TRANSITIONAL REGULATORY PROPOSAL

> 1 July 2014 to 30 June 2015

> Submission date: 31 January 2014

essential energy

CONTENTS

EXECUTIVE SUMMARY

This proposal outlines how Essential Energy plans to operate and maintain its electricity network in an efficient manner to keep it safe, reliable and affordable for customers. It includes an explanation of the funding needed to deliver these objectives.

The Australian Energy Regulator (AER) administers the rules that determine the investment plans and revenue of electricity distributors in the National Electricity Market (NEM). Every five years electricity distributors must submit proposals to the AER that explain their capital and operating plans and what they believe the revenue requirements are to fund those plans.

A new regulatory proposal was due to be submitted by the NSW and ACT electricity distribution businesses for the period of 2015 to 2019. During 2012 the Australian Energy Market Commission (AEMC) consulted on major rule change proposals covering the National Electricity Rules (NER or Rules) and approved many changes. The NSW and ACT distribution network businesses are the first organisations directed to submit proposals under these new rules.

During this rule change consultation, all parties agreed that a one-year transitional regulatory proposal would help smooth the implementation of the new rules, given the short implementation period available to NSW and the ACT after the rule change came into effect.

Essential Energy's transitional regulatory proposal covers the 2014-15 financial year, which is the first year of the five-year regulatory control period. It also provides an indication of key requirements for the total five-year period.

The requirements to deliver our capital and operating plans for the remaining four years will be covered in a substantive proposal to be submitted to the AER in May 2014.

Our transitional regulatory proposal has been prepared in accordance with the requirements of the transitional Chapter 6 and Division 2 of part ZW of Chapter 11 of the NER.

Explaining our Role

Essential Energy builds, maintains and operates the electricity distribution network in regional NSW. This requires the investment of billions of dollars each year. Our charges are provided to electricity retailers and when combined with TransGrid's transmission charges represent about half of customers electricity bills.

Essential Energy's average distribution charge is higher than other network areas across Australia. The difference is because proportionately there are fewer customers in our network and they are spread across a larger area. We service 95 per cent of the NSW landmass, but only 24 per cent of NSW customers.

On average, customers' total electricity charges break down into the components shown in figure 1 overleaf.

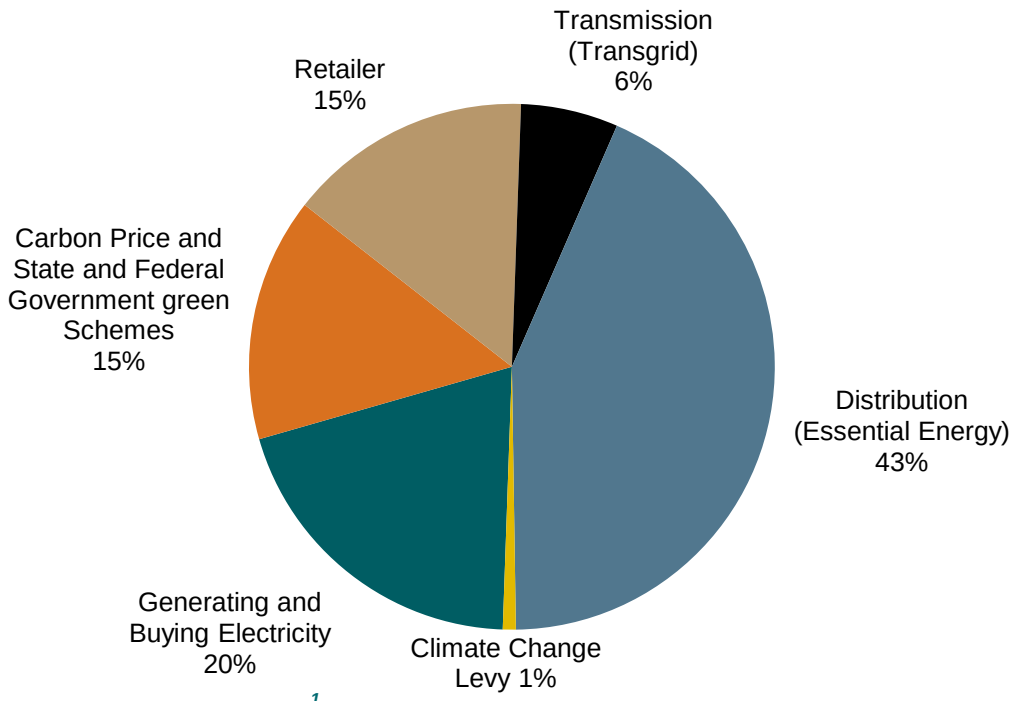

Figure 1: Components of Electricity Charges[1]

NSW Government Network Reform Program

In March 2012 the NSW Government announced a restructure of the three NSW electricity distribution organisations namely Essential Energy, Endeavour Energy and Ausgrid. That restructure commenced on 1 July 2012 with objectives to continuously improve safety performance, maintain network reliability and strive to contain average increases in our share of customers' electricity bills at or below the Consumer Price Index (CPI).

The network reform program has focussed on applying rigorous strategic, operational and financial discipline to both the capital and operating programs. This has delivered total savings in NSW of $1.1 billion in the 2012-13 financial year, with current projected savings of $4.3 billion over the five-year period commencing July 2011 for all of NSW. The benefits for Essential Energy of the network reform program are included in this transitional regulatory proposal, and will result in distribution network bill increases of less than inflation for our customers.

Transitional Regulatory Proposal Highlights

Compared to the current 2013-14 year, Essential Energy's share of an average household and small business electricity bill will increase in 2014-15 by 2.49%, which is 0.01% below the forecast rate of inflation. The typical impact for residential and small business customers is contained in the table below.

Table 1: Bill impact from network charges for typical residential and small business customers (including metering)

$pa; Nominal	2013-14	2014-15	Change ($)	Change (%)
Residential customer consuming 7 MWh p.a.	$1,282.80	$1,314.72	$31.92	2.49%
Small business customer consuming 23 MWh p.a.	$4,435.03	$4,545.39	$110.36	2.49%

[1] IPART, *http://www.ipart.nsw.gov.au/Home/For_Consumers/Why_electricity_costs_what_it_does*

The key drivers of this outcome are:

- The five year capital program will reduce from $4.2 billion approved by the AER for the 2009-14 regulatory period to a proposed $2.8 billion for the 2014-19 period[2] – a reduction of 34%, which is 42% below the forecast of inflation over the five year period;
- The five year operating program will increase from $2.2 billion approved by the AER for the 2009-14 regulatory period to a proposed $2.7 billion for the 2014-19 period[3] – an increase of 22%, which is 8% above the forecast of inflation over the five year period;
- We expect, on average, our customers will continue to reduce their use of electricity by 1.6% per annum over the five years commencing 1 July 2014. This expectation is a consequence of the continuing take up of domestic solar panels, the high Australian dollar impacting Australian manufacturing and the continuing impact of double digit electricity price increases from July 2009 to July 2012; and
- We expect that based on the proposed capital and operating program the current network reliability will be maintained for the regulatory period.

Better Customer Engagement

We have used a variety of channels to reach out and listen to our customers on the operations of Essential Energy and most importantly how these operations impact our customers' lives. These channels include qualitative and quantitative customer research, targeted stakeholder meetings and presentations, social media and customer correspondence. These opportunities for communication have varied depending on the type of customers, their communication preferences and availability of open two way channels of communication.

New customer engagement guidelines established by the AER give Essential Energy the opportunity to significantly expand and improve on its two way communication. To this end, Essential Energy has partnered with Endeavour Energy and Ausgrid to launch an innovative, low cost social media campaign, which is proving to be a highly successful engagement channel.

