AFFORDABLE, SAFE AND RELIABLE ELECTRICITY

An overview of our plans 2014–19
A NOTE TO OUR CUSTOMERS

Our key objectives:

• Safety
  continuously improving safety performance for employees, contractors and the public.

• Affordability
  strive to contain average increases in our share of customers’ electricity bills at or below CPI.

• Reliability
  ensure the ongoing reliability and sustainability of the network.

This booklet is an easy-to-read summary of Endeavour 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 our network and this work is funded through your electricity bill.

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

This regulatory submission reflects our vision and objectives to keep our network safe, reliable and affordable for our customers. It also reflects a more concerted effort by us to engage with our customers so that we can better match our plans with your long term interests.

We know from our discussions with customers that price increases of the past needed to end. We also understand that most customers are happy with reliability and do not want to pay for extra improvements. We also confirmed that you expect safety to be our continuing priority.

I am pleased to report that this proposal reflects these wishes. It sets out plans to keep our network electricity charges at or below CPI, or the rate of inflation, for the next five years. It includes our plans to improve safety for our people, our contractors and the public and maintain a reliable network.

These improvements are the result of two things. Firstly, Endeavour Energy’s concerted efforts over the past five years to do all we can to end rising network charges and build customer value. This efficiency program has generated $164m in savings over the past five years and progressively lowered network price increases for Endeavour’s customers since 2012.

Secondly, the NSW Government’s reforms to network electricity businesses announced in March 2012, designed to ease the pressure on households by keeping future network prices as low as possible.

We will continue to engage with you on this proposal and plan to submit a final revised proposal in January 2015 after considering more feedback from you.

Vince Graham
Chief Executive Officer

Our 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
THE ELECTRICITY NETWORK

About Endeavour Energy
Endeavour Energy’s network spans 24,500 square kilometres across Sydney’s Greater West, the Blue Mountains, the Southern Highlands, and the Illawarra and South Coast. Around 2.2 million people depend on us every day for a safe and reliable electricity supply.

We power some of the fastest growing regional economies in NSW, including Sydney’s North West and South West Growth Centres – areas earmarked by the NSW Government for future housing.

Between them, these Centres cover 27,000 hectares and will become home to more than 500,000 people in more than 180,000 dwellings, in areas similar in size to Wollongong and Canberra.

We’re preparing to meet this extra growth and maintain our existing network by investing responsibly and efficiently in our network over the next five years.

Endeavour is responsible for maintaining and modernising its network of substations, poles and wires. We also read and maintain your electricity meter, restore power after storms, keep trees away from power lines and maintain streetlights for councils.

We manage more than:
- 170 major substations
- 30,000 distribution substations
- 35,000km of power lines and
- 413,000 power poles.

Endeavour Energy is a network, or ‘poles and wires’ business, with assets valued at $5.6 billion. Our job as a ‘poles and wires’ business is to deliver electricity safely and reliably to customers’ premises.

Your bill
Operating, building and maintaining the electricity network costs millions of dollars every year. When combined with TransGrid’s charges, network charges make up about 46% of your bill. On average, customers’ electricity bills are made up of the components shown here.

- Transmission (TransGrid) 7%
- Distribution (Endeavour Energy) 39%
- Climate change fund levy 4%
- Retailer 15%
- Carbon price and State and Federal Government green schemes 15%
- Generating and buying electricity 20%
Around 908,000 customers are connected to Endeavour Energy’s network. Most of our customers are households and small to medium businesses located in urban and surrounding rural areas. We also serve large urban centres, medical precincts, and manufacturing and industrial customers who have specific needs for a safe and secure electricity supply.

Endeavour Energy’s long standing commitment to customers and stakeholders means your feedback and views have shaped our operations for many years.

In 2013, we developed our most comprehensive engagement program to date to encourage customers and stakeholders to better understand our business and have a significant say in how we operate.

This involved four phases shown below. We’ve used this process to better align our operations with customers’ long term priorities. We plan to review the effectiveness of this approach and embed customer engagement in our day to day operations.

Our engagement framework

Research
Understand customers’ needs and preferences, engage customers in setting priorities.

Education
Inform customers and provide support and channels to address knowledge gaps.

Consultation
Involve customers in developing network strategies and plans and regulatory submissions.

Review and embed
Inform customers on progress and embed engagement in day-to-day operations.

