.9%
			Minor	0.146	0.168	15.0%	-19.2%
		NPL4	Major		0.540		-0.8%
			Minor		0.330		0.7%
AER Draft Decision	Conventional	NPL1	Major	0.866	0.626	-27.7%	
			Minor	0.398	0.365	-8.3%	
		NPL2	Major	0.301	0.176	-41.6%	
			Minor	0.146	0.115	-21.4%	
	LED	NPL1	Major	0.866	0.423	-51.2%	-32.4%
			Minor	0.398	0.249	-37.3%	-31.6%
		NPL2	Major	0.301	0.140	-53.4%	-20.2%
			Minor	0.146	0.092	-36.7%	-19.5%
		NPL4	Major		0.324		-23.4%
			Minor		0.193		-22.6%
Energex Revised Proposal	Conventional	NPL1	Major	0.866	0.844	-2.6%	
			Minor	0.398	0.388	-2.6%	

⁴⁸ LED incentive is the difference between the respective conventional and LED rates. For NPL4, the incentive is in relation to the NPL1 LED lighting tariff, as it represents an NPL1 customer contributing an LED luminaire to an Energex owned asset.

				2019– 20	2020– 21	% change	LED incentive ⁴⁸
		NPL2	Major	0.301	0.293	-2.6%	
			Minor	0.146	0.142	-2.6%	
	LED	NPL1	Major	0.866	0.424	-51.0%	-49.7%
			Minor	0.398	0.257	-35.3%	-33.6%
		NPL2	Major	0.301	0.197	-34.4%	-32.7%
			Minor	0.146	0.131	-9.9%	-7.6%
		NPL4	Major		0.336		-20.7%
			Minor		0.207		-19.8%
AER Final Decision	Conventional	NPL1	Major	0.866	0.929	7.3%	
			Minor	0.398	0.427	7.3%	
		NPL2	Major	0.301	0.323	7.3%	
			Minor	0.146	0.157	7.3%	
	LED	NPL1	Major	0.866	0.363	-58.1%	-61.0%
			Minor	0.398	0.221	-44.4%	-48.2%
		NPL2	Major	0.301	0.186	-38.3%	-42.5%
			Minor	0.146	0.123	-15.8%	-21.5%
		NPL4	Major		0.291		-19.8%
			Minor		0.180		-18.9%

Source: Energex, *15.029 Public lighting LED and Conventional Pricing model* - JAN19; AER, *Draft Decision, Energex distribution determination 2020–25 - Public Lighting Pricing Model* - October 2019; Energex *11.003 Public lighting LED and Conventional Pricing model*, DEC19; AER, *Final Decision, Energex distribution determination 2020–25, Public Lighting Pricing Model*, May 2020.

15.6 Metering services

Metering services include maintenance, reading, data services, and the recovery of capital costs related to type 6 meters installed prior to 1 December 2017. Metering assets are used to measure electrical energy flows at a point in the network to record consumption for the purposes of billing. Energex forecast a metering population of nearly 2 million meters at the beginning of the 2020–25 regulatory control period.⁴⁹

Since the introduction of the Power of Choice reforms on 1 December 2017, Energex is no longer permitted to provide or install type 6 meters. Customers are now able to source new meters from the contestable market. New minimum standards for meters

⁴⁹ Energy Queensland, *Energex Alternative Control Services 2020–25*, January 2019, p. 7.

mean that only advanced or 'smart' meters (generally a type 4 meter for residential customers) with remote communications capability may now be installed.

We are responsible for setting charges relating to the meter reading, maintenance, and data services. These charges exclude the provision of type 6 meters, so do not include up front capital charges for new meters.

15.6.1 Metering services—Final decision

Our final decision is to:

- Reject Energex's revised operating expenditure
- Accept Energex's revised capital expenditure and metering asset base
- Apply our final decision rate of return, labour escalators and inflation forecasts consistent with standard control services.⁵⁰

Our final decision metering charges are listed in appendix C. Consistent with our draft decision, X factors for metering are set at zero for years 2 to 5 of the regulatory control period.⁵¹

15.6.2 Metering services—Reasons for final decision

Capital expenditure

Energex did not propose any direct capital expenditure for the 2020–25 regulatory control period in its revised regulatory proposal. However, Energex originally proposed \$8.06 million of non-network capital expenditure (not directly related to its metering assets).⁵² Energex accepted our draft decision to remove this amount of non-network capital expenditure.⁵³ Energex reassessed these expenses and included them in its operating expenditure.

Our final decision is to accept this revised capital expenditure. The nil amount of capital expenditure for the 2020–25 regulatory control period reflects that Energex is not permitted to provide or install meters under the Power of Choice reforms. The removal of the non-network capital expenditure reflects our draft decision that there should be no apportionment of non-network capital expenditure while there is no direct capital expenditure. This nil capital expenditure will also shorten the timeframe required to deplete the metering asset base.

⁵⁰ For further information, see Overview, Attachment 3 - Rate of Return and Attachment 6 - Operating Expenditure of this decision.

⁵¹ AER, *Draft Decision: Energex distribution determination 2020 to 2025 - Attachment 15 - Alternative Control Services*, October 2019, p.15-31. For more information of the form of control applying to alternative control services, see Attachment 13 of this final decision.

⁵² Energy Queensland, *Energex Revised Regulatory Proposal 2020–25*, December 2019, p. 57.

⁵³ Energy Queensland, *Energex Alternative Control Services 2020–25*, January 2019, p. 6.

Operating expenditure

Energex accepted our draft decision to apply a cap of 35 per cent to operating expenditure overheads. In response, Energex revised the allocation of these expenses, resulting in some expenses now being considered as operating expenditure, rather than overheads. Energex also included expenses previously categorised as non-network capital expenditure as operating expenditure.⁵⁴ We accept the reallocation of the relevant expenses.

In our draft decision, we accepted Energex's operating expenditure adjustments for non-recurring costs, operational improvements, and forecast merger savings. Energex has omitted these adjustments in its revised proposal. We consider these adjustments should still be incorporated in the calculation of Energex's operating expenditure, and have therefore reintroduced them in our final decision models. Energex also calculated its base year operating expenditure using 2018–19 actual results that differ to what it has reported in its RINs.

