

# Our five year future plan

Regulatory  
Proposal Overview  
2015 - 2020



positive energy



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# 1.

## Introduction





# 1.1 Message from the CEO



For over 100 years, Energex and its predecessors have been part of everyday life in South East Queensland. Delivering a safe and reliable electricity supply to almost 1.4 million homes and businesses is what we do.

This overview paper summarises our Regulatory Proposal to the Australian Energy Regulator and outlines our commitments during the 2015-20 period.

In it you will find information about what our customers have told us, what our plans are and what actions we are taking to reduce the impact of rising electricity prices.

The plans outlined in our Regulatory Proposal are submitted to the Australian Energy Regulator for their approval. These plans are aimed at finding the right balance between the quality of services customers receive and the price paid for these services.

To ensure our plans align with customers' expectations, we have been working to incorporate customer feedback into the development of our proposal. Our 'Connecting with you' program has involved comprehensive research and consultation with more than 6,700 residential and business customers, representative groups, local councils and electricity retailers.

During the 2010-15 period, we saw a reduction in electricity use and peak demand flatten. This has largely been due to changes in customer consumption behaviour, the purchase of energy efficient appliances and the installation of technologies such as solar PV.

Customer lifestyles and choices are changing, which present new challenges for the electricity supply industry.

In response to these changes we are focusing on better utilising our existing network equipment and maintaining current service levels. This focus will ensure we continue to deliver a safe and reliable electricity supply, without significant price impacts.

Delivering price stability is an important goal for Energex. We have taken a number of positive steps in recent years to minimise the impact of rising electricity prices. During the 2010-15 period we reduced our expenditure by a total of \$1.7 billion and expenditure will be further reduced by \$1.3 billion for the 2015-20 period.

We have made changes to our organisational structure resulting in annual savings of \$124.2 million in support costs and reduced our revenue by \$227.2 million. These changes have directly benefited customers by minimising the increases in electricity prices.

Our aim is to reduce the cost of living and deliver real cost reductions in the network component of the electricity retail bill. This will be achieved through changes to our plans and program of work. On average, residential customers will experience real price reductions during the 2015-20 period.

Energex exists because of our customers and the services they require from us to power their homes and businesses. We are confident that our plans will deliver a safe and reliable network to our customers at an affordable price.

Going forward, we will continue to work with our customers to deliver the best outcome for both customers and the electricity network.

**Terry Effeney**  
Energex Chief Executive Officer

# 1.2 Regulatory Proposal summary

## Overview for the 2015-20 period

Our proposal means that residential customers will experience real price reductions in the network component of their electricity retail bill to June 2020.

Network prices are based on our view of the efficient level of revenue we need to run our business, excluding payments made under the Queensland Government Solar Bonus Scheme. With the inclusion of the Solar Bonus Scheme payments, residential network prices would increase by around 2 per cent each year across the 2015-20 period.

To reduce cost of living impacts, in October 2014 the Queensland Government announced a policy to remove the cost of the Solar Bonus Scheme from electricity prices. On current cost modelling this initiative will see the average customer's electricity retail bill reduce from July 2015. Through our ability to refocus the company's business model to work more efficiently, combined with positive Government policies to reduce electricity-related cost of living pressures we will be able to deliver the same exceptional levels of high service to South East Queensland homes and businesses at a reduced cost.



### Customer feedback

We took our 2015-20 Regulatory Proposal to customer groups for feedback. They told us:

They rate our electricity services highly and do not want us to invest any more in the network to improve reliability.

The small group of customers who are still experiencing greater than average power outages felt we should invest to improve their network area.

Some customers are struggling with the cost of living and want us to reduce our impact on rising electricity prices.

They want us to continue to deliver a reliable electricity supply and offer a broad range of services such as demand management programs, customer service and tree trimming programs.

They want to be more involved with the decisions we are making.

They believe we should play an industry leadership role in demand management programs.

### Our proposal



#### Revenue \$8.4 billion\*

- reduce upward price pressures
- deliver long-term network price stability for our customers.

\*Excluding approximately \$1.4 billion in payments made under the Queensland Government Solar Bonus Scheme



#### Capital expenditure \$3.2 billion

- reduce capital expenditure
- maintain the current high levels of reliability
- improve reliability in network areas that are experiencing the most frequent power outages.



#### Operating expenditure \$1.7 billion

- maintain operating expenditure
- enhance engagement with our customers.

### What it means for customers

We will deliver network price stability to reduce costs to customers and deliver a price decrease should the Queensland Government Solar Bonus Scheme be removed from our network prices.

We will continue to deliver a safe and reliable electricity supply to homes and businesses and plan our network to meet future needs and technologies.

We will continue to deliver services to our customers including demand management programs, easy to use communication channels, tree trimming, community safety as well as storm and emergency response. We commit to providing customers with a safe and reliable electricity supply as well as high standards of service.

## 1.2 Regulatory Proposal summary

We submit our Regulatory Proposal to the Australian Energy Regulator every five years which outlines our forecasts for expenditure and revenue.

This document provides a summary of our 2015-20 Regulatory Proposal and covers many topics that impact on services you receive from us and the network price passed on to you by your electricity retailer. It outlines important considerations for our business, including how customer input has influenced our decision making.

The Australian Energy Regulator will review our Regulatory Proposal and make a final decision on the amount of revenue we are permitted to earn during the 2015-20 period.

We recover our revenue through network prices. Therefore, the price our customers pay for their electricity during the 2015-20 period will be affected by the Australian Energy Regulator's decision.

The Australian Energy Regulator's final decision applies for the period 1 July 2015 to 30 June 2020.

Topics covered in this summary include:

- customer engagement and how you have helped shape key decisions
- the revenue we earn as a regulated business
- expected pricing outcomes for our share of customer bills
- network investment plans
- services we provide
- forecasts for electricity use
- how services are paid for
- incentives we receive to keep our network reliable
- metering services
- demand management programs.

### How our regulatory process is governed

#### Who regulates the National Electricity Market?

The Australian Energy Regulator is responsible for the economic regulation of energy markets and networks in eastern and southern Australia.

Under the National Electricity Rules, the Australian Energy Regulator is responsible for reviewing and making a determination on Regulatory Proposals that are submitted every five years by electricity distributors like us.

#### What are the National Electricity Rules?

The National Electricity Rules exist so that electricity market participants understand their rights and responsibilities, and there is appropriate regulation.

These rules ensure electricity distributors like us, provide services to customers in the most efficient, safe and reliable manner. They are governed under the National Electricity Law.

# 1.2 Regulatory Proposal summary

## Achievements and challenges

### 2010-15 achievements and challenges (figures quoted up to June 2014)

#### Achievements

- Capital expenditure reduced by \$1.8 billion (compared to the Australian Energy Regulator approved amount) while continuing to provide a safe and reliable electricity supply through the provision of 23 new network substations, 1,700km of underground cables, 2,300 new distribution transformers and the connection of 65,000 new homes and businesses.
- Reduced our revenue by \$227.2 million which was a result of changes to our capital program and our decision not to pass on revenue gained through incentives. This has benefited customers as the revenue reduction was not passed on through network prices.
- Connected more than 230,000 solar PV systems to the electricity network.
- Restored power to over 250,000 homes and businesses in 72 hours, with over 300,000 loss of supply calls made to our Customer Contact Centre during ex-tropical cyclone Oswald in 2013.
- Restored power during other severe weather events including the 2014 Stradbroke Island fires, 2011 Queensland floods and provided support to Ergon Energy in North Queensland during cyclone Yasi in 2011.
- Supported the completion of a number of customer-driven infrastructure projects including Airport Link and Northern Busway tunnel/roadlinks and the commencement of the Legacy Way tunnel; extension of the rail-line to Springfield and Robina; the new Queensland Childrens Hospital at South Brisbane and Gold Coast University Hospital; and a major new prison near Gatton.
- Developed a Customer Engagement Strategy and internal framework to enhance customer involvement in key business decisions.
- Developed a new property strategy which saved around \$3.2 million per year as well as improved efficiency for our staff and services. This also included relocating a number of our offices to a centralised, purpose-built facility in Newstead, Brisbane.
- The cost of tree trimming reduced as a result of efficiencies made to how these services are delivered through our contractors.
- Changes to our organisational structure which will result in yearly savings of \$124.2 million in support costs benefiting our customers through lower network prices.
- Spending \$75 million less than we initially anticipated, our demand management program is on track to meet our target to reduce demand by 144 megavolt amperes as at June 2014. This was achieved through residential hot water, pool pump and air-conditioning initiatives as well as through improvements to power factor, the installation of electricity efficient lighting, refrigeration and motors for business customers.

#### Challenges

- An unprecedented drop in electricity use and flattening of demand largely due to changes in customer consumption behaviour, the purchase of energy efficient appliances and the installation of technologies such as solar PV.
- The most significant emergency network events in our history – ex-tropical cyclone Oswald in 2013 and the 2011 Queensland floods.
- Supporting localised growth areas and network development.





## 1.2 Regulatory Proposal summary

### Summary of key topics

#### Our regulated revenue

Our revenue is the total amount of money needed to efficiently operate and manage our business for the 2015-20 period. **We will be seeking approval for \$8.4 billion in total revenue for the 2015-20 period** which is the efficient level of revenue we need to run our business excluding payments made under the Queensland Government Solar Bonus Scheme.

We will balance our revenue each year to avoid network price increases like those that occurred between 2010-15. For the 2010-15 period, we delivered benefits to customers by making an explicit decision to reduce our revenue by a total of **\$227.2 million**. As a result of the reduction, we were approved by the Australian Energy Regulator to recover **\$7.4 billion**. We do not expect to recover the full amount by the end of the 2010-15 period. Consistent with our regulatory framework, we are proposing to recover this during the 2015-20 period which forms part of our network prices.

The increase we are asking for in the 2015-20 period is due to growth in our asset base as we have invested in improvements to the electricity network during the 2010-15 period. We understand the importance of reducing the cost of living for our customers through delivering real cost reductions while maintaining services.

Find out more about revenue in Section 3 of this document or Chapter 21 of our full 2015-20 Regulatory Proposal.

#### Capital expenditure – network investment

For the 2015-20 period **we will be seeking approval for \$3.2 billion in capital expenditure** which is a significant reduction compared to the 2010-15 period. This money is used for the cost of purchasing and installing network equipment, like poles, wires, cables, substations and transformers, as well as property, fleet and tools. It is the money we use to build the network and replace ageing network equipment.

By the end of the 2010-15 period, we expect to have spent a total of \$4.4 billion on capital expenditure to ensure the network supported the customer growth experienced during the period. During the 2015-20 period, the majority of our efforts will be focused on replacing ageing network equipment. This will ensure we continue to deliver high standards of community safety and network reliability.

Find out more about capital expenditure in Section 6 of this document or Chapter 9 of our full 2015-20 Regulatory Proposal.

#### Expected pricing outcomes

Our proposal means that **residential customers will experience real price reductions in the network component of their electricity retail bill to June 2020**. Our network prices are based on our view of the efficient level of revenue we need to run our business excluding payments made under the Queensland Government Solar Bonus Scheme. With the inclusion of the Solar Bonus Scheme payments, residential network prices would increase by around 2 per cent each year across the 2015-20 period.

Network prices form a part of your electricity bill issued by your electricity retailer. These include our costs to manage the network and they account for just under half of your total bill if you are a residential or small business customer. During the 2010-15 period, network prices increased due to a number of factors. We understand the importance of reducing the cost of living for customers while continuing to maintain services. It is our aim to deliver real cost reductions in the network component of the electricity retail bill during the 2015-20 period.

Find out more about expected pricing outcomes in Section 4 of this document or Chapter 23 of our full 2015-20 Regulatory Proposal.



## Operating expenditure – our day to day services to you

For the 2015-20 period **we will be seeking approval for \$1.7 billion in operating expenditure**, which is less than what we expect to spend during the 2010-15 period.

Operating expenditure refers to the routine, ongoing activities of running an electricity network, emergency response, fixing faults, maintaining network equipment and delivering services. By the end of the 2010-15 period we expect to have spent a total of \$1.9 billion on operating expenditure. This figure excludes payments made under the Queensland Government Solar Bonus Scheme. We will have spent marginally more than the amount approved by the Australian Energy Regulator.

This overspend was due to the emergency response for ex-tropical cyclone Oswald in 2013 and the 2011 Queensland flood-event, as well as costs associated with changing our organisational structure. The structural changes we have made result in yearly savings of \$124.2\* million in support costs benefiting our customers through lower network prices. During the 2015-20 period there will be reductions in operating expenditure as a result of efficiencies in tree trimming services and support activities. However, there will be some areas of operational expenditure that will increase. These include services such as planned maintenance on our network to ensure we continue to deliver a safe and reliable electricity supply, compliance with new obligations like asbestos removal and a greater focus on demand management programs.

Find out more about operating expenditure in Section 7 of this document or Chapter 10 of our full 2015-20 Regulatory Proposal.

\*This includes a small portion of capital expenditure.

## Forecasting electricity use and demand

During the 2015-20 period we are expecting to make **92,000** new customer connections to our network. There will be a yearly average growth rate of **0.5 per cent** for electricity use and **1.1 per cent** for peak demand.

For the 2010-15 period, electricity use fell and demand stabilised across a number of states in Australia. Like many other Australian distributors, we anticipated the growth experienced pre-2009 would continue, with high uptake of air-conditioners, increasing new customer connections to the electricity network and rises in peak demand.

In South East Queensland these forecasts did not eventuate with customers using less electricity and demand flattening. The forecasts were impacted due to a number of factors including the global financial crisis as well as the significant uptake of solar PV systems.

During the 2015-20 period, we do not anticipate a large increase in overall electricity use or demand. However, while demand growth is expected to remain stable for the network as a whole, we are still expecting growth in localised areas and, as such, our investment in the network will be based on these localised needs.

Find out more about forecasting electricity use and demand in Section 8 of this document or Chapter 8 of our full 2015-20 Regulatory Proposal.

## Classification of services and incentive schemes

**Service classifications** – The Australian Energy Regulator classifies services and this impacts how costs are recovered. There are two classifications - standard control and alternative control. The costs associated with standard control services are predominantly shared with all customers connected to the network. The costs associated with alternative control services are paid for by the person requesting the service. Find out more about these services including small customer connections, public lighting and changes to the classification of metering services (including what this means for customers) in Section 9 of this document or Chapters 6, 24, 25, 26 and 27 of our full 2015-20 Regulatory Proposal.

**Incentive schemes** – Incentive schemes are developed by the Australian Energy Regulator to drive certain outcomes and to reward electricity distributors and our customers when key targets have been met. Find out more about incentive schemes in Section 9 of this document or Chapters 16, 17, 18 and 19 of our full 2015-20 Regulatory Proposal.





# 1.3 About us

We deliver a safe and reliable electricity supply to our customers in South East Queensland. Our network spans approximately 25,000 square kilometres, provides distribution services to almost 1.4 million residential and business customers, includes over 260,000 solar PV connections and delivers electricity to a population base of around 3.2 million people in the region.

At the core of our business is high performing network equipment worth almost \$12 billion, the expertise of approximately 3,000 employees and a drive to provide our customers with electricity and network solutions that are safe, reliable, affordable, socially responsible, environmentally acceptable and sustainable. As a Government Owned Corporation we operate under regulations established at both national and state levels.

