

# An Overview

Our Revised Regulatory Proposals and  
Revised Tariff Structure Statements 2020-25

December 2019



Part of Energy Queensland

This Overview is a quick guide to our revised proposals to the Australian Energy Regulator (AER) for the 2020-25 regulatory control period. It is part of a suite of revised documents submitted to the AER on 10 December 2019 in response to stakeholder feedback and the AER's Draft Decisions. The Draft Decisions were published on 8 October 2019 and related to our Regulatory Proposals which were submitted on 31 January 2019.

As Energex and Ergon Energy are separate distribution network service providers (DNSPs) there are separate Revised Regulatory Proposals and Revised Tariff Structure Statements for each, with associated supporting information. Where possible supporting information is contained in a single document for both Energex and Ergon Energy.

You can find out more about our engagement process and how it has informed our thinking in the updated 2020 and Beyond Community and Customer Engagement Report. These and other key documents are available on [www.talkingenergy.com.au](http://www.talkingenergy.com.au)

In keeping with our commitment to connect respectfully with Aboriginal and Torres Strait Islander peoples and communities, we acknowledge Aboriginal and Torres Strait Islander people as the first people of Australia and the Traditional Custodians of this land and its waters. We pay our respects to Elders past, present and future for they hold the memories, the traditions, the culture and knowledge of Aboriginal Australia.

#### Copyright

© Energex Limited (ABN 40 078 849 055), Ergon Energy Corporation Limited (ABN 50 087 646 062) and Energy Queensland Limited (ABN 612 535 583)

This material is copyright. No part of this material may be copied, reproduced, adapted or transmitted in any form without the prior written consent of the copyright owner/s, except as permitted under the Copyright Act 1968 (Cth). If consent is provided, it will be subject to the requirement that there is due acknowledgement of the copyright owner/s as the source.

Requests and enquiries concerning reproduction and rights should be addressed to:

General Manager  
Community and Customer Strategy  
GPO Box 1461  
BRISBANE QLD 4001

Or via [regulatoryproposal@energyq.com.au](mailto:regulatoryproposal@energyq.com.au)



# Acting CEO Message

**Our revised proposals deliver balanced outcomes for our communities and customers - while safety remains our top priority we are outperforming our affordability commitment.**

On behalf of Energex and Ergon Energy, I would like to offer my sincere thanks to you, our Queensland communities and customers, for continuing to work with us to shape our network plans for 2020-25 and beyond.

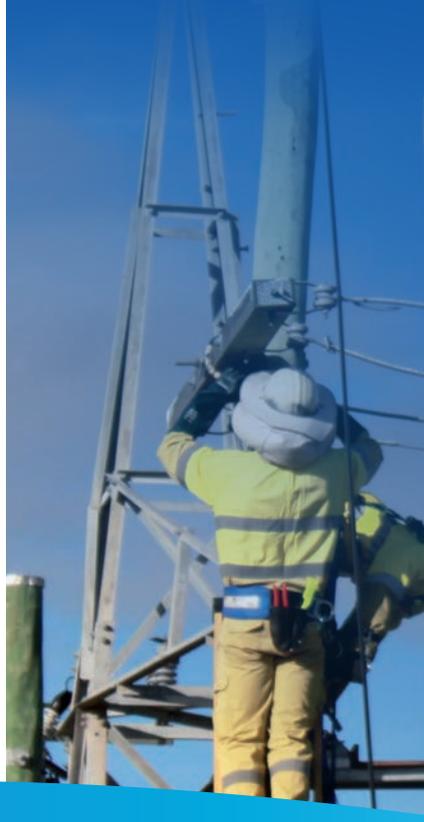
We submitted our Regulatory Proposals, including our Tariff Structure Statements (TSSs), for Energex and Ergon Energy in January 2019 which outlined our customer driven commitments to safety, affordability, security and sustainability. We highlighted the significant savings we have achieved since the formation of Energy Queensland (EQL) and proposed ongoing reductions in our cost structure.

Since January we have continued to work collaboratively with the Australian Energy Regulator (AER), our communities, customers, industry partners and shareholders. This constructive engagement has been instrumental in refining our Revised Regulatory Proposals and Revised TSSs to ensure that they still meet our customer commitments.

#### Safety First

We continue to look for ways to make our businesses more efficient and to submit proposals that are compliant and capable of acceptance. However, our number one priority is safety – this is a non-negotiable element of our investment plans and how we work.

Our capital expenditure (capex) program continues to be driven by the need to maintain a safe and reliable electricity supply across a vast area and in a variety of climates. High probabilities of extreme weather combined with ageing assets and a high uptake of solar present a range of technical challenges. The AER's Draft Decisions called for a greater level of justification to support our capex program to be undertaken earlier in the planning cycle than when we would normally undertake this level of analysis. In doing this additional analysis for our revised proposals we have uncovered more information in relation to some of our capex program requirements than we had previously identified.



For Energex, our revised capex forecast substantively accepts the AER's Draft Decision. We provide additional justification for important augmentation investment (augex) to meet customer demand and establish smart networks to integrate solar and batteries without creating risks to network security, supply quality or performance.

For Ergon Energy, we have material concerns with the level of replacement expenditure (repex) provided for in the AER's Draft Decision. These concerns have been compounded by additional safety issues that have come to light since our January submission. Aerial inspections of the Ergon Energy network in April 2019 identified significant additional safety repex requirements that were not known at the time of our January proposals. We also have concerns for the level of substituted augex for Ergon Energy.

We have responded to the AER and customers' requests for more detail by providing additional supporting evidence. We have enhanced the quantitative and qualitative analysis for our resubmitted business cases to deliver a more robust risk assessment for our revised capex forecast for both Energex and Ergon Energy

### More affordable electricity

We remain acutely aware that electricity affordability is a major concern for Queenslanders from both a cost of living perspective and a business competitiveness perspective. We are continuing to drive down the cost of distributing electricity across Queensland with our Revised Regulatory Proposals. Our goal is to ensure no-one is left behind and our communities grow stronger. In line with stakeholder feedback, we are delivering even further savings for customers by limiting our revised

operating expenditure (opex) forecast to our January submission amount for both Energex and Ergon Energy by accepting the AER's Draft Decisions.

We are proposing a further \$1,159 million (\$ nominal) reduction in our combined revenue requirement for Energex and Ergon Energy from that presented in our Regulatory Proposals.

We broadly accept the AER's tariff recommendations and have amended our Revised TSSs accordingly. In making these changes, we emphasise our commitment to implementing a network tariff framework in 2020-25 and beyond that provides better outcomes for our customers (including affordability, simplicity, choice and predictability), targets manageable customer impacts and caters for new technologies.

Our Revised Regulatory Proposals mean that the average residential customer in South East Queensland will receive a 16.1% real reduction in distribution network charges from 2019-20 to 2020-21 on their existing default tariff and the average small business customer will receive a 14.7% real reduction. Energex residential customers with a digital meter who choose to move to a new cost reflective tariff could save up to 19.8% while small businesses could save up to 15.7%.

In regional Queensland (East zone), the average residential and small business customer will receive a real reduction of 15.4% in distribution network charges. The Queensland Government Customer Service Obligation (CSO) means that the average residential and small business customer on notified retail prices will pay no more than the average residential and small business customer on default tariffs in South East Queensland. Ergon

Energy residential customers with a digital meter who choose to move to a new cost reflective tariff could save up to 17.6% on their distribution network charges while small businesses could save up to 20.0%.

### A secure supply - keeping the lights on

Energex and Ergon Energy's regulated revenues, as well as revenue per customer, are lower than at any time we have been regulated by the AER. The AER's Draft Decisions included considerably reduced revenue for both Energex and Ergon Energy when compared to our January proposals - mainly driven by the continuing decline in our allowed rate of return and changes to the regulatory tax approach.

The impact of these financial drivers on our revenue, as well as the substituted capex forecasts in the Draft Decisions place additional pressure on our ability to safely maintain our assets and support a resilient network. We still heard the strong themes of sustainability, as well as greater choice and control over energy solutions, as part of our conversations with communities and customers. Any reductions to our proposed expenditure will limit our responsiveness to our customers' desire for us to innovate and transform to a smart network to achieve greater efficiencies for the community overall.

We recognise that our engagement was a large investment for many of our stakeholders. However, we believe that this collaboration was fundamental to our ability to deliver better outcomes for Queenslanders. We remain passionate in our belief that an ongoing open dialogue is fundamental to creating real long-term value for all of Queensland's communities.

Yours faithfully,



Peter Scott  
Acting Chief Executive Officer  
Energy Queensland

**Our Revised Regulatory Proposals deliver a real reduction in revenue in 2020-21 of 19.31% for Energex and 13.60% for Ergon Energy. Our tariffs have been designed to share the benefits of these revenue reductions across customers in an equitable way.**





# Contents

<b>Our Revised Regulatory Proposals and Revised Tariff Structure Statements</b>	<b>6</b>
Why are we submitting revised proposals?	6
Where we invest and how it flows through to the bill	7
What have we explored?	7
What next?	7
<b>What we heard and how we are responding</b>	<b>8</b>
Our engagement program	8
How our revised proposals continue to meet our customer commitments	10
<b>Our Revised Expenditure and Revenue</b>	<b>14</b>
Capex	16
Opex	21
Revenue	23
<b>Our Revised Tariffs and Pricing</b>	<b>26</b>
Why are we changing our proposed tariffs and pricing?	26
Customer impacts of our revised network tariffs	29
<b>Our Revised ACS</b>	<b>32</b>
Public lighting	32
Metering Services	32
Ancillary (fee-based and quoted) services	32
Security lights	32
<b>Balancing the benefits and the risks</b>	<b>34</b>

# Our Revised Regulatory Proposals and Revised Tariff Structure Statements

We are proudly part of Energy Queensland, a Queensland Government owned organisation. Together we strive to deliver on our vision to energise Queensland communities. As Energex and Ergon Energy, our role is to maintain and operate the distribution networks across Queensland. While we are two of several electricity distribution network service providers (DNSPs) in Australia, our operating environments differ from others due to:

- a high probability of extreme weather and extended storm seasons
- stringent vegetation management requirements associated with tropical environments
- our extensive sub-transmission network
- high rates of uptake of photovoltaic (PV) solar systems.

Costs for the use of the electricity distribution networks in Queensland are passed on to customers through electricity retailers and have historically made up approximately one third of residential customers' electricity bills. Assuming the other bill components of generation, transmission and retail costs remain constant, the distribution component for residential customers will be less than 30% in 2020-25.

## OUR PURPOSE

To safely deliver secure, affordable and sustainable energy solutions with our communities and customers.

We serve Queensland and the many vibrant communities that we live and work in. With more than 7,000 employees across the state, it's our job to 'keep the lights on' from the Tweed River to the Torres Strait.

## Why are we submitting revised proposals?

Energex and Ergon Energy are regulated under the National Electricity Rules (NER) by the AER to ensure we manage the distribution networks efficiently and in the best interests of our communities and customers. It is the AER's role to cap the revenues we are allowed and regulate the amount we can recover through our distribution network charges. These are set in five-year periods, with our next regulatory control period starting on 1 July 2020.

Distribution network charges for the access to and supply of electricity via the distribution network, are incorporated into retail electricity bills across Queensland. These are known as our Standard Control Services (SCS) and, unless specified, this document refers to these services. A number of other customer specific and asset specific services and charges are separately regulated as Alternative Control Services (ACS).

The AER published its Draft Decisions on 8 October 2019. Our Revised Regulatory Proposals and Revised TSSs submitted on 10 December 2019 are our response to those Draft Decisions and include input we have received from community stakeholders, end use customers and industry partners. They also consider new information available that has become available since our 31 January 2019 submission.

As Energex and Ergon Energy are separately regulated by the AER, there are two separate Revised Regulatory Proposals and Revised TSSs. This document is an overview of both DNSP's expenditure and revenue as well as tariffs and pricing, including associated supporting information. It explains how we have listened and responded to stakeholders in developing our plans and outlines the commitments we are continuing to make to our communities and our customers.

This Overview sets out how we:

- have continued to respond to feedback from our communities, end use customers, industry partners and shareholders, including engagement since we submitted our Regulatory Proposals and TSSs in January 2019
- have responded to the AER's Draft Decisions
- propose to meet our customer commitments of safety, affordability, security and sustainability over the next regulatory control period.

We have adopted the "Accept, Modify and Justify" approach in our revised proposals as follows:

- **Accept:** We are accepting the AER Draft Decisions on the basis that the AER has accepted the forecast/proposal as per our earlier submission or because the substituted forecast/proposal is acceptable to us.
- **Modify:** We are modifying our proposal for stakeholder feedback, either to change the project scope (e.g. where an alternative option is acceptable) or to vary the forecast/proposal. This includes projects or programs where new information has become available since we prepared our January submissions (e.g. increase in known safety defects).
- **Justify:** We are maintaining the forecast/proposal set out in our earlier submission is prudent and efficient, re-submitting business cases and/or additional evidence to justify the needs.

An investment in the network can service the community for decades... so today's decisions will shape Queensland's energy future.

## Where we invest and how it flows through to the bill

The AER considers our investment plans and uses building blocks to set the revenue we are allowed to collect for the use of our networks. Our capital expenditure (capex) program includes both 'network capex' – renewing and building the 'poles and wires' and the other infrastructure to supply the power – and 'non-network capex' of information communication technology (ICT), property, fleet and equipment to support our network. Our operating expenditure (opex) covers the maintenance of the network and our day-to-day operation. Overheads are allocated to these costs through our Cost Allocation Method (CAM) approved by the AER.

## What have we explored?

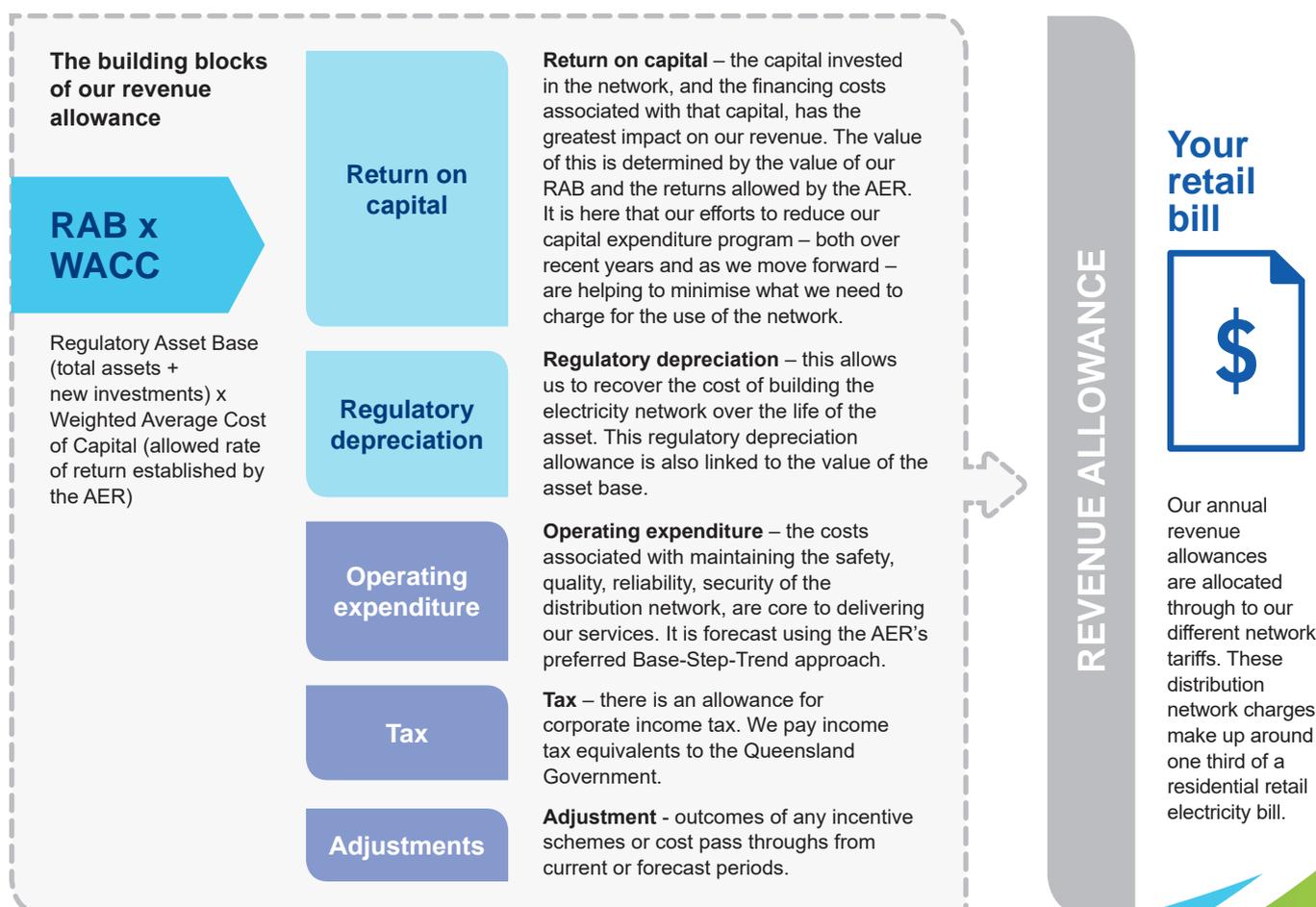
In preparing for 2020 and beyond, and in order to ensure we are best placed to deliver for all Queenslanders, we have continued to focus on ensuring our capital investment and operating plans are prudent and efficient and that our tariff reforms provide better outcomes.

