

Empowering communities to share and use energy for a better tomorrow

2019-24 Regulatory Proposal: Customer Overview

A photograph of a man and a woman shaking hands. The man is on the left, wearing a light blue button-down shirt, dark jeans, and a grey baseball cap. The woman is on the right, wearing an orange high-visibility work shirt with reflective silver stripes and dark pants. They are both smiling and looking at each other. The background is a blurred outdoor setting with trees and a white vehicle.

empowering
communities

Empowering communities to share and use energy for a better tomorrow

2019-24 Regulatory Proposal: Customer Overview

April 2018

empowering you

Our Vision

What we want to be

Empowering communities to share and use energy for a better tomorrow.

Our Purpose

What we stand for

To enable energy solutions that improve life.

Our Values

What we care about



Make safety your own



Be easy to do business with



Make every dollar count



Be courageous, shape the future



Be inclusive, supportive and honest

A short message from Essential Energy's Chief Executive Officer



This booklet summarises Essential Energy's proposed five-year plan for operating and maintaining NSW's largest electricity distribution network from 2019 to 2024. The plan has been shaped in close consultation with customers and stakeholders across the state to ensure we concentrate our efforts on the things that matter most to you while we deliver a safe, reliable and affordable electricity distribution service.

John Cleland Chief Executive Officer

The Essential Energy network is funded through charges that form part of the electricity bills issued by your retailer. Each bill covers everything from electricity generation to transmission, distribution (Essential Energy), retail and State and Federal Government charges. With Essential Energy's distribution network charges (tariffs) making up around 37 per cent of the typical total bill, our revenue is set by the Australian Energy Regulator (AER).

Every five years, we submit a Regulatory Proposal to the AER, which lays out exactly what we plan to do and the funding we'll need to do it. The AER reviews our Proposal, considers customer feedback, and tells us how much we can charge customers to cover the next five years of operations.

Our Proposal's key objectives are to deliver a safe, reliable and efficient electricity network for customers; limit increases in distribution network charges for customers and deliver long-term price stability; set the business up to service customers' future needs in a rapidly evolving energy ecosystem; and deliver satisfactory shareholder returns.

This 2019-24 Regulatory Proposal reflects our company vision, purpose and values throughout and responds to the feedback we've collected from customers and stakeholders over the past year and a half. Through an intense program of focus groups, interviews, forums, ongoing consultation groups and online surveys, our customers and stakeholders have helped us to prioritise our plans and refine our spending. They told us that safety is imperative, they are satisfied with our current levels of power supply reliability, and that our services must remain affordable.

We realise the pressure that electricity bills currently place on NSW households and businesses. Our aim is to minimise the impact of the distribution part of your electricity bill. We'll achieve this by running our business more efficiently, with investment in new technology and processes. Ongoing cost

reductions will be achieved primarily through prudent, targeted investment in innovative and enabling technologies that will deliver ongoing efficiencies and meet current and future customer needs. We will invest appropriately to enable network innovations such as microgrids and other cost-effective energy solutions for our regional, rural and remote communities.

This means we'll need to spend money before we can save money. In this Proposal we plan to limit increases in annual network charges to 1.43 per cent above CPI from 2019-24. By 2024, this will deliver network charges that are 36 per cent lower than their peak in the past 10 years.

We believe this Regulatory Proposal balances network reliability and safety with innovation and customer and community needs, while containing increases in distribution charges to a minimum.

There's a long journey ahead but with smart investment in new technologies, new ways of doing business and better customer communications, we believe we can reduce operating costs to their lowest levels in 20 years and reduce capital costs to their lowest levels in 19 years.

We're never finished listening to your views and feedback. This Regulatory Proposal is a milestone in our ongoing engagement with our customers and stakeholders. I invite you to read the information and then provide your feedback to the Australian Energy Regulator or to us directly using one of the communication channels detailed on the final page.

A handwritten signature in black ink, appearing to be 'John Cleland'. The signature is fluid and cursive, written over a white background.