## Contact us

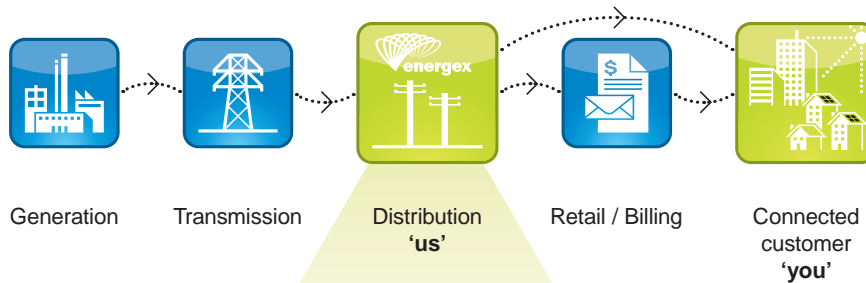
www.energex.com.au  
 custserve@energex.com.au  
 13 12 53 (8am to 5:30pm, Mon to Fri)  
 13 14 50 Translating and Interpreting Services

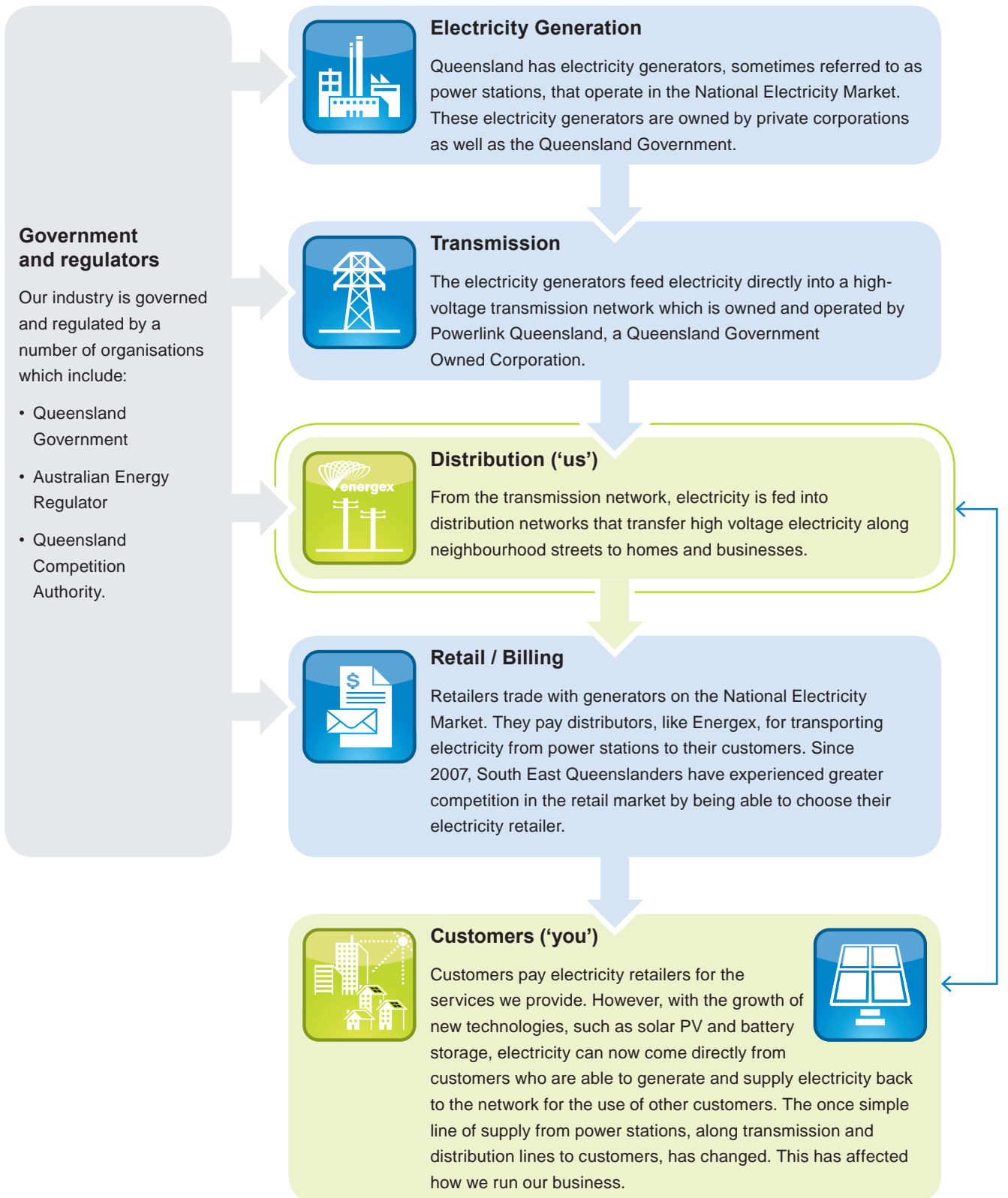
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## The electricity network in South East Queensland







# 2.

## Connecting With You





## 2.1 Our approach to customer engagement

The content in this section relates to Chapter 4 of our full 2015-20 Regulatory Proposal

We are committed to, and see the value of, effectively engaging with you so that we better understand your views. We understand that this knowledge enables us to better align our services, activities and interactions with your expectations.

We recognise that embedding customer engagement into our corporate culture can be challenging. We would like to acknowledge our constant drive to improve our engagement alongside our customer groups.

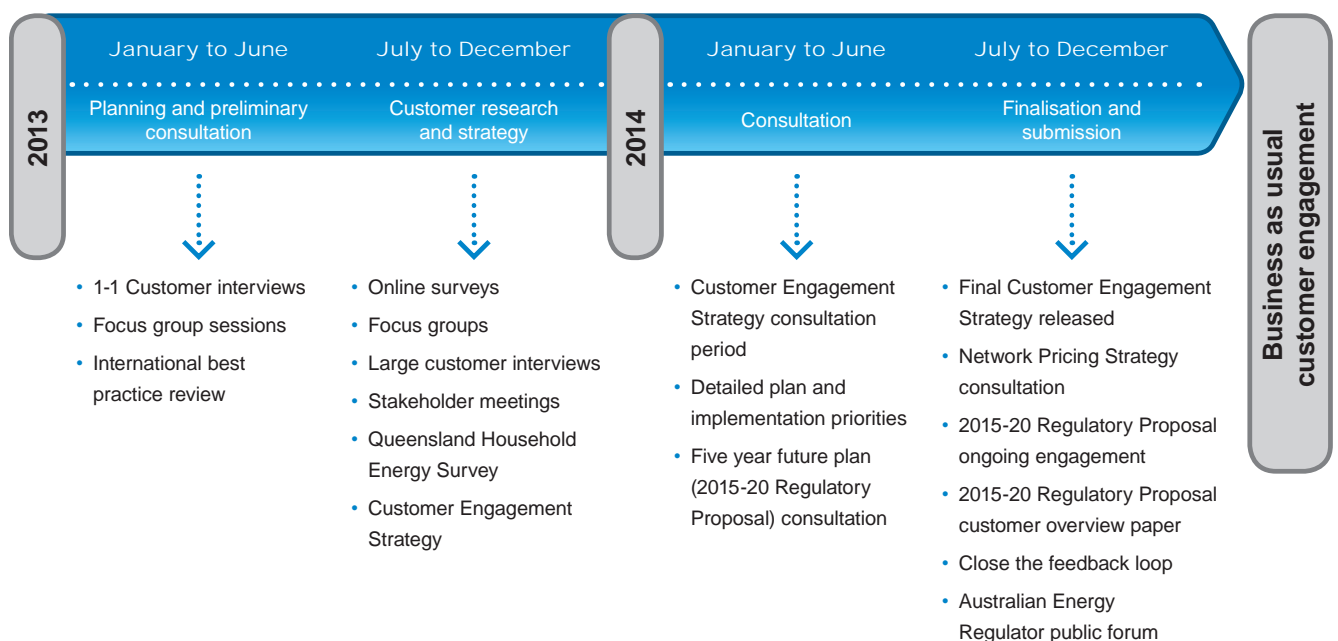
In addition to ensuring your views and expectations are incorporated into the decisions we have made for our 2015-20 Regulatory Proposal, we have embedded customer engagement into our day-to-day activities through a number of key initiatives, including:

- A dedicated Customer Engagement Research Program
- Our Customer Engagement Strategy
- Our Customer Engagement Framework
- Engagement on key initiatives such as electricity tariff reform.

Our vision for customer engagement is to create a culture which recognises and values working with our customers. Effective interaction will enable us to understand your preferences and plan the network to meet your current and future requirements.

Since early 2013 we have been engaging with our customers to ensure our 2015-20 Regulatory Proposal decisions align with their expectations. We are committed to improving our engagement with our customers and to set a foundation for meaningful and ongoing engagement into the future.

### Our customer engagement timeline



Find out more about our 'Connecting with you' program at [www.energex.com.au/connectingwithyou](http://www.energex.com.au/connectingwithyou)

## 2.2 Our Customer Engagement Research Program

As part of our Customer Engagement Research Program, we consulted with approximately 6,700 customers during 2013.

Participants provided us with information about their views and expectations regarding electricity supply, what their electricity needs are, their thoughts on electricity infrastructure and how they want to be engaged with in the future.

To ensure we consulted customers with varied electricity needs, we engaged with a broad range of our customer groups which included:

- Residential customers
- Small to medium business customers
- Large business customers
- Representative groups
- Electricity retailers
- Local councils.

### Research Insights

We have used the insights from the Customer Engagement Research as the foundation for the development of our Customer Engagement Strategy and Framework. The insights also informed our five year future plan (2015-20 Regulatory Proposal) as well as ongoing business decisions and engagement activities.

## Customer Engagement Research Insights

The Customer Engagement Research Insights give us an understanding of your views and expectations about the work we do and the way we manage the network. Your feedback has given us a number of key insights.

The 10 key insights listed are in no particular order:

- 1 You believe the safety and reliability of the network should be our primary focus, ahead of other services.
- 2 You believe current reliability is adequate and should be maintained without significant cost increase (with the exception of the small group of customers who are still experiencing greater than average power outages).
- 3 You view our tariff structures and those of electricity retailers as overwhelming.
- 4 You do not believe new or alternative technologies, other than solar PV, are a priority, however you believe we need to be actively planning for and communicating about new technologies that will benefit you.
- 5 You want a relationship with us to provide input into the decisions that matter to you.
- 6 You believe we could play an industry advocacy role in communicating expectations about key topics, including demand management programs, however some of your communication expectations are currently outside our capabilities.
- 7 You would prefer us to communicate with you using traditional methods supplemented with modern technologies.
- 8 Large business customers have higher expectations and needs for customer services and communications.
- 9 Electricity retailers view us as a good distributor but consider our service levels are below those of some private companies.
- 10 Representative groups are an appropriate voice of the customer and advocate the development of a hardship program. They are willing to be engaged further and to be used to communicate tariff and pricing related information to their members.



View our Customer Engagement Research report at [www.energex.com.au/customerengagementresearch](http://www.energex.com.au/customerengagementresearch)

## 2.3 Our Customer Engagement Strategy and Framework

Our Customer Engagement Strategy explains the structure of how and why we communicate and engage with our customers. It allows our customers to be involved, have their views considered in decision making and be informed about our programs and plans.

In addition, it also details what we will do to better align our services, activities and interactions with customers' views and expectations. By effectively engaging with our customers, we can offer the right levels of service to ensure our network investment meets our customers' current and evolving electricity needs.

Our guiding principles, set out below, underpin all of our customer engagement activities. We will be:

- 1 Transparent and open in our interactions with you
- 2 Committed to engaging with you
- 3 Timely and meaningful in our interactions with you
- 4 Accountable for our actions
- 5 Measuring our interactions with you

### Customer Engagement Strategy

The Customer Engagement Strategy defines the vision, values and objectives of our ongoing interactions with our customers. It aligns with our corporate strategy and is shared with customers and Energex employees. It has been developed in line with the International Association for Public Participation (IAP2) best practice engagement approach, to ensure we have meaningful and ongoing engagement with our customers.

© 2006, International Association for Public Participation, [www.iap2.org](http://www.iap2.org)

### Our 7-step customer engagement process



### Customer Engagement Framework

The Customer Engagement Framework is a guideline for how we engage with our customers. It includes a set of practices to assist us to effectively work with our customers in a proactive and meaningful way. It provides a guide to determine the most effective engagement levels and methods.



View our Customer Engagement Strategy at [www.energex.com.au/customerengagementstrategy](http://www.energex.com.au/customerengagementstrategy)



## 2.4 Our five year future plan

Since 2013 our customers have influenced key decisions for our 2015-20 Regulatory Proposal through our Customer Engagement Research Program and five year future plan consultation. We have consulted with over 6,700 customers in the development of our 2015-20 Regulatory Proposal.

We carried out a series of engagement activities ranging from surveys to online submissions and public workshops, to gain an understanding of our customers' views and expectations in relation to key topics for our 2015-20 Regulatory Proposal.

### Key topics



#### The big picture

Customer engagement  
Capital expenditure  
Operating expenditure  
Revenue



#### My home/business and bill

Changes to metering  
Reliability  
Power prices



#### My street

Vegetation management  
Local project communications



#### My community

Electricity and demand forecasts  
Demand management  
Customer choice  
New technologies

### Who participated?

- Small to medium business customers
- Residential customers
- Large business customers
- Regional councils
- Government
- Representative groups
- Electricity retailers



## What customers told us and how this has influenced our decisions

What you said	What we will do	What it means for you
You rate our electricity services highly and do not want us to invest any more in the network to improve reliability.	Capital expenditure will be reduced and mostly spent on replacing ageing network equipment to ensure our electricity supply continues to be safe and reliable. We will also continue to plan for growth in localised areas.	You will continue to receive a safe and reliable electricity supply. This will also assist in controlling price impacts in the future.
The small group of customers who are still experiencing greater than average power outages felt we should invest to improve their network area.	Have a targeted program to improve reliability for customers that receive lower levels of reliability compared with the majority of customers.	The worst 10 per cent of electricity supply areas will be improved to ensure all our customers can enjoy a safe and reliable electricity supply.
You do not want high price increases with some customers struggling with the cost of living.	Be cooperative participants in industry and tariff reform processes to deliver long-term price stability. Engage with our customers on our long-term network pricing strategy.	You will be consulted on initiatives which include changes to network tariffs and we aim to minimise network price increases during the 2015-20 period. Achieving this will end large network price increases.
You want us to continue to deliver a reliable electricity supply and to offer a broad range of services such as community safety, demand management programs and tree trimming programs.	Maintain operating expenditure at levels consistent with delivering a high standard of service, network safety and reliability.	We will continue to deliver services including tree trimming, storm and emergency response, safety communications, demand management programs and offer a wide range of communication channels.
You want to be more involved with the decisions we are making.	Improve our engagement with you and offer greater input into decision making.	We will engage with you more about key decisions and use your feedback to shape our direction.
You believe we should play an industry leadership role in demand management programs.	We will continue to provide demand management programs for residential customers in all network areas and business customers in areas of the network where it is needed.	You will continue to have access to popular demand management programs offering incentives for demand management solutions.



Find out more about our five year future plan engagement at [www.energex.com.au/ourfiveyearplan](http://www.energex.com.au/ourfiveyearplan)

# 3.

## Our regulated revenue





The content in this section relates to Chapter 21 of our full 2015-20 Regulatory Proposal



## 3.1 About revenue

### Revenue for 2010-15

For the 2010-15 period, we delivered benefits to customers by making an explicit decision to reduce our revenue by a total of **\$227.2 million**. This was a result of changes to our capital program and our decision not to pass on revenue gained through incentives. As a result of the reduction, we were approved by the Australian Energy Regulator to recover **\$7.4 billion**. We do not expect to recover the full amount by the end of the 2010-15 period.

The under recovery was due to a significant drop in customer electricity use. This was a result of changes in customer consumption behaviour, the purchase of energy efficient appliances and the installation of technologies such as solar PV.

Consistent with our regulatory framework, we are proposing to recover the under recovery of revenue during the 2015-20 period.

### Revenue for 2015-20

For the 2015-20 period, we will be seeking approval for **\$8.4 billion** of revenue which is the efficient level of revenue we need to run our business. The increase in total revenue is predominantly driven by our investment in network assets during the 2010-15 period, upon which we earn a return. An additional \$1.4 billion will be recovered for payments made under the Queensland Government Solar Bonus Scheme.

Unlike the 2010-15 period, where revenue increased steeply each year, we are forecasting our yearly revenue for the 2015-20 period to be at levels lower than inflation.