Essential Energy has developed a framework for the way it will engage with its customers. This framework and initial engagement activities have assisted in the development of this transitional regulatory proposal. Further and more detailed activity will increase over time and will be explained in more depth in Essential Energy's substantive regulatory proposal.

Essential Energy expects that this engagement framework will help ensure its operations and services become better aligned with the long term interests of electricity customers. We expect that clear and accurate communication will be delivered at the appropriate time and give customer's greater understanding of our operations and how and why they are funded.

This framework will also outline how Essential Energy will embed customer engagement practices into its business as usual operations, and how we will continuously assess and measure engagement actions to ensure they remain effective, open and transparent to all of our customers.

[2] For comparison, this proposed expenditure is inclusive of ancillary network services and metering. To give effect to the AER's 2014-19 classification of services, amounts in the remainder of this document will be exclusive of ancillary network services and metering unless otherwise stated.

[3] See above.

1. ESSENTIAL ENERGY AND OUR CUSTOMERS

Our Network

Essential Energy is responsible for building, operating and maintaining Australia's largest electricity network. Our distribution network serves approximately 800,000 customers and, geographically, covers 95 per cent of NSW, as shown in Figure 1-1 below.

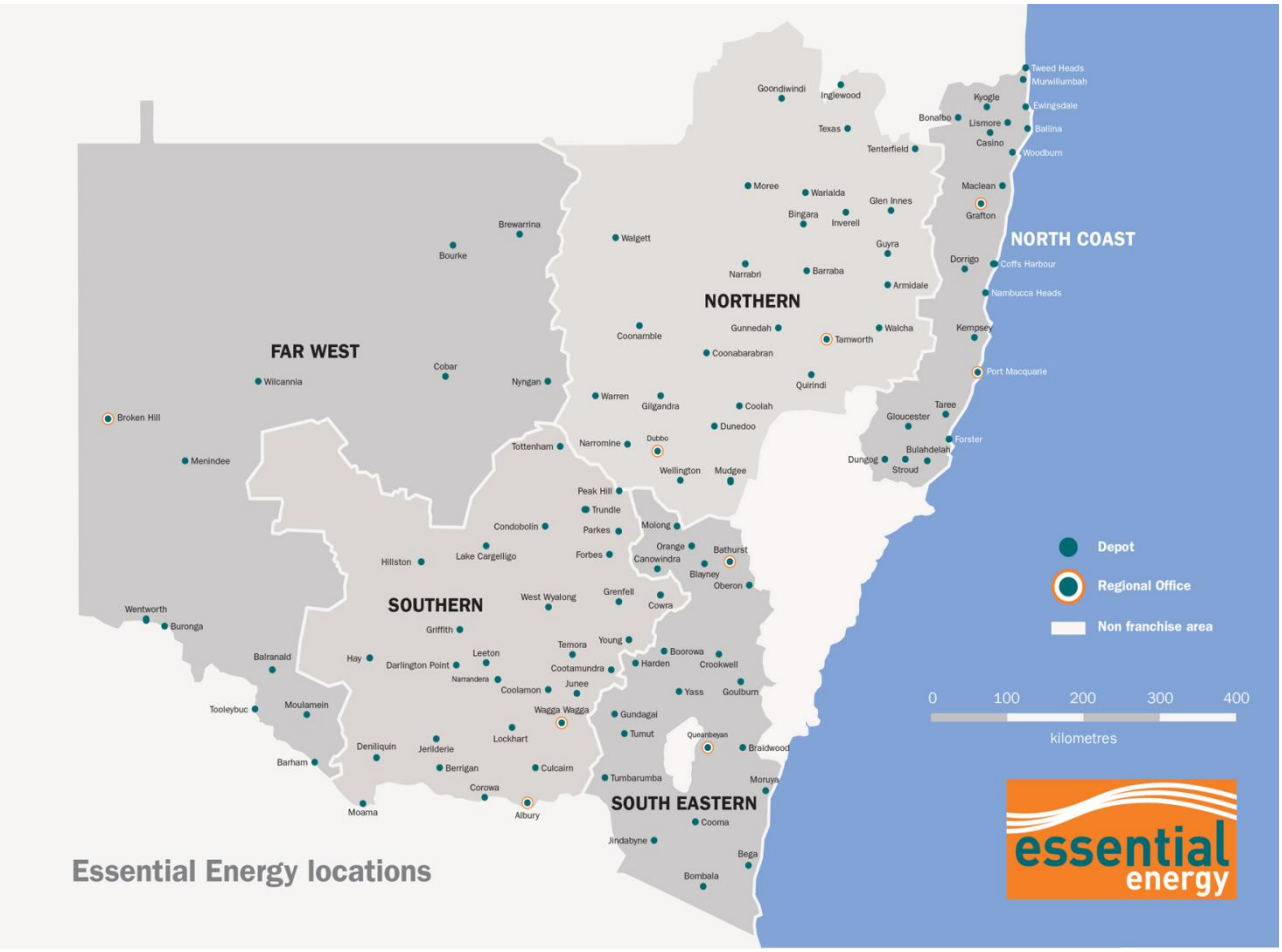

Figure 1-1: Essential Energy Locations

Essential Energy's infrastructure includes approximately:

- 200,000 kilometres of power lines and cables
- 1.4 million power poles
- 150,000 streetlights
- 135,000 substations
- 400 zone substations

Essential Energy's core responsibility is the operation, maintenance and investment in electricity network infrastructure to ensure the safe, efficient and reliable delivery of essential services to homes and businesses across rural and regional NSW. We are committed to making a serious and sincere effort to deliver better value for our customers by reducing our costs without compromising safety or services.

How our Network Transports Electricity

It is important that customers and stakeholders understand the electricity supply chain. We believe this will help them provide informed feedback on the plans and priorities of Essential Energy. The NSW electricity supply sector involves generation, transmission, distribution and retail sellers. Figure 1-2 below outlines the electricity supply chain and highlights the components associated with distribution asset management.