John Cleland
Chief Executive Officer








Proposal key facts

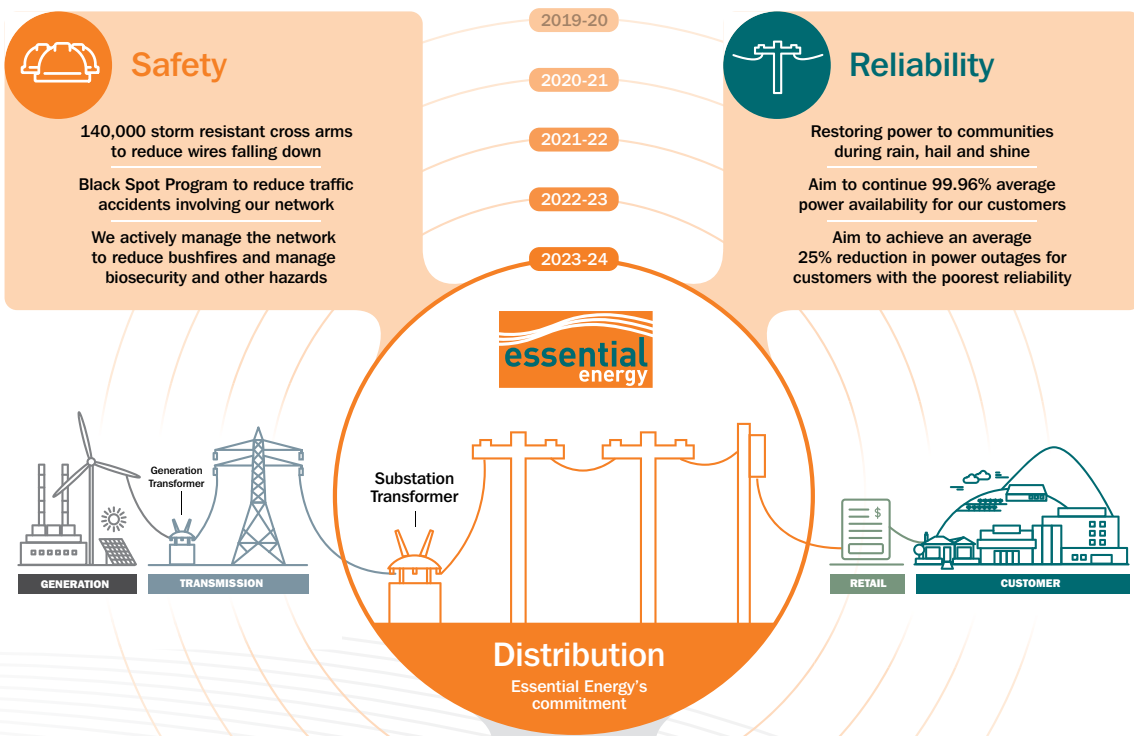
empowering
customers

Fact Sheet 2019-24 Regulatory Proposal











OUR CUSTOMERS' PRIORITIES

-  Safety Leader
-  Affordability
-  Reliability
-  Good customer service & communication
-  Transparency/bill itemisation
-  Environmentally friendly/encouraging renewables
-  Innovative technologies



Affordability

	Today	By 2024
 \$13  Quarterly distribution charges for a typical customer	\$172 ¹	\$185 ²
 6%  Cost of maintaining our network (operating expenditure)	\$1.8b (2014 to 2019)	\$1.7b (2019 to 2024)
 19%  Cost of refurbishing and replacing old assets (capital expenditure)	\$2.6b (2014 to 2019)	\$2.1b (2019 to 2024)
 6%  Essential Energy Asset Base (value of our network)	\$8.2b (forecast FY19 closing balance)	\$8.7b

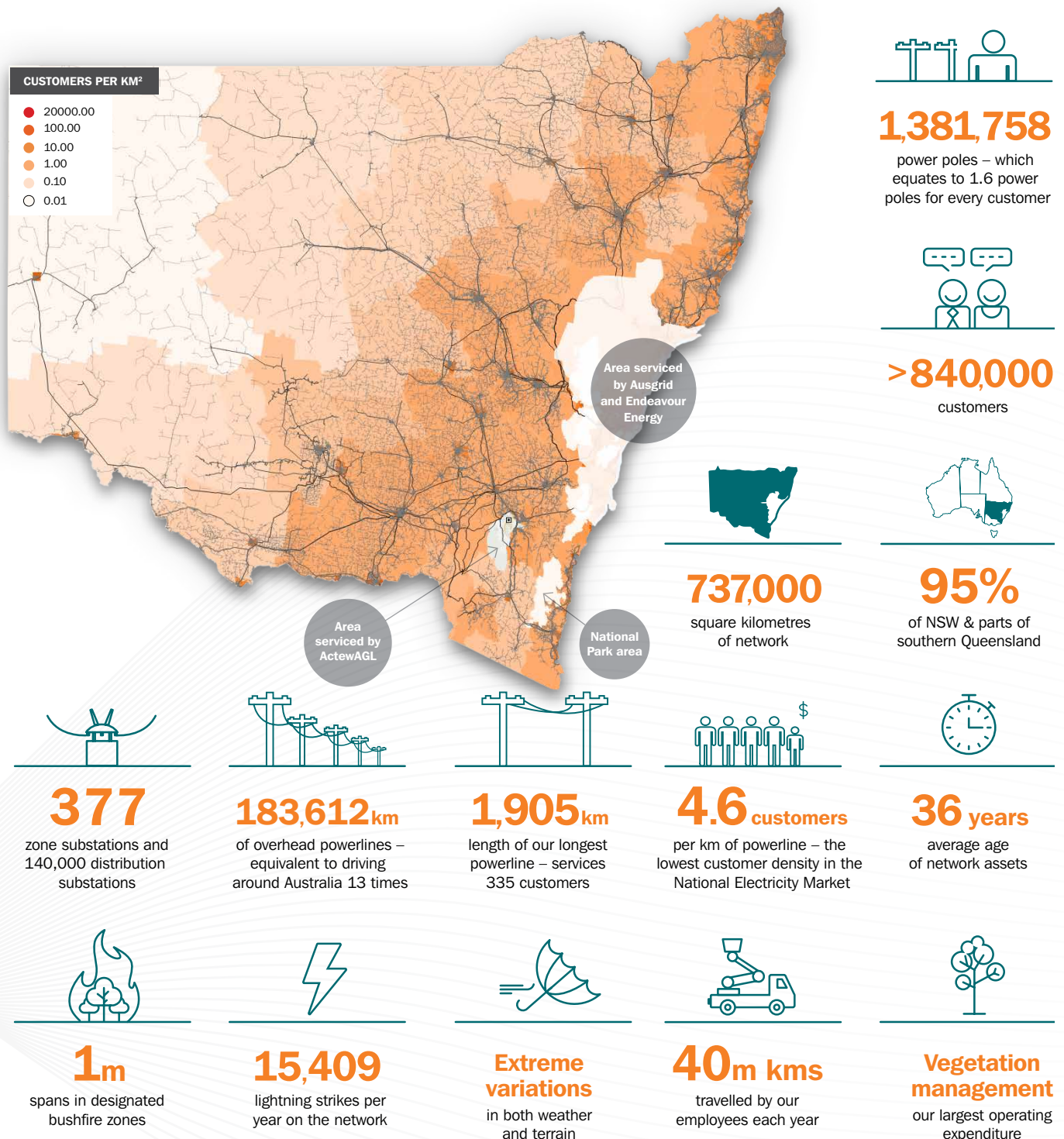
1.43%

increase in distribution charges p.a. above CPI for 2019-24

Note: 1. typical residential customer (5MWh) quarterly distribution charges at 1 July 2018
2. typical residential customer (5MWh) quarterly distribution charges at 30 June 2024