Since the submission of our Regulatory Proposals and TSSs in January 2019, we have continued to engage with our communities and customers to help inform our revisions to expenditure, revenue and tariff proposals. While there have been changes outside of our control in terms of the revenue allowance, with the AER's support for our revised proposals we are confident that our plans will enable us to deliver a bright energy future for Queensland.

## What next?

The AER will consult on our Revised Regulatory Proposals and Revised TSSs and publish its Final Determinations by the end of April 2020, with new pricing applying from 1 July 2020. Throughout this process we will continue to engage with our stakeholders and customers on our plans, including through our Customer Council and our website, [www.talkingenergy.com.au](http://www.talkingenergy.com.au), where all of our existing consultation material is available.

Questions can be directed to us via [regulatoryproposal@energyq.com.au](mailto:regulatoryproposal@energyq.com.au) or you can provide feedback to the AER via their website [www.aer.gov.au](http://www.aer.gov.au)



# What we heard and how we are responding

## INDUSTRY PARTNERS

We listened to 2,600+ of our industry partners

### Real Estate Developer Forum

2 sessions held

### Electrical Contractor Forum

12 sessions held

### Energy Retailer Forum

2 forums as well as one-to-one meetings with key retailers

### Voice of the Customer program

1,500 service surveys annually

We also receive over half a million customer calls annually, as well as countless other service interactions.

## END USE CUSTOMERS

We listened to 19,400+ of our end use customers and their representatives

### Customer Council

5 sessions held

### Regulatory Proposal – Tariff Structure Statement Working Group

15 sessions held

### Tariff Webinars

10 hosted

### Major Customer Forum

3 sessions held

### Agriculture Forum

4 sessions held

### Voice of the Customer program

10,500 service surveys annually

### AER Public Forums

2 in Brisbane, 1 each in Cairns and Townsville

### Independent Research

#### Residential deliberative forums

4 sessions held

#### Business focus groups

10 sessions held

#### Qualitative phone interviews including Western Zone

38 sessions held

#### Digitally excluded focus groups

2 sessions held

#### Quantitative residential and business online surveys

2,891 surveys

#### Annual Queensland Household Energy Surveys

4,957 surveys

## COMMUNITY STAKEHOLDERS

We listened to 2,500+ of our community stakeholders

### Stakeholder Engagement

5+ Board networking events

### Talking Energy

2,000+ engaged online

### Community Leader Forums

5 sessions held

### Mini/Follow Up Community Leader Forums

7 sessions held

### Our Draft Plans Webinar

1 hosted

### Local Council and MP engagements

90+ council visits

### Public Lighting Forum

9 sessions held

### Site Visit

1 hosted in Maryborough

## Our engagement program

We've been actively listening to our community stakeholders, our end use customers and our industry partners to better understand what really matters to them as we plan for 2020 and beyond. We stepped up our engagement efforts in 2018 and continued this engagement following the January 2019 submission. Our post submission engagement program included:

- engagement with retail customers and retailers
- becoming a foundation member of the Energy Charter, which seeks to

provide better customer outcomes through industry collaboration

- Customer Council and Regulatory Proposal-Tariff Structure Statement Working Group sessions
- customer forums by customer segment
- individual one-on-one stakeholder and customer meetings

The insights gained through these exploration activities have continued to inform:

- our affordability commitment

- the strategic direction of our network businesses
- our asset management approach
- our investment priorities for 2020-25
- a range of other considerations in our Revised Regulatory Proposals
- our proposed network tariff reforms for 2020-25, including how these might be passed through in retail bills.

Our post submission engagement program delivered rich and constructive feedback around all elements of our service offerings for both SCS and ACS.

## What we have heard since January 2019

## How we are responding

<p>Stakeholders liked:</p> <ul style="list-style-type: none"> <li>• headline price reductions</li> <li>• reductions in replacement expenditure (replex) and opex for both Energex and Ergon Energy</li> <li>• willingness of both DNSPs to engage and make changes as a result.</li> </ul>	<p>We remain committed to providing real distribution network charge reductions and have delivered even more savings.</p> <p>Energex replex remains at the same level as the January 2019 submission. We have proposed an increase in the replex for Ergon Energy, reflecting increased safety requirements which were identified subsequent to our January submission.</p> <p>The AER's alternative opex forecast was higher than what we proposed in January for both Energex and Ergon Energy, so the Draft Decisions accepted our proposed opex. Even though our updated internal opex forecasts were higher than our January proposals we have accepted the Draft Decision opex allowance and limited our revised opex for both Energex and Ergon Energy.</p>
<p>Our demand forecasts and capacity utilisation require more explanation.</p>	<p>We have updated our demand forecasts with additional explanations. Energex's peak demand forecast has increased, yet we have not increased our augex forecast.</p>
<p>Our proposed ICT expenditure, treatment of SPARQ legacy assets and the ability to deliver the scale of proposed change needs to be fully justified.</p>	<p>We have accepted the AER's reduction in ICT expenditure and updated our legacy asset forecast.</p> <p>We're actively progressing new technologies to deliver safety by design for our network, in combination with technology to integrate distributed energy resources (DER).</p>
<p>Ergon Energy replex requires further explanation, especially around</p> <ul style="list-style-type: none"> <li>• safety/condition changes</li> <li>• program phasing</li> <li>• unit rates and cost escalators.</li> </ul>	<p>We have reviewed and updated our replex key business cases to address concerns and have provided additional evidence and performed risk quantification where necessary.</p> <p>Additionally, the aerial inspections of the Ergon Energy network in April 2019 uncovered requirements for more safety driven work.</p>
<p>Posed the question of how we would achieve the proposed revenue savings and whether there are any more savings to be found.</p>	<p>Our regulated revenue has been further reduced by the fall in our allowed rate of return, also known as Weighted Average Cost of Capital (WACC), and the change in the regulatory tax calculation.</p> <p>We have worked hard to reduce our opex, however, updating our forecast using the AER's base-step-trend methodology led to a higher outcome for both Energex and Ergon Energy. Recognising this and our commitment to affordable customer outcomes, in line with stakeholder feedback, we have accepted the AER's Draft Decision opex allowances and limited our opex to that sought in our Regulatory Proposals.</p>
<p>General consensus among stakeholders and customers was that the TSS process is an area in which improvements could be made and in respect of which they have remaining concerns.</p>	<p>We acknowledged that more work was needed on our original proposed tariffs. We have worked collaboratively with the AER, customers and retailers to propose new simplified tariffs that provide improved flexibility and choice for customers, as well as a credible pathway towards cost reflectivity. We also had the customer impacts of our proposed tariffs independently assessed by the University of New South Wales with their detailed report provided as an attachment to our submission.</p>
<p>Retailers are interested in the customer impacts of transitioning to the demand tariffs. They also would like to be kept informed and have access to experts to assist the system changes required to support new tariffs.</p>	<p>We have shared the customer impact analysis with retailers. Our market systems teams are focused on preparing for system changes and we continue to communicate with retailers to keep them informed of our implementation plans, including contact points for further support.</p> <p>Additionally, we have communicated with retailers who are signatories to the Energy Charter that we are interested in working with them jointly to address stakeholder and customer concerns around pricing communications, information and tools. Our proposed suite of cost reflective tariffs is consistent with other DNSPs and we believe retailers will see value in developing systems, products and communication material at a national level.</p>
<p>Sustainability of price paths from 2020-25 and beyond, including the impact of the solar bonus scheme.</p>	<p>Our Revised Regulatory Proposals deliver even more substantial distribution network charge reductions for customers than our January proposals. To guide our path forward the customer commitments we co-designed with our stakeholders are relevant for 2020-25 and beyond. We have committed to avoiding future price shocks by optimising investment outcomes across multiple regulatory periods.</p> <p>The solar bonus scheme is a jurisdictional scheme and is considered separately to distribution network charges.</p>
<p>Further justification required on public lighting asset base and affordability of tariffs, including ensuring they provide an incentive for investment in energy efficient light emitting diodes (LEDs).</p>	<p>We have provided additional supporting information on the inception and regulatory oversight of the public lighting asset base. We have accepted the AER's approach to capping the recovery of our expenses and establishing competitive charges for our LED tariffs.</p>



## How our revised proposals continue to meet our customer commitments



### Safety First

The safety of our people, our communities and customers is a non-negotiable element of our investment plans. We provide network services across a vast area and variety of climates, which means there is not always a 'one size fits all' solution. Our ageing networks are also exposed to extreme weather and the high uptake of solar presents technical challenges. In responding to the AER and stakeholder feedback on our capex proposals we have provided additional justification to ensure that we receive funding to support a safe and resilient network.

Since January 2019 additional safety issues for the Ergon Energy network relating to an increase in pole failure rates and increased clearance to ground/clearance to structure (CTG/CTS) defects have come to light. This new information compounds our concerns with the level of repx provided in the AER's Draft Decision.

Bushfires are an inherent part of the Queensland landscape and environment, with bushfire risk management a critical focus for Energen and Ergon Energy. The 2019 summer season has already delivered the earliest and most severe start to a bushfire season on record, with significant and devastating bushfire activity across the state. This creates a material impact on our businesses and places our assets at an ever increasing risk.

As providers of an essential service, we need to be able to respond effectively to extreme weather events, and also to take proactive steps to reduce safety risks associated with our network infrastructure. Examples of these activities are the aerial inspections of overhead line assets in bushfire prone areas and taking appropriate actions to reduce pole top fires on our assets. Our program of improved protection and conductor replacement is also designed to reduce the number of incidents involving overhead conductors. Our vegetation management program

proactively treats vegetation in bushfire prone areas to reduce the occurrences of fire starts from vegetation contacting the network.

We continue to embrace the implementation of new technologies to ensure the safe operation of our networks. As smarter technologies continue to evolve, we are moving beyond traditional inspection and replacement programs. Enhanced data, systems and technology to support our networks are fundamental to enabling improved decision making as well as embedding safety by design. This means that we can continue to manage the risk and safety of an ageing network, while still providing the affordability that customers expect.

We also need to continue to manage the resilience of our networks, bearing in mind increasing risk around cyber security and data privacy. As more and more households and businesses install solar and battery systems, the two-way flow of energy must also be orchestrated.



## More affordable electricity

Our Revised Regulatory Proposals and Revised TSSs remain committed to delivering electricity price relief to Queenslanders. Indeed, we are now delivering even larger distribution network charge reductions than proposed in our January 2019 submissions.

Our asset and financial circumstances have changed since our Regulatory Proposals. Most notably, the financial markets have seen the returns the AER will allow us on our past and future network investment fall to their lowest in history. With the substantial reduction in WACC, we are now faced with a much greater challenge to fund critical safety investments as well as our ongoing and emergency maintenance activities. As the chart demonstrates the Commonwealth Government Bond yields, which drive our allowed rate of return, have materially declined since we submitted our Regulatory Proposals. The new method of calculating regulatory tax has also now been incorporated, further reducing revenue.

At the same time, we have identified new and urgent asset safety issues on the Ergon Energy network and actual 2018-19 opex was higher

than estimated, driven by higher spend on emergency response to severe weather events in regional Queensland, including Townsville flooding, Cyclone Owen and the super cell that hit the Fraser coast. We have had to review how we fund critical safety, security and sustainability commitments whilst still ensuring we continue to meet our affordability commitment.

The AER's alternative opex forecast was higher than what we proposed in January for both Energex and Ergon Energy, so the Draft Decisions accepted our proposed opex. Even though our updated internal opex forecasts were higher than our January proposals, in line with stakeholder feedback, we have accepted the Draft Decision opex allowance and limited our revised opex for both Energex and Ergon Energy.

The good news is that these changes deliver a greater reduction in distribution network charges. For example, the average Energex residential customer with basic metering will receive a once off real reduction of 16.1%, which will also be experienced by those regional customers on notified retail prices.

Complementing these reductions, a key objective of our proposed network tariff changes is to encourage customers to make the most of their

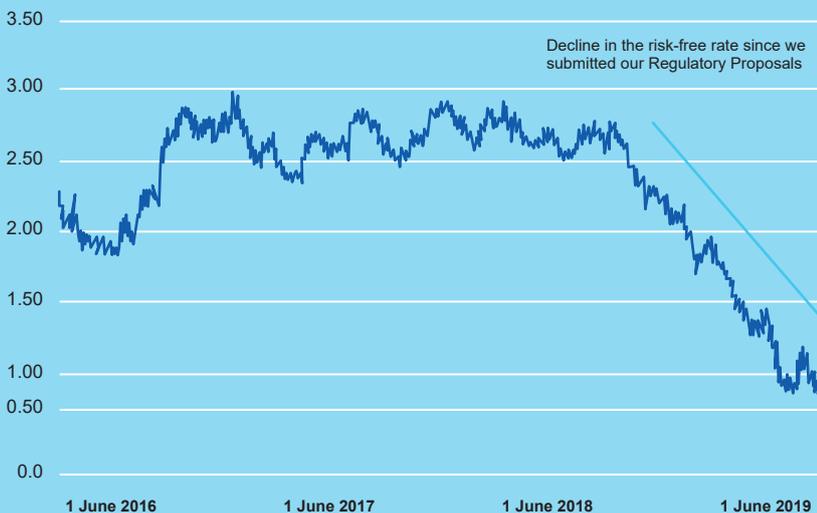
digital meters and use our networks outside of peak times to reduce their electricity bills. This should deliver fairer outcomes across customer types based on their usage of the network, with greater rewards for customers that use our networks most efficiently. By also implementing transitional tariffs to mitigate price impacts for customers unfamiliar with the concept of demand, it should ensure that no-one is left behind and that our communities grow stronger.

Over the longer term, more efficient network use facilitated by network tariff reform will reduce the financial pressure on our business by reducing the need for additional augex associated with future peak demand growth. This will also ultimately benefit customers through lower prices.

The cornerstone of our Regulatory Proposals was a commitment to do everything we can to reduce our distribution network charges and, in turn customers' bills.

We committed to deliver at least a 10% reduction in distribution network charges for average residential and small business customers in the Energex region from 2019-20 to 2020-21 on their existing default tariffs. This will also be experienced by those regional Queenslanders on notified retail prices as a result of the Queensland Government's uniform tariff policy.