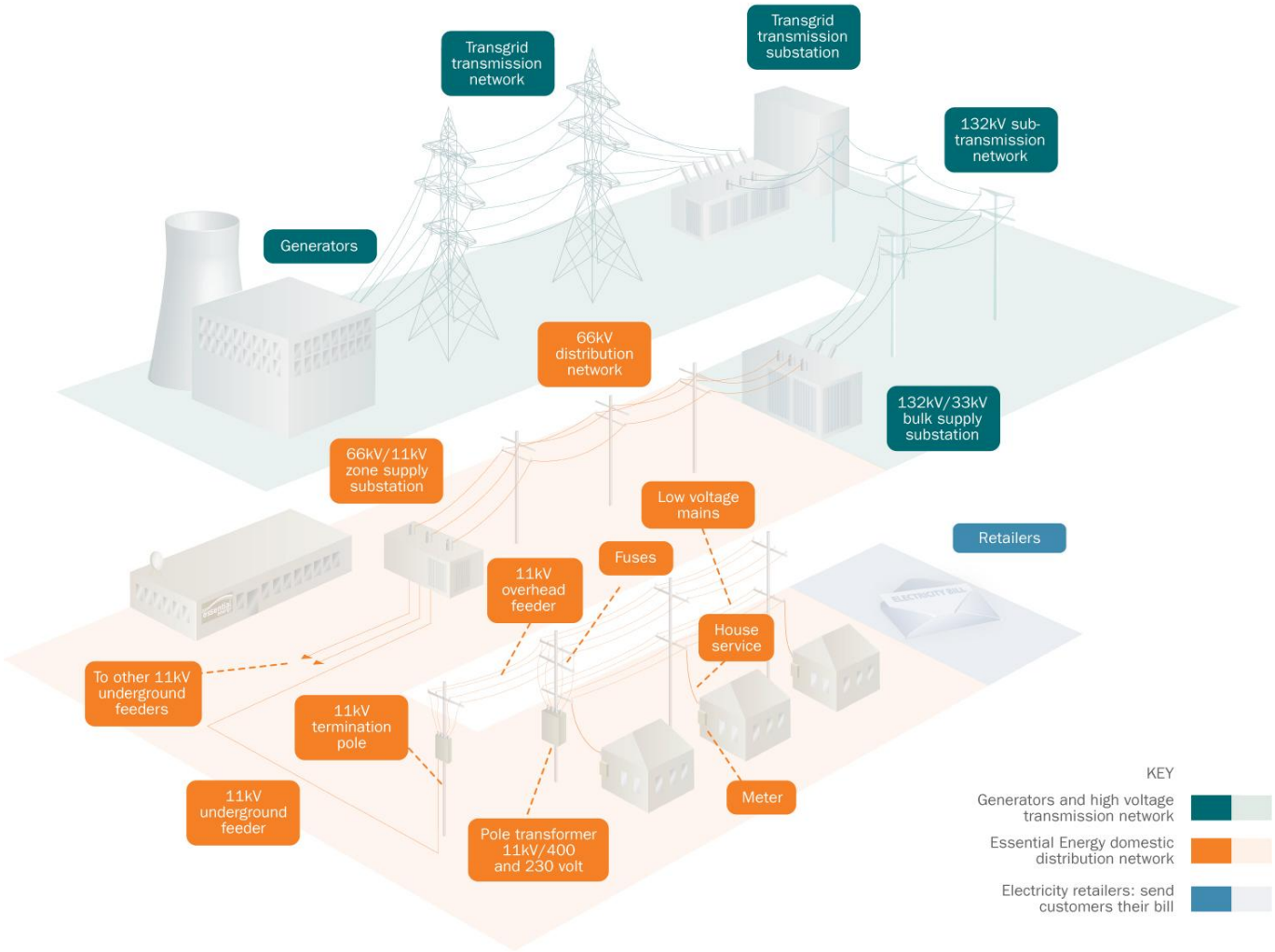

Figure 1-2: Electricity supply chain

Efficiency and the Network Reform Program

We plan to realise efficiencies in order to achieve our objective of striving to contain average increases in our share of customers' electricity bills at or below CPI. The NSW Government's network reform program has been the main driver of reducing capital and operating costs in our business. It provides an opportunity to reduce expenditure in building and maintaining the network across NSW, while maintaining network reliability.

Network Reform Program

In 2012 the NSW Government announced a reform of the electricity distribution network businesses in NSW, under which the three network distribution businesses – Ausgrid, Endeavour Energy and Essential Energy – would operate as separate network businesses under a single operating model known as Networks NSW. The three companies operate under a Networks NSW umbrella agreement with a joint Board and common Chief Executive Officer.

The NSW Government's network reform program aims to better control electricity charges by reducing the costs by streamlining decision-making and realising maximum value from the three networks. The savings associated with the network reform program have been incorporated into our operating and capital expenditure forecasts. These savings are driven by a suite of initiatives that can be grouped into four categories, including:

1. New operating model. This initiative relates to streamlining network corporate and support services, removing functional duplication, and sharing better practices between the three businesses;
2. Strategy and policy. This initiative relates to policy changes for consistent practices across the three distributors, particularly in network areas including reliability planning, maintenance and renewal policies, and fleet strategy and property portfolio management. In each case, significant operational business change will be required to achieve benefits;
3. Capital expenditure efficiency. This initiative relates to improved capital management across the three businesses in relation to expenditure on the network, as well as on fleet, property, and technology; and
4. Procurement and logistics. This initiative will create repeatable, auditable, controlled and faster sourcing processes that will drive significant procurement savings across a number of product and service categories.

Business efficiencies

In addition to these targeted reforms, the network reform program has also provided the impetus for Essential Energy to review its strategies, processes and cost controls. This has allowed us to systematically reduce our level of expenditure and contain average increases in our share of customers' electricity bills at or below CPI in the 2014-19 regulatory control period. Below is a list of the key areas of change.

- We have implemented cost controls on various corporate and field costs in order to reduce our expenditure. Costs targeted by this program include travel, marketing, overtime, legal, agency and contract staff;
- Essential Energy has experienced a lower than expected load growth in certain areas within the network. This allows us to analyse our planning and defer lower priority capital work. Efficient planning and capital program delivery allows a more systematic approach to maintaining the network;
- A focus on core functions in our supporting activities including Information Technology (IT), fleet and corporate property. Expenditure is limited to maintaining existing assets and systems rather than investing in new assets; and
- Management of employee numbers through natural attrition, retirements and voluntary redundancy programs.

Our Business Purpose

To be of service to our communities by efficiently distributing electricity to our customers in a way that is safe, reliable and sustainable.

Our Values

Essential Energy requires employees[4] to understand and support our corporate values. These five values and their associated behaviours are the basis for everything we do.

Safety excellence

- Put safety as your number one priority
- Do not participate in unsafe acts, and challenge unsafe behaviours
- Think before you act
- Lead by example
- Take responsibility for the health and safety of yourself and others

Respect for people

- Treat all people with respect, dignity, fairness and equity
- Demonstrate co-operation, trust and support in the workplace
- Practise open, two-way communication.

Customer and community focus

- Deliver value and reliable service to our customer and communities
- Use resources responsibly and efficiently
- Be environmentally and socially responsible

Continuous improvement

- Look for safer and better ways to do your job
- Improve our financial performance
- Support innovation to add value to our business

Act with integrity

- Act honestly and ethically in everything you do
- Be accountable and own your actions
- Follow the rules and speak up

Our Customers

The transitional regulatory proposal is the beginning of a process to determine the revenue (and therefore charges) that Essential Energy can recover from its distribution network customers during the 2014-19 regulatory control period. It is therefore important to inform customers and the AER of Essential Energy's overarching objectives. These objectives establish the framework and context for the transitional regulatory proposal. They are also the foundation of our substantive regulatory proposal that is due to be lodged in May 2014.

[4] Employees are defined as permanent employees (full time or part time) and any other person undertaking work in Essential Energy, including contractors and their agents or employees.

The underlying objective of Essential Energy's transitional regulatory proposal is to strive to ensure the proposed plans and programs contain average increases in our share of customers' electricity bills at or below CPI. We recognise the impact that rising electricity charges have had on families and businesses in our franchise area.

Essential Energy aims to provide an electricity network that is not only safe, but also maintained to ensure a reliable and efficient service over the next regulatory control period.

Essential Energy has engaged with a broad cross section of customers and stakeholders. Table1-1 below summarises the key activities in Essential Energy's customer engagement framework aligned with the regulatory proposal process.

Phase 1: Research	Phase 2: Consultation	Phase 3: Delivery	Phase 4: Educate, inform and consult
August 2012	**August 2012 – May 2014**	**May 2014**	**Ongoing**
> Customer and stakeholder surveys > Customer focus groups > Understanding the priorities of customers with regards to network investment	> Direct consultation and feedback session with stakeholder and lobby groups > Social media channels established and actively moderated to gather customer feedback > Customer Council and Rural Advisory Group consultation sessions	> Feedback integrated into substantive regulatory proposal and associated documents to support customer priorities in the planning process > Deliver customer friendly proposal based on feedback received from stakeholder groups > Publication of proposal on website with direct feedback option	> Targeted education programs based on customer needs and knowledge gaps > Capital project consultation > Ongoing and timely customer research > Effective customer communications and notifications > Online feedback and engagement channels > Stakeholder and customer group consultation.

