Affordable, safe and reliable electricity

An overview of our plans

2014–19
A note to our customers

This booklet is a summary of Essential Energy’s five-year plans for our electricity network, the funding we need to deliver those plans and how it will affect our customers’ electricity bills.

It costs hundreds of millions of dollars a year to maintain and operate Essential Energy’s network and this work is funded by you through your electricity bill.

Every five years, we submit a regulatory proposal to the Australian Energy Regulator (AER), which includes our proposed capital and operating plans and the funding needed to deliver them. The AER reviews our proposal, considers feedback, and decides how much revenue we can recover to fund our operations.

This regulatory proposal reflects our vision and objectives to keep our network safe and reliable and, importantly, aims to ensure that the services we provide our customers are affordable. This proposal also differs from previous regulatory proposals. It is based on a concerted effort to engage with and listen to our customers so that we can better match our plans with your long term interests.

We know from our discussions with customers that the price increases of the past could not continue. We learned that you are generally happy with levels of network reliability and do not want to pay for extra improvements. We also confirmed that safety should continue to be a priority.

I am pleased to report that this regulatory proposal reflects those wishes. It sets out plans to keep network electricity prices below the consumer price index (CPI), or the rate of inflation, for the next five years. It includes our plans to maintain network reliability and improve safety for our people and the public.

These improvements to our plans and operations are driven by the NSW Government’s reforms to the network electricity businesses, which were designed to ease the pressure on household budgets by keeping future electricity prices as low as possible.

We will continue to engage with our customers and stakeholders over the coming year on this proposal and hope to submit a final revised proposal in January 2015 after considering more feedback from you.

Vince Graham
Chief Executive Officer

These five values are the basis for everything we do.

**Safety excellence**
We take responsibility for safety excellence.

**Respect for people**
We believe in respect for people.

**Customer and community focus**
We honour our commitment to customers and communities.

**Continuous improvement**
We are committed to continuous improvement.

**Act with integrity**
We always act with integrity.
About Essential Energy

Essential Energy is responsible for building, operating and maintaining Australia’s largest electricity network. Our electricity network serves approximately 815,000 customers. Geographically, our footprint area covers 95 per cent of NSW including humid coastal environments in the north coast region, semi-arid desert in the far west, alpine peaks in the south and a grain belt that crosses central NSW from north to south.

A vast network spread across a range of environments presents unique and ongoing challenges. Essential Energy’s core focus is on ensuring the safe, affordable and reliable delivery of essential services to homes and businesses across regional NSW. We are committed to delivering better value for our customers by reducing our costs without compromising safety or services.

Essential Energy maintains and builds the poles and wires you see every day. We also read your electricity meter, put cables underground, ensure tree branches aren’t too close to our network and restore power after an unplanned outage.

Our network includes:
- > 200,000 kilometres of powerlines and cables
- > 1.4 million power poles
- > 150,000 streetlights
- > 135,000 substations
- > 400 zone substations.

The electricity network

TRANSMISSION LINES
Carry electricity long distances

HIGH VOLTAGE DISTRIBUTION LINES
Carry high voltage electricity to consumers

LOW VOLTAGE DISTRIBUTION LINES
Carry low voltage electricity to consumers

CUSTOMERS
Homes, offices and farms use electricity for lighting and heating and to power appliances

POWER PLANT
Generates electricity

GENERATION TRANSFORMER
Converts low voltage electricity to very high voltage for efficient transport

ZONE SUBSTATION TRANSFORMER
Converts high voltage electricity to low voltage for distribution

KEY:
- Essential Energy

Your bill

Operating, building and maintaining your electricity network costs millions of dollars every year. When combined with transmission network charges, our electricity network charges make up about 50 per cent of your bill. On average, customers’ electricity bills are made up of the components shown here.

- Transmission 6%
- Distribution (Essential Energy) 43%
- Climate change levy 1%
- Generating and buying electricity 20%
- Carbon price and State and Federal Government green schemes 15%
- Retailer 15%
Essential Energy has approximately 815,000 customers including households, small businesses and large business.

We have a solid history of engaging with our customers through a number of ways such as safety education programs, social media campaigns, and customer communications about what we are doing on the network, as well as asking dedicated customer groups what they think about our plans.

Talking and listening is key to understanding the concerns of customers and stakeholders to ensure that, as a State Owned Corporation, our plans align to the needs of our customers for the 2014-19 regulatory control period.