10 year Commonwealth government bond yield (%)



## Outperforming our affordability commitment

What we said in our Regulatory Proposals (RPs) and TSSs		What we're doing in our Revised Regulatory Proposals (RRPs) and revised TSSs	
<b>Affordability outcome</b>			
<p>At least 10% average residential and small business customer saving (10.3% residential and 11.4% small business) in real distribution network charges if they stay on their legacy default tariffs.</p> <p>An average residential customer in Energex's region is a household who consumes around 5,000kWh of energy per annum and an average small business customer consumes around 8,000kWh of energy per annum.</p> <p>In Ergon Energy's region an average residential customer consumes around 5,000kWh of energy per annum and average small business customer consumes around 7,500kWh of energy per annum. Under the Uniform Tariff Policy, the Queensland Government supports regional Queenslanders by subsidising any difference through Community Service Obligation (CSO) payments to ensure they pay similar prices for their electricity as customers in South East Queensland.</p>		<p><b>Energex</b> <b>Accept (Improved from RP)</b> 16.1% average residential customer saving in distribution network charges on their legacy default tariff, or up to 19.8% if they have a digital meter and move to a new cost reflective tariff.</p> <p>14.7% average small business customer saving in distribution network charges on their legacy default tariff, or up to 15.7% if they have a digital meter and move to a new cost reflective tariff.</p>	<p><b>Ergon Energy</b> <b>Accept (Improved from RP)</b> 15.4% average residential customer saving in distribution network charges on their legacy default tariff, or 16.1% for those on notified retail prices. Up to 17.6% if they have a digital meter and move to a new cost reflective tariff.</p> <p>15.4% average small business customer saving in distribution network charges on their legacy default tariff, with the CSO ensuring that they pay no more than those in South East Queensland. Up to 20.0% if they have a digital meter and move to a new cost reflective tariff.</p>
<b>Affordability measures</b>			
<p><b>Energex</b> Reducing our SCS capex from \$2,846 million (real \$2019-20) in 2015-20 to \$2,327 million in the 2020-25.</p>	<p><b>Ergon Energy</b> Limiting SCS capex for 2020-25 to \$2,905 million while ensuring a safe network and maintaining current levels of service performance.</p>	<p><b>Energex</b> <b>Accept</b> majority of capex. <b>Modify/Justify</b> for some repex, augex and non-network. Net capex change from RP is 0%.</p>	<p><b>Ergon Energy</b> <b>Accept</b> majority of capex. <b>Modify</b> for some repex to address new safety issues. <b>Modify/Justify</b> for some augex and non-network. Net capex change from RP is 3%.</p>
<p>Ambitious commitments to lower our operating, labour and overhead costs materially below what we currently incur, reducing our SCS opex from \$1,899 million (real \$2019-20 inclusive of debt raising costs) in 2015-20 to \$1,806 million in 2020-25.</p>	<p>Ambitious commitments to lower our operating, labour and overhead costs materially below what we currently incur, reducing our SCS opex from \$2,027 million to \$1,835 million.</p>	<p><b>Accept</b> for opex. We have accepted the AER's Draft Decision opex allowance and limited our revised opex to our RP amount.</p>	<p><b>Accept</b> for opex. We have accepted the AER's Draft Decision opex allowance and limited our revised opex to our RP amount.</p>
<p>Making greater use of distributed energy resources (DER) and demand side initiatives, with transparent pricing for when these investments can reduce the need for investment in our network.</p>		<p><b>Justify</b>, though we note the AER's Draft Decisions did not approve the key smart network investments that we need to achieve this.</p>	
<p>Applying the AER's 2018 Rate of Return Instrument to derive a rate of return estimate of 5.46% for 2020-21, compared with a forecast 5.98% for 2019-20.</p>		<p><b>Accept (Improved from RP)</b>, our forecast rate of return is 4.67% for 2020-21 and we expect that this will fall even further before the AER's Final Determinations.</p>	
<p>Proposed not to claim efficiency incentive scheme revenue as long as it is in the long term interests of customers.</p>		<p><b>Modified</b> other changes since we prepared the RP mean that claiming allowed revenue from incentives schemes is now in the long term interests of customers</p>	
<p>Applying a revenue reduction in year one of the 2020-25 regulatory control period of 10.25% for Energex and 9.44% for Ergon Energy, with annual increases thereafter based on inflation.</p>		<p><b>Energex</b> <b>Accept (Improved from RP)</b>, our year one real revenue reduction is 19.31%, with annual increases thereafter based on inflation.</p>	<p><b>Ergon Energy</b> <b>Accept (Improved from RP)</b>, our year one real revenue reduction is 13.60%, with annual increases thereafter based on inflation.</p>
<p>Delivering network tariff reforms that are equitable and offer additional savings, value and choice that will reward customers for their role in Queensland's energy transformation.</p>		<p><b>Accept (Improved from RP)</b>, the revised tariff suite for 2020-25 meets this commitment and will be complemented by our tariff education framework. Reforms that we have proposed to our tariffs will also help fully realise the potential value of emerging technologies to our customers.</p>	



## A secure supply – keeping the lights on

We have legislative and regulatory obligations to maintain the safety and reliability of our network services. Our customers have told us that they are generally happy with current levels of safety and reliability and value us 'being there for the community after the storm'. While we can always do things smarter, this will remain core to our state-wide network capability.

In four of the last five years we've incurred emergency response costs above the ten-year average for regional Queensland and the whole state is enduring its earliest and most severe bushfire season on record this year. However, as mentioned above we have limited our opex to ensure that we continue our drive to do things smarter.

Our revised capex proposals ensure that:

- we support the parts of the network that are still growing
- we have the appropriate standards, systems and network capability to successfully integrate new technologies as they emerge
- customers can easily connect and use the network as an enabler.

Our repex program is targeted at ensuring a consistent level of safe asset performance through current and future regulatory control periods, in line with customer feedback that reliability should be maintained at current levels. As our audited Regulatory Information Notices (RINs) for the last two years show, Ergon Energy's actual repex spend has exceeded the AER forecast. This is a driver for our increased safety

spend in its Revised Regulatory Proposal. Energex and Ergon Energy are committed to best practice asset management strategies, and while ever evolving and changing, we will continue to adapt both strategically and operationally to ensure the safe and reliable operation of our network in consideration of the Queensland environment.

To effectively service our state-wide operations, we must prudently invest in ICT, fleet, equipment and property. We acknowledge the complexity of our ICT works program and plans for the coming period. Across our ICT program, we have embedded several key actions to manage delivery risks and maintain solution quality with the lower expenditure from the AER's Draft Decisions.

To this end, our proposed expenditure for 2020-25 is directed to maintaining current levels of safety and reliability of network services, which in turn is reflected in our allowable revenue and distribution network charges. Responding to customer feedback, we have attempted to find the appropriate balance between maintaining safety and reliability of network services in accordance with our legislative obligations while placing downward pressure on prices.

## A sustainable future

We're still looking to the future and evolving into a network to best enable customer choice in their electricity supply solutions. During our conversations with communities and customers we still heard the strong themes of sustainability, as well as greater choice and control over energy solutions. The AER's Draft Decisions

considerably reduced revenue for both Energex and Ergon Energy placing pressure on our ability to sustain our business and limiting our responsiveness to our customer's desire for us to move towards a smart network.

Our revised expenditure and revenue proposals balance the interests of customers today and their desire for reductions in distribution network charges with the interests of future customers. Smart network investments facilitate our ability to dynamically manage our network and increase the distributed energy hosting capacity which will result in better utilisation of the network.

Our revised tariff and pricing proposals have been developed to continue to meet our customer commitments and have been informed by the extensive stakeholder engagement on network tariffs undertaken since the submission of our TSSs in January 2019. We believe that collaboration through our engagement program has been fundamental to our ability to deliver better outcomes for Queenslanders. We are committed to working with our customers to assist them to manage their energy consumption and to reward those customers who make the most efficient use of the network.

Key aspects of our tariff suite to facilitate the transition to sustainable future use of our networks include:

- optionality and simplicity in our cost reflective tariffs available to residential and small business customers
- flexibility in new cost reflective tariffs available across all customer tariff classes
- carefully managing customer price impacts in the transition to cost reflective tariffs.

# Our Revised Expenditure and Revenue

Significant market and regulatory changes have occurred since we submitted our Regulatory Proposals in January 2019 which contributed to a reduction in revenue for 2020-25 as presented in the AER's Draft Decision in October 2019. We have revised our expenditure and revenue proposals based on what we heard from our community stakeholders, our customers and our industry partners as well as the AER Draft Decisions and additional feedback provided by the AER.

Where available, we updated the information used in the preparation of our Revised Regulatory Proposals, such as the inclusion of 2018-19 actual financial outcomes, revisions to demand forecasts and the latest operational data. Notably our updated information includes the results from aerial inspections of the Ergon Energy network conducted in April 2019 for our program of safety works. The AER's alternative opex forecast was higher than what we proposed in January for both

Energex and Ergon Energy, so the Draft Decisions accepted our proposed opex. Even though our updated internal opex forecasts were higher than our January proposals, in line with stakeholder feedback, we have accepted the Draft Decision opex allowance and limited our revised opex for both Energex and Ergon Energy.

Energex	Unit	Regulatory Proposal	AER Draft Decision			Revised Regulatory Proposal		
		Forecast	Forecast	Difference from RP	Difference from RP (%)	Forecast	Difference from RP	Difference from RP (%)
<b>Revenue and pricing</b>								
Revenue (smoothed)	\$m nominal	6,541.17	5,839.97	-701.19	-11%	5,900.32	-640.84	-10%
P <sub>0</sub> (initial price decrease in 2020/21)	%	10.25%	20.32%	10.07%	98%	19.31%	9.05%	88%
X-factor (annual price change in remaining years)	% p.a.	0.00%	0.00%	0.00%	0%	0.00%	0.00%	0%
<b>Building blocks</b>								
Return on capital	\$m nominal	3,642.85	3,109.73	-533.12	-15%	2,955.67	-687.18	-19%
Operating expenditure (inc debt raising)	\$m nominal	1,940.69	1,942.41	1.72	0%	1,937.82	-2.88	0%
Depreciation	\$m nominal	804.04	756.18	-47.85	-6%	822.05	18.01	2%
Tax	\$m nominal	153.37	21.93	-131.44	-86%	-	-153.37	-100%
Revenue adjustment	\$m nominal	6.00	5.51	-0.49	-8%	183.82	177.81	2962%
<b>Key inputs</b>								
Average annual growth in peak demand	%	0.29%	0.29%	0.00%	0%	0.70%	0.41%	138%
Incentive schemes (EBSS and CESS)	\$m real 2019-20	264.30	125.10	-139.20	-53%	164.62	-99.68	-38%
Net new customers	customers	117,000	117,000	-	0%	105,000	-	0%
Inflation	%	2.42%	2.45%	0.03%	1%	2.37%	-0.05%	-2%
Rate of return (WACC)	%	5.46%	4.87%	-0.59%	-11%	4.67%	-0.79%	-14%
Net capital expenditure	\$m real 2019-20	2,019.78	1,793.37	-226.41	-11%	2,009.96	-9.82	0%
RAB per customer at end of period	\$ real 2019-20 per customer	7,886.57	7,745.85	-140.72	-2%	7,851.55	-35.02	0%

Totals may not add due to rounding.  
All customer numbers in the RRP have been updated to align with new QCA forecasting method.



Ergon Energy	Unit	Regulatory Proposal	AER Draft Decision			Revised Regulatory Proposal		
		Forecast	Forecast	Difference from RP	Difference from RP (%)	Forecast	Difference from RP	Difference from RP (%)
<b>Revenue and pricing</b>								
Revenue (smoothed)	\$m nominal	6,515.77	5,787.89	-727.87	-11%	5,997.40	-518.36	-8%
P <sub>0</sub> (initial price decrease in 2020/21)	%	9.44%	16.82%	7.38%	78%	13.60%	4.16%	44%
X-factor (annual price change in remaining years)	% p.a.	0.00%	0.00%	0.00%	0%	0.00%	0.00%	0%
<b>Building blocks</b>								
Return on capital	\$m nominal	3,346.29	2,806.91	-539.39	-16%	2,709.90	-636.39	-19%
Operating expenditure (inc debt raising)	\$m nominal	1,971.91	1,972.69	0.77	0%	1,968.04	-3.87	0%
Depreciation	\$m nominal	1,052.31	997.39	-54.92	-5%	1,051.53	-0.78	0%
Tax	\$m nominal	143.97	0.60	-143.37	-100%	-	-143.97	-100%
Revenue adjustment	\$m nominal	5.98	5.47	-0.51	-9%	260.33	254.35	4251%
<b>Key inputs</b>								
Average annual growth in peak demand	%	0.38%	0.38%	0.00%	0%	0.15%	-0.22%	-59%
Incentive schemes (EBSS and CESS)	\$m real 2019-20	307.84	202.75	-105.09	-34%	240.06	-67.78	-22%
Net new customers	customers	60,000	60,000	-	0%	36,000	-	0%
Inflation	%	2.42%	2.45%	0.03%	1%	2.37%	-0.05%	-2%
Rate of return (WACC)	%	5.46%	4.87%	-0.59%	-11%	4.67%	-0.79%	-14%
Net capital expenditure	\$m real 2019-20	2,724.24	2,150.91	-573.33	-21%	2,816.80	92.56	3%
RAB per customer at end of period	\$ real 2019-20 per customer	15,521.36	14,744.56	-776.80	-5%	15,513.85	-7.51	0%

Totals may not add due to rounding.  
All customer numbers in the RRP have been updated to align with new QCA forecasting method.

## Capex

Our Regulatory Proposals planned for \$2,020 million net capex (real \$2019-20) over 2020-25 for Energex and \$2,724 million for Ergon Energy. The AER provided substitute total capex estimates for both Energex (\$1,793 million, 11% lower than our proposal) and Ergon Energy (\$2,151 million, 21% lower than our proposal) in its Draft Decisions.

In its Draft Decisions the AER made it clear that we had not provided sufficient justification for some of the capex included in our Regulatory Proposals. We accept this feedback and note the constructive engagement we have had with the AER in the lead up and subsequent to its Draft Decisions and the support we have received from other stakeholders to address this issue. However, we do not consider that the capex allowances in the Draft Decisions would allow us to recover the efficient costs of meeting the capital expenditure objectives.

Any reductions to our revised capex allowances for Energex and Ergon Energy will limit the ability for basic network safety requirements to be

delivered. This would put our people, communities and customers at risk and potentially breach our compliance obligations. The Draft Decisions did not include any allowance for our low voltage (LV) network safety program which is critical to our safety initiatives. Innovative technology investments to enable a smart network are required to maintain our ability to provide a secure and reliable energy supply and comply with our obligations. These investments in an upgrade to a smart network will also facilitate our ability to dynamically manage our network and increase the distributed energy hosting capacity which will result in better utilisation of the network.

Consequently, we have revised the relevant business cases to include options and cost-benefit analyses, risk assessments and further detail on how the proposed capex meets the NER capital expenditure objectives and criteria.

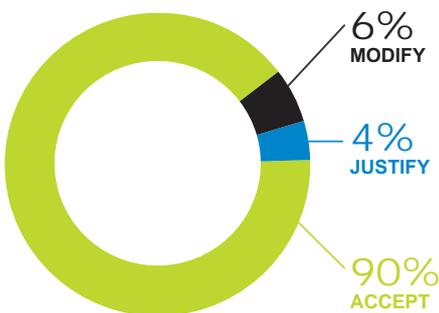
Our repex is required to maintain the safety, quality, reliability and security of our distribution network. We are particularly concerned with the AER's Draft Decision reductions to Ergon

Energy's repex program. We have also received new information since lodging our Regulatory Proposals in January 2019 that indicates a higher repex is required for Ergon Energy in particular relation to:

- Increased Defects**  
 Aerial survey work and related analysis on the Ergon Energy network identified a greater level of critical defects in relation to our Clearance to Ground and Clearance to Structure (CTG/CTS) compliance obligations. These require urgent remediation to address safety concerns and Electrical Safety Office's (ESO) notices.
- Increased Pole Remediation**  
 The Ergon Energy pole failure rate for 2018-19 exceeded Code of Practice targets, noting that it is a three year rolling average. Increases in pole replacements are essential to address pole failure rates and fundamental to mitigating community safety risks. This program is critical for safety risk management across the Ergon Energy network.

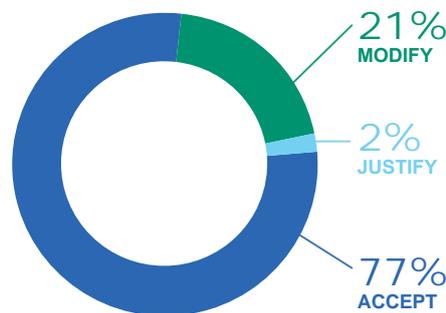
### Energex revised capex approach

(% of AER Draft Decision gross capex)



### Ergon Energy revised capex approach

(% of AER Draft Decision gross capex)



Our revised capex forecast for next period is 21% lower for Energex and 1% lower for Ergon Energy than what we expect to spend in the current period.