Our final decision is to reject Energex's revised operating expenditure. We have corrected Energex's actual results for 2018–19 and included the adjustments from the draft decision for non-recurring costs, operational improvements, and forecast merger savings. We have updated labour cost escalators in line with our decision for standard control services. This has resulted in total operating expenditure for the 2020–25 of \$88.8 million, 10 per cent lower than Energex's revised proposal.

Table 15.8 shows the movement in total operating expenditure between Energex's proposal and our final decision.

Table 15.8 Operating Expenditure (\$2019–20)

Operating Expenditure	2020–21	2021–22	2022–23	2023–24	2024–25	Total
Energex Proposal	19.05	18.55	18.11	17.68	17.27	90.66
AER Draft Decision	16.99	16.46	15.95	15.47	15.02	79.89
Energex Revised Proposal	21.62	20.65	19.72	18.83	17.98	98.79
AER Final Decision	19.22	18.46	17.74	17.04	16.37	88.82

Source: Energex, *15.010 Opex forecast*, ACS metering JAN19; AER, *Draft Decision - Energex distribution determination 2020–25 - Metering Opex - October 2019*; Energex, *11.007 Opex forecast - ACS public lighting* DEC19; AER, *Final Decision, Energex distribution determination 2020–25 - Metering Opex - May 2020*.

Price movements

In reaching our decision we have considered the price movements between regulatory control periods. While these price movements show differing changes between the capital and non-capital components, the overall increase for each tariff is between

⁵⁴ Energy Queensland, *Energex Revised Regulatory Proposal 2020–25*, December 2019, p. 57.

2 and 9 per cent in the first year, with tariffs increasing by inflation only for the remaining years of the 2020–25 period.

Price movements from 2019–20 to 2020–21 are shown in Table 15.9.

Table 15.9 Price Movements (\$ nominal cents/day)

			2019–20	2020–21	% change
Energex Proposal	Primary	Capital	7.362	6.587	-10.5%
		Non-capital	2.400	3.358	39.9%
	Load Control	Capital	2.209	1.976	-10.5%
		Non-capital	0.720	1.007	39.9%
	Solar PV	Capital	5.154	4.611	-10.5%
		Non-capital	1.680	2.350	39.9%
AER Draft Decision	Primary	Capital	7.362	7.167	-2.6%
		Non-capital	2.400	3.101	29.2%
	Load Control	Capital	2.209	2.071	-6.3%
		Non-capital	0.720	0.920	27.8%
	Solar PV	Capital	5.154	5.180	0.5%
		Non-capital	1.680	2.192	30.5%
Energex Revised Proposal	Primary	Capital	7.362	6.952	-5.6%
		Non-capital	2.400	3.715	54.8%
	Load Control	Capital	2.209	2.086	-5.6%
		Non-capital	0.720	1.115	54.8%
	Solar PV	Capital	5.154	4.982	-5.6%
		Non-capital	1.680	2.662	54.8%
AER Final Decision	Primary	Capital	7.362	7.045	-4.3%
		Non-capital	2.400	3.301	37.6%
	Load Control	Capital	2.209	2.035	-7.9%
		Non-capital	0.720	0.980	36.1%
	Solar PV	Capital	5.154	5.092	-1.2%
		Non-capital	1.680	2.334	38.9%

Source: Energex 15.028 Metering pricing model - ACS JAN19; AER, Draft Decision, Energex distribution determination 2020–25 - Metering PTRM - October 2019; Energex, 11.001 ACS Metering pricing model - DEC19; AER, Final Decision, Energex distribution determination 2020–25 - Metering PTRM - May 2020.

A Ancillary network services prices

Table 15.10 Fee based ancillary network service prices for 2020–21, final decision (\$2020–21)

Service Reference	Service description	Permutations	Traffic control	AER final decision fee
Tariff class: Connection application and management services				
Service Grouping: De-energisation				
EGX_1	Retailer requested de-energisation of the customer's premises where the de-energisation can be performed at the premises ie by a method other than main switch seal (eg pole, pillar, transformer or meter isolation link)	BUSINESS HOURS - NO CT	No	\$67.23
EGX_2	Retailer requested de-energisation of the customer's premises where the de-energisation can be performed at the premises ie by a method other than main switch seal (eg pole, pillar, transformer or meter isolation link)	AFTER HOURS - NO CT	No	\$89.91
EGX_3	Retailer requested de-energisation of the customer's premises where the de-energisation can be performed at the premises ie by a method other than main switch seal (eg pole, pillar, transformer or meter isolation link)	BUSINESS HOURS - CT	No	\$349.49
EGX_4	Retailer requested de-energisation of the customer's premises where the de-energisation can be performed at the premises ie by a method other than main switch seal (eg pole, pillar, transformer or meter isolation link)	AFTER HOURS - CT	No	\$489.44
EGX_5	Retailer requested de-energisation of the customer's premises where the de-energisation can be performed at the premises ie by a method other than main switch seal (eg pole, pillar, transformer or meter isolation link)	NON PAYMENT - NO CT	No	\$85.23
EGX_6	Retailer requested de-energisation of the customer's premises where the de-energisation can be performed at the premises ie by a method other than main switch seal (eg pole, pillar, transformer or meter isolation link)	NON PAYMENT - CT	No	\$349.49
EGX_7	Retailer requested de-energisation (MSS)	BUSINESS HOURS	No	\$39.79
EGX_8	Retailer requested de-energisation (MSS)	AFTER HOURS	No	\$53.99
EGX_11	Retailer requested de-energisation (MSS)	NON PAYMENT	No	\$62.26
Service Grouping: Re-energisation				
EGX_13	Retailer requests a re-energisation of the customer's premises where the customer has not paid their electricity account. No visual required	BUSINESS HOURS - NO CT	No	\$79.53
EGX_14	Retailer requests a re-energisation of the customer's premises where the customer has not paid their electricity account. No	BUSINESS HOURS - CT	No	\$89.52