Our engagement approach

Our engagement approach is based on best practice community engagement principles set out by the International Association of Public Participation. We’ve used these principles since 2008 for other community engagement projects and have used them again to:

• inform customers about our work
• consult customers on issues where there are different opinions and choices
• involve customers in shaping our plans and services through research, consumer forums and product trials
• collaborate with stakeholders and consumer representatives on issues of broad concern, including how we charge for street lighting and how we charge for electricity.
How we sought your views
As part of our engagement plan, Endeavour Energy:
• conducted quantitative and qualitative research with more than 900 residential and 300 small to medium business customers via surveys and focus groups
• extended the reach of our engagement program through an innovative Facebook campaign designed in conjunction with Ausgrid and Essential Energy
• analysed two years of existing customer research including our complaints and compliments data, our quarterly customer satisfaction reports, our energy efficiency product trials, and media and Energy & Water Ombudsman of NSW (EWON) reports
• held two interactive workshops in Penrith and Wollongong attended by 99 residential and small business consumers on priority customer issues
• met with a small group of peak consumer representatives at a joint Networks NSW forum to identify issues of concern and begin a discussion on the need to reform electricity tariffs
• presented plans to contain street lighting charges to CPI by meeting separately with 18 local councils in addition to our regular six monthly visits to monitor council satisfaction on our street lighting service
• met with retailers at an industry-wide forum
• wrote to retailers, industry associations, chambers of commerce, Local Government, Members of Parliament and other community stakeholders seeking feedback on our electricity plans and prices
• promoted our plans to contain our share of bill increases through metropolitan and regional media and invited feedback from customers and stakeholders
• informed Endeavour Energy’s Customer Consultative Committee about the key themes and priorities emerging from our engagement sessions
• met with the AER’s Consumer Challenge Panel to respond to questions about our proposed plans
• shared our plans and presentations via our website in the interests of broader transparency.

Our website contains detailed reports on our main engagement activities. See endeavourenergy.com.au/ourplans

Your priorities
After we conducted our initial research, we were pleased to see how closely customers’ priorities aligned with our proposed plans in our regulatory submissions. The main issues of concern to both residential and business customers, in priority order, were:

Customer priorities

1. Pricing and affordability
2. Reliability
3. Safety
4. Implementing energy efficiency programs
5. Supporting vulnerable households

The question we asked:
We would like you to rank these by how important you feel they are for Endeavour Energy to spend money on.
Base: n=901 residential customers; n=300 business customers
Ref: Customer engagement study August 2013

“I’m happy with what Endeavour does; they appear to be working towards keeping costs down to a minimum and passing on the savings to the consumer.”
Source: Consumer at Penrith forum
Here is a snapshot of your priority issues and what we’re doing about them.