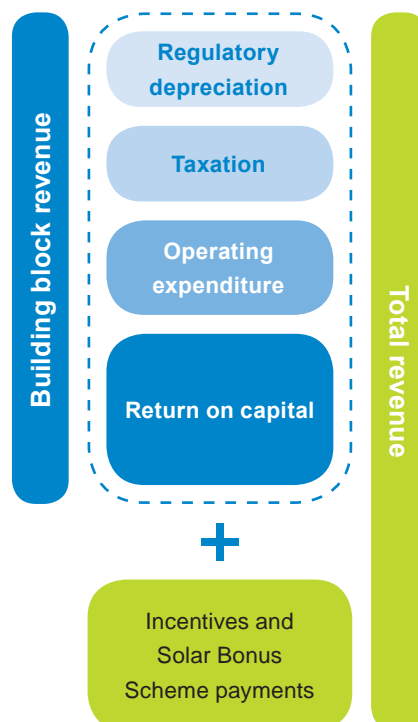
Currently, payments for the Queensland Government Solar Bonus Scheme are funded through our revenue and network electricity prices. Should the Queensland Government fund these payments in a different manner, our revenue and network prices would decrease as a result.

### What is revenue?

Revenue is the amount of money needed to efficiently manage and operate our business during the 2015-20 period and continue to deliver a safe and reliable electricity supply.

Our revenue is established using a 'building block approach'. This approach is established using multiple key components. The Australian Energy Regulator approves our revenue for the five year period. They decide if our proposal in each building block component is appropriate.

Revenue is a key part of our proposal as we recover this through the network prices we develop. Our goal is to keep revenue stable so we can minimise price impacts for customers.



### Revenue and our regulatory proposal

The 'building block approach' used to calculate the revenue we need to efficiently manage and operate our business during the 2015-20 period consists of:

- regulatory depreciation
- taxation
- operating expenditure
- return on capital\*

Find out more about the revenue building block in Chapter 21 of our full 2015-20 Regulatory Proposal.

\*Return on capital is the income we earn based on the value of assets we own. It is determined by a rate of return sometimes referred to as a WACC (Weighted Average Cost of Capital) and is set by the Australian Energy Regulator. This contributes to the revenue we earn.

## 3.2 Queensland Government Solar Bonus Scheme payments and revenue

The Queensland Government Solar Bonus Scheme commenced for eligible customers in June 2008. There has been a significant uptake of solar PV installations, with more than 260,000 systems connected to the network by the end of the 2013-14 financial year.

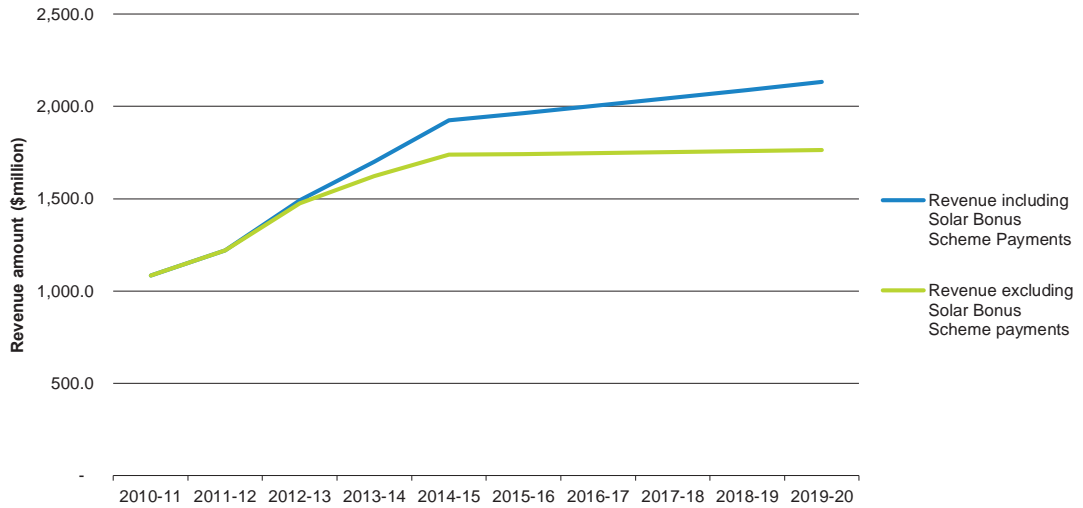
A large number of these customers are receiving payments from Energex under the Scheme.

The money paid under the Queensland Government Solar Bonus Scheme is recovered from all customers through our network prices which are included in your electricity retail bill.

The charts on the following page shows what our level of efficient revenue is to run the business and also revenue including Scheme payments.



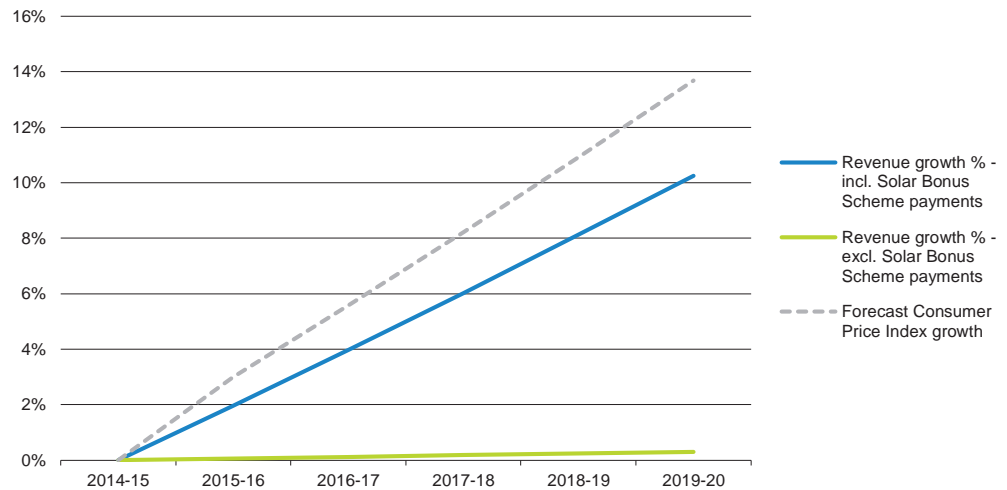
## 2010-15 and 2015-20 yearly revenue



The green line represents the efficient revenue we need to run our business and the blue line represents the efficient revenue including the Queensland Government Solar Bonus Scheme.

The efficient revenue shown in this chart includes metering revenue.

## Expected revenue growth during the 2015-20 period



This chart shows our expected revenue growth during the 2015-20 period in comparison to the Consumer Price Index. If we were not required to recover the Queensland Government Solar Bonus Scheme payments, our revenue would be less.



# 4.

## Expected pricing outcomes



# 4.1 About expected pricing outcomes

The content in this section relates to Chapter 23 of our full 2015-20 Regulatory Proposal

## Our network prices

We charge electricity retailers through our network tariffs and these charges indirectly form part of customers electricity retail bills. Total network costs, which include the costs for transmission services, account for just under half the final price you pay.

During the 2010-15 period network prices increased due to a number of factors, which included an increased investment in the network and a reduction in customer electricity use.

We understand the importance of reducing the cost of living for customers while continuing to maintain services. It is therefore our aim to deliver real cost reductions in the network component of the electricity retail bill during the 2015-20 period.

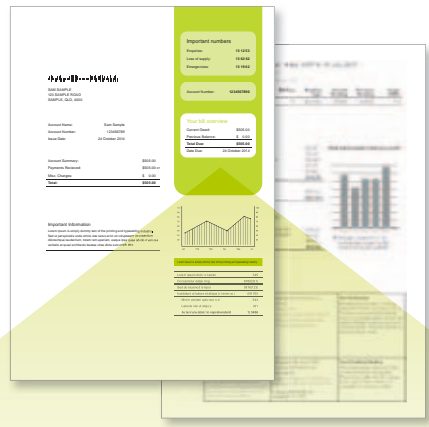
In this chapter we are expressing expected prices in two ways. We will show you the expected average price for each of our network tariffs in the unit of measure they apply. We will also show you how much revenue we expect to recover for each tariff from an average customer which is our network component of a customer's electricity retail bill.

It is important to note that the prices are indicative only and are subject to change. Find out more about expected pricing outcomes in Chapter 23 of our full 2015-20 Regulatory Proposal.

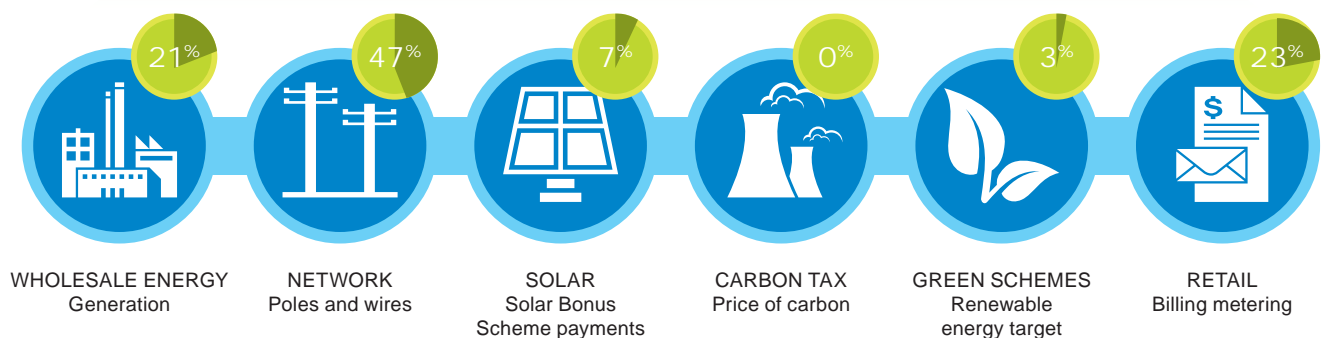
**Network pricing and our Regulatory Proposal**

Our Regulatory Proposal provides a high level estimate of network prices for the 2015-20 period. Each year we submit our pricing proposal to the Australian Energy Regulator for approval.

Visit our website to find out more about network pricing [www.energex.com.au/networkprices](http://www.energex.com.au/networkprices)



## Breakdown of a typical residential bill 2014-15\*



\*The percentages shown in the infographic have been referenced from the Queensland Competition Authority's Regulated Electricity Prices 2014-15 Final Report Fact Sheet - Electricity prices from 1 July 2014 (please note the figures do not add up due to rounding). A typical residential customer uses around 4.1 megawatt hours per year. To find out more visit the Queensland Competition Authority website [www.qca.org.au/home](http://www.qca.org.au/home)

Find out more about network pricing by visiting [www.energex.com.au/networkprices](http://www.energex.com.au/networkprices)

## 4.2 Expected network prices

In October 2014, the Queensland Government announced plans to remove the cost of the Solar Bonus Scheme from network prices.

If implemented, this will come into place in July 2015 and provide a significant reduction in network prices for customers.

Initial modelling on what this may mean for network prices is outlined below and shows a significant price decrease for customers from July 2015.

### Network tariffs and prices for residential and small to medium business customers excluding Queensland Government Solar Bonus Scheme payments

Network Tariff Code / Name		Price unit	2015-16	2016-17	2017-18	2018-19	2019-20
Small to medium business customers	<b>8500 Business Flat</b> (default small to medium business tariff)	c/kWh	11.90	12.07	12.29	12.36	12.35
		Change from prior year	-8.4%	1.4%	1.9%	0.5%	-0.1%
		\$/customer	1,888.25	1,883.18	1,897.34	1,896.45	1,885.46
	<b>8800 Business Time of Use</b>	c/kWh	10.50	10.66	10.94	11.16	11.28
		Change from prior year	-7.5%	1.6%	2.6%	1.9%	1.1%
		\$/customer	4,464.44	4,547.83	4,703.68	4,857.97	4,982.10
Residential customers	<b>8400 Residential Flat</b> (default residential tariff)	c/kWh	13.53	13.57	13.38	13.18	13.00
		Change from prior year	-9.7%	0.3%	-1.4%	-1.5%	-1.4%
		\$/customer	588.73	577.99	562.23	549.62	539.02
	<b>8900 Residential Time of Use</b>	c/kWh	11.47	11.15	11.07	11.12	11.07
		Change from prior year	-14.6%	-2.8%	-0.7%	0.4%	-0.4%
		\$/customer	499.36	475.06	465.32	463.64	459.10
	<b>7600 Residential PeakSmart</b>	c/kWh	11.43	11.14	11.07	11.04	10.99
		Change from prior year	-12.0%	-2.5%	-0.7%	-0.2%	-0.5%
		\$/customer	491.93	480.67	462.27	459.04	456.70
	<b>9000 Super Economy</b>	c/kWh	3.48	3.56	3.66	3.75	3.82
		Change from prior year	-9.7%	2.4%	2.8%	2.4%	1.7%
		\$/customer	70.42	71.64	71.99	72.07	71.89
	<b>9100 Economy</b>	c/kWh	7.55	7.73	7.84	7.82	7.78
		Change from prior year	-8.3%	2.5%	1.4%	-0.3%	-0.6%
		\$/customer	155.59	159.91	163.72	167.92	173.57



**Network tariffs and prices for residential and small to medium business customers  
including Queensland Government Solar Bonus Scheme payments**

Network Tariff Code / Name		Price unit	2015-16	2016-17	2017-18	2018-19	2019-20
Small to medium business customers	<b>8500 Business Flat</b> (default small to medium business tariff)	c/kWh	13.48	13.93	14.46	14.81	15.08
		Change from prior year	3.7%	3.3%	3.8%	2.5%	1.8%
		\$/customer	2,138.32	2,173.76	2,231.47	2,273.04	2,303.03
	<b>8800 Business Time of Use</b>	c/kWh	11.89	12.31	12.87	13.37	13.78
		Change from prior year	4.8%	3.5%	4.6%	3.9%	3.1%
		\$/customer	4,464.44	4,547.83	4,703.68	4,857.97	4,982.10

Residential customers	<b>8400 Residential Flat</b> (default residential tariff)	c/kWh	15.32	15.66	15.74	15.80	15.88
		Change from prior year	2.2%	2.3%	0.5%	0.4%	0.5%
		\$/customer	666.70	667.17	661.24	658.77	658.39
	<b>8900 Residential Time of Use</b>	c/kWh	12.99	12.87	13.02	13.33	13.53
		Change from prior year	-3.3%	-1.0%	1.2%	2.4%	1.5%
		\$/customer	565.50	548.36	547.26	555.70	560.77
	<b>7600 Residential PeakSmart</b>	c/kWh	12.95	12.86	13.01	13.24	13.43
		Change from prior year	-0.4%	-0.7%	1.2%	1.7%	1.4%
		\$/customer	557.08	554.84	543.67	550.20	557.84
	<b>9000 Super Economy</b>	c/kWh	3.94	4.11	4.31	4.50	4.66
		Change from prior year	2.2%	4.3%	4.7%	4.3%	3.7%
		\$/customer	79.74	82.70	84.67	86.38	87.81
	<b>9100 Economy</b>	c/kWh	8.54	8.92	9.22	9.37	9.50
		Change from prior year	3.8%	4.4%	3.3%	1.6%	1.3%
		\$/customer	176.19	184.59	192.55	201.27	212.01

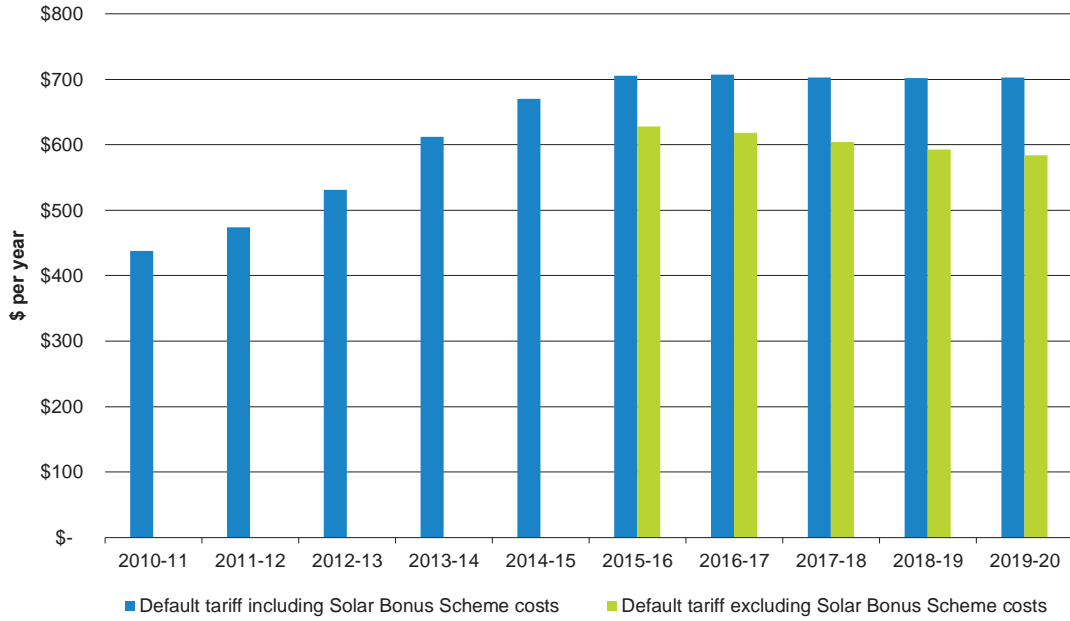
Important points to remember about the network prices on these two pages:

- These prices are estimated, exclude GST and may be subject to changes during the 2015-20 period.
- Our detailed pricing proposal is submitted each year to the Australian Energy Regulator for approval.
- These prices do not account for the entire bill paid by customers and reflect only our network costs.
- These tariffs represent 99.1 per cent of our customers. Network prices for other tariffs are published in Chapter 23 of our full 2015-20 Regulatory Proposal.
- These prices exclude the cost of metering. Find out more about metering on page 59 of this document.