Table 1-1: Summary of Essential Energy's customer engagement framework

Beyond structured engagement activities, Essential Energy has a strong business as usual community presence and active regional management teams supporting our customer value strategic plan.

During the current regulatory control period, Essential Energy has conducted customer research to determine what is important to our customers. In June 2012, a program of focus group discussions was held to explore customer's knowledge, attitudes and behaviours around electricity consumption and investment decisions.

This qualitative research was complemented by a survey with a sample size of over 1000 Essential Energy network customers. Research findings identified six clear customer values. These values are the essence of what is important to our customers and the ways in which they would like Essential Energy to manage these issues as a network distribution business. The six customer values identified through this research are described in Figure 1-3 and discussed below.

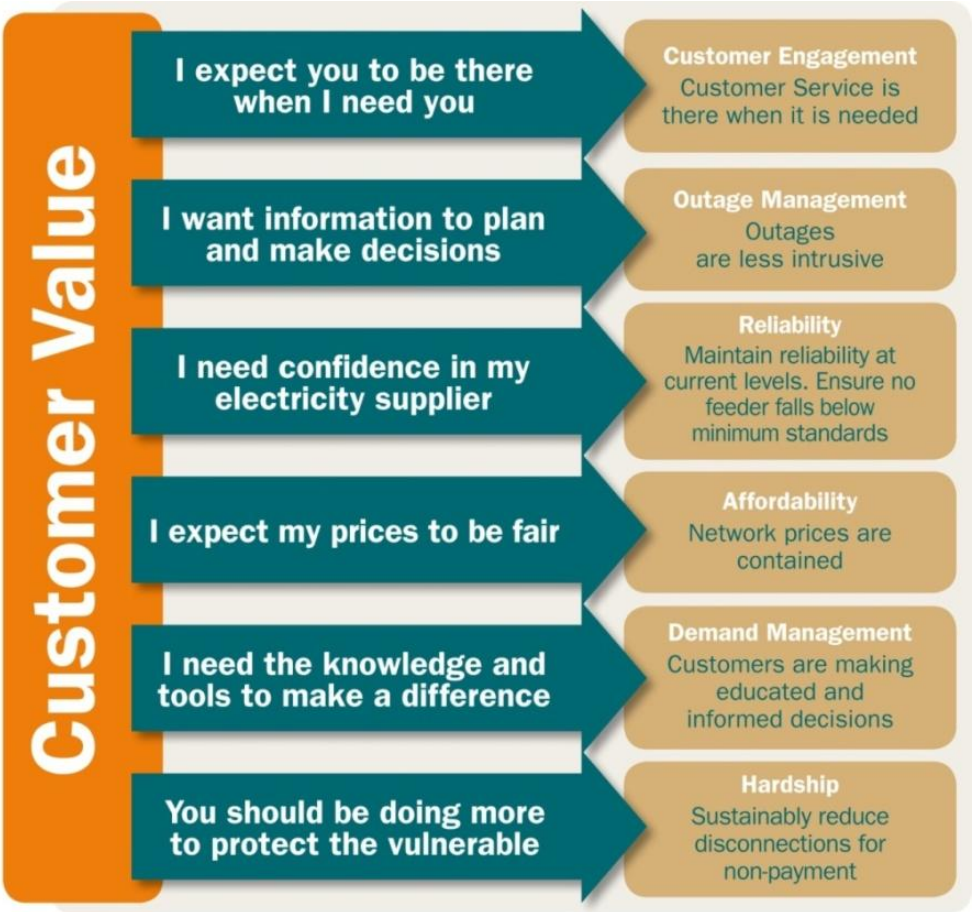

Figure 1-3: Identified Customer Values

Customer Engagement

Customers want information exchange between themselves and Essential Energy to be simple. This means communicating via channels that make information available when and where they need it. Mobile technology is a growing part of customers' lives, and they want future communications to reflect this.

Outage Management

The provision of clear information about the timing and duration of interruptions makes them more acceptable as it enables better planning. It also gives customers more control over their electricity usage and enables changes in patterns of use.

Reliability

Customers expect a constant supply of electricity, but generally view current levels of reliability as acceptable. For most, a reduction in price would not compensate for reduced reliability. Power interruptions are an inconvenience for most household customers, but for small businesses and some rural customers interruptions can have financial impacts.

Affordability

Customers do not fully understand why charges are rising, but accept it as inevitable and out of their control. However, they expect price rises to be a genuine result of investment in infrastructure, rather than an attempt to generate profit. Most customers are trying to reduce their electricity bills, and would like more information to help them do so.

Demand Management

Customers place a very high value on being able to control when and how they use electricity. Very few are willing to sacrifice this control, but many are willing to make changes to their appliances and usage patterns in order to manage the affordability of their electricity. A lack of understanding and being overwhelmed with technical information prevents some customers from making informed choices.

Hardship

Customers see the need to ensure that vulnerable households have access to a reliable electricity supply. However, there is a concern that programs designed to help vulnerable customers may be exploited by those who are not in need.

Listening to Feedback

The feedback from customer research and on-going engagement activities has shaped the investment decisions within our transitional regulatory proposal and will also shape the investment decisions within our substantive regulatory proposals. It has also been incorporated into the Asset Management Plans (AMPs) and other business plans of the network.

Essential Energy's focus on customer engagement is reflected in broader corporate objectives which were developed and implemented with customers at top of mind. Our objectives place the customer first and promote the long term interests of customers with respect to:

- **SAFETY** – by continuously improving our safety performance for employees, contractors and the public;
- **AFFORDABILITY** – by striving to contain average increases in our share of customers' electricity bills at or below CPI; and
- **RELIABILITY** - by ensuring the on-going reliability, security and sustainability of the network.

The above objectives are consistent with, and give effect to, the National Electricity Objective (NEO) and the revenue and pricing principles prescribed in the National Electricity Law (NEL). The NEL governs the exercise of the AER's economic regulation function, including the determination of the revenue (and therefore price) that Essential Energy can recover. The objective of the NEL is to:

> *"…promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to -*
>
> *(a) price, quality, safety, reliability and security of supply of electricity; and*
> *(b) the reliability, safety and security of the national electricity system."*[5]

The NEL places the long-term interests of network customers at the forefront. It also equally recognises the importance of allowing electricity network service providers sufficient expenditure to perform their core functions.

The NEL recognises that Essential Energy should be provided with a reasonable opportunity to recover at least the efficient costs that it incurs in providing network services and complying with its obligations. The NEL also states that charges to customers should allow for a return commensurate with the regulatory and commercial risks involved in providing the distribution network services to which the charges relate.

Essential Energy believes that it has balanced the need to operate and maintain a safe and reliable network while meeting all our legislative and regulatory obligations with the need to reduce pricing pressures on customers.

[5] Clause 7 of the National Electricity Law

2. REGULATORY MATTERS

This is a transitional regulatory proposal for revenue and charges in the 2014-15 year[6] (the transitional year). We will submit a complete substantive regulatory proposal in May 2014 that covers the entire 2014-19 regulatory control period.

Context and Content of Transitional Proposal

The AER administers the rules that electricity distributors such as Essential Energy comply with and operate under. Every five years, electricity distributors must submit proposals to the AER that explain their efficient capital and operating costs and what they consider the revenue requirements are to fund them.

A new regulatory proposal was due to be submitted by Essential Energy in May 2013 for the period of 1 July 2014 to 30 June 2019. During 2012 the Australian Energy Market Commission (AEMC) consulted on a number of major rule change proposals covering the NER and subsequently made a number of important changes. The NSW and ACT distribution network service providers (DNSPs) will be the first businesses to submit regulatory proposals under these new NER.