<table>
<thead>
<tr>
<th>You said...</th>
<th>A snapshot of what we’ll do</th>
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</table>
| **Pricing and affordability**                                             | • Continue our productivity and efficiency programs which delivered a real decrease in network electricity charges for the first time in a decade in July 2013.  
• Limit increases in our share of electricity bills to CPI for the next five years. |
| “Anything Endeavour can do to keep costs down is welcome”                 |                                                                                           |
| • Customers want stable, affordable electricity with no steep increases    |                                                                                           |
| **Reliability and outages**                                              | • Maintain our current level of reliability and improve areas with poorest reliability.  
• Introduce a new mobile site to give you live outage information  
• Investigate improved notifications using SMS and smart phone apps and review our written interruption notices. |
| “We’re living in a first world country and paying for a service”           |                                                                                           |
| • Most customers rate Endeavour Energy’s level of reliability as very good  |                                                                                           |
| and don’t want to pay more for a better service. Nor are they prepared to  |                                                                                           |
| pay less for poorer reliability.                                          |                                                                                           |
| • Customers also asked us to improve how we notify customers about outages|                                                                                           |
| and improve content too.                                                 |                                                                                           |
| **Safety**                                                               | • Improve our safety programs for our staff and contractors.  
• Maintain our road side pole ‘black spot’ relocation program, continue our public safety education program and expand its reach via social media. |
| “I expect safety to be a big priority for such an essential service.”     |                                                                                           |
| • Customers don’t want safety and reliability standards to be compromised,  |                                                                                           |
| even for lower prices.                                                    |                                                                                           |
| **Energy efficiency and demand management**                              | • Provide low cost, accessible tools on our new website.  
• Promote our demand management programs for large customers.  
• Maintain our efficiency programs to help keep increases in our share of customers’ bills at or below CPI. |
| “I’ve already done a lot to reduce my energy bill and welcome information  |                                                                                           |
| and tools to help manage my electricity use”                             |                                                                                           |
| • Customers appreciate advice on how to keep costs low but were generally  |                                                                                           |
| unwilling to compromise their lifestyle.                                  |                                                                                           |
| **Supporting vulnerable customers**                                       | • Continue our conversation with consumer groups to rethink the way we charge, so that those who can’t afford it are not paying for those who can.  
• Review our services for vulnerable customers, particularly life support customers. |
| “...it’s important, yes, but my priority is containing my bill”           |                                                                                           |
| • Customers recognised the need to keep electricity affordable for the     |                                                                                           |
| most vulnerable but did not think it was Endeavour Energy’s role.         |                                                                                           |
| **Customer satisfaction and service**                                    | • Renew our focus on customer service and develop new customer service apps for street lighting and graffiti reporting.  
• Design a new, customer focused website and mobile site. |
| “Why can’t you keep the lights on...I’m paying a lot for this service”    |                                                                                           |
| • Customer satisfaction is strongly linked to satisfaction with reliability.  |                                                                                           |
| The more frequent the outages, the lower the satisfaction. Many customers  |                                                                                           |
| expect us to also make good use of customer friendly apps and drive        |                                                                                           |
| improvements to customer service.                                         |                                                                                           |
| **Construction designs and standards**                                    | • Keep designing substations to blend with residential streets but spend less on design in industrial areas to save money.  
• Remind our staff and contractors to leave streets, construction and work sites tidy. |
| “I want substations to look good if they are in my neighbourhood and for  |                                                                                           |
| them to be secure”                                                       |                                                                                           |
| • Customers want attractive streetscapes, well designed infrastructure,  |                                                                                           |
| tidy streets and construction sites. Failure do this lessens satisfaction. |                                                                                           |
| **Vegetation management**                                                | • Continue to reduce safety hazards by trimming trees. We’ll work with councils to promote planting of appropriate species in overhead areas and we’ll leave work sites tidy. |
| “I understand you need to trim trees for safety but I don’t always like the |                                                                                           |
| result”                                                                  |                                                                                           |
| • Customers asked that we educate councils and residents about more        |                                                                                           |
| appropriate plantings.                                                   |                                                                                           |
| **Metering technology**                                                  | • Keep accumulation meters as our standard meter as they’re the cheapest. We’ll also give customers the choice to pay for smart meters if they’d like extra functionality. |
| “I want tools to keep costs down but I don’t want my old meter replaced   |                                                                                           |
| with a smart meter”                                                      |                                                                                           |
| • Customers want to know how to reduce their bill, but they want to retain |                                                                                           |
| control and not compromise lifestyles.                                    |                                                                                           |
| **Communication, education and engagement**                              | • Expand the reach of our information and education programs through better use of social media, targeted communication to affected stakeholders and by leveraging our relationship with other stakeholders.  
• Review the success of our engagement program and work to embed engagement processes in our day to day business. |
| “I don’t know a lot about Endeavour Energy and its programs – you need to |                                                                                           |
| do more to educate your customers”                                        |                                                                                           |
| • Awareness of Endeavour Energy was very low before engagement sessions.  |                                                                                           |
| Many thought we are privately owned and that was why prices had increased.  |                                                                                           |
| Customers also suggested more communication programs to educate customers. |                                                                                           |
OUR FIVE-YEAR PLANS: ELECTRICITY PRICES

Electricity prices
Endeavour Energy’s plans for the next five years are set firmly around our objectives to make the network safe, reliable, sustainable and affordable for our customers. To achieve these objectives we are limiting increases in our network charges at or below CPI. We’re also proposing reductions in capital investment 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.

Future charges – no increases above CPI
Network electricity charges make up about half of the electricity bill that you receive. Over the past five years it was the fastest rising component of your electricity bill. (See the table below.)

Over the next five years, Endeavour Energy is committed to keeping increases in our share of customers’ electricity bills to no more than inflation (2.5%). That means a real reduction in electricity charges. If the AER accepts our total five year proposal, we estimate it would add an annual increase of about $8 to the electricity costs of a typical home up to June 2019.