The substituted augex would compromise our ability to meet our Distribution Authority obligations in relation to safety net targets, NER compliance and network safety. For Energex, the 2019 demand forecasts indicate higher growth rates than the 2018 forecasts used in the Regulatory Proposals. While we are not seeking additional augex funding to meet this higher forecast demand, it reinforces that the capex investments as set out in our Regulatory Proposals (and Revised Regulatory Proposals) are genuinely required to enable us to prudently and efficiently meet our customers' future demand, maintain our network, and comply with all regulatory and legislative instruments.

We remain committed to investing capital prudently and efficiently on behalf of our customers, with a focus on delivering a safe network

that supports the integration of new technologies for greater customer choice in how they source and use energy.

For Energex, our revised capex substantively accepts the AER's Draft Decision. We provide additional justification for important augex to meet customer demand and establish smart networks to integrate solar and batteries without creating risks to network security, supply quality or performance.

For Ergon Energy, we have material concerns with the level of repex provided in the AER's Draft Decision which are compounded by additional safety issues that have come to light since our January 2019 submission. Aerial inspections of the Ergon Energy network in April 2019 identified significant additional safety repex

requirements. As these were not known at the time of our proposals we have modified our repex forecast accordingly. We also have concerns with the level of substituted Ergon Energy augex.

The AER accepted our proposed connections expenditure (connex) in its Draft Decisions. We have accepted the AER's reduction in ICT and have provided more justification for property and fleet forecasts where requested.

In consideration of feedback from our stakeholders, our compliance and safety obligations and priorities and a review of our program of work, our Revised Regulatory Proposals include \$2,010 million net capex (real \$2019-20) over 2020-25 for Energex and \$2,817 million for Ergon Energy.

## Resubmitted business cases

Capex Category	Energex	Ergon Energy	
Repex	<ul style="list-style-type: none"> <li>• LV Network Safety</li> <li>• DC Services Duplication</li> <li>• Secure Data Zone</li> <li>• Substation Asbestos</li> </ul>	<ul style="list-style-type: none"> <li>• LV Network Safety</li> <li>• DC Services Duplication</li> <li>• Secure Data Zone</li> <li>• Childers to Gayndah</li> <li>• Circuit Breakers and Reclosers</li> <li>• Communication Site Infrastructure</li> <li>• Communications Power Systems</li> <li>• CTG CTS</li> <li>• Field Mobile Voice Comms</li> <li>• Fixed Voice Communications</li> </ul>	<ul style="list-style-type: none"> <li>• Instrument Transformers</li> <li>• Life Extension of Legacy Telecommunications Data Comms</li> <li>• Operational Technology Environment</li> <li>• Obsolete Data Telecommunications</li> <li>• Physical Linear Media</li> <li>• Pole Top Structures Replacement</li> <li>• Poles and Towers</li> <li>• Low Voltage Service Lines</li> <li>• Substation Transformers</li> </ul>
Augex	<ul style="list-style-type: none"> <li>• Intelligent Grid Enablement</li> <li>• Backup Reach Program</li> <li>• Power Quality</li> <li>• Bells Creek</li> <li>• New 33kV Feeder Doboy to Queensport Substations</li> <li>• Petrie Zone Substation</li> <li>• Abermain to Amberley Supply Reinforcement</li> </ul>	<ul style="list-style-type: none"> <li>• Intelligent Grid Enablement</li> <li>• Backup Reach Program</li> <li>• Power Quality</li> <li>• Blackwater Substation Refurbishment</li> <li>• Protection Scheme Comms</li> <li>• Protection Scheme DER</li> <li>• Protection Scheme SEF</li> </ul>	<ul style="list-style-type: none"> <li>• Pittsworth, Broxburn and Yarranlea</li> <li>• Burnett Heads 66kV Line Augmentation</li> <li>• Cloncurry Supply Reinforcement</li> <li>• Network Capacity and Coverage</li> </ul>
Connex	-	-	-
ICT	-	-	-
Property	<ul style="list-style-type: none"> <li>• Rockhampton OTFH (Operational Technology Housing Facility)</li> <li>• Rocklea Training Facility</li> </ul>	<ul style="list-style-type: none"> <li>• Rockhampton OTFH</li> <li>• Property Security</li> <li>• Townsville Training Facility</li> <li>• Maryborough Consolidation</li> </ul>	
Fleet, tools and equipment	<ul style="list-style-type: none"> <li>• Updated fleet models with a consistent, rigorous approach to the application of forecast age or kilometre-based service life replacements based on each fleet asset's in-service date</li> </ul>		

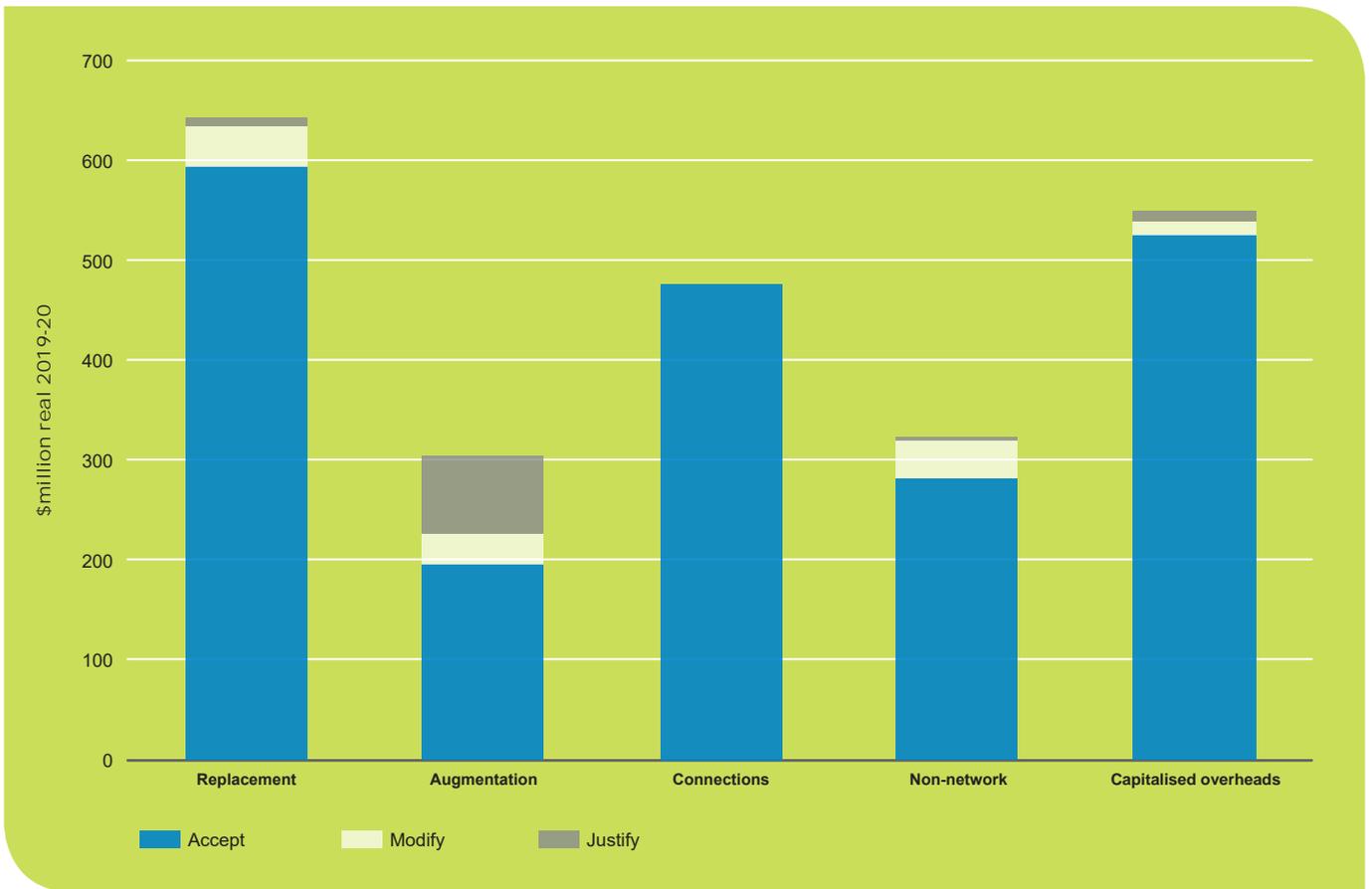
This table summarises major projects only. Additional justification has also been provided for modelling and other minor adjustments. Further information can be found in the capex chapters of the Revised Regulatory Proposals.

Energen \$m real \$2019-20	Regulatory Proposal	AER Draft Decision			Revised Regulatory Proposal		
	Forecast	Forecast	Difference from RP	Difference from RP (%)	Forecast	Difference from RP	Difference from RP (%)
Repex	643.44	578.16	-65.28	-10%	630.81	-12.63	-2%
Augex	301.07	193.79	-107.28	-36%	297.61	-3.46	-1%
Gross connections	475.05	471.97	-3.08	-1%	474.61	-0.44	0%
ICT	192.98	144.83	-48.15	-25%	147.66	-45.32	-23%
Property	80.59	57.30	-23.29	-29%	76.01	-4.58	-6%
Fleet	101.38	85.55	-15.83	-16%	99.09	-2.28	-2%
Other non-network	8.85	8.80	-0.05	-1%	8.76	-0.10	-1%
Overheads	523.55	535.23	11.69	2%	557.69	34.14	7%
<b>Gross capex</b>	<b>2,326.91</b>	<b>2,075.64</b>	<b>-251.27</b>	<b>-11%</b>	<b>2,292.24</b>	<b>-34.67</b>	<b>-1%</b>
less capcons*	267.31	265.87	-1.44	-1%	265.87	-1.44	-1%
less disposals	39.82	16.40	-23.42	-59%	16.40	-23.42	-59%
<b>Net capex</b>	<b>2,019.78</b>	<b>1,793.37</b>	<b>-226.41</b>	<b>-11%</b>	<b>2,009.96</b>	<b>-9.82</b>	<b>0%</b>

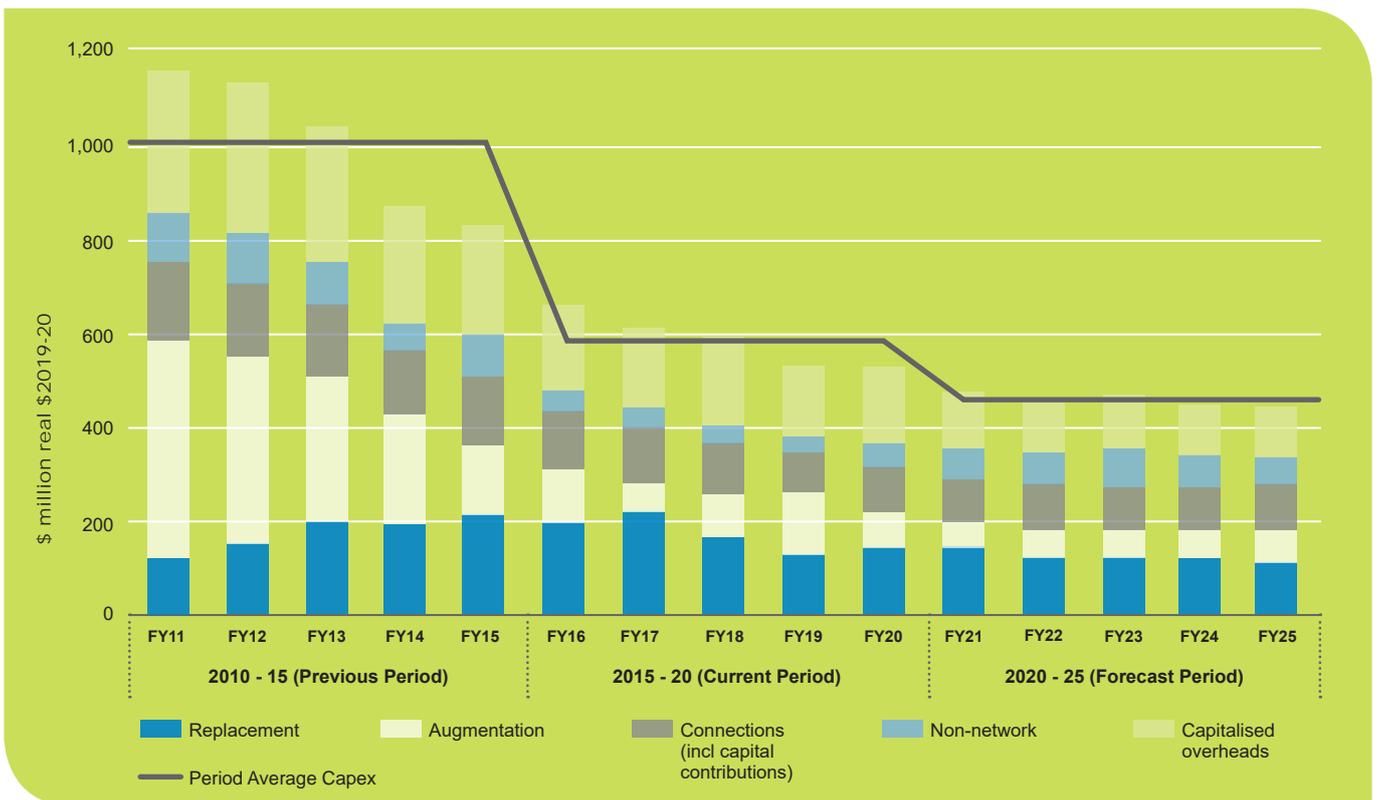
\* capital contributions

Ergon Energy \$m real \$2019-20	Regulatory Proposal	AER Draft Decision			Revised Regulatory Proposal		
	Forecast	Forecast	Difference from RP	Difference from RP (%)	Forecast	Difference from RP	Difference from RP (%)
Repex	1,094.41	834.53	-259.88	-24%	1,289.57	195.16	18%
Augex	248.51	169.31	-79.20	-32%	239.50	-9.01	-4%
Gross connections	375.91	373.21	-2.71	-1%	376.71	0.80	0%
ICT	210.12	158.44	-51.67	-25%	164.40	-45.72	-22%
Property	128.55	56.09	-72.46	-56%	103.84	-24.71	-19%
Fleet	135.76	114.56	-21.21	-16%	128.33	-7.43	-5%
Other non-network	24.90	22.24	-2.66	-11%	22.12	-2.79	-11%
Overheads	686.52	610.64	-75.88	-11%	682.16	-4.37	-1%
<b>Gross capex</b>	<b>2,904.70</b>	<b>2,339.02</b>	<b>-565.68</b>	<b>-19%</b>	<b>3,006.63</b>	<b>101.93</b>	<b>4%</b>
less capcons	169.87	168.96	-0.91	-1%	168.96	-0.91	-1%
less disposals	10.59	19.15	8.56	81%	20.87	10.28	97%
<b>Net capex</b>	<b>2,724.24</b>	<b>2,150.91</b>	<b>-573.33</b>	<b>-21%</b>	<b>2,816.80</b>	<b>92.56</b>	<b>3%</b>