During the rule change consultation, all parties agreed that a one year transitional regulatory proposal would help bridge the gap that would have occurred due to the short available implementation period after the rule changes came into effect.

Whilst Essential Energy's transitional regulatory proposal covers just the 2014-15 year, the first year of the 2014-19 regulatory control period, it also sets the context by providing an indication of key requirements for the subsequent regulatory control period. Full details for the 2014-19 regulatory control period will be covered in a substantive regulatory proposal to be submitted to the AER in May 2014.

The matters that Essential Energy must address in the transitional regulatory proposal are set out in transitional Chapter 6 and Division 2 of Part ZW of Chapter 11 of the NER. These matters focus mainly on:

- The amount we propose to be the annual revenue requirement for standard control services in the transitional year, the indicative range of revenue requirements for the 2014-19 regulatory control period and the inputs into the calculation of these revenue requirements;
- A summary of our plan for expenditure for the transitional year and the 2014-19 regulatory control period;
- The indicative charges for all direct control services; and
- A proposed connection policy and other compliance matters.

The AER has indicated its preferred approach for the above requirements in a letter to NSW DNSPs on 11 December 2013. Essential Energy has implemented the substance of this approach with a few refinements in preparing this transitional regulatory proposal. This is discussed further below.

Essential Energy's transitional regulatory proposal comprises this document and the information contained in the appendix, attachments, supporting documents and excel workbooks. These are listed at the end of the transitional regulatory proposal. The transitional regulatory proposal also contains a proposed connection policy at Attachment F, and outlines a consideration of some constituent decisions upon which the AER's distribution determination for the transitional year is predicated. These matters are addressed in Chapter 6 of this transitional regulatory proposal.

Real and nominal dollars

Nominal dollars represent the value of a dollar in a particular year. The purchasing power of a dollar in 2014 will be more than a dollar in 2017 due to the effect of inflation. The impact becomes larger over time. This is particularly evident when comparing what a dollar could buy, say 20 years ago, to what a dollar can buy today. The same logic applies when forecasting financial amounts into the future. It would be unrealistic to assume that an hour's worth of

[6] 1 July 2014 to 30 June 2015.

labour today would cost the same amount in five years' time. To adjust for this change in value, it can be useful to convert the dollars of past and future years to the real dollars of a specified year. This makes the dollars truly comparable over time.

Revenue in this transitional regulatory proposal will be shown in nominal dollars, and all operating and capital cost forecasts for the 2014-19 regulatory control period will be shown in real 2013-14 dollars.

Outcomes of AER's Framework and Approach Papers

The framework and approach (F&A) paper is the first step in the regulatory process that determines our revenue and charges for the upcoming regulatory period. In the F&A paper, the AER sets out its decisions and approach on a number of matters relevant to an upcoming distribution determination. One of the matters, for which the AER must set out its proposed approach, is the classification of distribution services. The AER may classify a distribution service provided by Essential Energy as:

- a direct control service; or
- a negotiated distribution service.

Direct control services are to be further classified between standard control services and alternative control services. In essence, standard control services comprise distribution services that are integral to electricity supply and are relied upon by the majority of our customers. Alternative control services involve customer specific or customer requested services. These services are provided to a particular group of customers or individual customers who request the service.

For the 2014-19 regulatory control period, the AER determined that none of the services provided by Essential Energy are suited to be classified as negotiated distribution services. For the services that the AER decided to classify as direct control services, the AER changed the classification of some of these services from their current classification of standard control services to alternative control services. In the case of one service, the AER decided not to classify it for the next period. Classification of services between standard control services and alternative control services is important as it determines the level of regulation to apply. In the case of a service being unclassified, it is not subject to economic regulation by the AER.

The AER's proposed approach to classification of services in the F&A paper is relevant for Essential Energy's transitional regulatory proposal. Clause 11.56.3(a) of the NER set out the content of the AER's distribution determination for the transitional year. In relation to the classification of distribution services, the NER require the AER to specify the same classification of services as that which was decided for the current regulatory control period, except to the extent that the AER's F&A paper for the subsequent regulatory control period provides otherwise. In this case, the classification of services for the transitional year must (to that extent) be modified or supplemented in accordance with the F&A paper.

NER Clause 11.56.3(h)(1) provides that any F&A paper that is published in respect of the subsequent regulatory control period may specify the classification of distribution services for the transitional year. This must be the same as the classification of distribution services that is specified for the subsequent regulatory control period by any F&A paper.

Transitioning to the new NER necessitates this F&A process to be divided into two stages. The stage 1 F&A paper was published by the AER on 25 March 2013[7]. It sets out the AER's approach to the classification of distribution services and decisions on the form of control mechanisms and dual function assets for both the transitional year and the 2014-19 regulatory control period.

The AER decided in the Stage 1 F&A paper:

- To change the classification of Type 5 and Type 6 metering services[8] and ancillary network services from standard control services to alternative control services from 1 July 2014;

[7] For comparison, this proposed expenditure is inclusive of ancillary network services and metering. To give effect to the AER's 2014-19 classification of services, amounts in the remainder of this document will be exclusive of ancillary network services and metering unless otherwise stated.

[8] Hereafter metering services.

- To not classify emergency recoverable works from 1 July 2014, meaning this service will not be regulated by the AER. It is currently deemed to be standard control services;
- That the form of control mechanism for standard control services is a revenue cap, and for alternative control services a cap on the prices of individual services; and
- That Essential Energy does not own, operate or control dual function assets.

For the Stage 2 F&A paper the AER may deal with:

- Modifications to be made to incentives schemes;
- The adjustments to the 2014-15 revenue approved under the determination for the transitional year and the notional revenue for the 2014-19 regulatory control period; and
- The manner in which prices that may be charged for alternative control services in the subsequent regulatory control period account for any under or over recovery of revenue during the transitional year.

The Stage 2 F&A paper is required by the NER to be published by the AER by 31 January 2014, the same day we are due to lodge this transitional regulatory proposal to the AER.[9] At the time of preparing and lodging the transitional regulatory proposal, the AER had not published its stage 2 F&A paper and consequently, Essential Energy is unable to consider these matters in this transitional regulatory proposal. Nevertheless, there has been engagement between NSW DNSPs and the AER on the stage 2 F&A paper. Our transitional regulatory proposal is based on the current understanding that:

- The AER plans to apply the service target performance incentive scheme (STPIS) with revenue at risk from 2015-16 onwards. For the transitional year, the current approach of collecting data via an annual regulatory information notice would continue;
- The new efficiency benefit sharing scheme (EBSS) will apply from the transitional year;
- Forecast depreciation would be used to establish the value of the regulatory asset base at the commencement of the next regulatory control period; and
- The demand management and embedded generation connection incentive scheme (DMEGCIS) will largely carry over the existing arrangements of the current regulatory control period, although the d-factor will be removed.

Giving proper effect to the AER's classification of services

The NER requires Essential Energy to propose an annual revenue requirement for standard control services in the transitional year. In addition, we are also required to provide indicative charges for all direct control services, as classified between standard control services and alternative control services by the AER in its stage 1 F&A paper. As noted above, the AER has reclassified some of our services from standard control to alternative control, including metering services and ancillary network services. In addition, the AER has reclassified emergency recoverable works from standard control to unclassified services. To give effect to the AER's classification, we need to allocate the costs of providing these services to the correct class of services in order to develop indicative charges for the transitional year.

However, an anomaly in the transitional NER means that we are prevented from allocating costs to these services for the transitional year. The NER state that costs which have been allocated to a particular service cannot be reallocated to another service during the course of a regulatory control period. Complying with this requirement of the NER means that proper effect cannot be given to the AER's classification of services for the transitional year.