Find out more about expected pricing outcomes in Chapter 23 of our full 2015-20 Regulatory Proposal.  
Visit our website for additional information about network prices at [www.energex.com.au/networkprices](http://www.energex.com.au/networkprices)

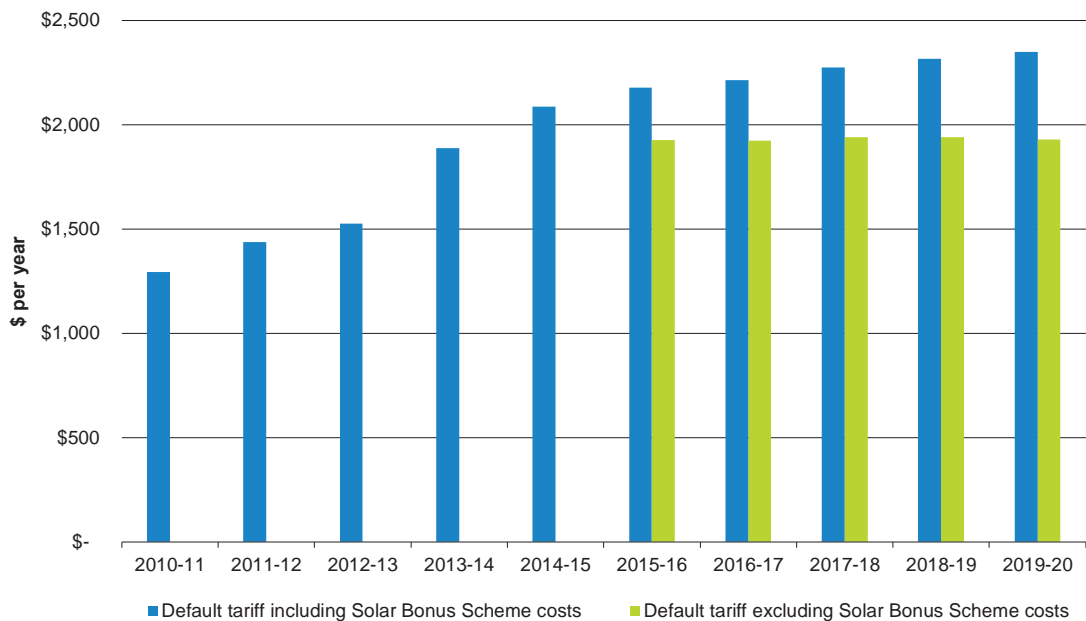
## Residential customers

Average network charges – network tariff code 8400



## Small to medium business customers

Average network charges – network tariff code 8500



For comparison purposes we have including the cost of metering in the above charts from 2015-16 onwards.







# 5.

## Comparing 2010-15 and 2015-20



## 5.1 Background

By the end of the 2010-15 period, we will have invested an estimated \$6.3 billion operating, maintaining and upgrading the network as part of our commitment to provide a safe and reliable electricity supply.

For more than 100 years our network has been built, maintained and operated to supply electricity safely to homes and businesses in South East Queensland. In the last five to ten years we have experienced unprecedented changes in the way customers use electricity, as well as the industry in which we operate.

These changes have largely influenced what has been spent on the network and supporting operational activities.

At the beginning of the 2010-15 period our approval for funding was based on significant growth in a number of areas which included an increasing population in South East Queensland, a strong economy and increasing electricity use and demand.

During the 2010-15 period, we experienced the full impact of the global financial crisis, a slowing in population growth, a reduction in electricity use and peak demand flatten. To adapt to this changing environment, we modified aspects of how we operated and what we were spending.

Within this dynamic environment, we remained focused on building the network in growth areas, safely maintaining the network and offering services our customers expect.

Over the next few pages, we will provide information about what we have delivered during the 2010-15 period and how this compares to the 2015-20 period.

As a result of under investment in the network during the 1990's, there has been a strong focus in the last five to ten years to deliver improvements.

As the expectations and lifestyles of our customers have evolved we have seen a change in the demand for electricity. A growth in appliances such as air-conditioners has meant that we have focused our efforts to deliver significant improvements to reliability. During this time we have also ensured that we improve our commitment to customer service and community safety.

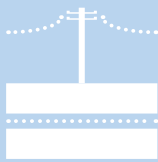
## 5.2 What we will have delivered during 2010-15



We expect to spend **\$4.4 billion** on capital expenditure by the end of the 2010-15 period and this has included:



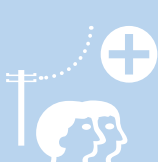
The installation of **23** new substations in growth areas.



The replacement of **2,172** overhead and **327** underground electricity cables.



This installation of around **2,300** additional new suburban distribution transformers.



The completion of **82,000** new residential and business customer connections to the network.



Our support in the completion of the following projects:

- The new Queensland Childrens Hospital
- The extension of the rail-line to Springfield and Robina
- The Airport Link
- The Northern Busway tunnel/roadlinks
- The commencement of Legacy Way tunnel
- The new prison near Gatton.



We expect to spend **\$1.9 billion** on operating expenditure by the end of the 2010-15 period and this has included:



Our reponse during ex-tropical cyclone Oswald in 2013:

- **800,000** visits to energex website
- Power restored to over **250,000** customers (**95 per cent** of power restored in 2 days, **98 per cent** in 3 days).
- Responded to over **300,000** loss of supply and emergency calls made to our Customer Contact Centre.



Our response to **300,000** power outages during the 2011 Queensland floods.



Our demand management program is on track to meet our target to reduce demand by **144 megavolt amperes** as at June 2014\*.



Spending \$75 million less than we initially anticipated, this achievement was delivered through residential **hot water, pool pump** and **air-conditioning** initiatives and through improvements to power factor, and the installation of electricity efficient lighting, refrigeration and motors, for business customers\*.



We have responded to more than **2 million** customer calls.

\*This includes a small portion of capital expenditure.



## 5.3 What changed during 2010-15

### What changed during the 2010-15 period

#### Reduction in electricity use and peak demand flattened

During the 2010-15 period, we saw electricity use drop and peak demand flatten across the network. This was a result of a number of factors including:

- population stabilisation in South East Queensland
- customer's reducing electricity use as a result of rising electricity prices and tough economic times
- the purchase of energy efficient appliances
- the installation of technologies such as solar PV.

#### Significant uptake of solar PV

The Queensland Government policy for the Solar Bonus Scheme offered generous incentives to customers in Queensland. As a result, there was a significant number of customers in South East Queensland that installed solar PV systems. Between July 2010 and June 2014, more than 230,000 new systems were connected to the electricity network. This resulted in a significant drop in electricity use during the day.

The unexpectedly high uptake of solar PV has resulted in substantially higher Scheme payments than forecast for the 2010-15 period. The Solar Bonus Scheme amount that we expect to pay by the end of the 2010-15 period is approximately \$700 million, compared to the forecast of approximately \$40 million. The money paid under the Scheme is added to our revenue and in turn increases the price you pay for electricity.

#### Electricity network capital program review

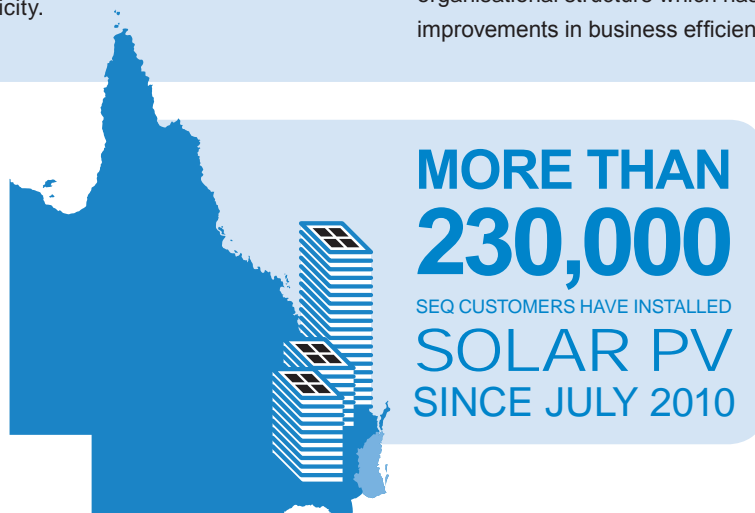
In the mid 2000s there were a number of recommendations to the Queensland Government to address previous under investment in the network. These recommendations resulted in a network investment program that ensured customers experienced a safe and reliable electricity supply. In particular, we were required to ensure network reliability levels exceeded the minimum standard required. In 2011, the Electricity Network Capital Program Review examined the program to date against required outcomes.

Changes to some standards were made following the Electricity Network Capital Program Review report. This resulted in reduced capital expenditure with benefits to customers through lower revenue and network prices.

#### Industry review

In 2012, the Queensland Government's Independent Review Panel on Network Costs examined the impact of investment in Queensland's electricity network on power prices. The Panel made 45 recommendations to better meet customer, community and shareholder expectations, as well as balanced network outcomes.

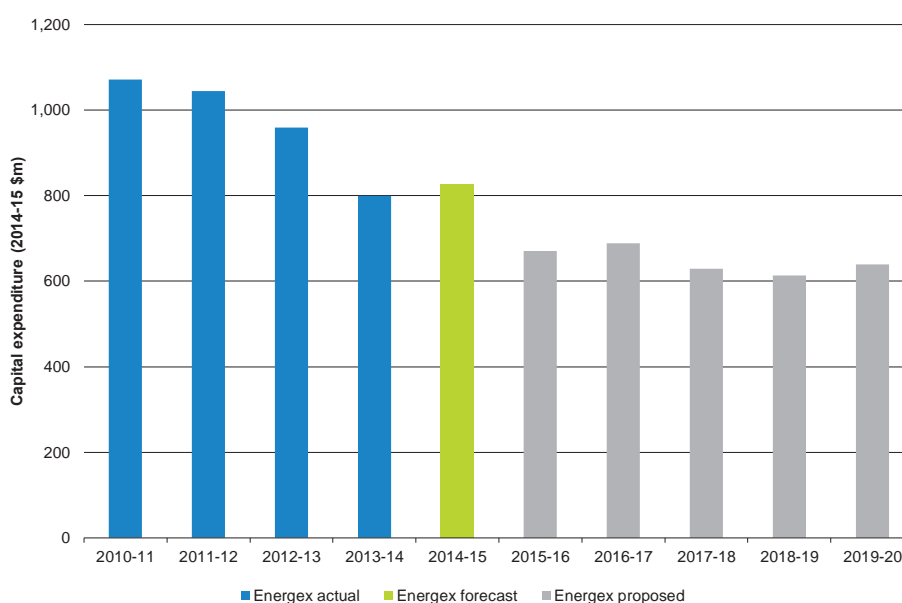
The recommendations included changes to the planning and reliability standards which resulted in further reductions to our capital expenditure. This ultimately delivers lower network prices over time. In response to the recommendations, we have also reviewed our internal work practices and organisational structure which has led to substantial improvements in business efficiency and cost savings.



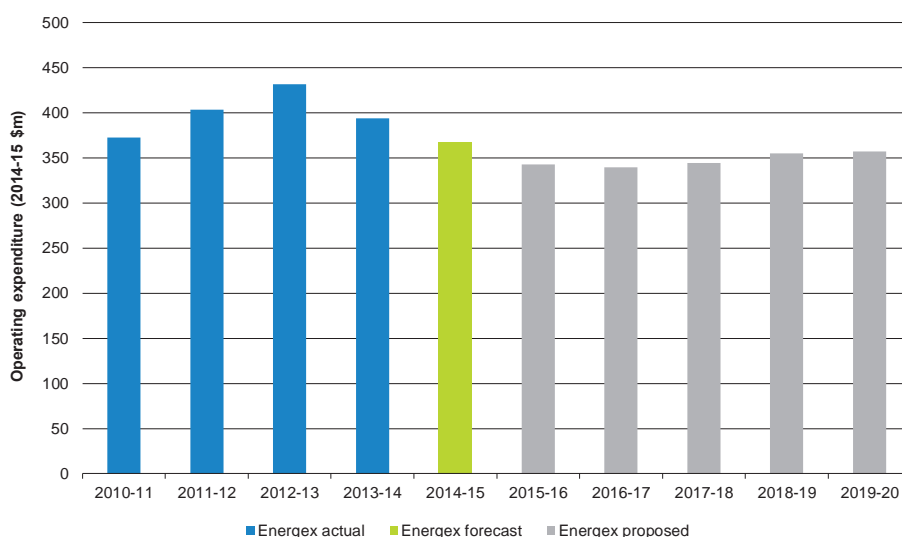
## 5.4 Comparing 2010-15 with 2015-20




We expect a continued decrease in our capital expenditure.  
Find out more about capital expenditure in Chapter 9 of our full 2015-20 Regulatory Proposal.




We expect operating expenditure to be slightly lower.  
The chart below does not include costs associated with the Queensland Government Solar Bonus Scheme.  
Find out more about operating expenditure in Chapter 10 of our full 2015-20 Regulatory Proposal.




## 5.5 Comparison tables for 2010-15 and 2015-20

 <b>Capital expenditure</b>	2010-15 (nominal \$m)			2015-20 (2014/15 \$m)	
	Years	Australian Energy Regulator approved	Actual spend	Years	What we are proposing
	2010-11	\$1,163.3	\$961.5	2015-16	\$670.3
	2011-12	\$1,230.0	\$960.1	2016-17	\$688.5
	2012-13	\$1,245.5	\$900.5	2017-18	\$629.0
	2013-14	\$1,266.3	\$770.6	2018-19	\$613.3
	2014-15	\$1,340.8	\$828.0 (forecast)	2019-20	\$638.4
<b>Total</b>		<b>\$6,245.8</b>	<b>\$4,420.7</b>		<b>\$3,239.6</b>

 <b>Operating expenditure</b>	2010-11	\$323.4	\$334.4	2015-16	\$342.5
	2011-12	\$329.1	\$370.7	2016-17	\$339.4
	2012-13	\$345.6	\$404.9	2017-18	\$344.1
	2013-14	\$363.1	\$379.3	2018-19	\$355.0
	2014-15	\$365.6	\$367.8 (forecast)	2019-20	\$357.2
	<b>Total</b>		<b>\$1,726.8</b>	<b>\$1,857.2*</b>	

\*The overspend was due to the emergency response for ex-tropical cyclone Oswald in 2013 and the 2011 Queensland flood-event, as well as costs associated with changing our organisational structure.