Service Reference	Service description	Permutations	Traffic control	AER final decision fee
	visual required			
EGX_15	Retailer requests a re-energisation of the customer's premises where the customer has not paid their electricity account. No visual required	AFTER HOURS - NO CT	No	\$107.91
EGX_16	Retailer requests a re-energisation of the customer's premises where the customer has not paid their electricity account. No visual required	AFTER HOURS - CT	No	\$121.89
EGX_17	Retailer requests a re-energisation of the customer's premises where the customer has not paid their electricity account. No visual required	ANYTIME - NO CT	No	\$107.91
EGX_18	Retailer requests a re-energisation of the customer's premises where the customer has not paid their electricity account. No visual required	ANYTIME - CT	No	\$121.89
EGX_19	Retailer requests a re-energisation for the customer's premises following a main switch seal (no visual required)	BUSINESS HOURS	No	\$15.44
EGX_20	Retailer requests a re-energisation for the customer's premises following a main switch seal (no visual required)	AFTER HOURS	No	\$82.66
EGX_21	Retailer requests a re-energisation for the customer's premises following a main switch seal (no visual required)	ANYTIME	No	\$82.66
EGX_25	Retailer requests a re-energisation for the customer's premises following a main switch seal (no visual required)	NON PAYMENT	No	\$120.67
EGX_27	Retailer or metering coordinator/provider requests a visual examination upon re-energisation (physical or remote) of the customer's premises.	BUSINESS HOURS - NO CT	No	\$129.32
EGX_28	Retailer or metering coordinator/provider requests a visual examination upon re-energisation (physical or remote) of the customer's premises.	BUSINESS HOURS - CT	No	\$274.35
EGX_29	Retailer or metering coordinator/provider requests a visual examination upon re-energisation (physical or remote) of the customer's premises.	AFTER HOURS - NO CT	No	\$149.87
EGX_30	Retailer or metering coordinator/provider requests a visual examination upon re-energisation (physical or remote) of the customer's premises.	AFTER HOURS - CT	No	\$364.32
EGX_31	Retailer or metering coordinator/provider requests a visual examination upon re-energisation (physical or remote) of the customer's premises.	ANYTIME - NO CT	No	\$149.87
EGX_32	Retailer or metering coordinator/provider requests a visual examination upon re-energisation (physical or remote) of the customer's premises.	ANYTIME - CT	No	\$364.32
EGX_33	Retailer or metering coordinator/provider requests a visual examination upon re-energisation (physical) of the customer's premises where the customer has not paid their electricity account. NMI de-energised > 30 days.	BUSINESS HOURS - NO CT	No	\$129.32
EGX_34	Retailer or metering coordinator/provider requests a visual	AFTER HOURS -	No	\$171.13

Service Reference	Service description	Permutations	Traffic control	AER final decision fee
	examination upon re-energisation (physical) of the customer's premises where the customer has not paid their electricity account. NMI de-energised > 30 days.	NO CT		
EGX_35	Retailer or metering coordinator/provider requests a visual examination upon re-energisation (physical) of the customer's premises where the customer has not paid their electricity account. NMI de-energised > 30 days.	ANYTIME - NO CT	No	\$171.13
EGX_36	Retailer or metering coordinator/provider requests a visual examination upon re-energisation (physical) of the customer's premises where the customer has not paid their electricity account. NMI de-energised > 30 days.	BUSINESS HOURS - CT	No	\$274.35
EGX_37	Retailer or metering coordinator/provider requests a visual examination upon re-energisation (physical) of the customer's premises where the customer has not paid their electricity account. NMI de-energised > 30 days.	AFTER HOURS - CT	No	\$379.23
EGX_38	Retailer or metering coordinator/provider requests a visual examination upon re-energisation (physical) of the customer's premises where the customer has not paid their electricity account. NMI de-energised > 30 days.	ANYTIME - CT	No	\$379.23
Service Grouping: Temporary disconnections and reconnections (which may involve a line drop)				
EGX_39	Temporary de-energisation and re-energisation of supply to allow customer or contractor to work close - the supply will be disconnected	No Dismantling - BUSINESS HOURS	No	\$350.49
EGX_40	Temporary de-energisation and re-energisation of supply to allow customer or contractor to work close - the supply will be disconnected	No Dismantling - AFTER HOURS	No	\$490.84
EGX_41	Temporary de-energisation and re-energisation of supply to allow customer or contractor to work close - the service may be physically dismantled or disconnected (e.g. overhead service dropped). This services includes switching if required.	Dismantling - SINGLE PHASE - BUSINESS HOURS	No	\$748.90
EGX_42	Temporary de-energisation and re-energisation of supply to allow customer or contractor to work close - the service may be physically dismantled or disconnected (e.g. overhead service dropped). This services includes switching if required.	Dismantling - MULTIPHASE - BUSINESS HOURS	No	\$898.68
EGX_43	Temporary de-energisation and re-energisation of supply to allow customer or contractor to work close - the service may be physically dismantled or disconnected (e.g. overhead service dropped). This services includes switching if required.	Dismantling - SINGLE PHASE - BUSINESS HOURS - Traffic Control	Yes	\$1,352.98
EGX_44	Temporary de-energisation and re-energisation of supply to allow customer or contractor to work close - the service may be physically dismantled or disconnected (e.g. overhead service dropped). This services includes switching if required.	Dismantling - MULTIPHASE - BUSINESS HOURS - Traffic Control	Yes	\$1,502.76
EGX_45	Temporary de-energisation and re-energisation of supply to allow customer or contractor to work close - the service may be physically dismantled or disconnected (e.g. overhead service dropped). This services includes switching if required.	Dismantling - SINGLE PHASE - AFTER HOURS	No	\$1,048.80
EGX_46	Temporary de-energisation and re-energisation of supply to allow customer or contractor to work close - the service may be physically dismantled or disconnected (e.g. overhead	Dismantling - MULTIPHASE -	No	\$1,258.56