About us

Essential Energy is a state owned electricity distributor, with an independent Board and management team. Our core focus is ensuring the safe, affordable and reliable delivery of electricity to homes and businesses across our vast and diverse network in regional NSW, which is one of Australia's largest electricity networks. We build and maintain the poles and wires you see every day, including some sections of underground cables, and are responsible for restoring power after unplanned outages.



Funding a safe and reliable network

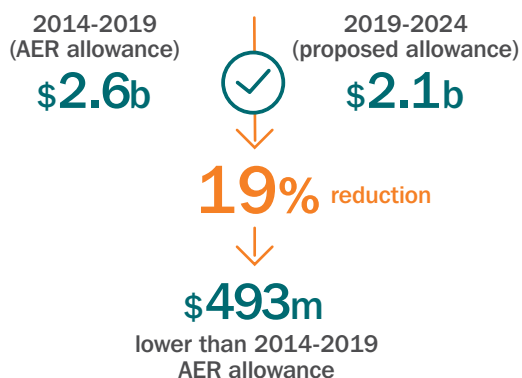
Essential Energy has built its network over decades to deliver a reliable electricity supply to customers across NSW. These poles and wires are built to meet peak demand – when electricity use is highest like on a very hot day. Even if you don't use our network very often, we still have to maintain the poles and wires so they are available when you do need to use them.

Transforming to improve efficiency

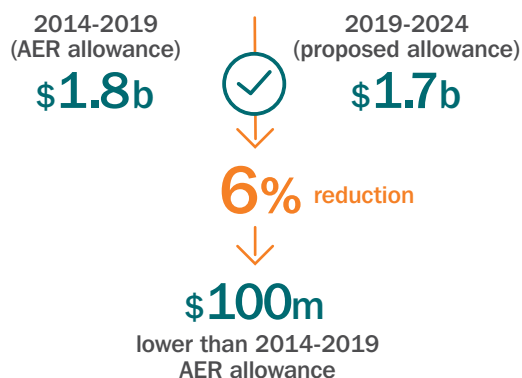
Since 2012, we have been transforming our business to reduce our costs.

Our 2019-24 Regulatory Proposal relies on achieving further efficiencies. These will come largely from investing in new information technology and the associated streamlining of our operations and processes, and from improving how we manage our assets.

OUR CAPITAL COSTS



OUR OPERATING COSTS



\$2.1b
Capital
Expenditure
over 5 years

\$1.7b
Operating
Expenditure
over 5 years

Limiting
real price
increases
to 1.43% p.a.

0.5% real
impact on
retail bill

6.1%
average rate
of return



The revenue we need to meet customer expectations

The revenue requirement outlined in this 2019-24 Regulatory Proposal to ensure the network is available and operating safely is \$5.1 billion over the five years, compared to \$5.3 billion in the 2014-19 regulatory period.

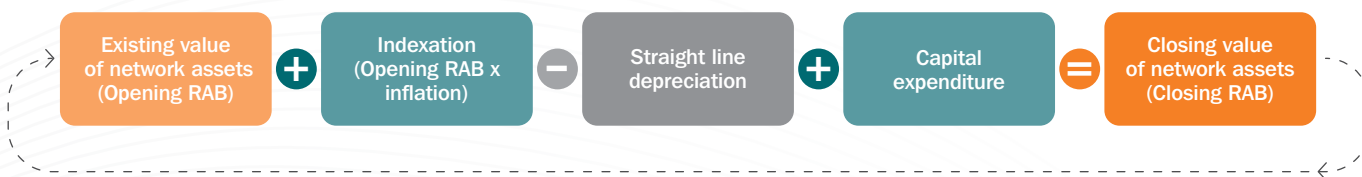
Our proposed revenue is made up of capital expenditure (including the cost of replacing old assets), operating expenditure (including the cost of maintaining assets), and the associated costs to fund those investments. This revenue enables us to operate and maintain a safe, reliable and efficient network.

The cost of debt and returns to our shareholder, on investment in the network is also included in our proposed revenue allowance via a rate of return, as determined by the AER. Our proposed average rate of return is 6.1 per cent over the 2019-24 regulatory period.

Total 2019-24 \$ million (Real 2018-19)	
Return on capital To repay our debt and equity holders for the funds invested in our network +	\$2,544
Return of capital Reflects the decline in asset value as they age +	\$632
Operating expenditure Recovery of our efficient operating costs +	\$1,718
Tax allowance and other adjustments Includes corporate income tax liabilities, revenue smoothing, incentive schemes and other adjustments =	\$247
Total revenue requirement	\$5,142 (average \$1,028 p.a)

Numbers may not add due to rounding

How the Regulated Asset Base (RAB) is calculated



Why are network charges going up if costs are coming down?