 <b>Revenue</b>	2010-15 (nominal \$m)			2015-20 (nominal \$m)		
	Years	Australian Energy Regulator approved per pricing proposal	Actual revenue (\$ Million)	Years	Forecast revenue (excluding Solar Bonus Scheme payments)	Forecast revenue (including Solar Bonus Scheme payments)
	2010-11	\$1,084.5	\$1,029.4	2015-16	\$1,669.4	\$1,890.6
	2011-12	\$1,220.1	\$1,152.3	2016-17	\$1,670.4	\$1,927.8
	2012-13	\$1,491.2	\$1,354.6	2017-18	\$1,671.5	\$1,965.8
	2013-14	\$1,700.4	\$1,608.3	2018-19	\$1,672.5	\$2,004.6
	2014-15	\$1,925.4	\$1,925.4 (forecast)	2019-20	\$1,673.5	\$2,044.1
<b>Total</b>		<b>\$7,421.6**</b>	<b>\$7,070.0</b>		<b>\$8,357.3</b>	<b>\$9,832.9</b>

\*\*This amount excludes approximately \$227.2 million in revenue that we chose not to recover due to reductions in our capital program and a decision not to pass through some incentive rewards.

Revenue during the 2010-15 period includes revenue for metering. This is not included in the 2015-20 figures as it has been re-classified as an alternative control service. Find out more about metering on page 59 of this document.

<b>Rate of return</b>	2010-15 Australian Energy Regulator approved	2015-20 Energex proposed
	<b>9.72%</b>	<b>7.75%</b>

Rate of return is the income we earn based on the value of assets we own. It is set by the Australian Energy Regulator and contributes to the revenue we earn. It is sometimes referred to as the Weighted Average Cost of Capital, or WACC.



# 6.

## Network investment



The content in this section relates to Chapter 9 of our full 2015-20 Regulatory Proposal



## 6.1 About capital expenditure

### What is capital expenditure?

Capital expenditure is the cost of purchasing and installing network equipment such as poles, wires, cables, transformers and substations. It also includes expenditure known as non-network capital expenditure that supports the delivery of network services including:

- fleet (light and heavy vehicles, elevated work platforms)
- tools and equipment
- property (offices and depots).

Capital expenditure occurs when network equipment needs replacement or refurbishment, when new network equipment is required for network areas reaching demand limit or when we must meet legislative requirements for reliability of supply for our customers.

Over the last 10 years we have delivered our largest ever capital expenditure program, resulting in improved network performance. As a result, the bills you pay today are covering the cost of previous network investment, but at the same time reliability levels have improved significantly. There has been a 40 per cent improvement in network reliability in the last decade.

The cost of capital expenditure is recovered over a long period of time, usually the life of the network equipment, which can be up to 60 years in some cases. This means our financial return on our network equipment is recovered over many years or even decades, depending on the type of equipment. As a result, a large reduction in capital expenditure alone does not provide immediate price relief for customers.

### Capital expenditure and our Regulatory Proposal

For our Regulatory Proposal to the Australian Energy Regulator, we are required to forecast our capital expenditure for the 2015-20 period. Our forecast needs to make certain we achieve the following capital expenditure objectives:

- Ensure we meet customer expectations in the delivery of our services.
- Ensure we comply with state and national regulatory requirements in relation to delivering a safe and reliable electricity supply to our customers.

We have forecast our capital expenditure having consideration for the Australian Energy Regulator's guidelines.

We submitted our forecast methodology to the Australian Energy Regulator on 25 November 2013 which is available to read on our website.



## 6.2 Capital expenditure for 2015-20

### A focus on replacing our ageing network equipment instead of building our network

- Many of our network poles, overhead powerlines, underground cables, transformers and substations have been serving our community since the 1970s and 1980s.
- We are continuing our network equipment replacement program to ensure our network remains safe and reliable.
- Network equipment that is faulty, at risk of damage, or coming to the end of its useful life is inspected and assessed for replacement.
- While we were building the network during the 2010-15 period we also replaced ageing network equipment.

#### What if we invested more in capital expenditure?

You would notice gradual price increases as capital expenditure costs are recovered over a long period of time.

#### What if we invested less in capital expenditure?

You would not notice an immediate reduction in network prices if less was spent on our capital expenditure. This is because capital expenditure is recovered over a long period of time.

The network would not be as safe and reliable as the replacement of ageing network equipment would be reduced. The impact of this would be an increase in repair work (operating expenditure) and more power outages during emergency events.





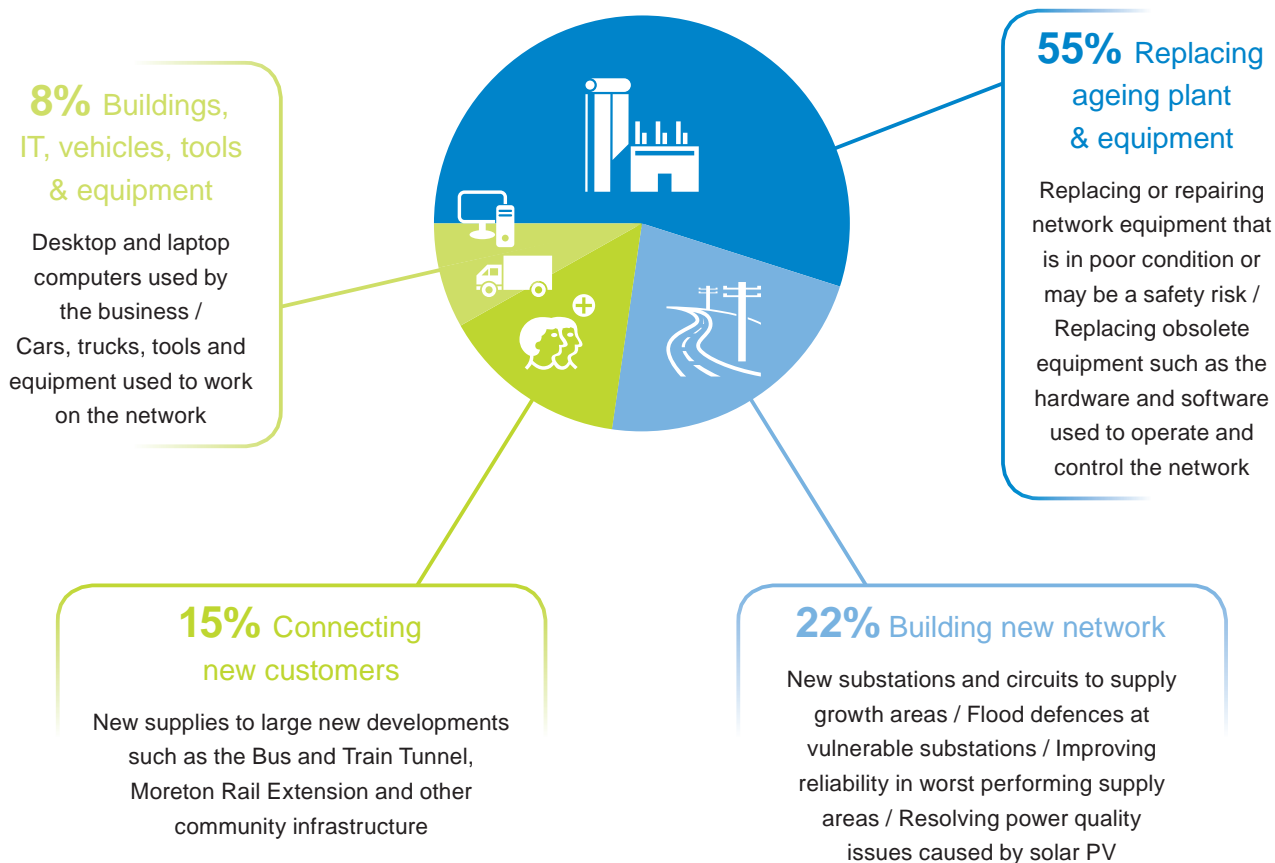
### What amount of capital expenditure are we proposing for the 2015-20 period?

(2014/15 \$m including indirect costs)

	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Replace ageing network equipment	\$363.1	\$369.9	\$345.4	\$357.1	\$337.5	\$1,773.0
Building new network	\$167.3	\$177.5	\$154.6	\$121.3	\$105.3	\$726.0
Connections and customer work	\$79.7	\$77.6	\$80.2	\$88.9	\$146.3	\$472.6
Non-network capital expenditure:	\$60.3	\$63.6	\$48.8	\$46.0	\$49.3	\$268.0
<ul style="list-style-type: none"> <li>• Information Communication and Technology system upgrades</li> <li>• Vehicle fleet</li> <li>• Buildings, property, tools and equipment.</li> </ul>						
<b>Total</b>	<b>\$670.3</b>	<b>\$688.5</b>	<b>\$629.0</b>	<b>\$613.3</b>	<b>\$638.4</b>	<b>\$3,239.6</b>

Numbers may not add up due to rounding.

### Breakdown of capital expenditure proposed for the 2015-20 period





## 6.3 What we are doing with customer feedback

As part of our Customer Engagement Program, we sought to understand customer expectations regarding how we invest in the network.

### You said

Our primary focus is a safe and reliable network. You do not want to pay more for increased reliability, except in areas where reliability is poor.

You want network investment to remain the same, without large increases to network prices.

You expect us to conduct detailed analysis of capital expenditure programs to ensure they are efficient.

You want us to further explore demand management solutions to reduce network investment, without reducing supply reliability and increasing the price.

You believe our focus should be the safe and reliable operation of the network.

### We will do

For the 2015-20 period we will focus on:

Continuing to provide a safe and reliable network.

Improving poor performing supply areas.

Keeping our community safe around our network.

Reducing further investment in our network and finding efficiencies to reduce our contribution to electricity prices.

Reviewing our capital expenditure program to identify where we can introduce initiatives which will minimise network upgrades and costs.

Offering demand management programs specific to customers' electricity use and demand needs, while minimising network upgrades.

Continuing to invest in areas of development and population growth to ensure customers are receiving a safe and reliable electricity supply.

### Outcome

You can trust that we power your homes and businesses in a way that is reliable and puts a high priority on community safety.

You will receive longer term price stability through the reduction of our capital expenditure program.

Before planning for large capital expenditure projects, we will investigate non-network solutions for electricity supply needs.

Demand management programs will continue to be a significant part of our business as we look for new ways to find non-network solutions for future supply needs

We will continue to be the backbone of growth in South East Queensland by supporting new electricity network developments.

## 6.4 Risks and benefits for customers

	Risks	Benefits
<b>If we spend less than proposed</b>	<ul style="list-style-type: none"> <li>• Network could become less safe and reliable, with less support for regional growth areas and less network equipment replaced regularly.</li> <li>• A reduction in replacement of ageing network equipment could risk community and staff safety.</li> <li>• Continuing customer dissatisfaction with the number and length of power outages in poorer performing supply areas.</li> <li>• We may be unable to meet our service delivery requirements and expectations.</li> <li>• A greater increase in operating expenditure to address network faults.</li> </ul>	<ul style="list-style-type: none"> <li>• The value of our assets would not be as high in the 2015-20 period. This would mean less revenue for us and lower network prices for customers.</li> </ul>
<b>If we spend more than proposed</b>	<ul style="list-style-type: none"> <li>• Unless additional capital expenditure is reflective of future electricity use, existing customers will pay more.</li> </ul>	<ul style="list-style-type: none"> <li>• Network is safer and more reliable, with greater support for regional growth areas and network equipment replaced regularly.</li> <li>• Greater customer satisfaction with the number and length of power outages in poorer performing supply areas.</li> </ul>



# 7.

## Our day to day services to you



The content in this section relates to Chapter 10 of our full 2015-20 Regulatory Proposal



## 7.1 About operating expenditure

### What is operating expenditure?

Operating expenditure is the cost of the routine, ongoing activities of managing, operating and maintaining an electricity network. It is recovered from customers within the year the costs occurred.

Operating expenditure includes:

- maintaining power lines to provide a safe and reliable network
- repairs when equipment suffers serious faults
- emergency response and repairs to the network after severe weather events
- tree trimming to ensure a safe and reliable electricity supply, particularly during severe weather events
- customer services including general network enquiries, fault and emergency response calls, community safety education and complaint management
- demand management programs.

While the Australian Energy Regulator approves our operating expenditure, there are some service expenses over which we have limited control.

This is the case with severe weather events. We do not know how many will occur within the five year period or how much network damage there will be. However, we can manage how efficiently we respond.

The 2010-15 period included two of the most severe weather events in our history – the 2011 floods and ex-tropical cyclone Oswald in 2013.

### Operating expenditure and our Regulatory Proposal

For our Regulatory Proposal to the Australian Energy Regulator, we are required to forecast our operating expenditure for the 2015-20 period. Our forecast needs to make certain we achieve the following operating expenditure objectives:

- Ensure we meet customer expectations in the delivery of our services.
- Ensure we comply with state and national regulatory requirements in relation to delivering a safe and reliable electricity supply to our customers.

We have forecast our operating expenditure having consideration for the Australian Energy Regulator's guidelines.

We submitted our forecast methodology to the Australian Energy Regulator on 25 November 2013 which is available to read on our website.

## 7.2 Operating expenditure for 2015-20

We are proposing a slight decrease in our operating expenditure compared with our spend during the 2010-15 period. We will:

- Maintain our existing network equipment to ensure we get the maximum value of our network so we continue to deliver a safe and reliable electricity supply to our customers.
- Continue to conduct planned maintenance on our network to ensure we meet reliability standards and customer expectations.

**New additional operating costs for the 2015-20 period:**

- Asbestos removal following the release of the National Strategic Plan for Asbestos Awareness and Management in July 2013.
- Continued focus on, and delivery of, demand management programs.

**Efficiencies we have made:**

- The cost of tree trimming will be lower as we have made changes to how these services are delivered through our contractors without adversely impacting network requirements.
- Changes to our organisational structure which will result in yearly savings of \$124.2 million in support costs benefiting our customers through lower network prices.
- Implementation of a distribution management system that will deliver cost reductions and improve our ability to remotely monitor and control our network and improve our emergency response capability.

\*This includes a small portion of capital expenditure.

### What if we invested more in operating expenditure?

You would notice an immediate increase in your electricity retail bills. There would also be an increase in the network's reliability, response to emergencies, project initiatives and customer services.

### What if we invested less in operating expenditure?

You would notice an immediate reduction in network prices. This is because operating expenditure is recovered in the year it is spent. However, customers could experience an increase in the number and length of power outages as well as a decrease in our customer service performance.