Service Reference	Service description	Permutations	Traffic control	AER final decision fee
	service dropped). This services includes switching if required.	AFTER HOURS		
EGX_47	Temporary de-energisation and re-energisation of supply to allow customer or contractor to work close - the service may be physically dismantled or disconnected (e.g. overhead service dropped). This services includes switching if required.	Dismantling - SINGLE PHASE - AFTER HOURS - Traffic Control	Yes	\$1,652.87
EGX_48	Temporary de-energisation and re-energisation of supply to allow customer or contractor to work close - the service may be physically dismantled or disconnected (e.g. overhead service dropped). This services includes switching if required.	Dismantling - MULTIPHASE - AFTER HOURS - Traffic Control	Yes	\$1,862.63
Service Grouping: Temporary connection				
EGX_49	Customer requested temporary connection (short term) and the recovery of the temporary builders supply. Excludes work on metering equipment.	BUSINESS HOURS - NO CT	No	\$898.68
EGX_50	Customer requested temporary connection (short term) and the recovery of the temporary builders supply. Excludes work on metering equipment.	AFTER HOURS - NO CT	No	\$1,258.56
EGX_51	Customer requested temporary connection (short term) and the recovery of the temporary builders supply. Excludes work on metering equipment.	BUSINESS HOURS - CT	No	\$1,497.80
EGX_52	Customer requested temporary connection (short term) and the recovery of the temporary builders supply. Excludes work on metering equipment.	AFTER HOURS - CT	No	\$2,097.60
Service Grouping: Supply Abolishment				
EGX_53	Retailer requests Energex to abolish supply at a connection point and decommission a NMI. May be used where a property is to be demolished; supply is no longer required; an alternative connection point is to be used; or a redundant supply is to be removed. Overhead or Underground	SERVICE ONLY - BUSINESS HOURS - CT (Complex)	No	\$449.34
EGX_54	Retailer requests Energex to abolish supply at a connection point and decommission a NMI. May be used where a property is to be demolished; supply is no longer required; an alternative connection point is to be used; or a redundant supply is to be removed. Overhead or Underground	SERVICE ONLY - BUSINESS HOURS - CT (Complex) - Traffic control	Yes	\$1,053.42
EGX_55	Retailer requests Energex to abolish supply at a connection point and decommission a NMI. May be used where a property is to be demolished; supply is no longer required; an alternative connection point is to be used; or a redundant supply is to be removed. Overhead or Underground	SERVICE ONLY - BUSINESS HOURS - NO CT (Simple)	No	\$374.45
EGX_56	Retailer requests Energex to abolish supply at a connection point and decommission a NMI. May be used where a property is to be demolished; supply is no longer required; an alternative connection point is to be used; or a redundant supply is to be removed. Overhead or Underground	SERVICE ONLY - BUSINESS HOURS - NO CT (Simple) - Traffic control	Yes	\$978.53
EGX_57	Retailer requests Energex to abolish supply at a connection point and decommission a NMI. May be used where a property is to be demolished; supply is no longer required; an alternative connection point is to be used; or a redundant	SERVICE ONLY - AFTER HOURS - CT (Complex)	No	\$629.28

Service Reference	Service description	Permutations	Traffic control	AER final decision fee
	supply is to be removed. Overhead or Underground			
EGX_58	Retailer requests Energex to abolish supply at a connection point and decommission a NMI. May be used where a property is to be demolished; supply is no longer required; an alternative connection point is to be used; or a redundant supply is to be removed. Overhead or Underground	SERVICE ONLY - AFTER HOURS - CT (Complex) - Traffic control	Yes	\$1,233.35
EGX_59	Retailer requests Energex to abolish supply at a connection point and decommission a NMI. May be used where a property is to be demolished; supply is no longer required; an alternative connection point is to be used; or a redundant supply is to be removed. Overhead or Underground	SERVICE ONLY- AFTER HOURS - NO CT (Simple)	No	\$524.40
EGX_60	Retailer requests Energex to abolish supply at a connection point and decommission a NMI. May be used where a property is to be demolished; supply is no longer required; an alternative connection point is to be used; or a redundant supply is to be removed. Overhead or Underground	SERVICE ONLY- AFTER HOURS - NO CT (Simple) - Traffic control	Yes	\$1,128.47
EGX_61	Retailer requests Energex to abolish supply at a connection point and decommission a NMI. May be used where a property is to be demolished; supply is no longer required; an alternative connection point is to be used; or a redundant supply is to be removed. Overhead or Underground	SERVICE ONLY - ANYTIME - CT (Complex)	No	\$629.28
EGX_62	Retailer requests Energex to abolish supply at a connection point and decommission a NMI. May be used where a property is to be demolished; supply is no longer required; an alternative connection point is to be used; or a redundant supply is to be removed. Overhead or Underground	SERVICE ONLY - ANYTIME - CT (Complex) - Traffic control	Yes	\$1,233.35
EGX_63	Retailer requests Energex to abolish supply at a connection point and decommission a NMI. May be used where a property is to be demolished; supply is no longer required; an alternative connection point is to be used; or a redundant supply is to be removed. Overhead or Underground	SERVICE ONLY - ANYTIME - NO CT (Simple)	No	\$524.40
EGX_64	Retailer requests Energex to abolish supply at a connection point and decommission a NMI. May be used where a property is to be demolished; supply is no longer required; an alternative connection point is to be used; or a redundant supply is to be removed. Overhead or Underground	SERVICE ONLY - ANYTIME - NO CT (Simple) - Traffic control	Yes	\$1,128.47
EGX_65	Retailer requests Energex to abolish supply at a connection point and decommission a NMI. May be used where a property is to be demolished; supply is no longer required; an alternative connection point is to be used; or a redundant supply is to be removed. Overhead or Underground (No travel time)	METER ONLY (Per NMI) - BUSINESS HOURS - CT	No	\$299.56
EGX_66	Retailer requests Energex to abolish supply at a connection point and decommission a NMI. May be used where a property is to be demolished; supply is no longer required; an alternative connection point is to be used; or a redundant supply is to be removed. Overhead or Underground (No travel time)	METER ONLY (Per NMI) - BUSINESS HOURS - NO CT	No	\$74.89
EGX_67	Retailer requests Energex to abolish supply at a connection point and decommission a NMI. May be used where a property is to be demolished; supply is no longer required; an	METER ONLY (Per NMI) - AFTER HOURS- CT	No	\$419.52