While we continue to improve efficiencies, we must also meet the funding costs associated with past investments in the network. Given the average life of network assets often exceeds 30 years, the associated funding costs are paid over a similar period (i.e. the whole life of the assets). This means, past investment decisions have a long-term impact on the amount of revenue required to fund the network in the future. The cost of refurbishing and replacing old assets (capital expenditure) continues to be greater than depreciation. While capital expenditure is greater than depreciation, the overall value of our assets (our Regulated Asset Base) will continue to grow. This places ongoing upward pressure on our Regulated Asset Base and network charges. To minimise the impact on customers' network charges, ongoing cost reductions will be delivered primarily through prudent, targeted investment in innovative and enabling technologies. This will limit average annual network charge increases to 1.43 per cent above inflation.

The RAB and the application of a return on network assets can be likened to a mortgage. For example, a person borrows money to purchase a 3 bedroom house, but decides later on the house is too small and borrows more money to extend the house to 4 bedrooms. If the person decides they don't need a 4 bedroom house anymore, that person is still obligated to repay the money borrowed plus interest.

Affordability

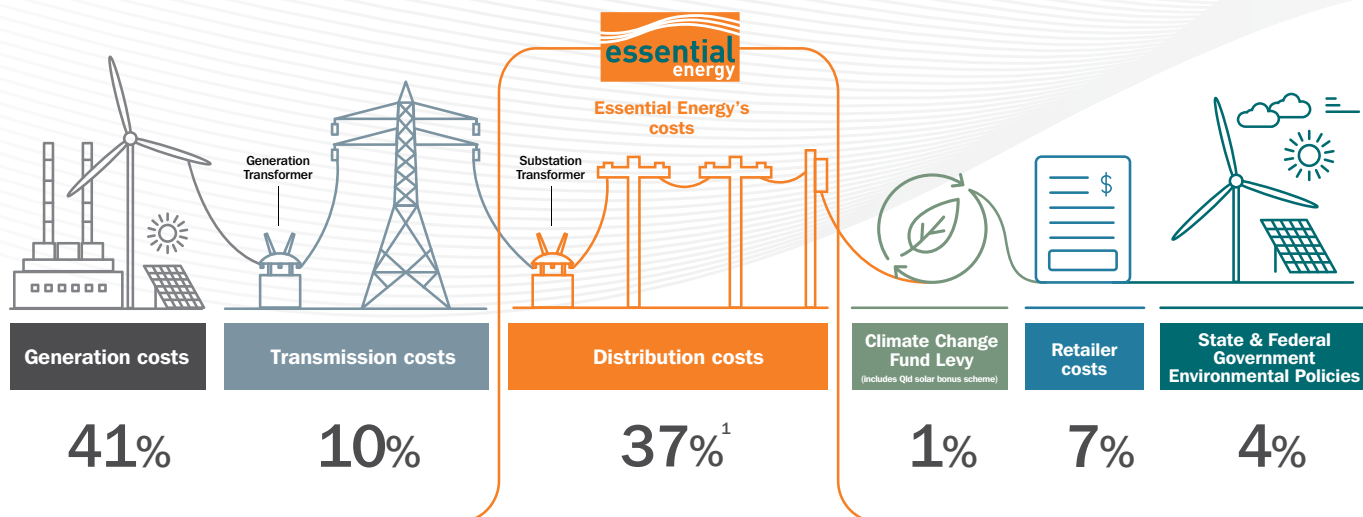
Limiting increases in network charges to 1.43% p.a. above CPI. By 2024 average network charges will be 36% lower than they were in their peak in the past 10 years.

We are committed to delivering better value by continuing to reduce our costs to customers without compromising safety or services.

Continuing to take into account customer and stakeholder feedback, this Proposal carefully balances safety and reliability against affordability for all our customers. We are proposing network charge increases limited to 1.43 per cent per year above the rate of inflation.

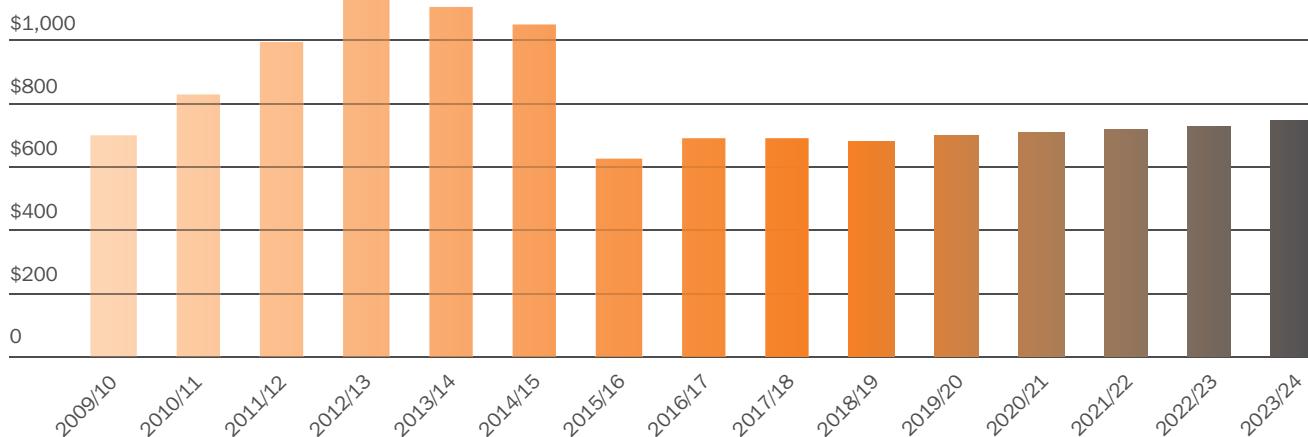
Our costs comprise about 37 per cent of a typical residential electricity bill. Most customers don't see our network charges which are paid by retailers, who build our costs into the total charge on a customer's bill.