The NSW DNSPs have had discussions with the AER on the approach to fulfilling the NER requirements for the transitional regulatory proposal, particularly the provision of indicative charges. On 11 December 2013, the AER wrote to Networks NSW outlining their views on a preferred approach to setting indicative charges for the transitional year.[10] We have largely adopted the AER's preferred approach so as to fulfil the AER's wish of minimising changes during the transitional year.

[9] Clause 11.56.4(o) and 11.55.2(b)(a) of the Rules.

[10] Letter from the General Manager, Network Regulation, AER.

As noted in Appendix 1, the AER's preferred view has impacted the way we have developed our transitional regulatory proposal. Whilst we have been clear that the AER's classification of services is applicable for the transitional year, we have included the costs of providing the reclassified services in the standard control services cost pool, where the costs will be recouped through DUOS charges. We have made clear however, that the annual revenue requirement only relates to standard control services as defined by the AER in its Stage 1 F&A paper. Importantly, the AER's preferred method has impacted the way we have presented indicative charges for these services as follows:

- For metering services the AER considers that new charges should not be established for the transitional year as the NER prevent the reallocation of costs from standard control services to alternative control services for the transitional year. Instead, we understand that the AER prefers to leave the costs of providing metering services within the standard control services cost pool, and these costs are to be recouped through charges for standard control services (i.e. DUOS tariffs). This approach is the same as how metering services costs are presently being recovered, as they are classified as standard control services in the current regulatory control period;
- For those ancillary network services with existing charges, the AER prefers to apply CPI to these prices, consistent with their interpretation of clause 11.56.3(j) of the NER; and
- For those ancillary network services currently being provided, but where there are no existing charges and the costs are currently captured as part of the standard control services cost pool, the AER prefers to leave the costs of providing these services in the standard control services cost pool and recovered through DOUS tariffs for the transitional year.

Essential Energy considers that further clarification from the AER would assist in the effective implementation of the AER's preferred approach for the transitional year. We have set out our proposed clarification in Appendix 1. We believe this would ensure a seamless transition from 2014-15 to the subsequent regulatory control period, whilst preserving the integrity of the AER's classification of services for the transitional year. Of significance is the clarity around the revenue amount that will be used for adjustments to the annual revenue requirement for standard control services in the subsequent regulatory control period and to demonstrate compliance with the control mechanism. Similarly, an adjustment is needed to alternative control services charges in the subsequent regulatory control period to account for the under or over recovery of revenue for these services during the transitional year, as a result of the AER's preferred method for pricing alternative control services during the transitional year.

Information Provided to Meet NER Compliance

The Rules relating to the transitional regulatory proposal require Essential Energy to submit information to the AER to help make a decision:

- Chapter 3 provides information relating to the AER's decision on standard control services, the proposed annual revenue requirement for standard control services in the transitional year, and other additional information including indicative.
- Chapter 4 meets the requirement to provide a summary of the plan for expenditure together with an explanation of how this proposed expenditure is consistent with the proposed annual revenue requirement set out in Chapter 3 of this transitional regulatory proposal.
- Chapter 5 provides information relating to the alternative control services of metering, public lighting and ancillary network services.
- Chapter 6 sets out several compliance arrangements that have to be addressed in this transitional regulatory proposal.

In addition to the above requirements, we must also submit a proposed connection policy, which is at Attachment F, as well as identify any parts of the regulatory proposal which we claim to be confidential. Essential Energy confirms that no part of the regulatory proposal is confidential. Finally we note that the AER has not issued a regulatory information instrument in respect of Essential Energy's transitional regulatory proposal.

3. CHARGES FOR STANDARD CONTROL SERVICES

Essential Energy provides a range of distribution services that are classified by the AER as standard control services. These are services central to the supply of electricity and are relied on by most (if not all) of our customers.

As part of our transitional regulatory proposal we are required to propose an amount to be the annual revenue requirement for the 2014-15 year that will recover the costs of providing standard control services[11]. This revenue will be recovered from our customers via distribution network tariffs (or charges). These charges reflect the recovery of the efficient expenditure we need to invest in our network, to operate and maintain that network and comply with our regulatory obligations. They also provide a reasonable return on our investment in the network. The AER must only approve the amount we propose to be the annual revenue requirement for 2014-15 if it is satisfied that the recovery of the proposed amount by Essential Energy is likely to minimise variations in prices between the years from 2013-14 to 2018-19[12]. In making this decision, the AER must also take into account the national electricity objective and the revenue and pricing principles.

We have provided other accompanying information that assists the AER in making its decision on the amount we propose as the annual revenue requirement for standard control services. This includes a range of revenue requirements for the 2014-19 regulatory control period, and other inputs such as the opening regulatory asset base and rate of return.

In addition, as noted in Chapter 2, Essential Energy has adopted the AER's approach to the setting of indicative charges for some alternative control services.

In this chapter we outline the amount we propose to be the annual revenue requirement for 2014-15 including:

- The approach we took in determining this amount;
- The inputs used to determine the proposed amount;
- The total bundled revenue we nominate to be recovered through Distribution Use of System (DUOS) charges for the transitional year. This amount will be effectively accepted or otherwise amended by the AER in its determination for the transitional year; and
- The indicative DUOS charges to recover the total bundled revenue nominated by Essential Energy.

Proposed Annual Revenue Requirement for Standard Control Services

We propose the amount of $1,293 million ($nominal) as the annual revenue requirement for the transitional year for standard control services.

The NER does not require us to calculate this amount in accordance with the provisions that would otherwise apply.[13] It is therefore essentially a placeholder amount, giving an indication of the annual revenue requirement for the regulatory year 2014-15.

Recognising this, the AER is required to make a final decision on Essential Energy's annual revenue requirement for 2014-15 in its final determination for the 2014-19 regulatory control period, with a 'true up' for the difference in the annual revenue requirement for 2014-15 that the AER determined for the transitional regulatory proposal and the substantive regulatory proposal.

Nevertheless, we have taken an approach that mirrors the NER requirements as much as possible. In determining the amount we propose as the annual revenue requirement for 2014-15, and the indicative range of annual

[11] As they are defined in the AER's stage 1 F&A paper.
[12] Clauses 11.56.3(b).
[13] As acknowledged under clause 11.55.2(b) of the Rules.

revenue requirements for the subsequent regulatory control period, we have used the main elements of the building block approach prescribed in the NER for the calculation of annual revenue requirements relating to standard control services. These main elements are:

- Indicative forecast capital and operating expenditure;
- Indicative estimate of the value of the regulatory asset base; and
- Indicative rate of return.

These main elements are inputs into the annual revenue requirement using the AER's post-tax revenue model (PTRM) attached at Attachment A. Details of these elements are provided in this chapter and in chapter 4.

We have adopted this approach to ensure that:

- We adhere as close as possible to the NER requirements that would otherwise apply so as to minimise the adjustments needed when the 'true up' is performed; and
- The amount we propose as the annual revenue requirement for the transitional year has been derived using the indicative forecast capital and operating expenditure for that year. That is, the annual revenue requirement we propose for the transitional year is consistent with the indicative expenditure we expect to incur in providing standard control services for that year. Moreover, in calculating the indicative range of revenue requirements for the subsequent regulatory control period, we have also used the indicative estimate of forecast capital and operating expenditure for these years. As such, there is a relationship between the indicative forecast expenditure we expect to incur and the revenue we propose to recover from customers.

Further, to minimise potential price variations we have used our best estimates of required capital and operating expenditures for standard control services over the full 2014-19 regulatory control period and smoothed the resulting annual revenue requirements over a 5 year horizon. Table 3-1 below shows the result of the above approach with $1,293 million ($nominal) being proposed to be Essential Energy's annual revenue requirement for standard control services in the transitional year.