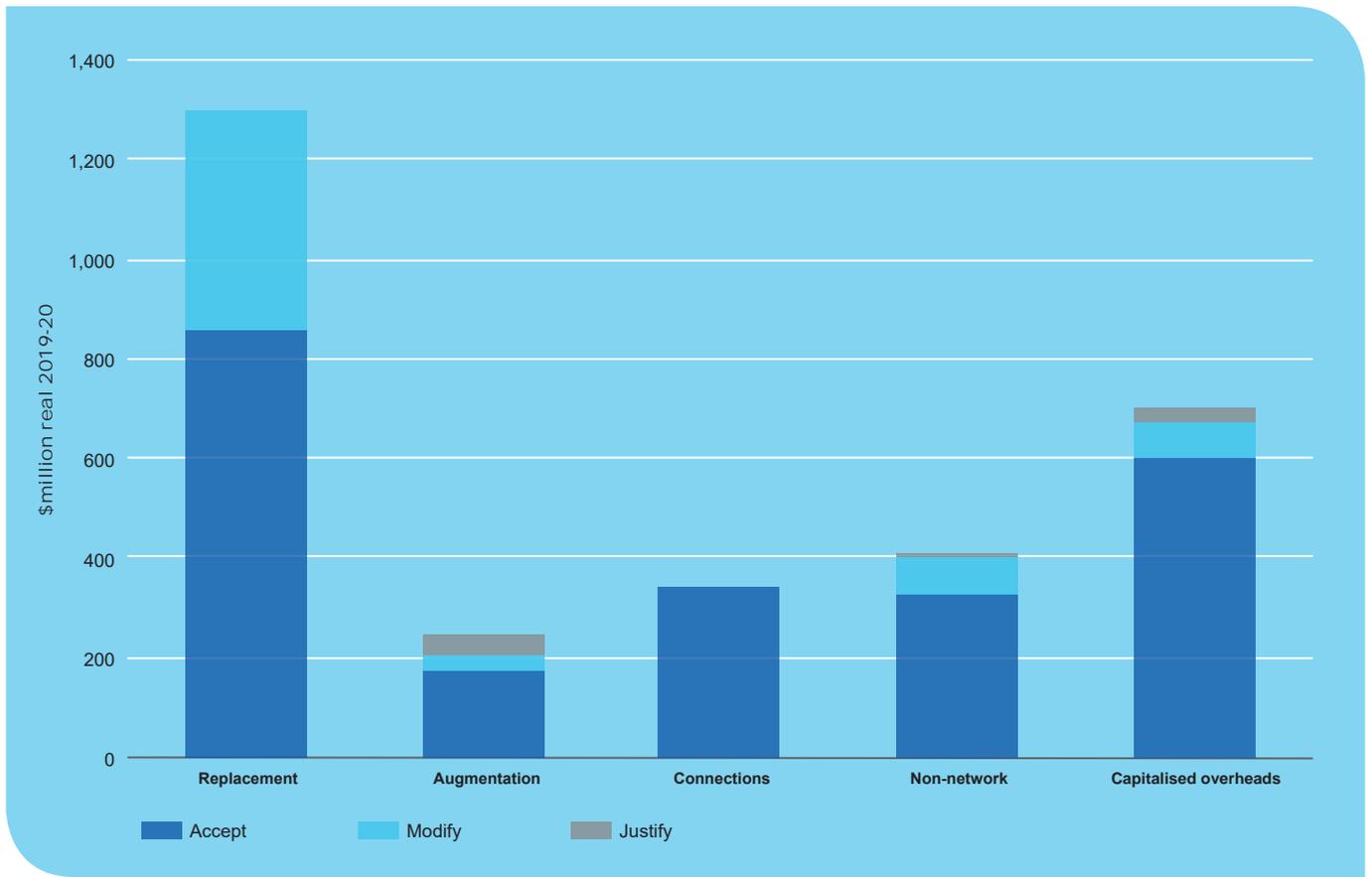
### Energex total capex forecast by category, 2020-25



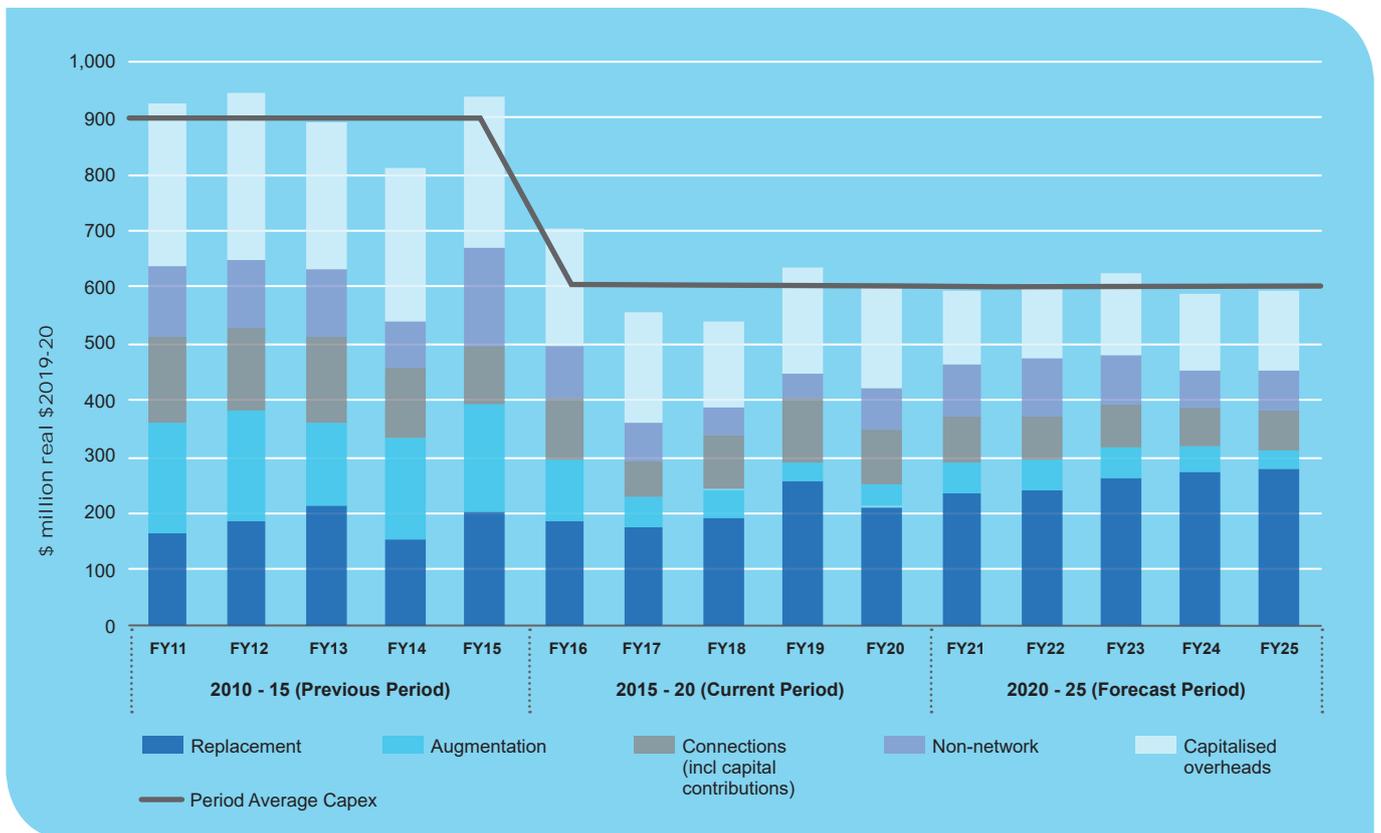
### Energex capex trend



### Ergon Energy total capex forecast by category, 2020-25



### Ergon Energy capex trend



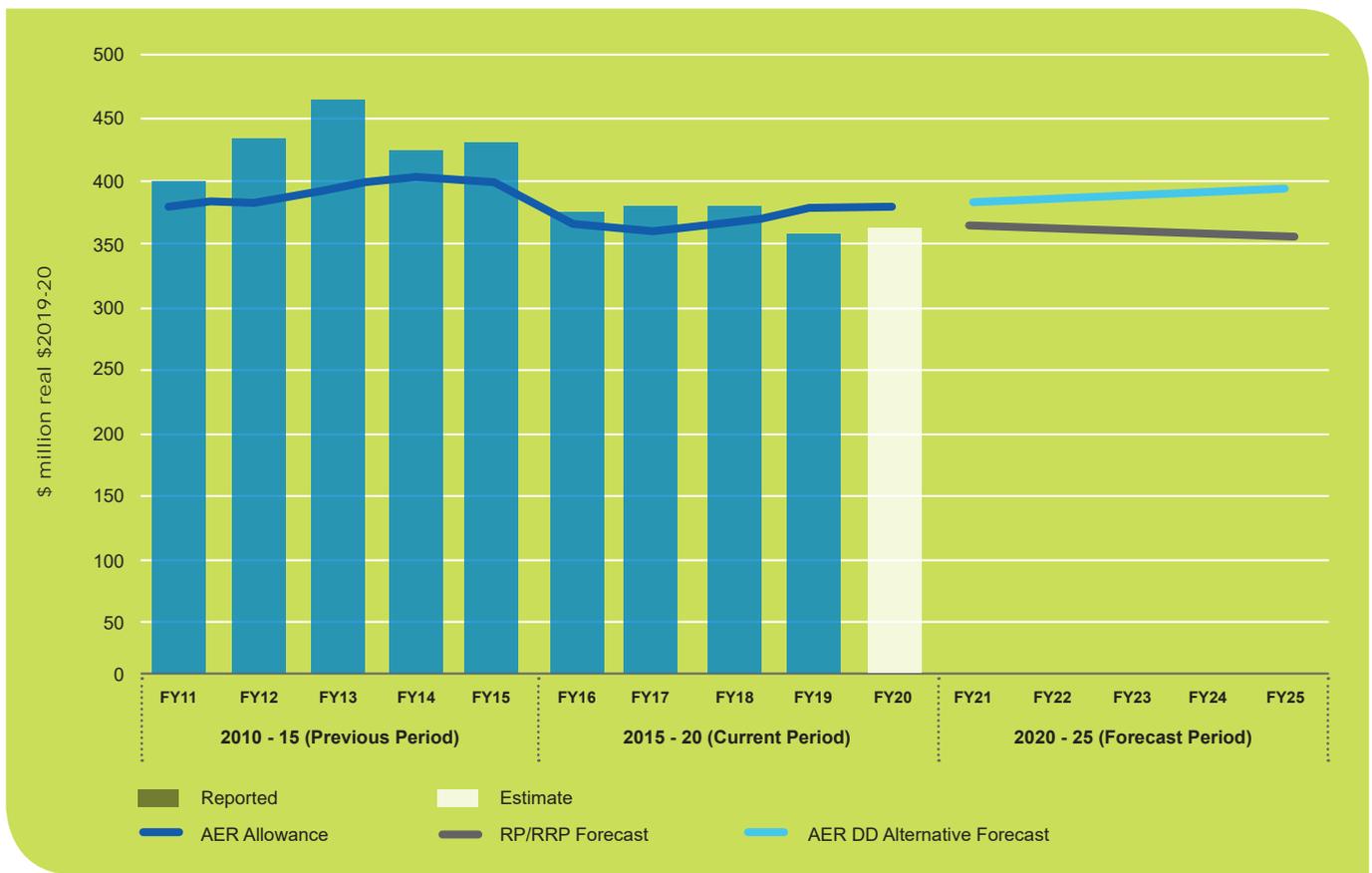
# Opex

Our Regulatory Proposals planned for \$1,806 million opex (real \$2019-20 including debt raising costs) over 2020-25 for Energex and \$1,835 million for Ergon Energy. The AER tested our proposals and accepted them in the Draft Decisions because they were lower than its alternative forecasts of efficient opex.

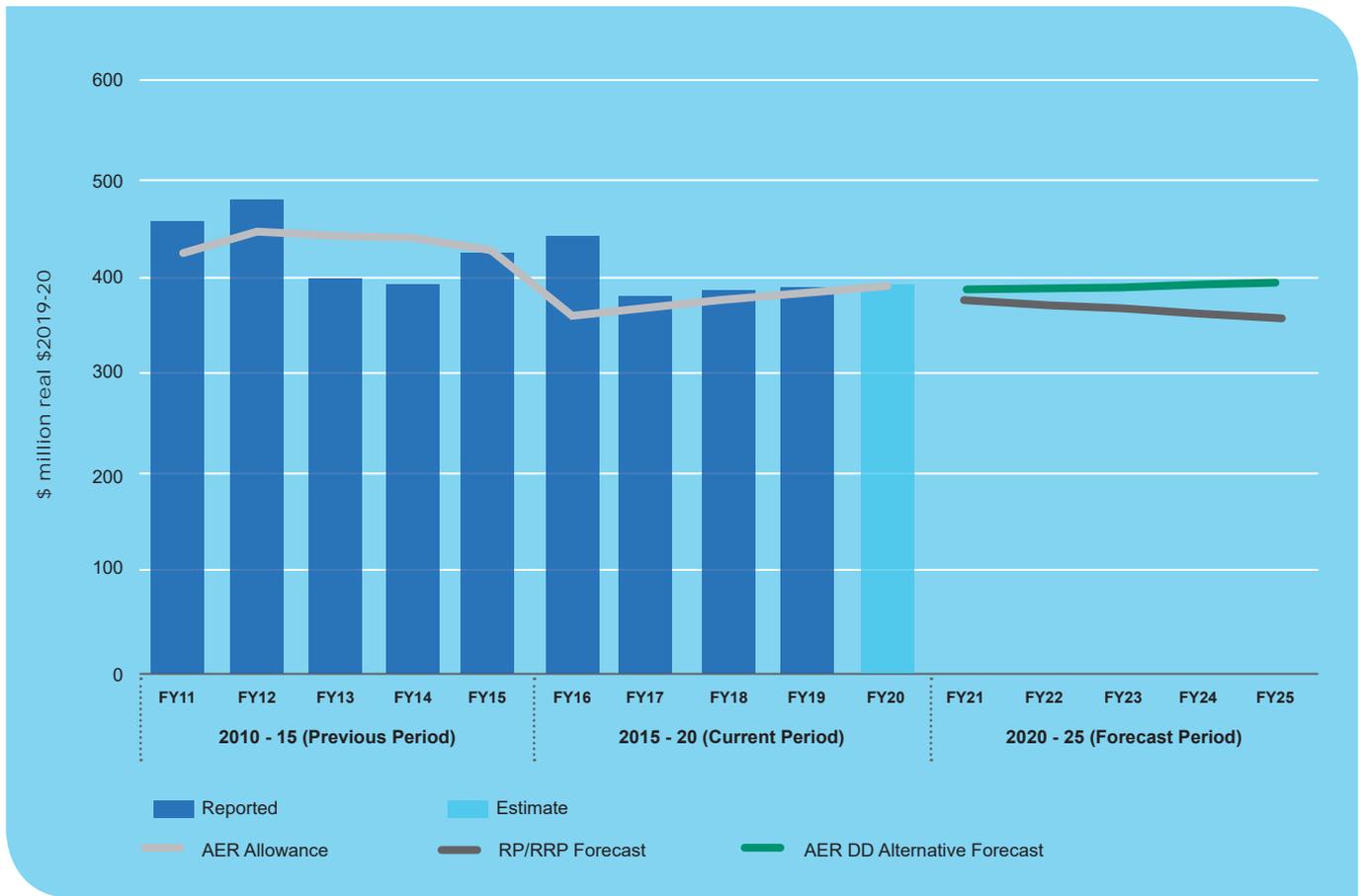
Even though our updated internal opex forecasts were higher than our January proposals, in line with stakeholder feedback, we have accepted the Draft Decision opex allowance and limited our revised opex for both Energex and Ergon Energy.

Our revised opex forecast for next period is 2.8% lower for Energex and 7.9% lower for Ergon Energy than what we expect to spend in the current period.

## Energex opex trend



### Ergon Energy opex trend



## Revenue

To deliver our plans, Energex requires a total revenue allowance of \$5,900 million (nominal) for 2020-25 which is 11% lower in nominal terms and 19% lower in real terms than its 2015-20 revenue allowance. Ergon Energy requires a total revenue allowance of \$5,997 million (nominal) for 2020-25 which is 5% lower in nominal terms and 14% lower in real terms than its 2015-20 revenue allowance.

The material revenue reductions for both businesses are driven by our affordability commitment as well as changes to the financial and regulatory environment

Regulated revenues, as well as revenue per customer, for both businesses are lower than at any time that Energex and Ergon Energy have been regulated by the AER. We proposed 10.25% and 9.44% real revenue reductions for Energex and Ergon Energy in the Regulatory Proposals.

Real revenue reductions in the AER’s Draft Decisions considerably exceeded our proposals at 20.32% and 16.82%. The difference was mainly due to the significant decline in the WACC, modelling changes giving effect to the AER’s new regulatory tax approach and the AER’s substituted capex reductions.