Recognising the pressures rising distribution costs place on homes and businesses, Essential Energy's charges fell by about 38 per cent in the previous regulatory period.



TYPICAL RESIDENTIAL CUSTOMER USING 5MWH PER ANNUM²

\$1,200 Annual distribution network bill – real 2018-19\$



1. Based on the 2017-18 forecast, Australian Energy Market Commission, 2017 Residential Electricity Price Trends, 18 December 2017 p.100

2. 5MWh represents a typical household with three to four occupants

Innovation

The electricity landscape is becoming more complex than ever before, with rapidly evolving technologies, innovative business models and a shifting regulatory landscape. The availability of technology solutions that have the potential to deliver sustainable efficiency gains is growing. As we reshape our business, we will place an increasing level of importance on enabling the network of the future.



Technology and data

We will implement core business technology systems to streamline our operations and provide data to allow better decision making. We plan to invest \$141 million during 2019-24 to deliver sustainable cost reductions for our customers.



Remote sensing technologies

We plan to make greater use of remote sensing technologies, such as Light Detection and Ranging (LiDAR). LiDAR allows us to develop and build a three-dimensional model of our network, applying much greater sophistication to risk identification and management.



Microgrids

We will trial new technologies, including microgrids and small-scale renewables, that will improve efficiency and lower network expenses for all customers.



Research and development

We will support and invest in new energy technologies that reduce infrastructure expenditure. Our Proposal also includes expenditure on research and development.

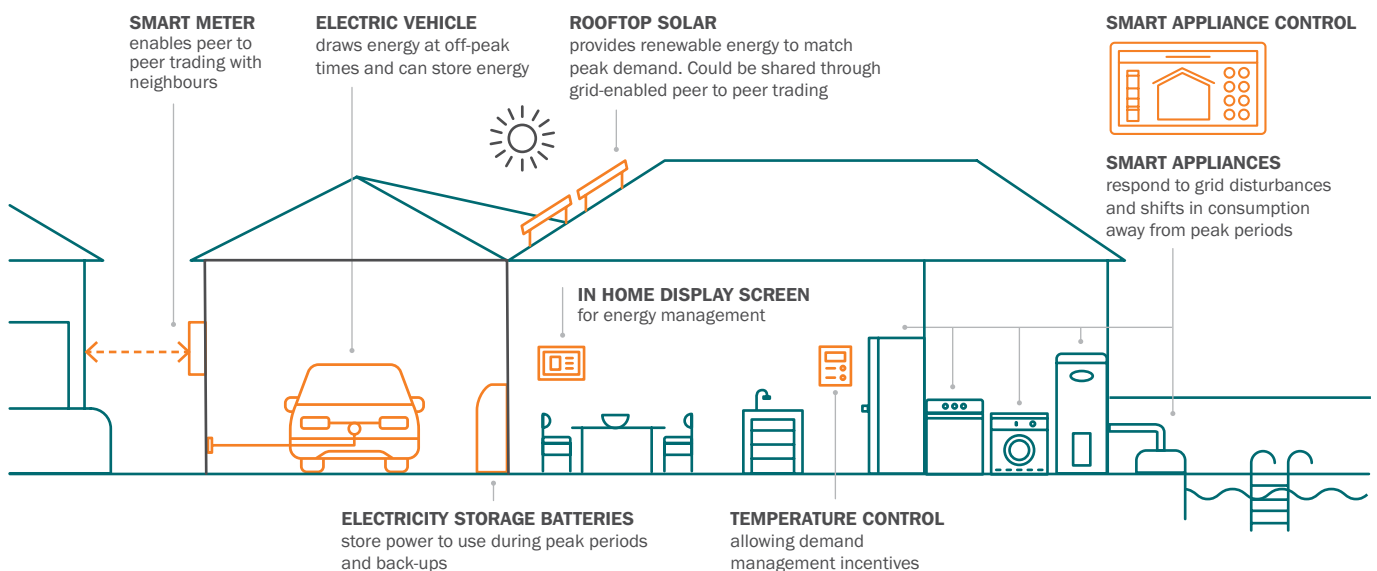


Using new technologies to manage our network

We will leverage new technologies (such as drones) to help us inspect and maintain the network. Maintenance practices of assets spread across our vast network may benefit from these developing technologies in the future.

Essential Energy plans to be at the heart of this emerging energy market where generation and storage that is embedded across the network plays a key role in the energy ecosystem. As the provider of the network 'platform' through which energy is exchanged, we also recognise the need to collaborate with multiple participants who will also make equal contributions to this transformation.

The diagram below shows how new technology may change the way our customers use electricity in the future.



Listening and acting

We are always interested in your views and feedback and will continue to meet our customer commitments to Listen, Respect and Deliver. When developing this Regulatory Proposal, we consulted with diverse groups of customers and stakeholders. This engagement program covered all aspects of our Proposal. Feedback was obtained through surveys, interviews, deliberative forums, and stakeholder group meetings.

Our customers' top priorities.