As we prepare our plans for capital and operating expenditure, we have increased our depth and range of engagement to enable us to align the long term interests of consumers in line with the way our business operates on a day to day basis.

We think that being clear about the way we will engage with our customers and stakeholders is important, and we have utilised a framework that outlines our customer and stakeholder engagement process.

Informing means providing information and education that is relevant and timely for all customers and stakeholders. We do this on our website, through traditional media channels like press and letters to customers, and via social media.

Consulting is about getting feedback from customers and stakeholder groups so we can consider all the alternatives when we make decisions. This means we do research and ask customers and stakeholders questions through surveys and polls on social media.

Involving customers ensures customer concerns and objectives are understood and considered. We do this through meetings with our customers and stakeholders to discuss key issues or projects on the network.

Collaborating with the public to make decisions is about understanding the risks and benefits of alternatives with regard to the preferred solution. We meet with our Customer Council and Rural Advisory Group on a regular basis to listen, understand and act on concerns.

Empowering means placing the final decision in the hands of the public. Essential Energy is not able to truly empower our customers as our business is highly regulated and subject to a number of legal requirements around safety and licence conditions.
Our framework ensures customers know what to expect and how we will deliver when it comes to customer engagement.

While we can’t empower our customers, we can provide better education, customer communication, take advice on where we can improve and explain how and why we are funding projects and operating expenses on the network.

While developing our plans for the 2014–19 regulatory control period we conducted a research program comprising 1013 customer surveys and eight focus groups across our network area.

This large research program identified six clear customer values that told us what customers want from Essential Energy. In response to this, we have enhanced our developed tools to respond to these values. What customers said and what we are doing about it is explained in the table below:

<table>
<thead>
<tr>
<th>Customer Value</th>
<th>Response</th>
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<tbody>
<tr>
<td>I expect you to be there when I need you</td>
<td>Customer engagement: Customer service is there when it is needed.</td>
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<tr>
<td></td>
<td>&gt; We have a call centre available 24 hours a day, seven days a week to answer customer questions and provide service</td>
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<td></td>
<td>&gt; We have dedicated social media and online feedback forms to ensure customers can contact us how they like</td>
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<td></td>
<td>&gt; We are working on new customer communication tools to make it even easier to contact us when you need to.</td>
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<td>I want information to plan and make decisions</td>
<td>Outage management: Outages are less intrusive.</td>
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<td></td>
<td>&gt; Where it is safe to do so, we utilise live line crews to maintain the network</td>
</tr>
<tr>
<td></td>
<td>&gt; We are meeting our reliability targets set in licence conditions</td>
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<tr>
<td></td>
<td>&gt; We send you letters to let you know when we need to have an outage to work on the network</td>
</tr>
<tr>
<td></td>
<td>&gt; We bring in crews from neighbouring depots to get jobs done safely and efficiently.</td>
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<tr>
<td></td>
<td>&gt; The communication tools we are working on aim to make it easier to find out about outages in your area.</td>
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<tr>
<td>I need confidence in my electricity supplier</td>
<td>Reliability: Maintain reliability at current levels. Ensure no feeder falls below minimum standards.</td>
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<tr>
<td></td>
<td>&gt; We plan to maintain our current level of reliability</td>
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<tr>
<td></td>
<td>&gt; We have a program that ensures we work on the areas with poor reliability to provide a better service to customers no matter where they live.</td>
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<tr>
<td>I expect my prices to be fair</td>
<td>Affordability: Network prices are contained.</td>
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<tr>
<td></td>
<td>&gt; We will strive to contain the network component of electricity prices to CPI over the next five years</td>
</tr>
<tr>
<td></td>
<td>&gt; We are making productivity and efficiency gains as well as reducing capital and operating expenses.</td>
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<tr>
<td>I need the knowledge and tools to make a difference</td>
<td>Demand management: Customers are making educated and informed decisions.</td>
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<tr>
<td></td>
<td>&gt; We provide education on the services we provide</td>
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<td></td>
<td>We will ensure that the information we provide is relevant, timely and accessible for our customers.</td>
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<tr>
<td>You should be doing more to protect the vulnerable</td>
<td>Hardship: Sustainably reduce disconnections for non-payment.</td>
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<tr>
<td></td>
<td>&gt; We are following legislation that ensures we don’t disconnect customers at certain times</td>
</tr>
<tr>
<td></td>
<td>&gt; We are working with retailers to examine options for disconnections for non-payment.</td>
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</table>
Sharing your views

We have provided a wide range of tools to ensure you can always contact us or share your thoughts on what we do. In 2013 we launched a Facebook page with Endeavour Energy and Ausgrid called Your Power, Your Say. We have utilised this page to ask customers specific questions and gather insights and information from customers about what we do and our plans for the future.