Table 3-1 also shows the indicative range of annual revenue requirements[14] for the 2014-19 regulatory control period based on a rate of return or weighted average cost of capital (WACC) range of 8.52 per cent to 9.11 per cent.[15] The rate of return was used as the variable in deriving the indicative range of revenue requirement. All other inputs such as forecast capital and operating expenditures remain the same under both scenarios. From this WACC range, we have used a conservative estimate for rate of return of 8.52 per cent to calculate the amount we propose to be the annual revenue requirement for standard control services in the transitional year.

Table 3-1: Indicative range of smoothed revenue requirements ($M, nominal)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Actual/estimated revenue	1,509	1,361						
High end of range (9.11% WACC)			1,346	1,360	1,368	1,378	1,396	6,848
Low end of range (proposed) (8.52% WACC)			1,293	1,306	1,314	1,323	1,341	6,578

Minimising price variations

To minimise price variations over time we need to consider changes in the level of revenues required to meet efficient costs, as well as forecast changes in energy consumption over time. For example, if the required level of revenue drops in the transitional year before rising again in the subsequent regulatory control period[16], and we do not attempt to smooth revenue recovery over the 2014-19 regulatory control period, customers would face a price movement downwards followed by a price movement upwards.[17] Alternatively, if energy consumption falls and

[14] Clause 11.56.2(b)(5).

[15] This range is a nominal vanilla formulation, which means that the cost of equity is assumed to be post-tax and the cost of debt is pre-tax, before taking into account the fact that interest costs can be offset against taxable corporate income (i.e. not incorporating the interest tax shield). The AER's post-tax revenue model takes account of the interest tax shield within a separate tax building block cash flow.

[16] Rise and fall in revenue may reflect the lumpiness of the expenditure profile

[17] Assuming energy consumption remains constant.

required revenue remains at the same level, then average prices will need to increase. To offset this impact, revenues can be smoothed so that less revenue is recovered in years where energy consumption is lower than other years.

In addition to this, the NER require that revenues be smoothed to minimise the difference between required revenues and expected revenue recovery in the last year of the regulatory control period (2018-19)[18].This is intended to minimise the significant price movements between the 2014-19 regulatory control period and the following regulatory period[19].

Essential Energy has taken these factors into account when developing our proposed annual revenue requirement for standard control services in the transitional year. Figure 3-1 below illustrates our best estimate of required revenues that will be required over the 2014-19 regulatory control period. The graph also shows the revenue smoothing profile we have adopted to minimise price variations between years. This smoothing profile determines the revenue we propose as our annual revenue requirement for standard control services in the transitional year, as well as the indicative required revenues for the subsequent regulatory control period.

This smoothed revenue profile has been calculated using the AER's PTRM and ensures that our proposed smoothed revenues are equal to required revenues in net present value terms.

In smoothing the required revenue over the 2014-19 regulatory control period, we need to consider the expected revenue for 2013-14, the last year of the current regulatory control period. The expected revenue for 2013-14 is shown above in table 3-1. Expected revenue for 2013-14 include revenues related to metering services, ancillary network services and emergency recoverable works. These services change classification from standard control to alternative control from 1 July 2014.

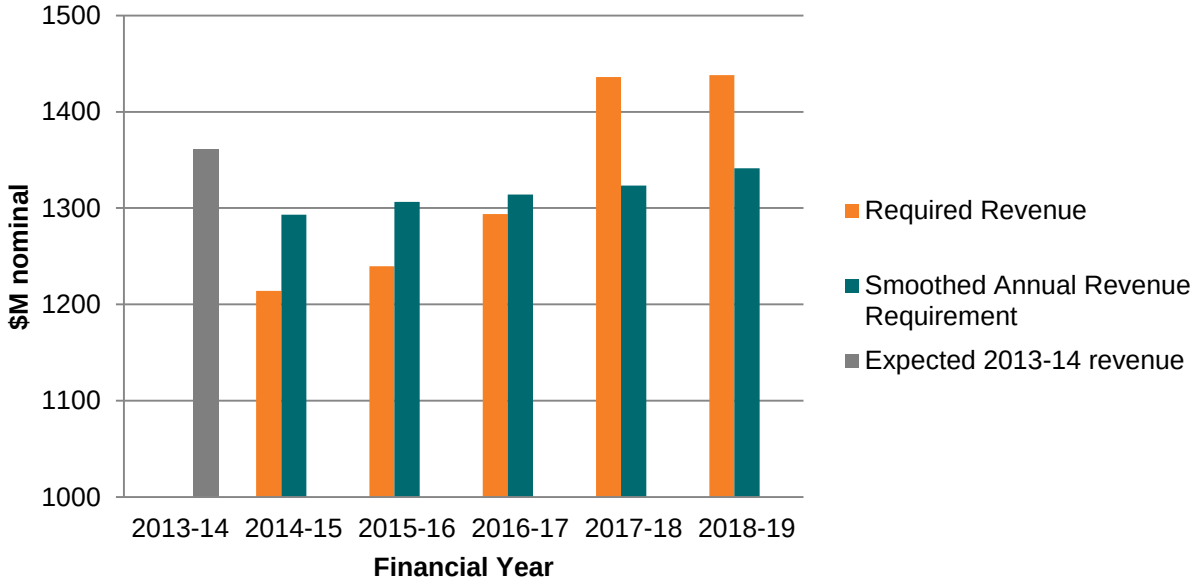

Figure 3-1: Proposed smoothed annual revenue requirement vs.required revenue

Supporting Inputs

The above sections provide an indicative estimate of the annual revenue requirement for standard control services in the transitional year, plus an indication of the likely revenue required in the subsequent regulatory control period. These revenues have been calculated using the building blocks approach and the AER's revenue model, the PTRM. The building block components used to calculate the annual revenue requirement for the transitional year and indicative revenue requirements for the subsequent regulatory control period are:

[18] NER, clause 6.5.9(b)(1).

[19] For example, if revenues are smoothed over five years in such a way that smoothed revenue recovery in 2018-19 is significantly less than the level of revenues required to meet efficient costs, then in the following regulatory period prices may need to increase significantly to meet the required level of revenues.

- A return on the value of the regulatory asset base (RAB). This is determined by multiplying the value of the RAB by our proposed rate of return. The value of the RAB reflects the remaining value of past capital investments and the forecast value of future capital expenditure. The proposed rate of return reflects the cost of capital for a benchmark efficient network service provider;
- A return of capital or regulatory depreciation;
- Forecast operating expenditure;
- An estimate of the cost of corporate income tax; and
- An indicative revenue carry over amount from the application of the EBSS in the current regulatory control period.

The building block components of our proposed indicative annual revenue requirements (unsmoothed) for standard control services in the 2014-19 regulatory control period are outlined in Table 3-2 below.

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Table 3-2: Building block components of indicative unsmoothed annual revenue requirement ($M, nominal)

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Return on capital (RAB)	579	620	656	692	727	3,274
Return of capital (regulatory depreciation)	99	118	132	135	129	614
Operating expenditure	481	479	475	484	497	2,415
EBSS carry over	(15)	(53)	(48)	39	0	(77)
Cost of corporate tax	71	75	79	85	86	396
Total required unsmoothed revenues[20]	1,214	1,240	1,294	1,436	1,438	6,622

Indicative opening regulatory asset base for 2014-15

The indicative value of the RAB as at 1 July 2014 is $6,790 million in nominal terms. This RAB value has been calculated based on clause 6.5.1 and schedule 6.2 of the NER (despite schedule 6.2.1 being not applicable to the transitional year) and the AER's Roll Forward Model (RFM). The completed indicative RFM is provided at Attachment B.