### What amount of operating expenditure are we proposing for the 2015-20 period?

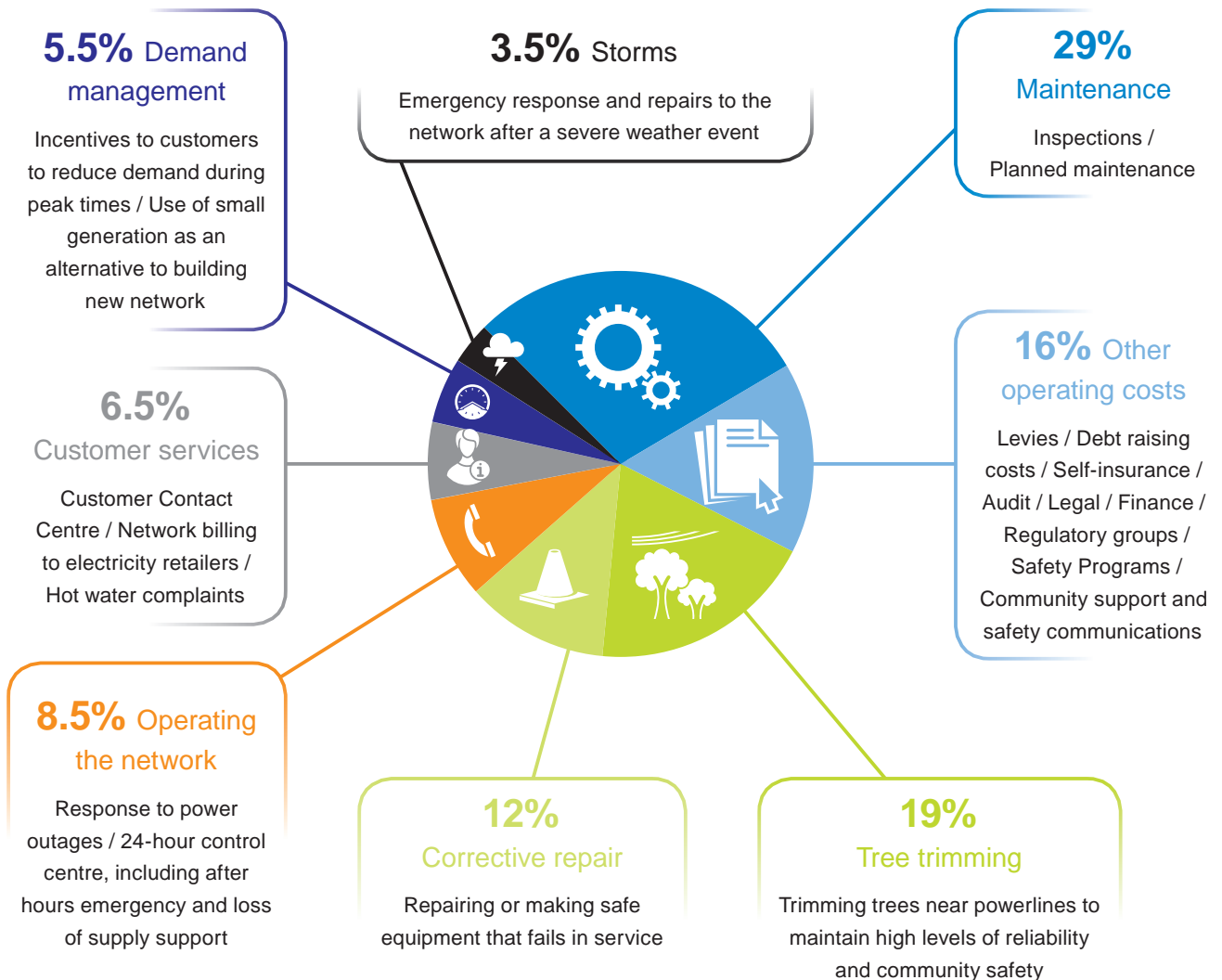
(2014/15 \$m including indirect costs, but excluding payments made under the Queensland Government Solar Bonus Scheme)

	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Inspection	\$22.2	\$22.0	\$22.6	\$23.2	\$23.2	\$113.1
Planned maintenance	\$78.0	\$77.3	\$79.3	\$81.2	\$81.5	\$397.2
Corrective repair	\$41.7	\$41.2	\$42.0	\$42.8	\$42.6	\$210.3
Tree trimming	\$66.9	\$64.6	\$65.2	\$65.8	\$65.1	\$327.4
Emergency response/storms	\$12.1	\$11.9	\$12.1	\$12.3	\$12.2	\$60.6
Network operating costs	\$28.6	\$28.6	\$29.4	\$30.2	\$30.4	\$147.2
Network billing and other energy market services	\$3.3	\$3.2	\$3.2	\$3.2	\$3.2	\$16.1
Customer services (including contact centre)	\$19.7	\$19.3	\$19.4	\$19.7	\$19.6	\$97.8
Demand management programs	\$16.3	\$17.5	\$17.9	\$20.7	\$23.0	\$95.3
Levies	\$8.8	\$8.7	\$8.7	\$8.6	\$8.5	\$43.3
Debt raising costs	\$6.6	\$6.7	\$6.9	\$7.0	\$7.2	\$34.4
Self-insurance	\$2.3	\$2.3	\$2.3	\$2.3	\$2.4	\$11.7
Other operating costs	\$36.2	\$36.0	\$35.2	\$38.0	\$38.3	\$183.7
<b>Total</b>	<b>\$342.5</b>	<b>\$339.4</b>	<b>\$344.1</b>	<b>\$355.0</b>	<b>\$357.2</b>	<b>\$1,738.2</b>

Numbers may not add up due to rounding.



## Breakdown of operating expenditure proposed for the 2015-20 period



## 7.3 Our operational services

### Customer service/Service performance

#### Our services to you

Operating expenditure is about ensuring we deliver services to you. Our Customer Contact Centre and field services are two key customer interface groups. We regularly assess the performance of these services to ensure we are delivering the best results possible. Between July 2010 and June 2014, our Customer Contact Centre responded to more than 2 million customer calls.

To monitor our quality of customer service, we conduct a monthly telephone survey with a random sample of customers who have recently called our Customer Contact Centre. Independent research agency, TNS Australia conducts these surveys.

The quality of field services is also assessed. Customers receiving services from field crews at their home or business are asked a series of questions to measure satisfaction with the service we provided. The results of this ongoing research is used to create a customer service index benchmark that is referred to as the Service Performance Index.

We have a corporate key performance indicator related to the Service Performance Index which measures service in the following areas:

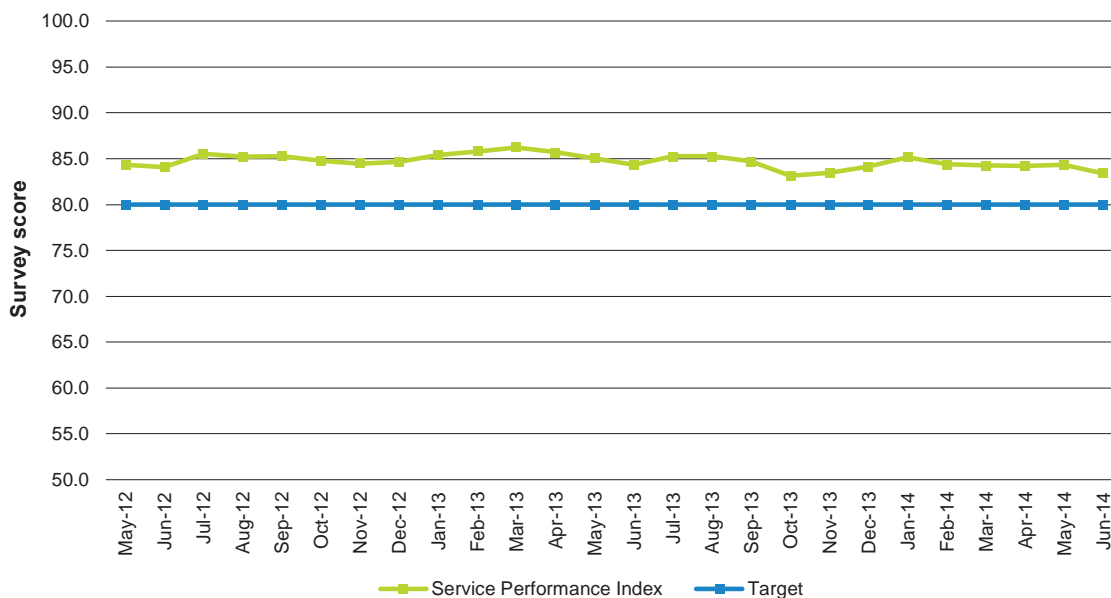
- phone call service
- customer service
- problem resolution
- customer confidence in the information provided
- timely completion of work
- quality of work
- staff behaviour
- other key indicators of service performance.

Our Service Performance Index score has consistently rated above 80 since 2009.

#### Customer views

Our research shows you expect us to maintain high levels of customer service. Customers understand and support the costs associated with providing high service levels. Any decline in customer service would be deemed unacceptable by customers in an environment where they are already exposed to increasing electricity prices.

### Service Performance Index



## 7.3 Our operational services

### Delivery of services

#### On time performance

As part of our customer service commitment we have an obligation to deliver specific services to customers within certain timeframes. There are around 28 services that we measure our on time performance for. Some of the services include new connections, disconnections, re-connections, metering (reading and maintenance) and overhead replacement. Between July 2010 and June 2014 we completed 2.7 million customer service jobs with 96.2 per cent of these completed on time.

#### Guaranteed Service Levels

We are required under the Queensland Electricity Industry Code to meet Guaranteed Service Levels for our customers. Between 2010-11 and 2013-14 23,326 Guaranteed Services Level payments were made at a cost of \$1.3 million.

The instances where customers may be eligible for compensation are:

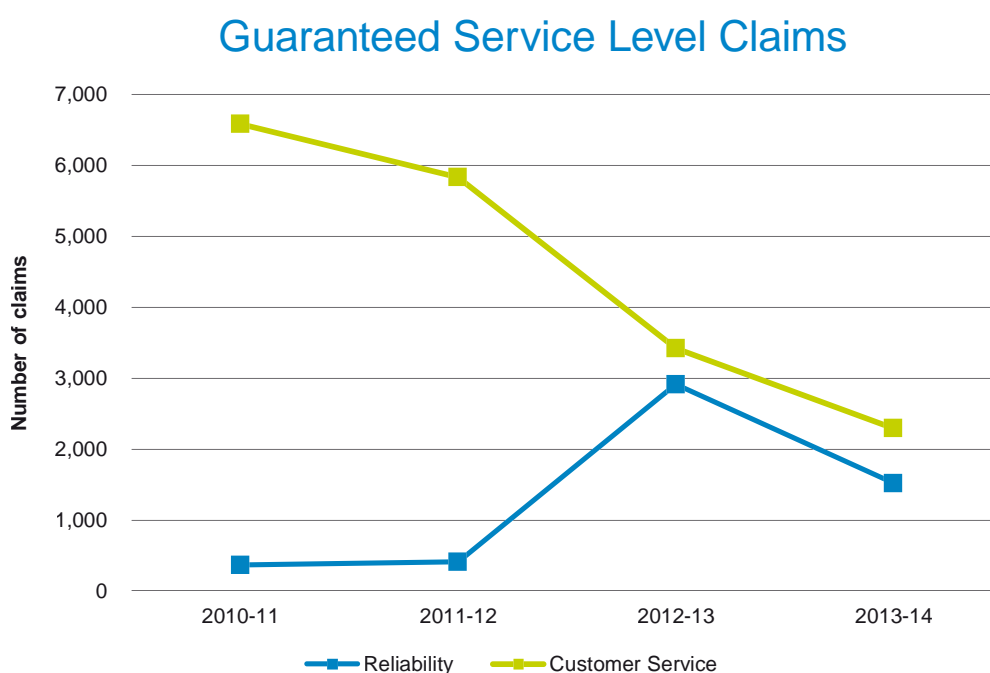
##### Reliability

- interruption duration (the number of power outages)
- interruption frequency (the length of power outages).

##### Customer Service

- new connections not completed on time
- wrongful disconnections
- failure to reconnect on time
- missing a scheduled appointment
- failure to notify of a planned interruption.

To find out more about our Guaranteed Service Levels visit [www.energex.com.au/guaranteedlevels](http://www.energex.com.au/guaranteedlevels)





## 7.3 Our operational services

### Managing peak demand on our electricity network

Between 4pm and 8pm each day thousands of South East Queenslanders arrive home from work and simultaneously use multiple appliances such as computers, TVs, cook tops, ovens, dishwashers, washing machines and air-conditioners. This is peak demand in action – when the network is experiencing the most pressure. It is even worse during very hot summer days.

Between 2004 and 2009 peak demand increased significant pressure on the network. Over the past decade we invested heavily to ensure our network has the capacity to meet this demand when customers need it.

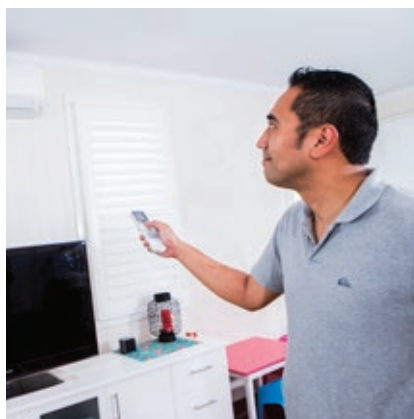
Over the past few years, due to a number of factors, peak demand across the network has flattened. While we are still seeing some new localised peaks during extreme weather periods, we no longer need to build the network to the same extent.

During the 2010-15 period, we received funding from the Queensland Government and the Australian Energy Regulator to conduct a range of programs aimed at managing peak demand.

For the 2015-20 period, we are proposing to continue with our demand management programs for residential customers in all network areas and business customers in areas of the network where it is needed. For the 2015-20 period we will be seeking approval for **\$95.3 million** for our demand management programs.

#### Customer views

During our research, both residential and business customers indicated they were aware of peak demand, however, they had little knowledge of the term demand management or of the Positive Payback program. When explained, they both considered demand management programs to be an important community initiative and indicated we should be responsible for these programs and actively promoting them. Customers are supportive of solutions that would reduce their electricity retail bill and any future network price increases.



## 7.3 Our operational services

### Our demand management programs

As part of our focus on reducing demand at peak times, we have developed programs for residential and business customers. These programs have been developed through close consultation with customers, industry and government bodies.

Our Positive Payback programs offer rewards and incentives to homes and businesses that help manage peak electricity demand.

These two programs offer different demand management solutions for households and business customers.

#### Benefits of Positive Payback

- less need to expand the network and a reduction to network spend, which will ultimately save customers money
- cash back incentives for customers to join the programs
- better management of electricity usage and costs.

For more information visit

[www.energex.com.au/positivepayback](http://www.energex.com.au/positivepayback)



#### For residential customers

Positive Payback for Households offers rewards for homes that connect to economy tariffs or install technologies that reduce electricity usage during peak periods. This includes using a control device for air-conditioning units and the installation of energy efficient pool pumps.

##### Hot water control load

- Over 1,500 rebates paid to customers who have moved to an economy or super economy tariff.

##### Pool pump peak load reduction

- Over 13,500 rebates paid to customers switching their pools to an economy tariff or purchasing and installing a five star rated or better energy efficient pump.
- Over 19,000 pool pumps are connected as a result of the Positive Payback campaign.

##### Air-conditioning

- Over 27,000 air-conditioners enrolled in the program since 2008.



#### For business customers

Positive Payback for Businesses is available to business customers in eligible areas that install energy efficient equipment or appliances at their site that lowers their electricity usage during periods of peak electricity demand.

##### Power factor Correction

- 20.5 megavolt amperes of demand reduction gained by power factor improvements.

##### Demand Response (Embedded Generation & Load Curtailments)

- 10.5 megavolt amperes of permanent demand reduction through energy efficiency (lighting, refrigeration, motors, heating, ventilation and air-conditioning).

##### Energy Efficiency

- 46.6 megavolt amperes of demand response through generation and load limitation.

## 7.3 Our operational services

### Tree trimming

Trees and other vegetation can interfere with power lines. This can pose a serious risk to public safety and the environment as well as cause power outages.

For these reasons we undertake a routine tree trimming program to maintain vegetation around power lines.

By the end of the 2010-15 period we expect to have spent approximately 19 per cent of our operating expenditure on tree trimming.

For the 2015-20 period, we will not increase our operating expenditure for our tree trimming program. The cost of tree trimming will be lower as we have made changes to how these services are delivered through our contractors while still delivering safe outcomes for the community. It is important for us to maintain our tree trimming program as it ensures your homes and streets are kept safe. Trees around power lines can be dangerous and interrupt supply.

So we will continue to meet our obligations in your local area in a cost effective manner. Ensuring we spend money efficiently and effectively on the maintenance of trees and other vegetation around power lines means our community can be safe, and supply interruptions are limited.

#### What if we spend more?

- Trees would be trimmed often and in a more visually appealing way.
- We would trim more trees in the community.
- The costs for tree trimming would increase and directly impact network prices in the following year.