Service Reference	Service description	Permutations	Traffic control	AER final decision fee
	alternative connection point is to be used; or a redundant supply is to be removed. Overhead or Underground (No travel time)			
EGX_68	Retailer requests Energex to abolish supply at a connection point and decommission a NMI. May be used where a property is to be demolished; supply is no longer required; an alternative connection point is to be used; or a redundant supply is to be removed. Overhead or Underground (No travel time)	METER ONLY (Per NMI) - AFTER HOURS - NO CT	No	\$104.88
EGX_69	Retailer requests Energex to abolish supply at a connection point and decommission a NMI. May be used where a property is to be demolished; supply is no longer required; an alternative connection point is to be used; or a redundant supply is to be removed. Overhead or Underground (No travel time)	METER ONLY (Per NMI) - ANYTIME - CT	No	\$419.52
EGX_70	Retailer requests Energex to abolish supply at a connection point and decommission a NMI. May be used where a property is to be demolished; supply is no longer required; an alternative connection point is to be used; or a redundant supply is to be removed. Overhead or Underground (No travel time)	METER ONLY (Per NMI) - ANYTIME - NO CT	No	\$104.88
NEW1	Request to de-energise an unmetered supply point.	BUSINESS HOURS	No	\$374.45
NEW2	Request to de-energise an unmetered supply point.	AFTER HOURS	No	\$524.40
NEW3	Request to de-energise an unmetered supply point.	BUSINESS HOURS - TRAFFIC CONTROL	Yes	\$978.53
NEW4	Request to de-energise an unmetered supply point.	AFTER HOURS - TRAFFIC CONTROL	Yes	\$1,128.47
Service Grouping: Supply Enhancement				
EGX_71	Service upgrade. For example, an upgrade from single phase to multi phase and/or increase capacity. Excludes work on metering equipment (if required). Overhead	BUSINESS HOURS - SINGLE TO MULTI PHASE	No	\$951.80
EGX_72	Service upgrade. For example, an upgrade from single phase to multi phase and/or increase capacity. Excludes work on metering equipment (if required). Overhead	BUSINESS HOURS - SINGLE TO MULTI PHASE - Traffic control	Yes	\$1,555.88
EGX_73	Service upgrade. For example, an upgrade from single phase to multi phase and/or increase capacity. Excludes work on metering equipment (if required). Overhead	BUSINESS HOURS - MULTIPHASE INCREASE CAPACITY	No	\$1,026.69
EGX_74	Service upgrade. For example, an upgrade from single phase to multi phase and/or increase capacity. Excludes work on metering equipment (if required). Overhead	BUSINESS HOURS - MULTIPHASE INCREASE CAPACITY - Traffic control	Yes	\$1,630.77
EGX_75	Service upgrade. For example, an upgrade from single phase to multi phase and/or increase capacity. Excludes work on	AFTER HOURS - SINGLE TO MULTI	No	\$1,251.70

Service Reference	Service description	Permutations	Traffic control	AER final decision fee
	metering equipment (if required). Overhead	PHASE		
EGX_76	Service upgrade. For example, an upgrade from single phase to multi phase and/or increase capacity. Excludes work on metering equipment (if required). Overhead	AFTER HOURS - SINGLE TO MULTI PHASE - Traffic control	Yes	\$1,855.77
EGX_77	Service upgrade. For example, an upgrade from single phase to multi phase and/or increase capacity. Excludes work on metering equipment (if required). Overhead	AFTER HOURS - MULTIPHASE INCREASE CAPACITY	No	\$1,356.58
EGX_78	Service upgrade. For example, an upgrade from single phase to multi phase and/or increase capacity. Excludes work on metering equipment (if required). Overhead	AFTER HOURS - MULTIPHASE INCREASE CAPACITY - Traffic control	Yes	\$1,960.65
EGX_79	Service upgrade. For example, an upgrade from single phase to multi phase and/or increase capacity. Excludes work on metering equipment (if required). Underground	BUSINESS HOURS - SINGLE TO MULTI PHASE	No	\$224.67
EGX_80	Service upgrade. For example, an upgrade from single phase to multi phase and/or increase capacity. Excludes work on metering equipment (if required). Underground	BUSINESS HOURS - SINGLE TO MULTI PHASE - Traffic control	Yes	\$828.75
EGX_81	Service upgrade. For example, an upgrade from single phase to multi phase and/or increase capacity. Excludes work on metering equipment (if required). Underground	BUSINESS HOURS - MULTIPHASE INCREASE CAPACITY	No	\$224.67
EGX_82	Service upgrade. For example, an upgrade from single phase to multi phase and/or increase capacity. Excludes work on metering equipment (if required). Underground	BUSINESS HOURS - MULTIPHASE INCREASE CAPACITY - Traffic control	Yes	\$828.75
EGX_83	Service upgrade. For example, an upgrade from single phase to multi phase and/or increase capacity. Excludes work on metering equipment (if required). Underground	AFTER HOURS - SINGLE TO MULTI PHASE	No	\$314.64
EGX_84	Service upgrade. For example, an upgrade from single phase to multi phase and/or increase capacity. Excludes work on metering equipment (if required). Underground	AFTER HOURS - SINGLE TO MULTI PHASE - Traffic control	Yes	\$918.71
EGX_85	Service upgrade. For example, an upgrade from single phase to multi phase and/or increase capacity. Excludes work on metering equipment (if required). Underground	AFTER HOURS - MULTIPHASE INCREASE CAPACITY	No	\$314.64
EGX_86	Service upgrade. For example, an upgrade from single phase to multi phase and/or increase capacity. Excludes work on metering equipment (if required). Underground	AFTER HOURS - MULTIPHASE INCREASE CAPACITY - Traffic control	Yes	\$918.71
Service Grouping: Point of attachment relocation				