We asked customers questions about prices, reliability, vegetation management, solar power and street lights. We were also able to provide education and more information about these topics to our followers.

Alongside this, Essential Energy has a dedicated Facebook page and Twitter account that we monitor and update. From these channels, it is clear that customers want real-time information about unplanned supply interruptions as well as work that is scheduled in local areas.

Our website and social media channels have been key to providing safety information including what to do during storms, fires and floods as well as safety information for farmers involved in cotton and wheat harvesting. This ensures we maintain our focus on safety for our employees, and the public when working near the electricity network.

We also integrate social media and online platforms with traditional media like press and radio to make sure that all customers can access information in a way that suits them.

In the long term, we will use your feedback to:

> understand the customer lifecycle and preferred communications methods
> offer more real-time communications channels during unplanned outages
> use technology to deliver safety, planned supply interruption information and updates about programs like aerial inspection and vegetation management.

All the feedback we receive from you provides us with valuable insights to inform our plans and make sure we address your concerns. Sharing your views is important to us, so please keep us informed. You will find our contact details on the back of this booklet.
Customers’ network charges are mostly variable, based on how much electricity is used, on an inclining scale. This means the more you use, the higher your bill will be.

In the future, we expect that customers who can afford technology such as solar and battery storage can avoid variable electricity charges. We expect these customers would generally be home owners with disposable income.

With our current charging structure, those who can’t afford technology will end up paying more to cover the fixed costs of supplying electricity. These are likely to be renters, and people on low and fixed incomes, which creates a real equity issue.

We are starting to discuss other options with key groups and customers. These could include looking at lower variable charges or a declining block structure, to keep bills more stable and predictable over time.

Regardless of the outcome, we will strive to keep our share of prices to CPI or less for the next five years.

Our five-year plans: electricity charges

Essential Energy’s plans for the next five years are set firmly around our objectives to make the network safe, reliable and affordable for our customers. To achieve these objectives, we are proposing network electricity price increases that are less than CPI. We are proposing a large reduction in capital spending and operational spending increases that are also below the rate of inflation.

Our network investment and reliability management plans are built on the assumption of maintaining existing levels of reliability, while continually making our network safer.

Future electricity charges – no increases above CPI

Network electricity charges make up about half of the electricity bill that you receive in the mail and, over the past five years, this was the fastest rising component of your electricity bill.

Over the next five years Essential Energy is proposing to increase its share of electricity charges by 2.30 per cent. This will mean that network electricity prices would increase at 0.20 per cent below CPI.

If the AER accepts our total five year proposal, we estimate this would add about $154.48 to the electricity costs of a typical home by July 2019.

The NSW Government began a network reform program on July 1, 2012. Its aim was reduce duplication across the three network businesses in NSW, including Essential Energy, so that future network electricity charges could be kept to CPI or below for this five-year period. This reform program has helped to deliver this turn around in network electricity charges for the benefit of our customers and the communities we serve.

Future challenges

One of the challenges facing Essential Energy and the electricity industry generally is how to keep charges stable in the longer term because the historic price structures don’t reflect our costs.

This means we are re-thinking how we should charge for electricity in the future, and have started to discuss this with consumer groups.

The challenge is this: most of the costs to run an electricity network are fixed. However we only recover a small proportion of those costs through the fixed daily charge.

Movement in our share of electricity bills (nominal %)

Past and proposed average household price increases

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</tr>
</thead>
<tbody>
<tr>
<td>Dollar change</td>
<td>$116</td>
<td>$152</td>
<td>$191</td>
<td>$201</td>
<td>$-29</td>
<td>$30</td>
<td>$30</td>
<td>$31</td>
<td>$32</td>
<td>$32</td>
</tr>
<tr>
<td>Percentage change</td>
<td>17.76%</td>
<td>19.72%</td>
<td>20.75%</td>
<td>18.14%</td>
<td>-2.23%</td>
<td>2.30%</td>
<td>2.30%</td>
<td>2.30%</td>
<td>2.30%</td>
<td>2.30%</td>
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Past increases 2009–14

Proposed increases 2014–19
What we need to serve you

The amount of revenue the AER allows Essential Energy to collect from its customers to fund the safe and efficient operation of its network has a direct impact on customers’ electricity bills.