If approved by the AER, from next year our share of average annual household electricity bills will increase by 1.2% and remain below CPI for the five years to 2019.

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

This means we are thinking about 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.

However, network charges to customers 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 pricing structure, those who can’t afford technology will end up paying more to cover the fixed costs of supplying electricity. This is likely to be renters, and people on low and fixed incomes, which is a real equity issue.

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

As we continue to discuss this important challenge, our goal is to keep our share of customers’ bills to CPI or less for the next five years.

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**Actual and proposed changes in an average household bill**

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</tr>
</thead>
<tbody>
<tr>
<td>Dollar change</td>
<td>$65</td>
<td>$64</td>
<td>$85</td>
<td>$31</td>
<td>$1</td>
<td>$7</td>
<td>$8</td>
<td>$8</td>
<td>$8</td>
<td>$8</td>
</tr>
<tr>
<td>Percentage change</td>
<td>17.8%</td>
<td>15.0%</td>
<td>17.3%</td>
<td>5.4%</td>
<td>0.1%</td>
<td>1.2%</td>
<td>1.2%</td>
<td>1.2%</td>
<td>1.2%</td>
<td>1.2%</td>
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Impacts are nominal changes for a residential customer consuming 5MWh pa and are for the distribution component of the network bill.

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The amount you pay in network electricity charges directly impacts how much revenue Endeavour Energy collects to fund the safe and efficient operation of the network.

From 2009–14, the AER allowed Endeavour Energy to collect $4.9 billion in revenue to help fund a large expansion and renewal of the electricity network. This was needed to replace old equipment, meet increasing peak demand for power and to meet new standards introduced by the government in 2005 and revised in 2007.

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 and their new reliability standards, this has meant we do not require increasing amounts of revenue.

For the next five years, our total revenue request is $5.3 billion compared to $4.9 billion over the previous five years, a real decrease of 5% below the forecast CPI.

The AER looks at all aspects of our proposals and will make a draft determination in November 2014 and a final determination in April 2015.

How do we propose to spend our revenue?

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

Our capital program will reduce from $3.0 billion approved by the AER for 2009 to 2014, to a proposed $1.9 billion for the next five years – a reduction of 36% which is 43% below the forecast rate of inflation.

We’re proposing to invest this $1.9 billion on growth and the replacement of material assets that are at risk of failing, which could result in loss of supply, safety issues, and environmental problems. This includes large substations, the cables that connect them and the power lines and power poles or distribution centres that allow us to safely power 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 set aside for residential growth in the two Growth Centres in North West and South West Sydney.

Over the next five years we also need to invest in capital equipment that supports the operation of our network. This includes electricity meters, property to build new substations or depots and IT systems and large trucks and equipment.

Our operating costs will increase slightly from $1.6 billion approved by the AER from 2009-14 to a proposed $1.8 billion for the next five years – this is a real decrease of 2% below the forecast CPI.

These costs are largely driven by the cost of removing vegetation around power lines, particularly in bushfire-prone areas of our network. This costs us $65 million each year.

It is also driven by the maintenance required for our network, including the need to respond to network damage caused by incidents and storms, and network breakdowns or routine repairs.
Our investment strategy will focus on:

- **Renewal** - $923 million
- **Growth** - $429 million
- **Reliability** – $65 million.

**Renewal**

Our renewal program is aimed at replacing network assets at the end of their service life in a planned and efficient manner.

This means we will be replacing transformers, circuit breakers, power lines and other equipment throughout our network based on their condition and serviceability.

This investment is focused on maintaining reliability and making sure assets remain in good condition so that we achieve a sustainable level of network investment, rather than a ‘boom-bust’ cycle.

**Growth**

A key driver of growth-related investment is the need to provide infrastructure to service the large new developments in Sydney’s Growth Centres.

The NSW Government’s Sydney Metropolitan Plan states that new sites in the North West and South West Growth Centres are expected to accommodate up to 180,000 new dwellings for around 500,000 residents over the next 25 to 30 years.