Service Reference	Service description	Permutations	Traffic control	AER final decision fee
EGX_87	Customer requests their existing overhead service to be replaced or relocated, e.g.as a result of point of attachment relocation. No material change to load. This includes De-energisation, followed by physical dismantling then reattachment of service and re-energisation. Excludes work on metering equipment (if required)	BUSINESS HOURS - SINGLE PHASE	No	\$627.35
EGX_88	Customer requests their existing overhead service to be replaced or relocated, e.g.as a result of point of attachment relocation. No material change to load. This includes De-energisation, followed by physical dismantling then reattachment of service and re-energisation. Excludes work on metering equipment (if required)	BUSINESS HOURS - SINGLE PHASE - Traffic Control	Yes	\$1,231.43
EGX_89	Customer requests their existing overhead service to be replaced or relocated, e.g.as a result of point of attachment relocation. No material change to load. This includes De-energisation, followed by physical dismantling then reattachment of service and re-energisation. Excludes work on metering equipment (if required)	AFTER HOURS - SINGLE PHASE	No	\$825.28
EGX_90	Customer requests their existing overhead service to be replaced or relocated, e.g.as a result of point of attachment relocation. No material change to load. This includes De-energisation, followed by physical dismantling then reattachment of service and re-energisation. Excludes work on metering equipment (if required)	AFTER HOURS - SINGLE PHASE - Traffic Control	Yes	\$1,429.36
EGX_91	Customer requests their existing overhead service to be replaced or relocated, e.g.as a result of point of attachment relocation. No material change to load. This includes De-energisation, followed by physical dismantling then reattachment of service and re-energisation. Excludes work on metering equipment (if required)	BUSINESS HOURS - MULTI PHASE	No	\$929.64
EGX_92	Customer requests their existing overhead service to be replaced or relocated, e.g.as a result of point of attachment relocation. No material change to load. This includes De-energisation, followed by physical dismantling then reattachment of service and re-energisation. Excludes work on metering equipment (if required)	BUSINESS HOURS - MULTI PHASE - Traffic Control	Yes	\$1,533.71
EGX_93	Customer requests their existing overhead service to be replaced or relocated, e.g.as a result of point of attachment relocation. No material change to load. This includes De-energisation, followed by physical dismantling then reattachment of service and re-energisation. Excludes work on metering equipment (if required)	AFTER HOURS - MULTIPHASE	No	\$1,174.35
EGX_94	Customer requests their existing overhead service to be replaced or relocated, e.g.as a result of point of attachment relocation. No material change to load. This includes De-energisation, followed by physical dismantling then reattachment of service and re-energisation. Excludes work on metering equipment (if required)	AFTER HOURS - MULTIPHASE - Traffic Control	Yes	\$1,778.43

Tariff class: Network Ancillary services

Service Grouping: Re-arrange connection assets at customer's request

Service Reference	Service description	Permutations	Traffic control	AER final decision fee
EGX_95	Rearrange connection assets at customer's request - simple (upgrade from overhead to underground where main connection point is in existence). Recovery of the overhead service and connection of the consumer mains to the pre-existing pillar for a customer requested conversion of existing overhead service to underground service	BUSINESS HOURS - SINGLE PHASE	No	\$748.90
EGX_96	Rearrange connection assets at customer's request - simple (upgrade from overhead to underground where main connection point is in existence). Recovery of the overhead service and connection of the consumer mains to the pre-existing pillar for a customer requested conversion of existing overhead service to underground service	BUSINESS HOURS - SINGLE PHASE - Traffic Control	Yes	\$1,352.98
EGX_97	Rearrange connection assets at customer's request - simple (upgrade from overhead to underground where main connection point is in existence). Recovery of the overhead service and connection of the consumer mains to the pre-existing pillar for a customer requested conversion of existing overhead service to underground service	AFTER HOURS - SINGLE PHASE	No	\$1,048.80
EGX_98	Rearrange connection assets at customer's request - simple (upgrade from overhead to underground where main connection point is in existence). Recovery of the overhead service and connection of the consumer mains to the pre-existing pillar for a customer requested conversion of existing overhead service to underground service	AFTER HOURS - SINGLE PHASE - Traffic control	Yes	\$1,652.87
EGX_99	Rearrange connection assets at customer's request - simple (upgrade from overhead to underground where main connection point is in existence). Recovery of the overhead service and connection of the consumer mains to the pre-existing pillar for a customer requested conversion of existing overhead service to underground service	BUSINESS HOURS - MULTI PHASE	No	\$823.79
EGX_100	Rearrange connection assets at customer's request - simple (upgrade from overhead to underground where main connection point is in existence). Recovery of the overhead service and connection of the consumer mains to the pre-existing pillar for a customer requested conversion of existing overhead service to underground service	BUSINESS HOURS - MULTI PHASE - Traffic Control	Yes	\$1,427.87
EGX_101	Rearrange connection assets at customer's request - simple (upgrade from overhead to underground where main connection point is in existence). Recovery of the overhead service and connection of the consumer mains to the pre-existing pillar for a customer requested conversion of existing overhead service to underground service	AFTER HOURS - MULTIPHASE	No	\$1,153.68
EGX_102	Rearrange connection assets at customer's request - simple (upgrade from overhead to underground where main connection point is in existence). Recovery of the overhead service and connection of the consumer mains to the pre-existing pillar for a customer	AFTER HOURS - MULTIPHASE - Traffic Control	Yes	\$1,757.75