Our Revised Regulatory Proposals propose 19.31% real revenue reductions for Energex and 13.60% for Ergon Energy.

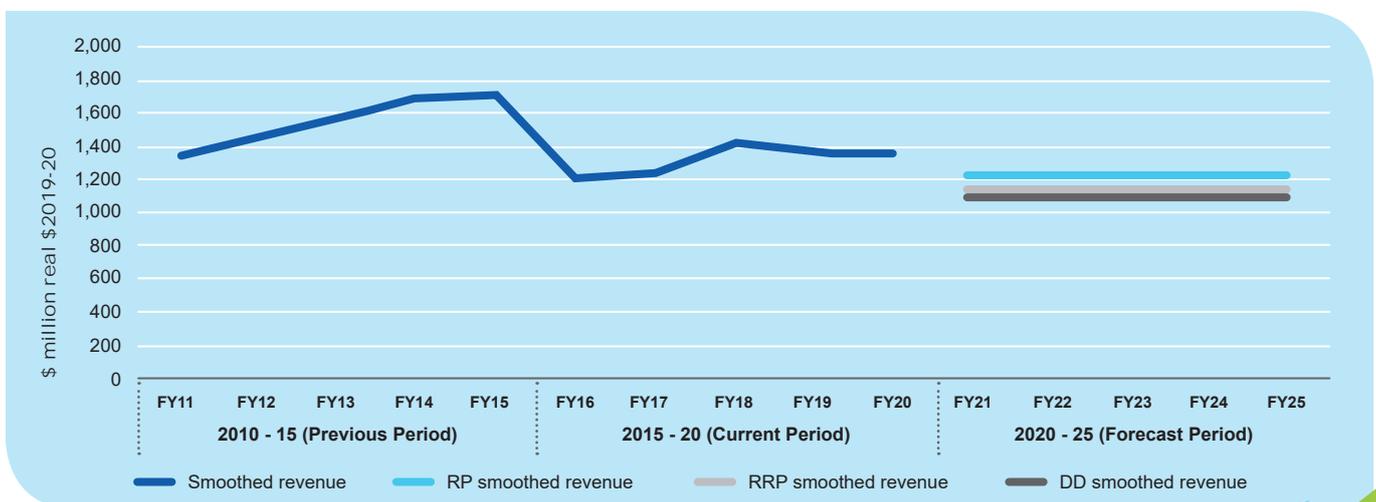
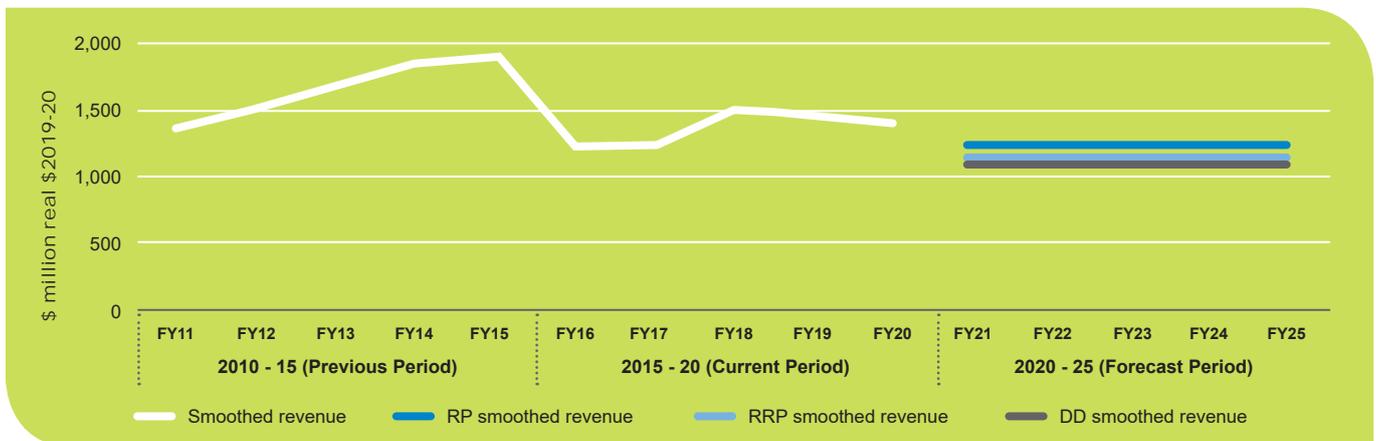
Key inputs in calculating our Revised Regulatory Proposal revenues include:

- **Opening RAB**  
We updated the opening RAB value of Energex to \$12,861 million (nominal) for inflation indices, actual capex for 2018-19 and the reduction in the value of legacy ICT assets of \$22 million (nominal). We updated the opening RAB value of

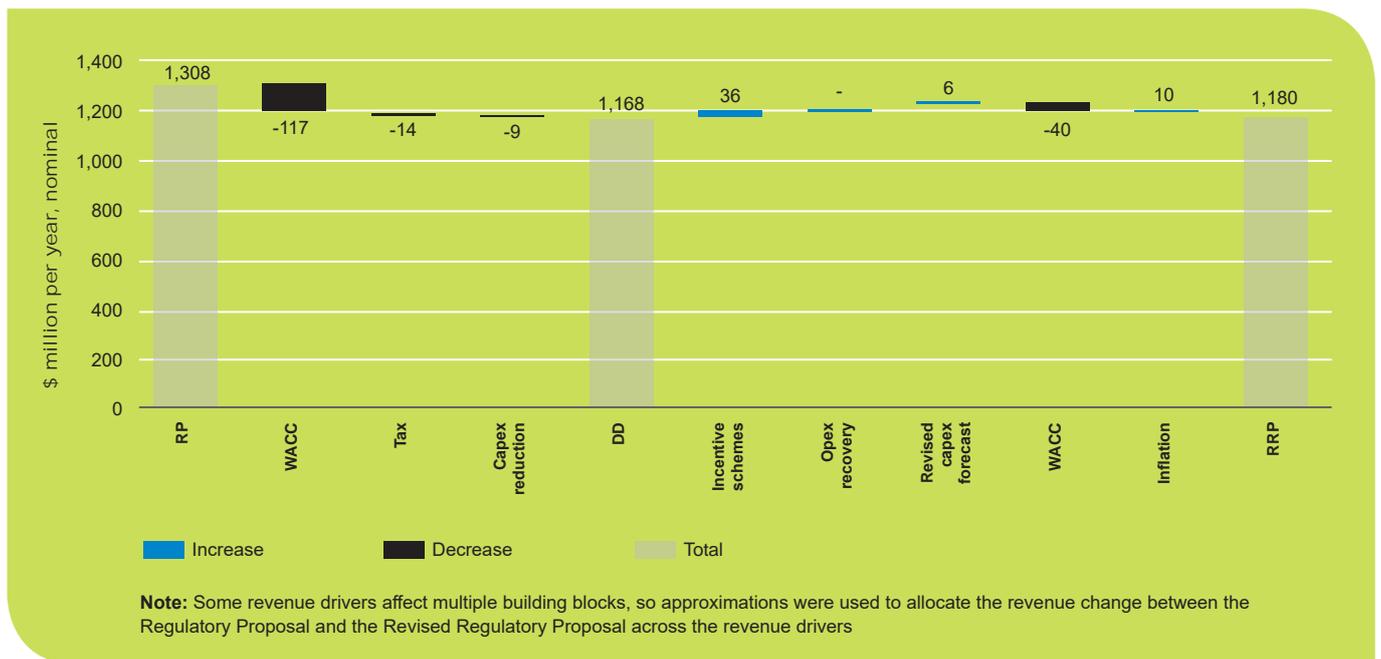
Ergon Energy to \$11,513 million for inflation indices, actual capex for 2018-19 and the reduction in the value of legacy ICT assets of \$33 million.

- **Incentive schemes**  
We are electing to claim CESS and EBSS revenue of \$165 million (real \$2019-20) for Energex and \$240 million for Ergon Energy.
- **AER tax review**  
Application of the new tax allowance calculation has led to revenue reductions of \$45 million (real \$2019-20) for Energex and \$85 million for Ergon Energy.
- **WACC**  
The impact of declining bond yields has led to revenue reductions of \$655 million (real \$2019-20) for Energex and \$645 million for Ergon Energy.

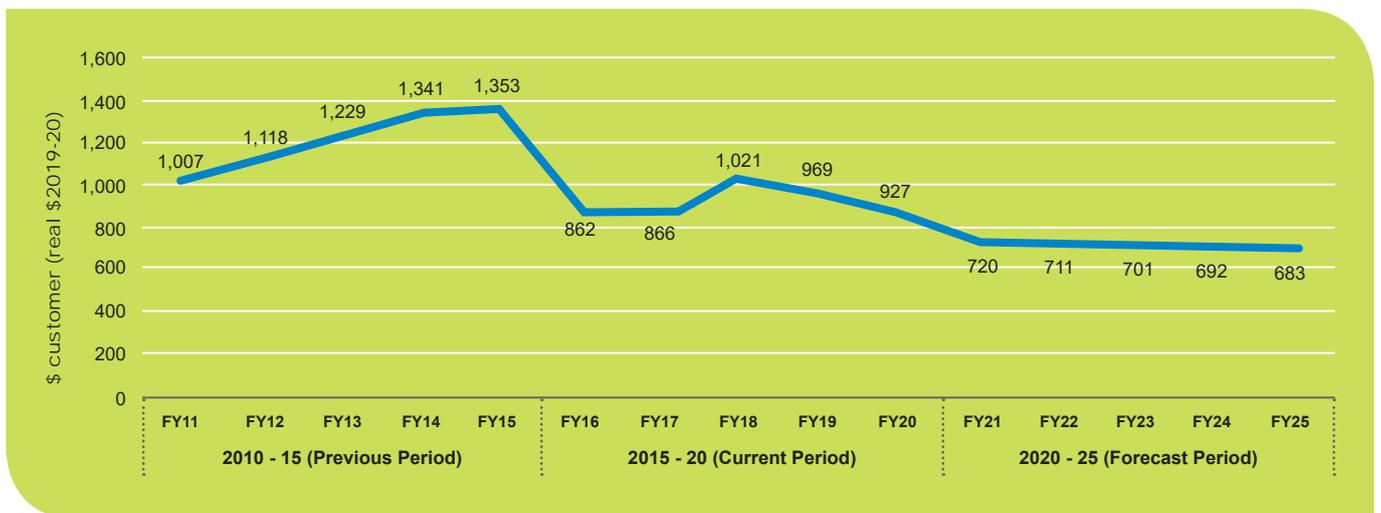
### Energex and Ergon Energy annual revenue trends



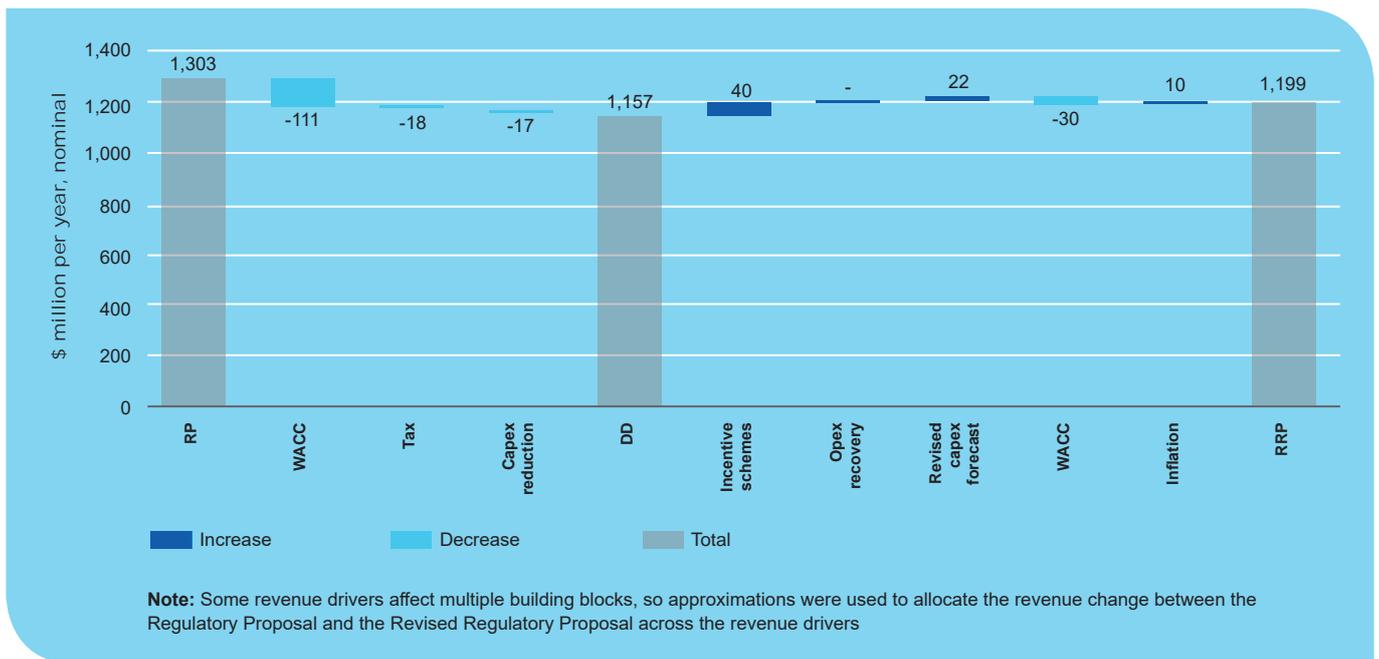
## Energex annual revenue drivers, 2020-25



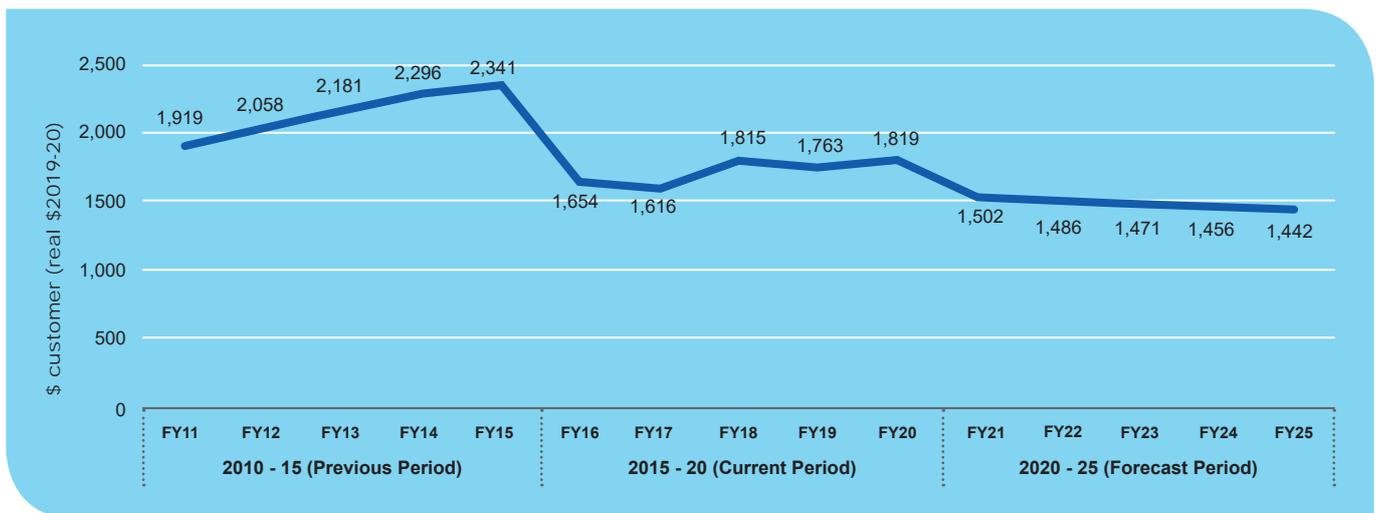
## Energex annual revenue per customer trend



### Ergon Energy annual revenue drivers, 2020-25



### Ergon Energy annual revenue per customer trend



# Our Revised Tariffs and Pricing

Following submission of our tariff proposals for Energex and Ergon Energy in January 2019, we have continued to directly engage and consult with our stakeholders, customer advocates, retailers and customers to obtain further insight on their views of our proposed network tariff strategy for 2020-25 and beyond. The outcomes of this engagement have been reflected in the revised Energex and Ergon Energy TSSs submitted to the AER.