Safety is essential for doing business

OUTCOME	OUTCOME
<p>Affordability</p>	<p>Encourage renewables</p>
<p>Reliability</p>	<p>Bill itemisation</p>
<p>Good customer service and communication</p>	<p>Innovative technologies</p>

Our customers' priorities

Phase 1 and Phase 2 What we heard from customers

Phase 3 Outcomes

<p>Safety</p>	<ul style="list-style-type: none"> > Customers expect safety to be fundamental to everything we do. > Poles in high traffic accident locations should be moved (Black Spot Program). 	<ul style="list-style-type: none"> > Safety remains our number one priority. > Replacing old cross arms with new technology which is storm resistant to reduce wires falling down. > Black Spot Program will move poles in specific areas to reduce traffic accidents. > Continuing our safety education programs.
<p>Affordability</p>	<ul style="list-style-type: none"> > Customers see our distribution costs are good value for money at around 37% of a typical residential bill. > Affordability is important, but needs to be balanced with efficient services. > Equity and fairness is important, with concern for vulnerable and remote customers. > Remove inappropriate vegetation and selectively replant. > Safely stacking cut vegetation is not supported. > To reduce costs, customers were prepared for streetlights repairs to take an average of seven days rather than four days. 	<ul style="list-style-type: none"> > Proposal applies the Rate of Return Guideline from independent regulator. > Investing in technology that will improve efficiency and lower operating and capital spend. > Seeking partnership to help support vulnerable customers. > Proposal includes specific vegetation removal where appropriate and selective replanting to reduce bills. > Completing streetlight repairs in an average of seven days instead of four days to improve scheduling efficiency. Greater use of LED technology for lower costs.

Our customers' priorities

Phase 1 and Phase 2 What we heard from customers

Phase 3 Outcomes

Reliability



- > 90% of customers felt our network service is reliable.
- > Limited support for planned outages starting earlier or finishing later.
- > Equity and fairness is important, with concern for those with low reliability.
- > Little understanding of Service Target Performance Incentive Scheme (STPIS) or support for increasing our STPIS revenue.

- > Evidenced-based prudent asset planning to ensure we meet long-term customer needs.
- > Proposal aims to improve reliability, on average, by 25% in our worst-performing areas.
- > Trial alternate start and finish times for planned outages.
- > Increase to our STPIS revenue at risk, from 2.5% to 5% to strengthen the accountability and incentives applied to our business.

Pricing



- > Changing the time at which electricity is used impacts quality of life. Incentives needed to support change.
- > Progression to cost-reflective charges should be slow and careful. Bills should be predictable and stable.
- > Locational pricing, seasonal pricing and fixed charge increases were not popular.
- > Choice between pricing options required.
- > Support a price that encourages off-peak charging for electric vehicles.
- > Invest in researching microgrids as an option.
- > No change required to charging windows for time of use pricing.

- > Off peak charging available and related services piloted.
- > Increased fixed charges have been limited to \$5 p.a., with offsetting changes in variable charges which allows slower progression towards cost-reflective prices.
- > No locational or seasonal pricing.
- > Network charging plans updated, with opt out for all residents and small businesses.
- > New default assignment for customers installing new innovative technologies to encourage efficient use.
- > Microgrids will be piloted, with pricing trials undertaken and policy propositions.
- > Education on our network charges enhanced.

Customer service and communication



- > Want greater energy use and bill transparency.
- > Aware of us but not what we do e.g. who to report a fault to.
- > Support more customer engagement and education.
- > Want us to invest in customer service, timely outage notifications and meter data availability.

- > Proposal includes enhanced communications and engagement programs.
- > Resources to improve awareness and customer understanding of the role Essential Energy plays in delivering electricity.
- > Continue to be involved in and support the local community.
- > Collaborating with land owners to improve vegetation management.
- > Outage notification schedule and system will remain, and availability of interval meter data to be improved.

Innovation and renewables



- > Support for new energy technologies and invest in research and development that reduces network expenditure.
- > Generation source can be changed provided reliability and price remain stable.
- > Concerned new technology advantages not available to all.

- > Proposal includes expenditure on research and development.
- > Trialling new technologies, including microgrids and small-scale renewables, that will improve efficiency and lower network expenses.

Investing in our communities

Essential Energy contributes to the communities we serve in a number of ways. During the 2019-2024 regulatory period we plan to grow and build on our existing relationships and extend the reach of our support across regional and rural NSW.





NAWO

Essential Energy is a member of the National Association of Women in Operations (NAWO), an organisation which champions women in operations



Essential Energy deployed two teams of workers to Tonga to assist with power supply restoration following Tropical Cyclone Gita in February 2018

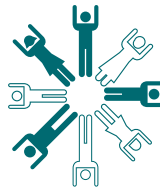


ATSI trainees joined Essential Energy's Pre-Employment pilot program in 2017 aimed at equipping participants with nationally-recognised qualifications and industry specific skills. All six have successfully transitioned into the 2018 Apprentice program



clontarf foundation

Clontarf Foundation and Girls Academy – new partnerships that aim to help provide training and career opportunities for ATSI men and women



Diversity & Inclusion

6



37 Apprentices

including 18 apprentices from identified diversity groups, starting in 2018 across 28 regional locations

Padmount Beautification

In partnership with House with No Steps, local artists have painted padmounts in the North Coast area as part of Essential Energy's anti-graffiti program whilst providing a creative outlet for local residents



2,739 Lives saved

937 Donations in NSW

Red25

Essential Energy employees were recognised in the Australian Red Cross Blood Service's NSW State Awards for the Highest Number of Lives Saved in the Corporate Category. Together, Essential Energy employees made 937 donations in NSW in 2016, and saved an estimated 2,739 lives.