Service Reference	Service description	Permutations	Traffic control	AER final decision fee
	requested conversion of existing overhead service to underground service			
Service Grouping: Faults/Emergency response				
EGX_103	Attending loss of Supply - customer fault	BUSINESS HOURS	No	\$299.56
EGX_104	Attending loss of Supply - customer fault	AFTER HOURS	No	\$419.52
Tariff class: Auxiliary metering services				
Service Grouping: Removal of a meter (Type 5 & 6)				
EGX_105a	Removal of Meter	BUSINESS HOURS - NO CT	No	\$119.88
EGX_106a	Removal of Meter	BUSINESS HOURS - CT	No	\$119.88
EGX_105	Removal of Meter	AFTER HOURS - NO CT	No	\$158.33
EGX_106	Removal of Meter	AFTER HOURS - CT	No	\$158.33
Service Grouping: Meter test				
EGX_107	Customer requested Meter Accuracy Testing of type 5-6 meter (physically test meter)	BUSINESS HOURS - NO CT	No	\$770.96
EGX_108	Customer requested Meter Accuracy Testing of type 5-6 meter (physically test meter)	BUSINESS HOURS - CT	No	\$805.91
EGX_109	Customer requested Meter Accuracy Testing of type 5-6 meter (physically test meter)	AFTER HOURS - NO CT	No	\$1,076.85
EGX_110	Customer requested Meter Accuracy Testing of type 5-6 meter (physically test meter)	AFTER HOURS - CT	No	\$1,125.80
Service Grouping: Meter inspection and investigation on request				
EGX_111	Inspection required to check reported or suspected fault and no fault in meter is found. (no physical meter test)	BUSINESS HOURS - NO CT	No	\$94.13
EGX_112	Inspection required to check reported or suspected fault and no fault in meter is found. (no physical meter test)	AFTER HOURS - NO CT	No	\$160.58
EGX_113	Inspection required to check reported or suspected fault and no fault in meter is found. (no physical meter test)	BUSINESS HOURS - CT	No	\$366.55
EGX_114	Inspection required to check reported or suspected fault and no fault in meter is found. (no physical meter test)	AFTER HOURS - CT	No	\$510.50
EGX_115	A request to conduct a site review of the state of the customer's metering installation(s) (no physical meter test), i.e. multiple premises. Includes provision of meter data above the minimum requirements and meter inspection to check a reported or suspected fault. Does not include provision of any hardware - First Unit	BUSINESS HOURS	No	\$146.87
EGX_116	A request to conduct a site review of the state of the	AFTER HOURS	No	\$202.85

Service Reference	Service description	Permutations	Traffic control	AER final decision fee
	customer's metering installation(s) (no physical meter test), i.e. multiple premises. Includes provision of meter data above the minimum requirements and meter inspection to check a reported or suspected fault. Does not include provision of any hardware - First Unit			
EGX_117	A request to conduct a site review of the state of the customer's metering installation(s) (no physical meter test), i.e. multiple premises. Includes provision of meter data above the minimum requirements and meter inspection to check a reported or suspected fault. Does not include provision of any hardware - Additional Units	BUSINESS HOURS	No	\$71.98
EGX_118	A request to conduct a site review of the state of the customer's metering installation(s) (no physical meter test), i.e. multiple premises. Includes provision of meter data above the minimum requirements and meter inspection to check a reported or suspected fault. Does not include provision of any hardware - Additional Units	AFTER HOURS	No	\$97.97
Service Grouping: Meter reconfiguration				
EGX_119	A request to make a change from one tariff to another tariff (Controlled Load)	BUSINESS HOURS - NO CT	No	\$93.48
EGX_120	A request to make a change from one tariff to another tariff (Controlled Load)	AFTER HOURS - NO CT	No	\$159.66
EGX_121	A request to make a change from one tariff to another tariff (Controlled Load)	BUSINESS HOURS - CT	No	\$306.64
EGX_122	A request to make a change from one tariff to another tariff (Controlled Load)	AFTER HOURS - CT	No	\$426.60
EGX_123	A request to make a change from one tariff to another tariff	BUSINESS HOURS - NO CT	No	\$93.48
EGX_124	A request to make a change from one tariff to another tariff	AFTER HOURS - NO CT	No	\$159.66
EGX_125	A request to make a change from one tariff to another tariff	BUSINESS HOURS - CT	No	\$456.42
EGX_126	A request to make a change from one tariff to another tariff	AFTER HOURS - CT	No	\$636.36
Service Grouping: Load control time switch				
EGX_127	Change load control equipment (inc. time switch and relay install, modify and removal)	BUSINESS HOURS - NO CT	No	\$141.88
EGX_128	Change load control equipment (inc. time switch and relay install, modify and removal)	BUSINESS HOURS - CT	No	\$421.47
Service Grouping: Metering alteration				
EGX_129	Meter alteration – meter is being relocated or meter wiring altered and requires DNSP to visit site to verify the integrity of the metering equipment	BUSINESS HOURS - NO CT	No	\$132.09
EGX_130	Meter alteration – meter is being relocated or meter wiring	AFTER HOURS -	No	\$184.16

Service Reference	Service description	Permutations	Traffic control	AER final decision fee
	altered and requires DNSP to visit site to verify the integrity of the metering equipment	NO CT		
EGX_131	Meter alteration – meter is being relocated or meter wiring altered and requires DNSP to visit site to verify the integrity of the metering equipment	BUSINESS HOURS - CT	No	\$835.86
EGX_132	Meter alteration – meter is being relocated or meter wiring altered and requires DNSP to visit site to verify the integrity of the metering equipment	AFTER HOURS - CT	No	\$1,167.75
Service Grouping: Metering reading				
EGX_133	Customer requests a check read, transfer read or validation of an estimated read on the meter, may be due to reported error in the meter reading. This is only used to check the accuracy of the meter reading	BUSINESS HOURS	No	\$11.32
EGX_134	Site remains active and reading undertaken upon customer move in. Retail requested	BUSINESS HOURS	No	\$11.32
EGX_135	Special meter reading including final read. Retailer or customer requested	BUSINESS HOURS	No	\$11.32
Service Grouping: Type 6 non-standard metering data services				
EGX_136	Provision of load profile data where available – Retailer requested	BUSINESS HOURS	No	\$156.86
Service Grouping: Reseal				
EGX_137	Reseal and inspection of meter after customer initiated work	BUSINESS HOURS	No	\$62.25
Tariff class: Network Ancillary services				
Service Grouping: Call out fee				
EGX_138	Crews attend site at the customers request and is unable to perform job due to customers fault/fault of a third party. TECHNICAL. Wasted travel time and wasted time at customer's premises.	BUSINESS HOURS - 1 crew	No	\$100.35
EGX_139	Crews attend site at the customers request and is unable to perform job due to customers fault/fault of a third party. TECHNICAL. Wasted travel time and wasted time at customer's premises.	BUSINESS HOURS - 2 crews	No	\$200.71
EGX_140	Crews attend site at the customers request and is unable to perform job due to customers fault/fault of a third party. TECHNICAL. Wasted travel time and wasted time at customer's premises.	AFTER HOURS - 1 crew	No	\$140.54
EGX_141	Crews attend site at the customers request and is unable to perform job due to customers fault/fault of a third party. TECHNICAL. Wasted travel time and wasted time at customer's premises.	AFTER HOURS - 2 crews	No	\$281.08
EGX_142	Crews attend site at the customers request and is unable to perform job due to customers fault/fault of a third party. NON	BUSINESS HOURS	No	\$7.42