During 2009–14, the AER allowed Essential Energy to collect $6.1 billion in revenue to help fund electricity network renewal and upgrade to replace old equipment meet increasing peak demand for power and meet new standards introduced by the government.

It was also required to help pay increased borrowing costs brought about by the Global Financial Crisis in 2009.

These pressures on our operations have decreased, and combined with the NSW Government’s network reform program, this has meant our revenue requirements have stabilised.

For the next five years, our total revenue request is $7.1 billion.

The amount of revenue we can recover from customers depends on how the AER calculates the rate of return on our investment in the network. The rate of return determines how much of our plans we can deliver while allowing a responsible return to the NSW Government to support other services such as schools and hospitals. The rate of return is called the Weighted Average Cost of Capital (WACC).

We have based our revenue request on a rate of return of 8.83 per cent because we believe it allows longer term stability for our network. The AER may decide on a different rate of return and therefore a different revenue amount.

The AER considers all aspects of our proposals and decides how much funding we are allowed to recover.

How do we propose to spend our revenue?

Essential Energy breaks down its costs into capital expenditure, operational expenditure, borrowing costs and funding required to pay a return to our shareholder, the NSW Government.

Our capital program will reduce from $4.2 billion approved by the AER for 2009-14, to a proposed $2.8 billion for the next five years – a reduction of 33 per cent, which is 41 per cent below the CPI.

We are proposing to invest in core network programs that are designed to maintain the reliability of our network and improve areas where the network has reached the end of its life to ensure we provide a safe and reliable power supply for your home or business.

Although electricity consumption is falling, there are still parts of the electricity network that need to be upgraded to provide more capacity. This includes areas where housing estates are growing, like the north and south coast regions of NSW.

Our operating program will increase from $2.3 billion approved by the AER from 2009-14 to a proposed $2.8 billion for the next five years – an increase of 25 per cent, which is an 11 per cent increase above CPI.

These costs are largely driven by the cost of removing vegetation around powerlines to keep our network safe and reliable. It is also impacted by external factors like the decisions of industrial relations.

This graph compares the revenue we collected from 2009-10 to 2013-12, the past regulatory period. It shows the planned revenue.

Past and future revenue ($bn nominal)

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual/estimated</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009-10</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>2010-11</td>
<td>1.4</td>
<td>1.4</td>
</tr>
<tr>
<td>2011-12</td>
<td>1.6</td>
<td>1.6</td>
</tr>
<tr>
<td>2012-13</td>
<td>1.8</td>
<td>1.8</td>
</tr>
<tr>
<td>2013-14</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>2014-15</td>
<td>2.2</td>
<td>2.2</td>
</tr>
<tr>
<td>2015-16</td>
<td>2.4</td>
<td>2.4</td>
</tr>
<tr>
<td>2016-17</td>
<td>2.6</td>
<td>2.6</td>
</tr>
<tr>
<td>2017-18</td>
<td>2.8</td>
<td>2.8</td>
</tr>
<tr>
<td>2018-19</td>
<td>3.0</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Real reduction in capital program 41%
Real increase in operating costs 11%
While we strive to contain average prices to below CPI, there is still work that needs to be done to keep the network safe and reliable.

During the 2009-14 regulatory control period, our investment strategy focused on improving reliability and catering for growth in the network. Our customers have recognised the improved levels of reliability in our network over the last decade but indicated that future improvements in reliability were not required, particularly not at the expense of higher prices.

Compared with 2003, customers today experience approximately 60 minutes less interruption time per year. The frequency of interruptions has also decreased by 26 per cent, to approximately two outages per year.

Due to customer feedback, our expenditure plans will focus on maintaining the current level of reliability to ensure it does not deteriorate.

We will still invest in the poor performing areas of the network to improve the service of those who experience below average levels of reliability.

We will also invest in projects that improve the safety of the network and replace assets such as powerlines, powerpoles, transformers and circuit breakers that are at the end of their life.

We will spend a modest amount on increasing capacity in areas where peak demand is increasing such as new suburbs and industrial estates.