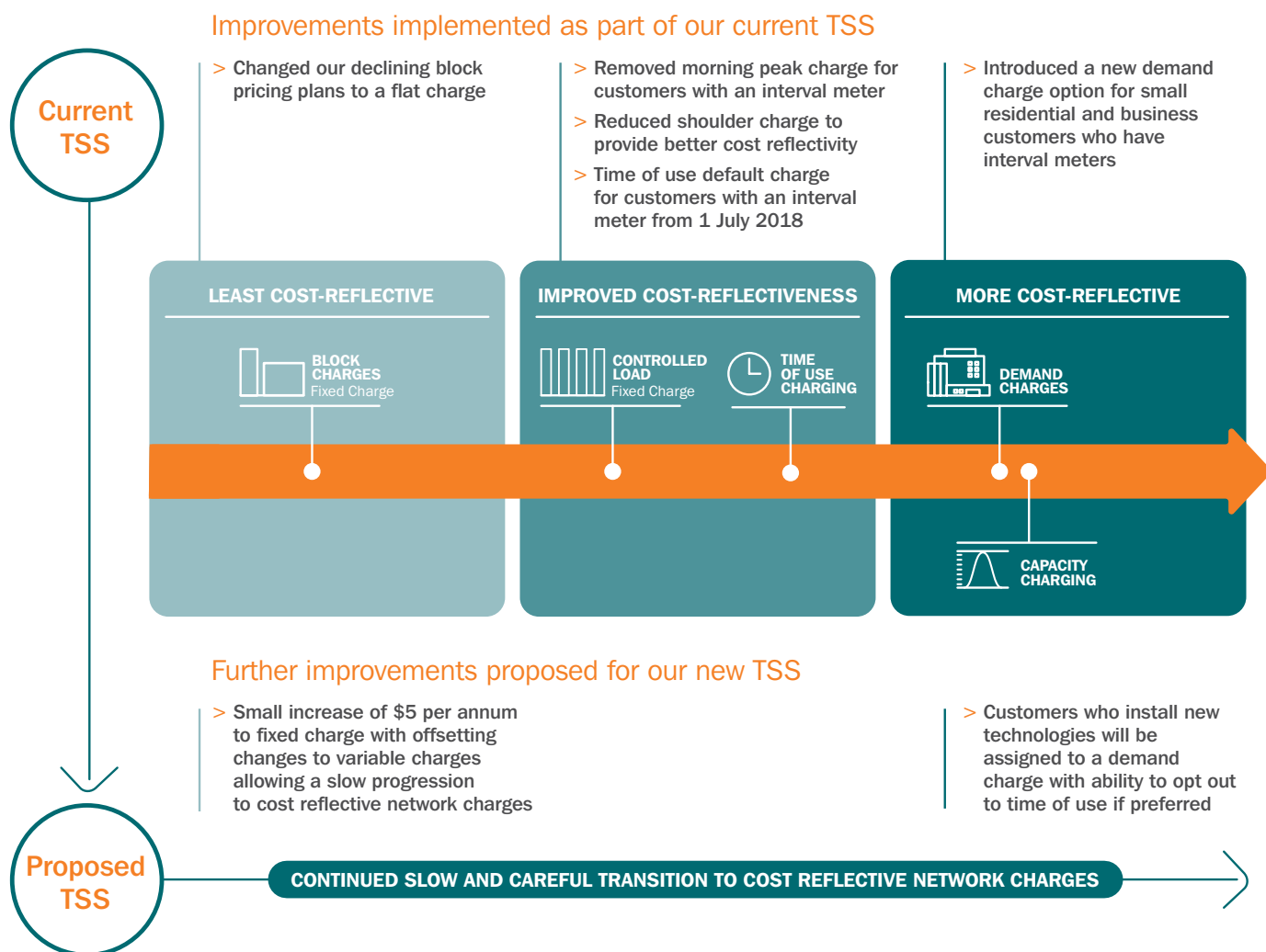
Aviation Safety Award

Essential Energy developed a new powerline marker that was affordable, easy to install and improves visibility. Awarded the Leland Snow Innovation Award from the Aerial Application Association of Australia (AAAA) in recognition of this work

"Make no mistake Essential is leading the country in aviation safety measures and this latest effort is very, very significant"
Phil Hurst, CEO AAAA

Our proposed pricing structures

Our Proposal aims to ‘fine tune’ the pricing structures introduced in our 2017-19 Tariff Structure Statement (TSS) to keep pace with the changing energy market, particularly the increasing volume of innovative technology connections to our network. Our proposed changes have been informed by customers and stakeholder feedback received through our engagement process.





Customer engagement

Customer consultation is at the heart of how we do business. We use safety education programs, social media campaigns and ‘always-on’ customer communications to keep customers informed about what we are doing and get their feedback on our plans.

Recently, we have expanded our activities to encompass a broader range of stakeholders with varying levels of awareness of, and interest in, the electricity system. This has allowed us to better understand our stakeholders’ views about Essential Energy’s services and the value we provide, and the trade-offs they are willing to accept to help lower our costs.

By incorporating customer and stakeholder feedback when planning the capital and operating expenditure for our 2019-24 Regulatory Proposal, we are ensuring our proposed day to day operations will align with the long-term interests of customers. Through education and communication, we also aim to empower our stakeholders to make educated decisions about how they use electricity.

Being clear about how we engage with customers and stakeholders is important. Our engagement framework, which is included with our Regulatory Proposal as [Attachment 4.1](#), has enabled us to tailor a rigorous, comprehensive consultation strategy that ensures all affected and interested stakeholders have the opportunity to influence the Proposal.