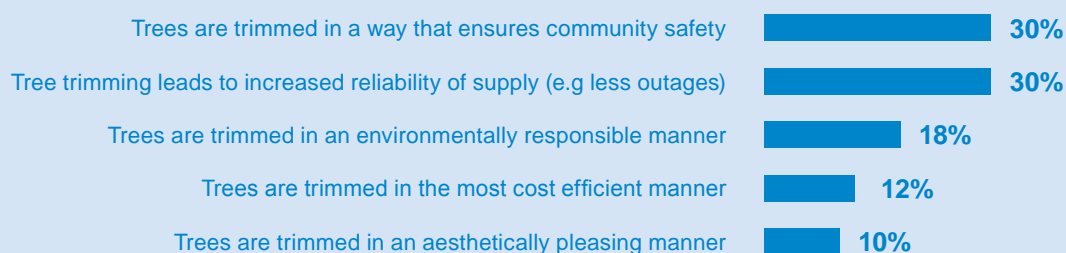
#### What if we spend less?

- Trees might be trimmed less, increasing the community safety risk and the potential for power outages.
- Trees might be cut back further to avoid regular visits to conduct work and the results would be less aesthetically pleasing.
- We could reduce our operating expenditure putting downward pressure on network prices.

#### Customer views

Our customer research indicated that customers have a reasonable understanding of why we conduct tree trimming programs in their community. Their clearest understanding and expectation was for trees to be trimmed in a way that ensures community safety and reduces power outages.

#### Customer feedback on our Tree Trimming Program









## 7.4 What we are doing with customer feedback

As part of our Customer Engagement Program, we sought to understand customer expectations regarding how we maintain and operate the network.

### You said

You want us to maintain the current levels of supply, but do not want to pay any more to maintain the network. You do not want your electricity reliability to drop even if it means network prices would be lower.

You prefer demand management programs that provide financial incentives for off-peak use. Despite low awareness, when informed about demand management, there is significant support for us to provide these programs.

You think tree trimming is important for maintaining supply reliability and community safety.

You believe we should be responsible for promoting electrical safety messages, particularly storm safety and preparation.

You want a relationship with us so you can have input into decisions that are important to you.

### We will do

Maintain current supply levels through ongoing maintenance of the network. To ensure you continue to receive a safe and reliable electricity supply.

We will continue to offer incentives under the peak demand program for residential and business customers during the 2015-20 period.

While we have found efficiencies to save on tree trimming, levels of service will remain the same.

Continue to communicate effectively with our community, particularly in relation to electrical safety and storm preparation.

Enhance our engagement with you through our Customer Engagement Strategy.

### Outcome

Reliability will remain the same however some areas experiencing a greater number of power outages should see an improvement.

We will continue to run our demand management programs providing incentives and benefits to customers.

You will continue to have trees trimmed, through an ongoing program, at a lower cost than previous years. This will ensure you continue to receive a safe and reliable electricity supply.

We will maintain our focus on community safety and storm preparedness.

You will continue to have opportunities to be involved in ongoing business decisions relating to the supply and the services we offer you.

## 7.5 Risks and benefits for customers

What are the risks and benefits to this approach for customers?

	Risks	Benefits
<b>If we spend less than proposed</b>	<ul style="list-style-type: none"> <li>• Less network maintenance means our network is less safe and more prone to power outages.</li> <li>• We would not be able to offer as many services, like demand management programs and customer services.</li> </ul>	<ul style="list-style-type: none"> <li>• Less operating expenditure can result in more immediate price savings for customers.</li> </ul>
<b>If we spend more than proposed</b>	<ul style="list-style-type: none"> <li>• An increase in operating expenditure can result in an immediate rise in electricity prices being passed on to customers.</li> </ul>	<ul style="list-style-type: none"> <li>• Greater network maintenance means our network is safer and less prone to power outages.</li> <li>• We could continue to offer a broad range of services, as well as increase our focus on customer service activities.</li> </ul>



# 8.

## Forecast electricity use and demand





# 8.1 About electricity use and demand

The content in this section relates to Chapter 8 of our full 2015-20 Regulatory Proposal

## What are electricity use and demand forecasts?

Electricity use is the amount of power used all day, every day and is measured by electricity meters at homes and businesses. It is the basis of the power bill for residential and small business customers.

Electricity demand is when electricity use levels are at their maximum for a given point of a given day.

In order to calculate the revenue required for our capital and operating expenditure, we need a method to forecast customer electricity needs for the 2015-20 period.

We need to consider how much electricity customers use but also how much they are using at peak times. For example solar PV systems contribute to a reduction in overall electricity use, however at residential peak times (4-8pm) these systems do not reduce electricity demand.

Forecasting is a critical element of our Regulatory Proposal to the Australian Energy Regulator. These forecasts form the basis for how we build our network, maintain our network and recover our revenue for the five year period.

## How do we forecast electricity use and demand?

Twice a year we undertake a comprehensive process to forecast electricity use, demand and customer connection growth rates. Customers have changed the way they use electricity and this has resulted in changes to the way we forecast.

We have made changes to our forecasting approach to model the impacts of weather, technology and customer behaviours at a more detailed level. This has given us a greater insight into how each of these elements impact electricity use and demand.

## Important considerations for electricity use and demand forecasts:

- price
- solar PV uptake
- electric vehicles
- battery storage
- temperature
- air-conditioning
- economic growth
- population growth and distribution
- government policy
- demand management
- promotion of new technologies
- closure of large industry.

## Electricity use, demand and our Regulatory Proposal

Electricity use and demand are a key part of our capital and operating expenditure forecasts. We need to submit to the Australian Energy Regulator:

- the forecast customer use of the network
- the method used to develop the forecast.

## Our electricity forecasts

Since 2004 and during the 2010-15 period, we have been building the network to meet peak demand. While peak demand was rising during 2004-09, it has flattened in recent years.

We invested in the network to meet this growing peak demand. Customer demand has been lower than forecast during the 2010-15 period and we do not anticipate a large increase for the 2015-20 period. As peak demand has stabilised, so has our investment in our network. Forecasting electricity use and demand on the network is very important. Understanding how and when our customers will use the network helps us make decisions in relation to building, maintaining and providing other services.

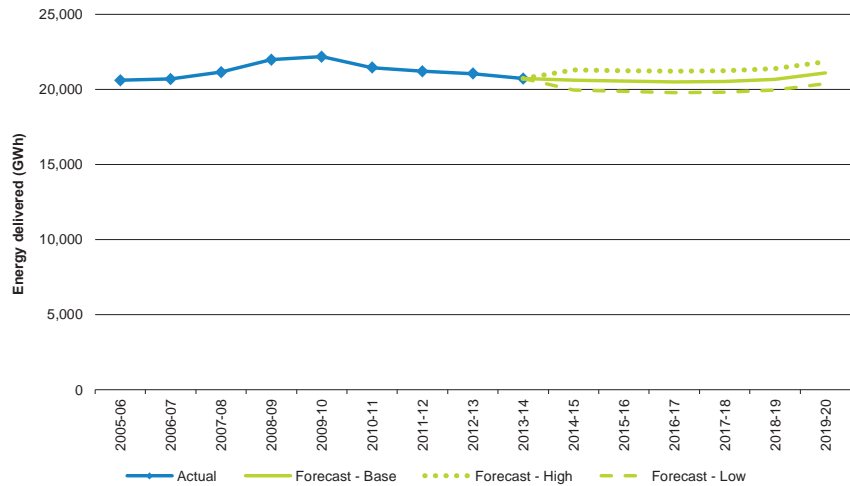
## 8.2 Key components of our forecast

### Electricity use

We are seeing a decline in commercial electricity use which we expect to continue. Residential electricity use is expected to grow slightly alongside economic growth predictions.

Overall, electricity use of our network is predicted to increase but at a much lower rate than any longer term trends.

Energy delivered from 2005-06 to 2019-20



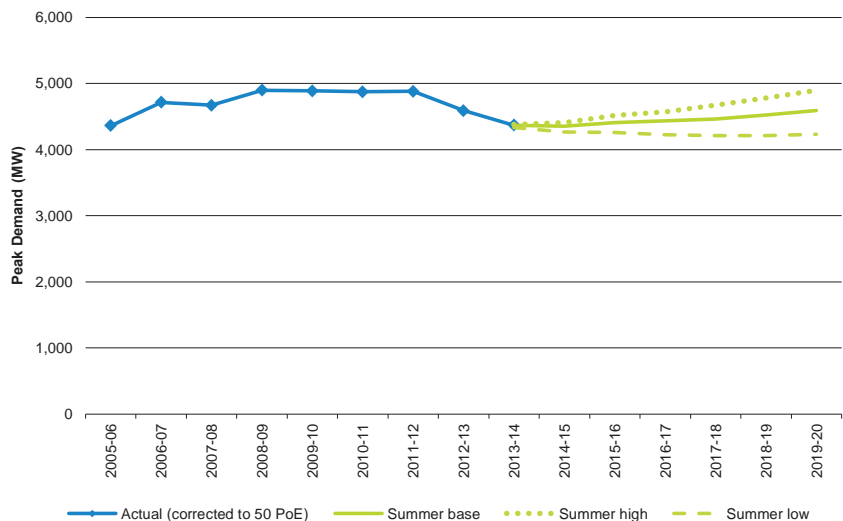
### Peak demand forecasts

Geographically, there are still some network areas that require investment for growth. Network investment plans will be tailored to meet any additional demand in these areas.

Around 15.2 per cent of substations will have a yearly growth rate greater than 2 per cent. This means our plans for investment will be tailored to meet any additional demand on the network in these growth areas.

Across the entire network, demand will increase at a very small rate. Peak demand relates to the time when our network is under the most constraint from high volumes of electricity being transported through the network.

Summer peak demand from 2005-06 to 2019-20



The forecast in this chart is based on a 50 per cent probability of exceedance forecast. For more information on forecasts refer to Chapter 8 of our full 2015-20 Regulatory Proposal.

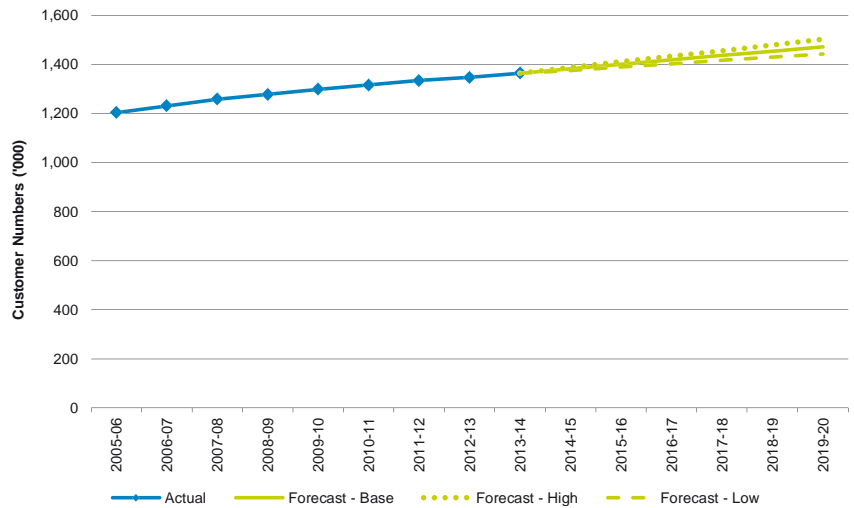
## Customer numbers

By the end of the 2010-15 period we expect to have completed 82,000 new connections to the network. In comparison, we are expecting 92,000 new connections for the 2015-20 period.

We anticipate we will move from 1.381 million connected customers at the beginning of 2015-16 to 1.473 million by the end of 2019-20 which is an average yearly growth rate of 1.3 per cent.

We are expecting growth will gradually increase towards the end of the 2015-20 period.

### Customer numbers from 2005-06 to 2019-20





# 9.

## Incentive schemes and service classifications

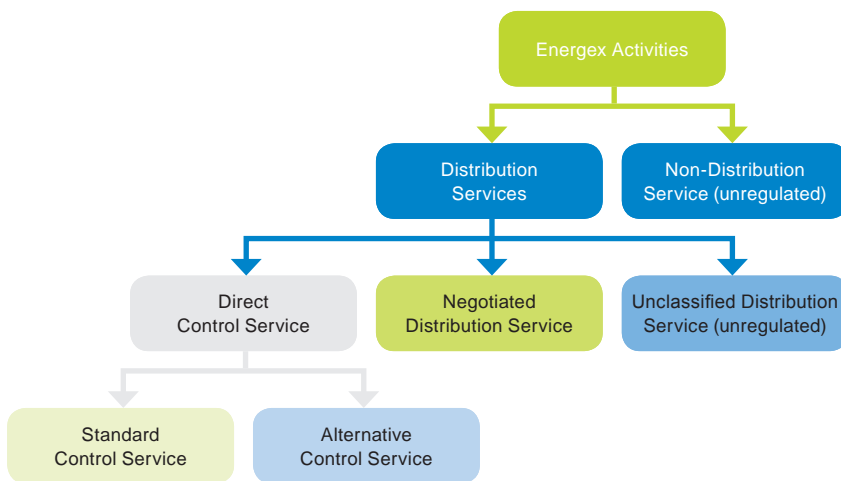




The content in this section relates to Chapters 6, 16, 17, 18, 19, 24, 25, 26 and 27 of our full 2015-20 Regulatory Proposal

## 9.1 Regulated services

The regulation of the electricity industry and its services is complicated. Services can be regulated or unregulated and the Australian Energy Regulator defines this. We detail in our Regulatory Proposal how we will provide these services based on how they are regulated which also impacts how we recover the cost of providing these services.



### Revenue Cap

A control mechanism whereby a distributor cannot earn more than a set amount of revenue in a five year period. The maximum allowable revenue for a distributor is set by the Australian Energy Regulator.

### Price Cap

A control mechanism which sets a maximum limit on the price of a service.

### Direct control service

A distribution service where the price paid or the revenue earned from the service must be regulated under the distribution determination. There are two types of direct control services: standard control services and alternative control services.



Services we provide where the entire community shares the cost are called **standard control services**. Standard control services include network services which ensure the operation of our network and delivery of electricity services. The costs for these services are shared by everyone connected to the network and are subject to a 'revenue cap'. This means the total revenue is a fixed amount collected over a five year period.



Services requested and paid for by individual customers are called **alternative control services**. These services are subject to a 'price cap' rather than a 'revenue cap', which means there is a limit on the price that can be charged. Examples of alternative control services are large customer connections, public lighting services and ancillary network services. The Australian Energy Regulator has also confirmed that metering for small customers will be classified as an alternative control service. These are the meters that the majority of Energex customers use. See Section 9.4 of this document for more information.

Most of our electricity services are regulated as direct control services and further classified in either two ways

## 9.2 Incentive schemes

### The Australian Energy Regulator sets incentive schemes to drive certain outcomes with the objective of rewarding improvements.

There are a broad range of schemes available. For the purposes of this overview paper, we will address two schemes. These are:

- The Demand Management Incentive Scheme
- The Service Target Performance Incentive Scheme.

### Demand Management Incentive Scheme

The use of new and alternative technologies could provide opportunities for greater reductions in capital expenditure investment through non-network alternatives. The Demand Management Incentive Scheme will allow us to continue to investigate further options for demand management solutions. This will complement our existing Positive Payback programs which provide incentives for customers to reduce their peak demand.

For the 2015-20 period we plan to use the Demand Management Incentive Scheme allowance of \$5 million for analysis, investigation and development of solutions that effectively manage emerging drivers of demand. The proposed schemes for 2015-20 include Home Area Network research projects, controlled load modelling, control of third party building management systems, a small to medium business demand management response study and electric vehicle research.

### Service Target Performance Incentive Scheme

The Service Target Performance Incentive Scheme rewards or penalises distributors like us by adjusting their yearly revenue based on performance achieved against set targets.

The performance standards in 2015-20 will apply in relation to telephone answering and reliability (the number and length of power outages).