Further to this stakeholder engagement, we have carefully considered the AER's key findings and recommendations regarding the Energex and Ergon Energy June 2019 TSSs that are set out in its Draft Decisions. We broadly accept the AER's recommendations and have amended our revised TSSs accordingly.

In making these changes, we emphasise our commitment to implementing a network tariff strategy in the 2020-25 regulatory control period and beyond that provides better outcomes for our customers including affordability, simplicity, choice, predictability, targeting manageable customer impacts and catering for new technologies.

## Why are we changing our proposed tariffs and pricing?

The AER's Draft Decisions on the June 2019 tariff suite included the following elements:

- acknowledgement that we are at the forefront of the customer driven and technology enabled transformation of the energy sector in Australia
- recognition that we are leading the way in the use of automated load control in the residential and small business customer segment
- advice that, while parts of the TSSs contributed to the compliance with the distribution pricing principles and network pricing objective, some elements required amendment or further details
- views that the Inclining Block Tariff (IBT) is not considered an efficient cost reflective tariff structure and, therefore, should not be considered as a default tariff for new customers
- support for more research to be undertaken during the 2020-25 regulatory control period to validate the proposed capacity tariff
- advice that demand tariffs should be the default tariffs for customers with digital metering.

We have broadly accepted the Draft Decisions, and have made the following changes to our Revised TSSs:

- implementation of transitional demand network tariffs as the default tariff for residential and small business customers with digital meters. These tariffs have been calibrated to manage customer impact associated with

mandatory assignment to cost reflective tariffs. Existing customers with digital meters on 1 July 2020 will be allowed to remain on their legacy tariffs until 30 July 2021

- introducing a new opt-in time-of-use (TOU) energy tariff for Residential and Small Business customers which offers discounted daytime energy rates
- trialling capacity tariff options from 1 July 2021 with a view to assessing their potential implementation beyond 2025
- shortening the peak charge window to 4pm to 9 pm week days on all demand and time-of-use tariffs with the applicable days depending on customer type and tariff
- calibrating the long run marginal cost (LRMC) based price signal in our network tariffs in recognition that network wide capacity issues during peak periods are lower priority compared to customer impact
- introduction of a new wide inclining fixed tariff, incorporating consumption-based inclining fixed charges, as the default tariff for all small business customers with basic meters who consume more than 20MWh per year
- including opportunities to achieve a meaningful shift of customers onto cost reflective structures supported by the AER.

Our proposal for Standard Asset Our proposal for Standard Asset Customer (SAC) large remains unchanged from our June 2019 TSS proposal.

The following table provides a summary of how we have addressed the AER's Draft Decisions for each SCS tariff type in our Revised TSSs.



## Our tariff response to the Draft Decisions

Tariff Type	Network Tariff/ Tariff Class	June 2019 Proposal	AER Draft Decisions	Revised TSSs
<b>Residential</b>	Residential Basic IBT [Energex] Residential Basic IBT [Ergon Energy]	Tariff structure and charges reflect higher use of network capacity	Consideration of alternative options	<b>ACCEPT</b> The flat tariff (Energex) and IBT (Ergon Energy) will remain the default tariffs for customers with basic metering only.
	Residential Flat [Energex] Residential IBT [Ergon Energy]	Safety net tariff	Preference to close access to flat and IBT tariff	<b>ACCEPT</b> We propose to introduce a new optional TOU Energy tariff as an alternative tariff option.
	Residential Demand B	2 charging period demand tariff - default for new customers	Remove daytime charging window and transition to LRMC over time	<b>ACCEPT</b> Daytime charging window has been removed.
	Residential Transitional Demand Tariff		Preference for a transitional demand tariff for residential customers with digital meters.	<b>ACCEPT</b> Residential customers with digital meters on 1 July 2020 will be assigned to the transitional demand tariff and be provided with the option to remain on their legacy tariff for the next 12 months.
	Capacity Tariff	Tariff with daytime and evening capacity charge periods with multiple capacity thresholds available on an opt in basis.	Preference to engage and develop tariff and understanding through trials	<b>ACCEPT</b> capacity tariffs will be trialled from 1 July 2021. Form of capacity tariff still to be determined.
	Seasonal TOU Energy	Grandfathered	Consider seasonality to be cost reflective	<b>JUSTIFY</b> We do not support the AER's decision on the basis of customer feedback. Seasonality is considered too complex.
	Secondary load control		Acknowledge EQL capability	<b>ACCEPT</b> Unchanged from June.
<b>Small Business</b>	Business Basic IBT [Energex] Business Basic IBT [Ergon Energy]	Tariff structures and charges reflect higher use of network capacity	Consideration of alternative options	<b>MODIFY</b> We propose to retain the current flat tariff (Energex) and IBT structure (Ergon Energy) for small basic meter business customers with consumption less than 20MWh/year. Customers with basic metering consuming more than 20MWh/year will be assigned to the new Wide Inclining Fixed tariff.
	Business Flat [Energex] Business Basic IBT [Ergon Energy]	Safety net tariff	Preference to close access to the flat and IBT tariffs and for alternative path to cost reflective tariffs	<b>ACCEPT</b> We propose to introduce a new optional TOU Energy tariff as an alternative tariff option.
	Small Business Demand B	Tariff with daytime and evening charging windows as default for new customers	Recommended removal of daytime charging window and transition to full LRMC price signal over time	<b>ACCEPT</b>
	Capacity Tariff	Tariff with daytime and evening capacity charge periods with multiple capacity thresholds available on an opt in basis.	Preference to engage and develop tariff and understanding through trials	<b>ACCEPT</b> Capacity tariffs will be trialled from 1 July 2021. Form of capacity tariff still to be determined.
	SAC Small Load Control Primary Tariff A	Improve options for customers	In principle subject to further details being provided in the revised TSS	<b>ACCEPT</b> Further details provided in Revised TSS.
	Secondary Load Control		Acknowledge EQL capability	<b>ACCEPT</b> Unchanged from June.

Tariff Type	Network Tariff/ Tariff Class	June 2019 Proposal	AER Draft Decisions	Revised TSSs
<b>Transitional</b>	Transitional Network TOU Energy Tariff 1 (for T62) <sup>1</sup> [Ergon Energy Only]	Opt in	In principle	<b>JUSTIFY</b> Required additional supporting information for tariff has been included in Revised TSS Explanatory Notes.
	Transitional Network TOU Energy Tariff 2 (for T65) <sup>1</sup> [Ergon Energy Only]	Not included in June 2019 TSS	N/A	<b>MODIFY</b> Included in Revised TSS.
	Transitional Network Dual Rate Demand Tariff 3 (for T66) <sup>1</sup> [Ergon Energy Only]	Not included in June 2019 TSS	N/A	<b>MODIFY</b> Included in Revised TSS.
<b>SAC Large</b>	TOU Demand	New default for new customers	Further substantiation required on the relative efficiency properties of the new default tariff compared to the legacy demand tariffs  For Ergon Energy, greater clarity required on introduction of kVA demand charging, particularly in terms of the customer price impacts	<b>JUSTIFY</b> Required additional supporting information for tariff has been included in Revised TSS Explanatory Notes.
	Seasonal TOU Demand [Ergon Energy Only]	Grandfathered		<b>ACCEPT</b> Unchanged from June.
	Large Business Primary Load Control	Opt in	In principle	<b>JUSTIFY</b> Required additional supporting information for tariff has been included in Revised TSS Explanatory Notes.
	Large Business Secondary Load Control	Opt in	In principle	<b>JUSTIFY</b> Required additional supporting information for tariff has been included in Revised TSS Explanatory Notes.
<b>Major customers</b>	Changes to the ICC tariff class definition	This change would allow certain CAC customers to access the ICC tariff	In principle, subject to further details being provided as part of the revised TSSs	<b>ACCEPT</b> Further details provided in Revised TSS.

<sup>1</sup> Tariffs only available to customers who have accessed transitional retail tariffs between 2017-20. Available for SAC Small eligible customers



## Customer impacts of our revised network tariffs

We accept the AER's Draft Decisions that further analysis is required to fully assess the customer impacts of our proposed 2020-25 tariff suite, particularly for Residential and Small Business customers.

We engaged the University of New South Wales (UNSW) and Commonwealth Scientific and Industrial Research Organisation (CSIRO) to undertake detailed bill impact analysis of our proposed tariff reform. This analysis was based on the average network bill and the impact is considered at the network (distribution and transmission) charge level.

We consider price impacts to be the highest priority in the transitioning of customers to more cost reflective tariffs over the 2020-25 regulatory control period. We are also mindful that all our customers, regardless of their metering type, should benefit from the significant savings associated with our lower allowable revenues. To this extent, average bills under all the 2020-21 network tariffs will be lower than under the 2019-20 tariffs. Furthermore, our cost reflective tariffs have been designed in such a way that will be more attractive to most customers.

The different distribution network charge bill reductions customers will experience on 1 July 2020 depending on their tariff type are summarised as follows:

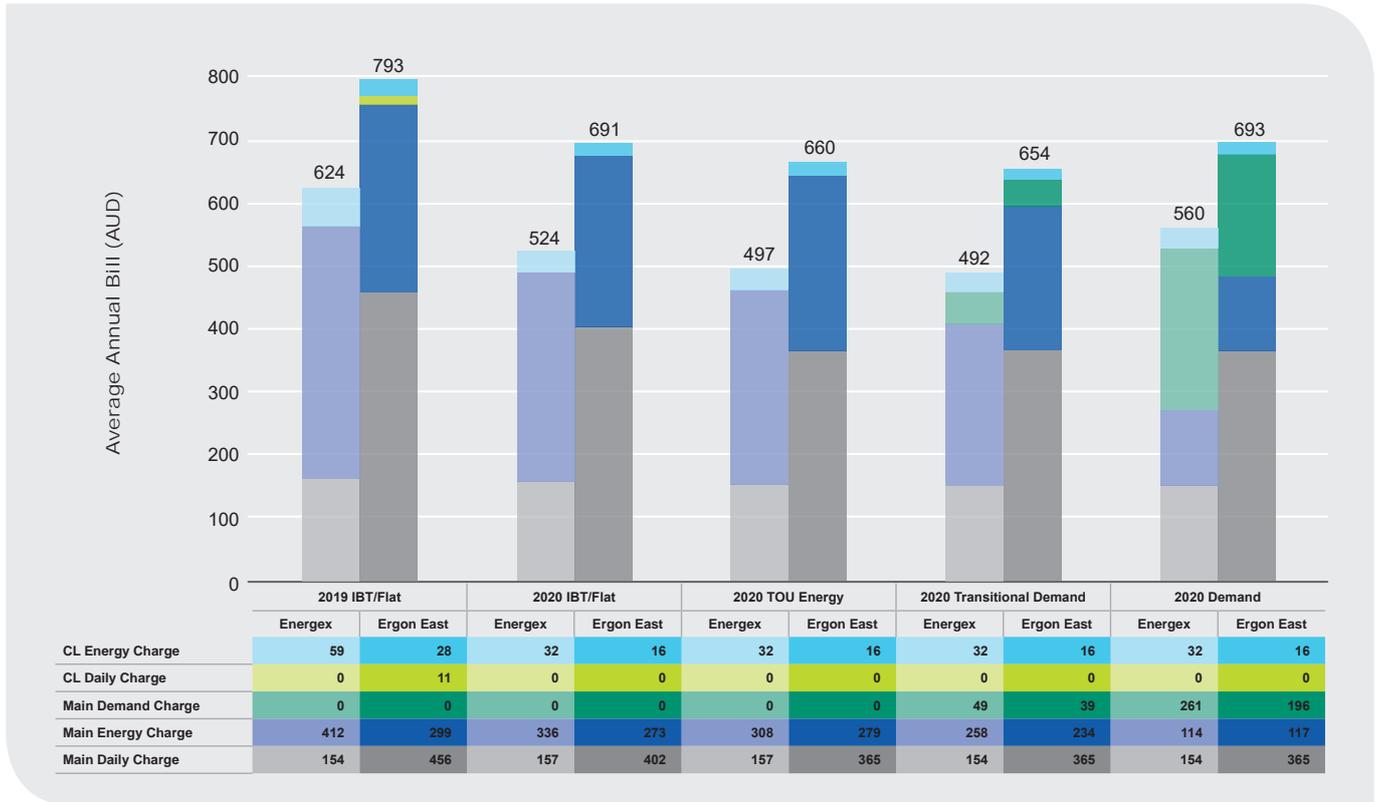
- of the 2020-21 tariffs, the Transitional Demand tariff results in the lowest average bills
- for residential customers in 2020-21 the majority of residential customers with digital metering will be better off under the Transitional Demand and TOU Energy Tariffs. For example:
  - Energex's residential customers compared to the Flat Tariff in 2020-21, 90% of customers will be better off under the Transitional Demand Tariff and 71% on the TOU Energy Tariff.

- Ergon Energy's residential customers in the East compared to the IBT in 2020-21, 54% of customers will be better off under the Transitional Demand Tariff and 58% on the TOU Energy Tariff
- for small business customers with a digital meter consuming less than 20MWh/annum in 2020-21:
  - Energex's customers compared to the Flat Tariff in 2020-21, 91% of customers will be better off on the Transitional Demand Tariff and 74% on the TOU Energy Tariff
  - Ergon Energy's customers in the East compared to the IBT in 2020-21, 67% of customers will be better off on the Transitional Demand Tariff and 61% on the TOU Energy Tariff
- for small business customers consuming 20MWh/annum or more in 2020-21:
  - Energex's customers compared to the Energex Wide Inclining Fixed Tariff (WIFT) in 2020-21, most customers are better off under the new Transitional Demand, TOU Energy, and Demand Tariffs (99%, 88% and 73% respectively)
  - Ergon Energy's customers in the East compared to the Ergon Energy WIFT in 2020-21, a clear majority of customers are better off under the Transitional Demand, TOU Energy and Demand Tariffs (100%, 89% and 85% respectively)
- for Energex's customers with life support equipment compared to the Flat Tariff in 2020-21, a clear majority of customers are better off under the Transitional Demand and TOU Energy (81% and 62% respectively).

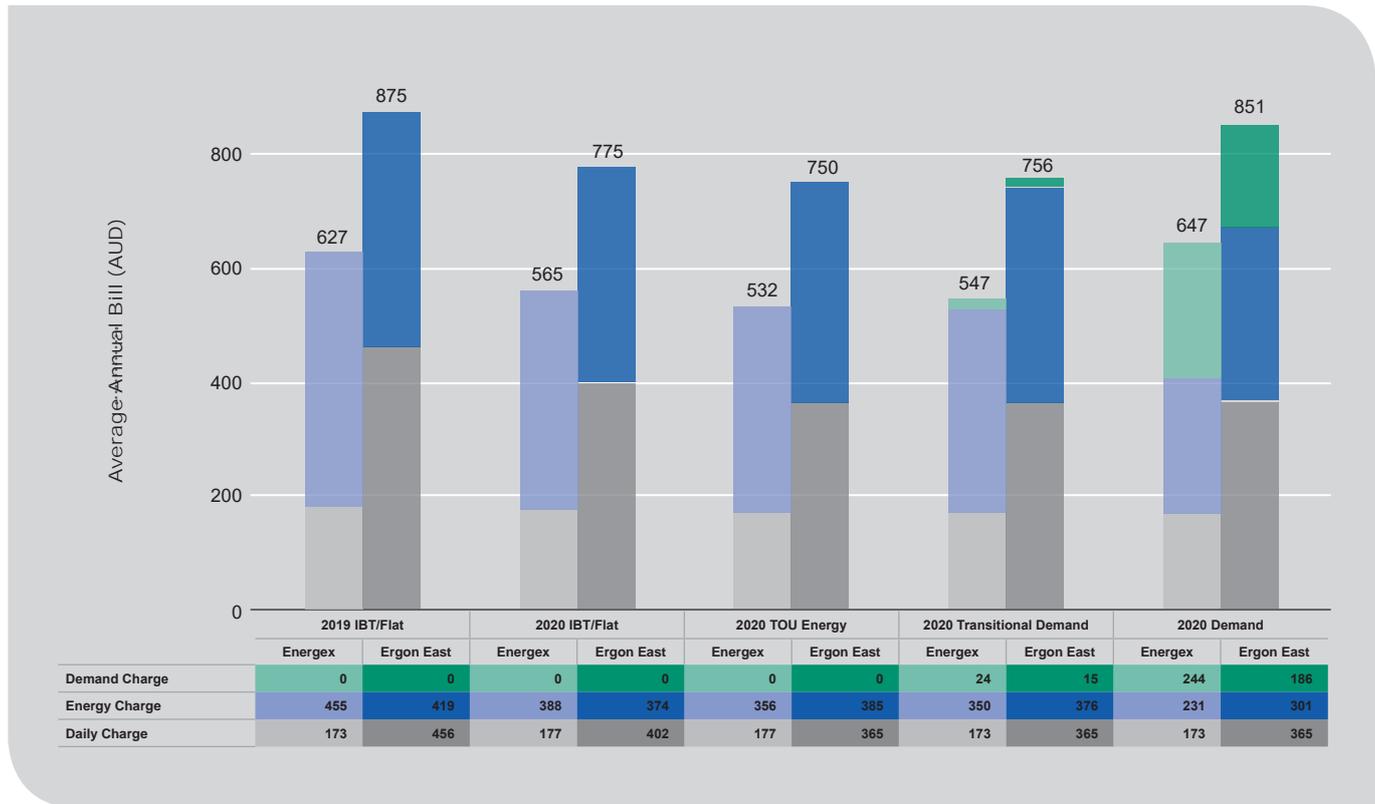
The following graphs show a comparison to legacy tariffs in 2019-20. Compared to 2019-20 almost all customers will be better off in 2020-21.