Our network services these Growth Centres but currently does not have sufficient capacity to support this growth. So, major infrastructure works are required to increase network capacity to service these new customers in the near future. Some of the proposed projects include:

<table>
<thead>
<tr>
<th>Project</th>
<th>Purpose</th>
<th>Estimated cost</th>
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<tbody>
<tr>
<td>Marsden Park Zone Substation</td>
<td>Support new residential growth in Marsden Park</td>
<td>$19M</td>
</tr>
<tr>
<td>Marsden Park South Zone Substation (Stage 1)</td>
<td>Service new Sydney Business Park commercial precinct</td>
<td>$15M</td>
</tr>
<tr>
<td>Oran Park Zone Substation</td>
<td>Construct permanent zone substation to supply Oran Park Town</td>
<td>$16M</td>
</tr>
<tr>
<td>Leppington South Zone Substation (Stage 1)</td>
<td>Support new residential growth in Leppington</td>
<td>$4M</td>
</tr>
</tbody>
</table>

**Reliability**

We invest to ensure our network delivers the level of reliability our customers expect and meets minimum service levels.

During our consumer engagement program, customers recognised an improved level of reliability in our network over the past decade but indicated their belief that future improvements in reliability were not required, particularly not at the expense of higher prices.

Due to this consumer feedback, our expenditure plans will now focus on maintaining the current level of reliability rather than making further overall improvements.

We will still invest, however, in improving the performance of our network for those customers who currently receive below average reliability.

**Sydney’s Growth Centres at a glance**

**North West Sydney**

The North West Growth Centre is approximately 10,000 hectares – the size of Wollongong in NSW.

It will have capacity for 70,000 new dwellings and 200,000 people. It is made up of 16 ‘Precincts’, 11 of which are at various stages of development.

**South West Sydney**

The South West Growth Centre is approximately 17,000 hectares, comprising 18 precincts. It will be around the same size as Canberra.

It will focus on the major centre of Leppington, be serviced by the South West Rail Link and has capacity for around 110,000 new dwellings.
Endeavour Energy provides a number of other customer services that are outlined in our proposal, including:

**Metering**

**Existing meters**
Your electricity meter records how much electricity you use in your home or business. Each quarter we read your meter and send data to electricity retailers who use the information for your electricity bill.

Metering charges have always been included in your network charges, with the costs spread evenly across all customers. This means the costs of providing meters and metering services have been hidden.

The AER is changing the way we charge customers for their meters and the services we provide to maintain, read and manage data from them. It has decided to separate metering and network charges to promote competition, allow more customer choice and remove subsidies between services. The means you will not be charged more for metering but separate charges may apply.

The majority of our customers have basic accumulation meters. We propose to recover the existing and annual costs for this metering service, which will be $27 per annum on average per customer for your main meter and about $12 per annum on average for each off-peak and solar meter.

**New meters**
When a customer needs a new meter – such as a meter upgrade due to renovations, installing a solar PV system or airconditioner, the cost of that meter will be added to the installation cost customers currently pay upfront to their electrician or Accredited Service Provider.

This is already the case for non-standard meters (such as time of use) so that other customers do not subsidise services requested by an individual customer.

**Street lights**
Endeavour Energy manages 196,000 street lights on behalf of local councils with the costs recovered from councils. The number of public lights in Endeavour Energy’s area is forecast to grow to 222,000 by 2018–19.

As part of our customer and stakeholder engagement program we held 18 meetings with councils on street lighting and held further forums. As a result of those forums Endeavour Energy understands councils welcome our plan to contain our share of total street lighting costs to no more than CPI for the next five years.

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**Other customer 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:
- special meter readings
- reviewing designs for large commercial customers that need to connect to our network

For more information on these services please see our submission on our website at [www.endeavourenergy.com.au/ourplans](http://www.endeavourenergy.com.au/ourplans)
BENEFITS AND RISKS

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

Benefits

- **Stability** – We propose to keep average increases to our share of customers’ electricity bills at or below CPI for five years.

- **Reliability** – We propose to maintain reliability.

- **Safety** – Our capital and operating plans aim to deliver programs that are safe and sustainable for the electricity network and 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.

- **Removing 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** – The AER has determined that Endeavour Energy’s revenue from customers will be capped. If electricity consumption falls further than we forecast, unit prices may increase but total revenue cannot increase.

- **Reduced reliability** – If our capital program is not delivered on time the electricity supply may be less reliable in some areas.

- **Future prices** – Without changes to tariff structures customers who cannot afford to invest in solar technology will be burdened with increased network costs.

- **New rules** – Customers who request a special service may now pay considerably more as the AER said they 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 using 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