Service Reference	Service description	Permutations	Traffic control	AER final decision fee
	TECHNICAL. Wasted travel time.			
EGX_143	Crews attend site at the customers request and is unable to perform job due to customers fault/fault of a third party. NON TECHNICAL. Wasted travel time.	AFTER HOURS	No	\$9.65

Source: AER Analysis; AER final decision model for Energex and Ergon Energy fee-based and quoted ancillary network services.

Table 15.11 Fee-based services - security lighting, \$2020–21

Light size	Annual charge / unit
Small LED (W70, W100)	\$196.53
Medium LED (W200)	\$252.11
Small conventional (150W)	\$277.36
Medium conventional (250W)	\$289.10
Large conventional (400W)	\$291.97

Source: AER Analysis; AER final decision model for Energex security lighting services.

Table 15.12 Quoted service hourly labour rates for 2020–21, final decision (\$2020–21)

Energex labour category	AER labour category ²	AER final decision - maximum total hourly rate (base plus on-costs plus overheads) - Ordinary time	AER final decision - maximum total hourly rate (base plus on-costs plus overheads) - Overtime
Admin Employee	Admin	\$77.00	\$134.75
Professional Managerial	Project Manager	\$191.28	\$252.30
Power Worker	Field Worker	\$118.30	\$164.48
Technical Service Person	Technical Specialist	\$149.82	\$209.81
Electrical System Designer	Engineer	\$140.42	\$190.39
Supervisor	Project Manager	\$174.95	\$233.24
Para-Professional	Engineer / Field Worker	\$165.02	\$222.83
Apprentice	Field Worker	\$96.44	\$132.65
System Operator	Senior Engineer	\$206.56	\$290.52

Energex labour category	AER labour category ²	AER final decision - maximum total hourly rate (base plus on-costs plus overheads) - Ordinary time	AER final decision - maximum total hourly rate (base plus on-costs plus overheads) - Overtime
Tech/PW ¹	Tech specialist/Field Worker ¹	\$134.06	\$187.15
Tech/PW/Admin ¹	Tech specialist/Field Worker/Admin ¹	\$115.04	\$169.68

Source: AER calculations; AER final decision model for Energex and Ergon Energy fee-based and quoted ancillary network services

1: Based on Marsden Jacob report. These labour categories are for comparison purposes only

2: The labour rates for this labour category is an average of the labour rates for the underlying labour categories. While the AER does not have a specific matching labour category we have taken a similar approach and applied the average of our final decision labour rates for the relevant categories.

Table 15.13 AER final decision on X-factors for each year of the 2020–25 regulatory control period for ancillary network services (per cent)

	2021–22	2022–23	2023–24	2024–25
General ¹	-0.9825%	-1.0493%	-1.0262%	-0.9668%
Security lighting	-0.6463%	-0.6902%	-0.6750%	-0.6360%

Source: AER analysis; AER final decision models for Energex and Ergon Energy fee-based and quoted ancillary network services and Energex's security lighting services.

Note: We do not set an X factor for 2020–21 because we set the 2020–21 ancillary network service prices in this determination.

To be clear, labour escalators themselves are positive for each year of the regulatory control period. However, the labour escalators in this table are operating as de facto X factors. Therefore, they are negative.

1: Excludes security lighting.

B Public lighting prices

Table 15.14 2020–21 prices (\$ nominal)

			\$/day	\$/year
Conventional	NPL1	Major	0.929	339.19
		Minor	0.427	155.89
	NPL2	Major	0.323	117.90
		Minor	0.157	57.18
LED	NPL1	Major	0.363	132.43
		Minor	0.221	80.79
	NPL2	Major	0.186	67.82
		Minor	0.123	44.89
	NPL4	Major	0.291	106.27
		Minor	0.180	65.53

Source: AER - Final Decision - Energex distribution determination 2020–25 - Public Lighting Pricing Model - May 2020.

Note: The X-factors for public lighting services for the remaining years of the period are 0 per cent, and prices are only escalated for inflation.

C Metering Prices

Table 15.15 2020–21 prices (\$ nominal)

		cents/day	\$/year
Primary	Capital	7.045	25.71
	Non-capital	3.301	12.05
Load Control	Capital	2.035	7.43
	Non-capital	0.980	3.58
Solar PV	Capital	5.092	18.58
	Non-capital	2.334	8.52

Source: AER - Final Decision - Energex distribution determination 2020–25 - Metering PTRM - May 2020

Note: The X-factors for metering services for the remaining years of the period are 0 per cent, and prices are only escalated for inflation.

Shortened forms

Shortened form	Extended form
AER	Australian Energy Regulator
capex	capital expenditure
distributor	distribution network service provider
NER	National Electricity Rules
NSP	network service provider
opex	operating expenditure
PTRM	post-tax revenue model
RBA	Reserve Bank of Australia
RIN	regulatory information notice
WACC	weighted average cost of capital