Distributors can propose 'at risk revenue' (a reward or penalty) of up to 5 per cent of their total revenue. We propose to keep the current lower rate of 2 per cent given that our customers have indicated to us that they do not want to pay more to have their network reliability levels increased.

Of the 2 per cent of revenue at risk; 1.9 per cent will relate to reliability targets and 0.1 per cent will relate to telephone answering targets.

Information about the Efficiency Benefit Sharing Scheme can be found in Chapter 15 and 16 of the 2015-20 Regulatory Proposal and the Capital Expenditure Sharing Scheme in Chapter 17.

## 9.3 Classification of public lighting services

We currently construct, operate and maintain public lighting services for 12 regional councils and the Department of Transport and Main Roads in South East Queensland.

There are currently around 305,000 public lights installed to ensure our community is safe and secure on our streets and thoroughfares. The Australian Energy Regulator has classified public lighting as an alternative control service. This means that each public lighting service operated, constructed or maintained by us will be paid for by the regional council or government department in that particular area.

### Customer views

We met separately with a number of councils, the Department of Transport and Main Roads, and the Local Government Association of Queensland to obtain feedback regarding the classification of public lighting services. We discussed the options of these services being classified as an alternative control service or a negotiated service. Our customers supported the view that public lighting should remain as an alternative control service during the 2015-20 period which means the Australian Energy Regulator sets price limits for what we can charge for these services.

### How do we calculate the cost to build and service public lighting?

Street lights can be built by Energex or the customer (typically, local councils) and then given to us to operate, maintain and repair. If we build them, they are classified as 'non-contributed' and if the customer builds them they are classified as 'contributed'.

1. To assess the costs associated with building and servicing public lighting, we classify public lighting as either contributed or non-contributed.
2. We work out the capital and operating expenditure to calculate the costs required to fund these services.
3. The public lighting classifications are then further divided into smaller groups, depending on the size and location of the asset. These smaller groups have a classification of 'major' or 'minor'.
4. The network tariff is established for the first year using the building block approach. This is adjusted each remaining year during the five year period for changes in the cost components.

**(Total revenue requirement/Number of lamps)**

**Number of days in the year**

**= Public lighting tariffs for services**

The table below indicates the alternative control service prices for public lighting. In most cases, the price will reduce in 2015-16.

### Expected prices for public lighting services for the 2015-20 period

\$/day	Category	Rates	2015-16	2016-17	2017-18	2018-19	2019-20
Major Street Lights	non-contributed	\$/day	0.88	0.90	0.92	0.95	0.97
		% change	-27%	2%	2%	2%	2%
	contributed	\$/day	0.28	0.29	0.29	0.30	0.31
		% change	-15%	2%	2%	2%	2%
Minor Street Lights	non-contributed	\$/day	0.40	0.41	0.42	0.43	0.44
		% change	-16%	2%	2%	2%	2%
	contributed	\$/day	0.13	0.14	0.14	0.15	0.15
		% change	4%	2%	2%	2%	2%

All prices are exclusive of GST

## 9.4 Metering and connections

We currently offer electricity metering services to our small customers. Small customers are those which use less than 100 megawatts hours of electricity per year and are generally residential and small to medium business customers.

A typical residential customer uses 4.1\* megawatt hours of electricity per year and a typical small to medium business customer uses 5.4\* megawatt hours.

Our electricity meters measure the amount of electricity you use at your property. This information is collected by our meter readers on behalf of your electricity retailer. Meter reading information on electricity use is the basis for your electricity retail bill. These meters also measure electricity exported by solar PV systems to the network.

\*Typical usage for a residential and business customer is sourced from the Queensland Competition Authority's Regulated retail electricity prices 2014-15 Final Determination.

We are responsible for metering services for small customers such as the installation, replacement, reading and maintenance of the electricity meter. Currently our metering costs for small customers are shared between all connected customers.

We intend to change the approach to metering and apply specific charges based on individual customer circumstances. It is important to note that these will not be new charges. They are being un-bundled from the cost that forms part of our overall revenue, paid for by everyone. It is a retailer's decision whether they make the un-bundled charges visible on a customer's electricity retail bill.

These changes will allow for metering competition in the future.



Expected prices for metering service charges relating to primary, controlled load and solar PV tariffs for the 2015-20 period

Expected prices	Tariff type	2015-16	2016-17	2017-18	2018-19	2019-20
c/day	Primary tariff	10.73	11.09	11.47	11.85	12.26
	Controlled load	3.22	3.33	3.44	3.56	3.68
	Solar PV	7.51	7.77	8.03	8.30	8.58
\$/year	Primary tariff	39.17	40.49	41.86	43.27	44.73
	Controlled load	11.75	12.15	12.56	12.98	13.42
	Solar PV	27.42	28.34	29.30	30.29	31.31

Find out more about metering service charges in Chapter 25 of our full 2015-20 Regulatory Proposal.



## Customer views

We sought feedback from our customers in relation to how we should apply metering service charges.

Customer feedback indicated:

- Customer views were mixed about up front versus daily costs.
- Many customers stated the importance of 'user pays' and some customer representatives supported an up front cost.
- There were concerns about customers perceiving this as a new charge on their electricity bills.
- Concerns about confusion and complexity for customers.
- Balancing the need between user pays and simplicity was important.

## How the metering changes will apply

Separating metering costs from other electricity charges allows customers to see what they are paying for. It is important to know that this is not a new charge. This also means there are opportunities for market competition in the future, meaning you could choose a meter provider other than us to provide you with your metering services.

We have decided to charge a daily fee on a per tariff basis as this generally aligns to each individual customer's metering needs.

Other metering services that are commonly one-off interactions, such as special meter reads, meter removal and meter testing will not be included in the daily metering services charge, but will continue to have a limit on how much we can charge. The daily metering services charge would not include additional one-off services like special meter tests and customer-elected replacements. These services will be quoted where the price reflects any special customer requirements. In addition, exit fees may apply to any metering change request that results in the removal of a working meter.

Find out more about how metering service charges will apply in Chapter 25 of our full 2015-20 Regulatory Proposal.

## Customer connections

We initially considered re-classifying small customer connections as an alternative control service to facilitate a user pays approach. We are not pursuing this option for the 2015-20 period due to insufficient time to adequately consult customers and stakeholders. Large customer connections (for commercial and industrial sites using more than 4 gigawatt hours per year) will remain classified as an alternative control service.

Find out more about customer connections in Chapter 24 of our full 2015-20 Regulatory Proposal.



## 9.5 What we are doing with customer feedback

As part of our Customer Engagement Program, we sought to understand customer expectations relating to how we maintain and operate the network in relation to incentive schemes and service classifications.

### You said

You would like to see us take a leadership role in communicating about demand management programs and continuing to look for new ways we can provide these solutions.

Most regional councils were supportive of our approach for public lighting services to continue to be classified as alternative control services.

Customers responded well to the concept of up-front costs for metering, but had concerns about price impacts and the misconception of it being a new charge.

### We will do

We will continue to utilise funding made available to us to investigate future innovations in demand management.

We will continue to offer public lighting services as alternative control services.

We are looking to enhance our approach to business-as-usual engagement with our public lighting customers.

We will charge a daily fee per tariff for most metering charges.

### Outcome

We will efficiently utilise any funding allocated to us through the Demand Management Incentive Allowance to investigate innovations in demand management.

There will be no change to how the provision of public lighting services will be classified.

Greater engagement with public lighting customers will produce enhanced mutual understanding about the supply of services and regional council expectations for business-as-usual public lighting services.

Simple daily metering charges will apply, with no up-front payments. It is a decision for electricity retailers as to whether this cost will be displayed on your electricity bills.

# 10.

## Glossary

Term	Definition
2010-15 period or 2015-20 period	Relates to our Regulatory Proposal funding periods.
2014/15 \$m	2014/15 \$m figures represent expenditure in the 2014-15 equivalent dollar value.
50 per cent probability of exceedance (50 PoE)	The chances (or probability) that the network's peak demand will be achieved. 50 PoE means there is a 50 per cent chance of exceedance, or it is likely to happen once in every two years.
Alternative control service	Services requested and paid for by individual customers are called alternative control services. There is a limit on the price that can be charged. Examples of alternative control services are large customer connections, public lighting services and ancillary network services.
Assets	The assets referred to in the revenue section of this document are made up of our financial assets and network equipment.
Australian Energy Regulator	The Australian Energy Regulator is the economic regulator of the national electricity market established under Section 44AE of the Competition and Consumer Act 2010 (Commonwealth). It is their role to review our Regulatory Proposal and determine our funding for the five year regulatory period.
Capital expenditure	Expenditure typically resulting in additional or replacement of network equipment.
Consumer Price Index (CPI)	Consumer Price Index is determined by the Australian Bureau of Statistics which measures changes in the price of consumer goods and services purchased by households.
Demand	The amount of electricity being used at a given time measured in either kilowatts or kilovolt amperes.
Demand management programs	Demand management programs provide solutions to our customers which are designed to reduce demand on our electricity supply network or part of the electricity supply network.
Electricity distributor	An electricity distributor is an owner and operator of substations, poles and wires that transport electricity from high voltage transmission network to customers. It is also a provider of technical services including construction of power lines, inspection of equipment, maintenance and public lighting. We are an electricity distributor, operating as a registered participant in the National Electricity Market for the region of South East Queensland. There are sixteen electricity distributors which operate within the National Electricity Market.
Electricity market participants	Market Participants are entities which operate in the National Electricity Market and are registered with the Australian Energy Market Operator. Market Participants include generators, retailers, electricity distributors and transmission businesses.
Electricity Network Capital Program Review	The Electricity Network Capital Program Review was commissioned by the Queensland Government in late 2011. An independent panel was established to undertake a review of the capital infrastructure programs of Energex, Ergon Energy and Powerlink with the view to achieving efficiencies and cost savings while maintaining network security and reliability. The panel identified significant potential capital expenditure savings and Energex's program of capital work was reduced in line with these findings.
Electricity retailer	Your electricity retailer bills you for the electricity you use. Our charges are incorporated in these costs however they may not be separately itemised.

Term	Definition
Electricity use	The amount of electricity used by a customer (or all customers) over a period of time. Electricity use is measured in terms of watt hours, kilowatt hours, megawatt hours or gigawatt hours.
Gigawatt hours (GWh)	A measure of electricity volume or use.
Guaranteed service levels	A Guaranteed Service Level is a commitment of Energex to meet standards defined by the Queensland Electricity Industry Code. The standards include; appointments, hot water, reliability etc. Where these service levels are not met, we are required to make a payment to the customer impacted.
International Association for Public Participation	The approach used by Energex to incorporate customer engagement activities into our decision making processes has been designed using the IAP2 Spectrum® and the associated five step planning process. The IAP2 Spectrum® clarifies the level of public participation required for an engagement activity. The approach needs to consider the specific circumstances and how involved the customer needs to be for each engagement activity. A customer in this sense is any individual, organisation or political entity with an interest in the outcome of the decision. <small>© 2006, International Association for Public Participation www.iap2.org</small>
Kilowatt hours (kWh)	A measure of electricity volume or use.
Maximum allowable revenue	The maximum revenue which can be recovered through network tariffs for the regulatory period.
Megawatt hours (MWh)	A measure of electricity volume or use.
National Electricity Law	The legislation that establishes the role of the Australian Energy Regulator as the economic regulator of the National Electricity Market and the regulatory framework under which the Australian Energy Regulator operates.
National Electricity Market	The interconnected electricity grid covering Queensland, New South Wales, Victoria, Tasmania, South Australia and the Australian Capital Territory.
National Electricity Rules	The legal provisions (enforced by the Australian Energy Regulator) that regulate the operation of the National Electricity Market and the national electricity systems, the activities of market participants and the provision of connection services to retail customers.
Network price(s)	The total amount payable on your electricity retail bill is made up of a number of components (refer to the 'breakdown of a typical residential bill' on page 22 of this document). A network price is one of those components. The network price you pay is made up of distribution services (Energex) and transmission services (Powerlink). Network prices in this document relate to the Energex component of the network price. The Energex component of the network price pays for the costs associated with building and maintaining the network as well as the operation of our business.



Term	Definition
Network tariff(s) Network tariff codes	Network tariffs define the way we recover our revenue. Customers are assigned to one or more network tariffs in accordance with our tariff assignment policy. Network tariffs are developed with consideration of our pricing objectives to signal efficient use of the network, be equitable, stable, cost reflective and simple to apply. Each network tariff has a different rate and can be structured differently. Refer to the network tariff table for a list of our network tariffs.
	8500 Business Flat – This tariff is the default tariff for business customers who use less than 100 megawatt hours of electricity per year.
	8800 Business Time of Use – This tariff is available to business customers who use less than 100 megawatt hours of electricity per year. This time of use tariff accounts for when, as well as how much, electricity is used by each customer. Electricity is priced at different levels, depending on the time of day. Volume charges are lower during off-peak hours and higher during peak hours.
	8400 Residential Flat – This tariff is the default tariff for residential customers regardless of their size and cannot be used in conjunction with Residential Time of Use (8900) or PeakSmart Time of Use (7600).
	8900 Residential Time of Use – This tariff is available to residential customers regardless of their size and cannot be used in conjunction with Residential Flat (8400) or PeakSmart Time of Use (7600). Depending on the time of day, the tariff is priced differently with highest rates during peak hours and lower rates the rest of the day. Customers must have a time of use capable meter to access this tariff.
	7600 Residential PeakSmart Time of Use – This tariff is available to residential customers regardless of their size and cannot be used in conjunction with Residential Flat (8400) or Residential Time of Use (8900). Depending on the time of day, the tariff is priced differently with highest rates during peak hours and lower rates the rest of the day. Customers must have a time of use capable meter to access this tariff, and additional eligibility requirements must be met.
	9000 Super Economy – Specified connected appliances are controlled by network equipment so supply will be permanently available for a minimum period of 8 hours per day during time periods set at the absolute discretion of Energen, but usually between the hours of 10:00 pm and 7:00 am.
	9100 Economy – Specified connected appliances are controlled by network equipment so supply will be available for a minimum period of 18 hours per day during time periods set at the absolute discretion of Energen.
Nominal \$m	Nominal \$m represents expenditure value in the year it is incurred.
Operating expenditure	Operating expenditure is the combined total of maintenance and operating costs. Maintenance costs relate to the repair and maintenance of network equipment while operating costs relate to the day to day operations unrelated to maintenance costs.
Peak demand	The peak demand recorded at a customer’s individual meter or the peak demand placed on the electrical distribution network system at any time or at a specific time or within a specific time period, such as a month. Maximum demand is an indication of the capacity required for a customer’s connection or the electrical distribution network.

Term	Definition
Positive payback	A program which provides incentives to residential or business customers to participate in demand management programs.
Power factor	A measurement of how efficiently customers use electricity that is drawn from the network.
Queensland Government Solar Bonus Scheme	A Queensland Government policy that pays small residential and business customers for the surplus electricity generated from roof-top solar PV systems that is exported to the Queensland electricity network
Regulation	Regulations are delegated legislation made under or in relation to an Act of Parliament.
Regulatory Proposal	A regulatory proposal is a submission we make to the Australian Energy Regulator every five years to outline our forecasts for expenditure and revenue for the relevant period.
Reliability	Reliability means to how long and how often customers experience power outages.
Solar PV	A system made up of an inverter and photovoltaic (PV) panels that uses sunlight to generate electricity for use at the customers property. These systems have the capability to feed electricity into the network.
Standard control service	Services we provide where the entire community shares the cost are called standard control services. Standard control services include network services which ensure the operation of our network and delivery of electricity services. The costs for these services are shared by everyone who is connected to the network and are subject to a 'revenue cap'. This means the total revenue is a fixed amount collected over a five year period.

We are committed to delivering balanced business outcomes while continuing to deliver safe and reliable services to our customers.

This overview paper summarises the key points raised in Energex's 2015-20 Regulatory Proposal, submitted to the Australian Energy Regulator in October 2014.



We welcome questions and feedback from customers and stakeholders. This can be directed to the Energex Customer Engagement Team.

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