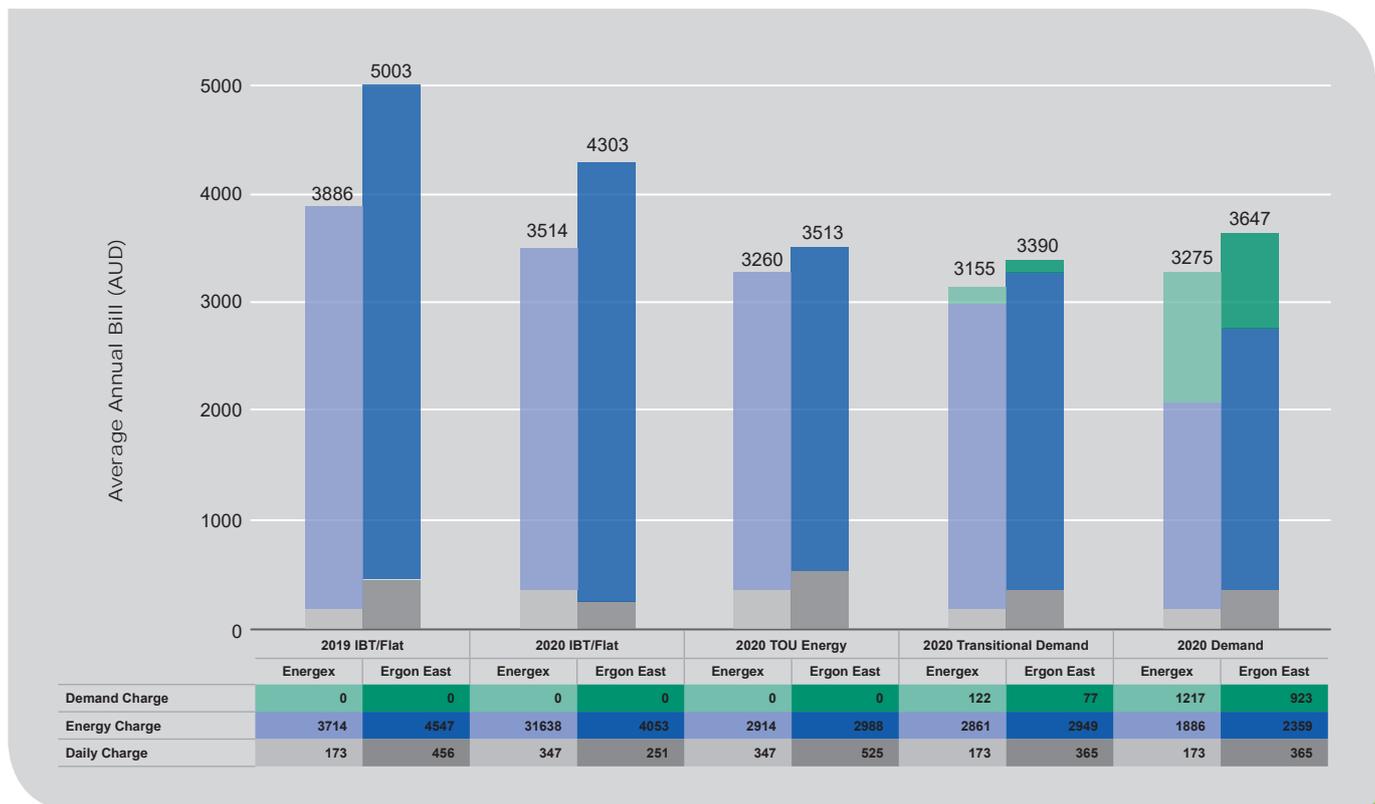
Comparison of average annual bills for residential customers, Energex (South East) and Ergon Energy (East)



Comparison of average annual bills, small businesses with consumption 20MWh/yr or less, Energex (South East) and Ergon Energy (East)



Comparison of average annual bills, small businesses with consumption greater than 20MWh/yr, Energex (South East) and Ergon Energy (East)





# Our Revised ACS

## Public lighting

The AER's Draft Decisions accepted the structure of our approach, including the introduction of tariffs specifically for Light Emitting Diodes (LEDs) and our practice of retaining the initial tariff assignment of gifted assets where we fund replacement of these assets. However, there are material differences in what the AER considered reasonable costs and what we had proposed. We proposed reductions to most public lighting tariffs and, in most cases, the AER's Draft Decisions applied further reductions. The drivers for these reductions include the reduction in WACC and changes in tax which affects all regulated revenue, as well as the allocation of overhead costs. Reduced public lighting tariffs mean:

- additional incentive on our business to work our asset base harder and to ensure that the investments we make are efficient. These impacts for public lighting are the same as for the broader business
- increased differentiation between the tariffs for non-contributed and contributed as well as conventional and LED lights – which increase the incentive for councils to install LEDs.

In our June 2019 TSS, we proposed a new NPL4 tariff to support customers' transition to LEDs. This tariff recognised that customer funded LED lights could be used on our conventional poles. The AER's Draft Decisions modified our initial proposal to include a transition using LED poles. We accept the AER's proposed approach.

In response to a stakeholder request, EQL included a public lighting metered supply tariff in its proposals on the basis that a metrology procedures change would occur, allowing the addition of micro-meters on LED lights. The AER rejected the inclusion of a placeholder public lighting metered supply tariff in the Draft Decision and, as such, Energex and Ergon Energy will continue without this tariff until 2025 even if there is a metrology change.

## Metering services

The AER adjusted our metering proposal in line with changes in WACC and the non-network expenditure Draft Decisions, reducing the overall metering revenue for both Energex and Ergon Energy. We accept the AER's proposed approach. The AER rejected the addition of non-metering assets to the metering asset base. We have accepted the AER's approach and included these costs as an operating expense, while still maintaining revenue reductions from current levels.

## Ancillary (fee-based and quoted) services

The Draft Decisions were broadly in line with our proposals for fee-based and quoted services with a small impact based on quoted services labour rate changes. We have updated some service assumptions in our pricing models for Energex and Ergon Energy ensuring the services are aligned across our networks.

## Security lights

The AER endorsed our approach that security lighting services will be installed on a quotation basis, with a fee basis for ongoing maintenance, operation and replacement costs. We have provided fees for these services in our Revised Regulatory Proposals.

## Our response to the ACS Draft Decisions

ACS	Regulatory Proposals	AER Draft Decisions	Revised Regulatory Proposals
<b>Public Lighting</b>	<ul style="list-style-type: none"> <li>extensive 47% targeted LED rollout by 2025</li> <li>new LED specific NPL1 and NPL2 tariffs, with customers transitioning within tariff categories and without exit fees</li> <li>new NPL4 tariff for customer funded replacement of conventional luminaire and lamp to LED (recognising that the associated pole and cabling are non-contributed)</li> <li>consistent asset base, base-step trend and pricing approach with overall network business</li> <li>a new public lighting metered supply tariff in the event of a future amendment to the metrology requirements</li> </ul>	<ul style="list-style-type: none"> <li>accepted LED rollout and asset management plan</li> <li>accepted tariff structure including asset allocation within NPL2 asset base</li> <li>accepted creation of NPL4 tariff category</li> <li>changed basis for NPL4 from conventional poles to LED poles</li> <li>reduced proposed public lighting tariffs</li> <li>updated WACC and regulatory tax approach</li> <li>updated allocation of overheads</li> <li>rejected the inclusion of public lighting metered supply tariff</li> </ul>	<p><b>ACCEPT</b></p> <ul style="list-style-type: none"> <li>reallocation of overheads for Ergon Energy and update for the latest available information</li> <li>bottom up build of opex included</li> <li>changed NPL4 price calculation from conventional poles to LED poles</li> </ul>
<b>Metering services</b>	<ul style="list-style-type: none"> <li>no longer responsible for new meters. Ergon Energy has virtually no direct capex and Energex has none</li> <li>included non-network capex allocations consistent asset base, base-step trend and pricing approach with overall network business</li> </ul>	<ul style="list-style-type: none"> <li>updated for WACC, tax and labour escalators</li> <li>updated allocation of overheads</li> <li>rejected Energex's non-direct capex and operating expenditure</li> </ul>	<p><b>ACCEPT</b></p> <ul style="list-style-type: none"> <li>reallocation of non-network Capex for Energex and overheads for both Energex and Ergon Energy and update for the latest available information</li> </ul>
<b>Ancillary (fee-based and quoted) services</b>	<ul style="list-style-type: none"> <li>cost reflective</li> <li>increased consistency between Energex and Ergon Energy</li> <li>increased transparency and efficiency through use of fee-based rather than quoted mechanism for homogenous, high volume services</li> </ul>	<ul style="list-style-type: none"> <li>acceptance of overall approach</li> <li>adjusted for some labour rates - impact is very small as only on quoted services (no fee-based services have para-professional content), and regardless of categorisation, the tasks need to be undertaken by suitably qualified individuals</li> <li>acceptance of fee permutations differentiated by time-of-day for Energex</li> <li>Ergon Energy's travel time approach approved – with 2-hours charged for long feeders and 20 minutes for short feeders. Provides greater transparency and simplification</li> </ul>	<p><b>MODIFY</b></p> <ul style="list-style-type: none"> <li>update for latest available information</li> <li>reviewed and updated fee - based service assumptions which resulted in lower fees for some services</li> </ul>
<b>Security lights (watchman lights)</b>		<ul style="list-style-type: none"> <li>change from 1 July 2020 from unregulated to ACS</li> <li>AER's endorsement of EQL's approach that security lighting services will be installed on a quotation basis, with a fee basis for ongoing maintenance, operation and replacement costs</li> </ul>	<p><b>ACCEPT</b></p>

# Balancing the benefits and the risks

This overview explains how we are delivering distribution network charge reductions and maintaining reliability of supply while we transition to a smart network which will enable greater choice and control for customers. We have considered the impacts of the AER’s Draft Decision view on Energex

and Ergon Energy and continue to look for ways to make our businesses more efficient. However, we will not compromise on the safety of our people, communities and customers.

The future of the electricity market is uncertain and ever-evolving so there

are risks that we will monitor and respond to if necessary. However, we need the AER to determine sufficient revenues to enable us to safely deliver our plans in 2020 and beyond. Absent sufficient expenditure allowances and sustainable revenues our risks will increase.

The risks	
<b>Safety</b>	Electricity is fundamentally dangerous, and it is not possible to eliminate all risks to our people and the community. We operate in an uncertain environment with a high probability of extreme weather, bushfires and extended storm seasons. There is a risk that we will be unable to meet current and future safety and performance outcomes as a result of receiving less than the required expenditure allowance.
<b>Affordability</b>	Our distribution network charge forecasts are informed by modelled energy use. If the overall units of energy used falls, or if cross-subsidisation between customers increases, future charges will be impacted.
<b>Market reforms</b>	The industry is facing significant uncertainty, with energy policy and the NER likely to continue to evolve. Compliance regimes such as cyber security are also evolving rapidly. This may lead to additional costs or changes to the way revenue is assessed and calculated, which would ultimately be passed on to customers or affect the sustainability of network businesses.
<b>Retailer response</b>	In order for customers to benefit from our network tariff reforms, and digital meters, all retailers need to pass through price signals to customers and provide new meters in a timely manner.
<b>Reliability</b>	While we are confident in our asset management approach, we are managing an ageing network and reliability can be impacted in unexpected ways. New customer technology presents both a risk and an opportunity regarding supply reliability and quality.
<b>Cyber attacks</b>	While we are investing in this area, this evolving risk may compromise the security of the network and lead to potential loss of data. As we progress in a rapidly changing technology environment we need an agile response framework.
<b>Pace of change</b>	The energy transformation underway may mean the assets we invest in today may not be right for the future. We have already leveraged a range of low-cost options to support the existing penetration of solar. We will need to continue to investigate the best possible ways to build, maintain and operate our services, connect new customers and technologies, and provide the right information to customers.
<b>Growth forecast</b>	If the rate of growth is greater than forecast, we may be required to reprioritise our planned works, or undertake additional infrastructure investment.
<b>Choice and control</b>	Despite our best efforts, some customers may not be able to take advantage of solar, batteries and other technologies to control their energy bills.



# OUR CUSTOMER COMMITMENTS



## SAFETY FIRST

Our number one priority is safety – our commitment is to the people and communities who we work with and support every day. We aspire to be an industry leader in health, safety, environment and cultural heritage.



### AFFORDABLE

We continue to look for ways to make electricity more affordable across our networks, and to advocate for the reforms needed for a bright energy future for all Queenslanders.



#### PRICING

To help take the pressure off electricity prices, we'll continue to drive down the cost of distributing the electricity across Queensland.



#### NETWORK TARIFFS

Our tariff and other reforms will be transparent, fair and equitable. We'll continue to show leadership in the energy transformation – with reforms that help to realise the potential value of emerging technologies.



#### FAIRNESS

We recognise the need to support our customers and communities, especially during times of vulnerability. We are committed to delivering responsibly on what really matters so that no-one is left behind and our communities grow stronger.



### SECURE

We're here 24/7 to keep the lights on – providing peace of mind with a safe, reliable electricity supply, and the knowledge that we'll be there 'after the storm'.



#### EMERGENCY RESPONSE

We'll be there after the storm, prepared and with the resources to safely respond to whatever Mother Nature delivers. And work closely with others in emergency response.



#### RELIABILITY

We'll maintain recent improvements in power reliability – and continue to improve the experience of those being impacted by outages outside the standard.



#### SERVICE PROMISE

We'll strive to find new ways to provide a great customer experience – to make it easy. And we'll meet our Guaranteed Service Levels – if we don't, we'll pay you.



### SUSTAINABLE

Enabling your use of new and emerging technologies and providing easier access to the network - we give you as much control as you choose for your energy solutions with information and more sustainable choices.



#### NETWORK AS AN ENABLER

We're looking to the future and evolving the network to best enable customer choice in their electricity supply solutions. We'll innovate to integrate solar, batteries and other technologies with the network in a way that is cost effective and sustainable.



#### COLLABORATION

We'll engage with you and provide you with the information you need, when and how you need it, to support sustainable energy choices.



#### CONNECTIONS

We'll make it easier and more timely to connect to the network, helping you from beginning to end, with an aligned state-wide service offering and further system improvements.



Part of Energy Queensland

[ergon.com.au](http://ergon.com.au)  
[energex.com.au](http://energex.com.au)

Ergon Energy  
PO Box 1090  
Townsville QLD 4810

Energex Limited  
GPO Box 1461  
Brisbane QLD 4001