A Discussion Paper provided background information about our business and an open invitation to seek opinions on proposed capital, operating and investment decisions

We held interviews, surveys and deliberative forums with customers and stakeholders to understand what matters to them most

Customers identified the key customer values that have fundamentally informed the development of this Regulatory Proposal

We launched Essential Engagement, an online forum for people to ‘Have Your Say’ on key initiatives in our Regulatory Proposal

Customer feedback was shared in the Woolcott Engagement Program Summary Report – Phase 1



Phase 1: Consultation

JAN TO JUN 17

- > Online survey: 752 residential customers and 250 small to medium businesses
- > ‘YourSay’: 34 residents and 4 businesses
- > 11 interviews with large customers and stakeholders
- > 7 deliberative customer forums with 513 attendees and internal and external observers
- > 1 Customer Advocacy Group meeting
- > 1 Vegetation Management Consultation Group meeting
- > 1 Streetlight Consultative Committee meeting

DEEP DIVE

Using a range of engagement activities, deeper consultation was held on customer priorities and issues impacting the Regulatory Proposal

An Engagement Focus Paper was published and used as a tool to support customer consultation and discussion

Customer feedback was shared in the Woolcott Engagement Program Summary Report – Phase 2



Phase 2: Consultation

JUL TO SEP 17

- > Online survey: **754** residential customers and **250** small to medium businesses
- > 'YourSay': **11** residents
- > **16** interviews with large customers and stakeholders
- > **7** deliberative customer forums with **518** attendees with 54% repeat participants and internal and external observers.
- > **2** pricing workshops with **10** stakeholder groups
- > **2** Customer Advocacy Group meetings
- > **1** Streetlight Consultative Committee meeting
- > **4** retailer meetings
- > **1** LED streetlighting meeting with local councils



NOV 17

We refreshed:

Our Vision...
empowering communities to share and use energy for a better tomorrow

Our Purpose...
to enable energy solutions that improve life

1,598
Total number engaged



TESTING

We are testing 'what we heard' and 'closing the loop' by continuing our engagement activities across our footprint in NSW

On 9 February we released our draft Regulatory Proposal for public consultation



Phase 3: Consultation

JAN TO FEB 18

- > Public release of engagement findings and regulatory proposal
- > Draft Regulatory Proposal invitation for feedback
- > YourSay online dialogue
- > **3** "closing the loop" customer forums
- > Survey
- > Employee engagement
- > **1** Customer Advocacy Group meeting
- > **1** Vegetation Management Consultation Group meeting
- > **1** Streetlight Consultative Committee meeting





**AER
SUBMISSION
APRIL 2018**

ONGOING

Our consultation with these advisory groups is ongoing as is our engagement on future plans and activities

Key risks and benefits for consumers

In summary, our proposal provides the following potential risks and benefits to our customers.

Topic	Risks	Benefits
Safety 	<ul style="list-style-type: none"> > We balance investment with safety and risk, but it would be impossible to eliminate all risks. 	<ul style="list-style-type: none"> > Our proposed expenditure plans will continue to provide a safe electricity network.
Affordability 	<ul style="list-style-type: none"> > Incorrect price signals will result in growing cross-subsidisation between customers. 	<ul style="list-style-type: none"> > We will limit real network revenue increases to 1.43%. > We will build on the work of our prior TSS and continue our slow and steady move to more cost-reflective prices.
Reliability 	<ul style="list-style-type: none"> > Balancing service levels with efficient expenditure means customers will still be impacted by outages. 	<ul style="list-style-type: none"> > We will aim to increase average network reliability in the poorer performing areas of our network, whilst maintaining reliability elsewhere.
Innovation 	<ul style="list-style-type: none"> > Not all customers will be able to access new technologies to realise savings. 	<ul style="list-style-type: none"> > Alternatives to traditional network investment can deliver more cost-effective solutions, reducing prices for customers.

Other areas for consultation

Other services Essential Energy provides to customers.

Alternative Control Services are other services where a specific customer pays for services every time we provide them (user pays). For the 2019-2024 regulatory period, we have grouped these services into three classifications.

Alternative Control Services are regulated by the AER, which caps the prices we can charge. We are not proposing any major changes to how we deliver or set prices for them.

We have developed new prices for several ancillary services that are currently unregulated but have been re-classified by the AER as regulated services. These include emergency recoverable works and security lighting.



Public lighting services

- > Over 150,000 streetlights managed on behalf of councils.
- > Charges will be component based providing greater pricing transparency to public lighting customers.



Type 5 and 6 basic metering services

- > Maintenance of the existing basic accumulation meters (type 5 and 6) until they are replaced.
- > Charges will be cost-reflective, fair and simple to administer. For more information: essentialenergy.com.au/poc



Ancillary network services

- > Non-routine user pays services (such as customer connections).
- > Services that we provide to customers on an as-needs basis but are closely related to common distribution services, such as move-in move-out meter reading and services associated with new customer connections.

Have your say

Customers are invited to read our Regulatory Proposal and provide feedback to the Australian Energy Regulator via their website at aer.gov.au or to us directly using one of the communication channels detailed below.

You can provide feedback on our plans in a number of ways:

Email yoursay@essentialenergy.com.au

Post Manager Customer Service
Essential Energy
PO Box 5730
Port Macquarie NSW 2444

Phone 13 23 91

Web essentialenergy.com.au/yoursay

Essential Engagement

engage.essentialenergy.com.au

Sharing your views. Our customer engagement is always on, with many platforms:



Essential Engagement



Email



Twitter



Facebook



Phone



Face to face



SMS



Website



Letters