The biggest cost to our operating expenses over the next five years is vegetation management. Vegetation growing close to and over powerlines is a bushfire risk and also causes trees to come into contact during windy or stormy weather. We have guidelines in place to ensure vegetation is managed to safe clearance zones.

Periods of drought and then significant rainfall in certain parts of the state saw vegetation grow at rates we had never seen before. We are now working on ensuring our network is safe and vegetation is managed efficiently and effectively.

All other operating expenditure categories will remain stable whilst ensuring the quality and safety of the network do not deteriorate. To do this we will do annual inspection programs and carry out maintenance and repair assets to extend their life.

Operating expenses also include the cost of responding to network damage caused by incidents like storms and wind.

More information on current network projects can be found at essentialenergy.com.au/snapshot.
**Other customer services**

Essential Energy also provides a number of other services to customers that are outlined in our proposal.

**Metering**

**Existing meters**

The AER has changed the way we must charge customers for their meters and the services we provide to maintain, read and manage data from them.

Metering charges have always been included in your network charges, with the costs spread evenly across all customers.

The AER has unbundled the charges for some metering services to promote competition, allow more customer choice and remove subsidies between services. The costs of metering services will now be more transparent and may appear separately on the bill you receive from your retailer.

The majority of our customers have basic accumulation meters. We propose to recover the existing capital and maintenance costs for this metering service, and propose an average of $50.73 per year, during 2014-19, for the average residential customer.

**New meters**

When a customer needs a new meter – such as meter upgrade due to renovations, an additional meter or a new meter at a new site – the cost of that meter will be added to the installation cost customers currently pay up front to their electrician or Accredited Service Provider.

This is already the case for non-standard meters (eg for solar installations) so that other customers do not subsidise services requested by an individual customer.

Customers will now also pay an exit fee when they change meters to cover the stranded costs of their old meter. This fee will be paid via your Accredited Service Provider. The average exit fee during 2014-19 is proposed to be $117.43 for the average customer.

**Other network services**

The AER has also unbundled a range of other services, called ancillary services, which will now be charged on a user-pays basis. Ancillary network services are non-routine services provided to customers on request.

Examples include:

> meter readings outside the normal cycle
>
> reviewing designs for large commercial customers who need to connect to our network.

More information and charges for these services can be found at essentialenergy.com.au/ourplans.

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**Streetlights**

Essential Energy manages approximately 150,000 streetlights on behalf of local councils, with the costs recovered from councils. The number of public lights in Essential Energy’s area is forecast to grow to over 160,000 lights by 2018–19.
Benefits and potential risks

Our proposal provides the following benefits and potential risks to our customers.

Benefits

- **Stable prices** – We strive to keep average price increases to our share of customers’ electricity bills at or below CPI for five years.
- **Reliability** – We propose to maintain network reliability.
- **Safety** – Our capital and operating plans aim to deliver programs that create a safe and sustainable electricity network for the communities it serves.
- **Clarity of costs** – We are giving customers greater transparency about how much they pay for metering.
- **New growth areas** – Electricity infrastructure for new growth centres will foster local economic development.
- **Remove cross-subsidies** – Customers who don’t use specific services (such as special meter test readings) will no longer subsidise those who do.

Potential risks

- **Volatility** – If energy use is lower than forecast, a revenue cap may result in customers paying more than we propose.
- **Reduced reliability** – If our capital program is not approved, we may need to postpone projects which could make the electricity supply less reliable in some areas.
- **Future prices** – If our forecasts for economic growth, asset condition and customer connections are not approved, we may need to spend more than our AER allowance to address unexpected issues. This could add to customer prices in 2020–24.
- **New rules** – Customers who request a special service may now pay considerably more as the AER has said these services cannot continue to be subsidised by our general customer base.
Have your say

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

> Contact us directly via the details at the bottom of this page
> Join the conversation on Facebook at facebook.com/yourpoweryoursay
> Submit your feedback directly to the AER at aer.gov.au.

What happens next?

> Customer feedback to the AER on the regulatory proposal closes in August 2014
> The AER will provide a draft determination on Essential Energy’s regulatory proposal in November 2014
> In January 2015, we will respond with a revised regulatory proposal that takes your feedback into account as well the feedback from the AER
> Final plans and proposed charges will then be published on 30 April 2015
> In the meantime, we will also look at any feedback to determine whether it can help us improve our day-to-day operations or procedures.

Contact us

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Supply interuptions 13 20 80
Interpreter services 13 14 50

essentialenergy.com.au/ourplans

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