The RAB value reflects the roll forward of actual capital expenditure from the 2008-09 year to the 2012-13 year, and estimated capital expenditure for the 2013-14 year. These capital expenditure amounts contain the actual and estimated capital expenditure relating to types 5 and 6 metering services and ancillary network services.[21]

The AER has changed the classification of types 5 and 6 metering services and ancillary network services to alternative control services from 1 July 2014. We therefore needed to make adjustments to the value of the RAB as at 1 July 2014 to exclude the values of assets used to provide types 5 and 6 metering services and ancillary network services from the RAB. We want to ensure that the RAB value as at 1 July 2014 only reflects the value of assets used by Essential Energy to provide standard control services.

We have excluded an amount of $99 million from the RAB as at 1 July 2014, in order to reflect the values of existing assets used to provide types 5 and 6 metering services. Provision of ancillary network services does not require the use of capital assets and no adjustment has been made to the RAB value for ancillary network services. Chapter 5 provides details of the method we used to calculate the values of types 5 and 6 metering services assets to be removed from the RAB. These were previously included in the RAB but are excluded from 1 July 2014. Table 3-3 below shows the roll forward of Essential Energy's RAB from 1 July 2009 to 30 June 2014. The indicative opening RAB value as at 1 July 2014[22] is $6,790 million.

[20] Totals may not add due to rounding.
[21] These services are classified as standard control services prior to 1 July 2014.
[22] See clause 6.5.1 of the NER.

Table 3-3: Indicative opening RAB value for standard control services as at 1 July 2014($M, nominal)

	2009-10	2010-11	2011-12	2012-13	2013-14
Opening RAB	4,319	4,821	5,384	6,066	6,518
Add: Actual and estimated capital expenditure	688	724	771	655	585
Less: Regulatory depreciation	187	160	89	202	171
Less: Adjustment to reflect actual vs. allowed capital expenditure in 2008-09					45
Less: indicative metering services assets to be removed					99
Closing RAB	**4,821**	**5,384**	**6,066**	**6,518**	**6,790**

Proposed rate of return

Essential Energy proposes a conservative rate of return of 8.52 per cent. We used a trailing average approach to the cost of debt and a long-term average approach to the cost of equity informed by the range of relevant available evidence on the efficient cost of equity for energy networks.[23] We consider that a long term average approach is reflective of both the efficient costs of debt and equity for regulated energy networks. As the AER recognised in its final rate of return guideline, in the presence of re-financing risk, the benchmark efficient practice is to issue debt on a staggered portfolio basis.[24]

We also consider that investors in regulated utility firms are likely to invest over a long term horizon and it is reasonable to use long term historical data to set the efficient cost of equity over a five year regulatory control period. This approach smooths out short term volatility in data used to estimate the cost of equity. We have also had regard to prevailing conditions in the market for equity funds when developing our indicative rate of return for this transitional regulatory proposal. In addition, stable returns are an important driver in producing stable charges to customers over the long term.

We propose a cost of debt of 7.55 per cent, a cost of equity of 9.98 per cent, and a gearing level of 60 per cent.

Our proposed cost of equity has been informed by the opinion of expert economic consultants Competition Economics Group (CEG). Additional details on Essential Energy's approach to the rate of return are outlined in a report from CEG titled "WACC Estimates" provided as Attachment G.

Table 3-4 below shows the WACC ranges we used to calculate the indicative revenue requirements described in section 3.1 above.

Table 3-4: Indicative range for the rate of return and proposed rate of return

	Low end of indicative WACC range (proposed)	High end of indicative WACC range
Overall WACC	**8.52%**	**9.11%**
Cost of equity	9.98%	11.02%
Cost of debt	7.55%	7.84%
Gearing	60%	60%
Nominal risk free rate	4.78%	5.17%
Inflation rate	2.50%	2.50%
Debt risk premium	2.77%	2.67%
Market risk premium	6.50%	6.50%
Gamma	25%	25%

Cost of debt

Essential Energy proposes a trailing average cost of debt using yields over the past ten years on Australian BBB+ corporate bonds with a term to maturity at issuance of ten years. We have used a conservative cost of debt

[23] We refer to the return on equity and the return on debt in the NER as the cost of equity and the cost of debt.

[24] AER, *Final rate of return guideline,* December 2013, pp. 104-105.

estimate of 7.55 per cent, which is based on the average of the long run estimate of the cost of A and BBB rated debt as estimated by the Reserve Bank of Australia (RBA).[25]

For the upper end of our WACC range, we have used a cost of debt estimate of 7.84 per cent, which has been estimated by CEG as the trailing average ten year cost of debt using only Bloomberg data for yields on seven year corporate bonds and regulatory precedent for the method of extrapolating the yield from a seven year yield to an implied ten year yield.

To the extent possible we have had regard to the AER's final rate of return guideline to estimate our indicative rate of return. The AER's final rate of return guideline stated that a trailing average cost of debt is commensurate with the benchmark efficient practice, which is to issue debt on a staggered portfolio basis to manage refinancing risks. We have adopted a trailing average estimate and consider that this approach is commensurate with the NER, as it reflects the benchmark efficient cost of debt for network businesses.

However, the final rate of return guideline also stated that the AER intends to apply transitional arrangements that move all businesses over ten years from the current approach of estimating the cost of debt over a short observation period close to the final decision for a network determination. Based on current forecasts of yields on ten year BBB corporate bonds, this would significantly under compensate Essential Energy relative to its stand-alone benchmark efficient costs of debt finance.

As we have noted in submissions to the AER throughout the rate of return guideline consultation process, Essential Energy has consistently issued debt on a staggered portfolio basis and prudently managed refinancing risks over the past ten years. The AER's introduction of a debt transition would not allow us the opportunity to recover at least our efficient costs of debt finance which is inconsistent with the revenue and pricing principles outlined in section 7A of the NEL.

We consider that the proposed transitional arrangements for moving to a trailing average cost of debt set out in the AER's final rate of return guideline are inconsistent with the NEL and the NER.

We also note that based on advice received from UBS and provided on a confidential basis to the AER in combined NSW DNSP submissions to the AER's draft rate of return guideline, it would not have been, nor would it now be possible to efficiently re-finance the debt portfolios of the NSW distributors on the basis implied by the AER's transition approach to setting the cost of debt.

The UBS advice suggests that it would be difficult and costly for the NSW DNSPs to refinance their debt portfolios over a 10-40 day period close to the start of the next regulatory control period. UBS suggested:

- If the NSW DNSPs attempted to hedge their debt portfolios (approximately $17 billion in notional debt) over a 10-40 day period, it is questionable whether the Australian swap market would be sufficiently liquid to accept this level of swap contracts;
- Even if the NSW DNSPs were able to hedge their full debt portfolios using interest rate swaps over a longer period (e.g. three months), the transaction would need to be performed behind information barriers to avoid speculators taking advantage of the hedging requirement. However, this would also limit the ability to gain a competitive rate through competition across market participants;
- The costs involved in executing such a large hedging transaction would be significant and the market risk that the NSW DNSPs would have to take on during the execution period would be extraordinarily high. It may be possible for the NSW DNSPs to issue their debt offshore in the US market and then enter into swaps to fix the USD/AUD exchange rate. However, the transaction costs including information requirements, credit rating reports, and advertising would be high;
- Moreover, even though the US bond market is much more deep and liquid than the Australian market a new issuance of $17bn or greater would attract a significant new issuance premium. For example, the recent debt issuance by Verizon (approximately $US49 billion) attracted a 100 basis point new issue premium. There would also be significant lead time (up to three months) before such a transaction could be completed;

[25] See Attachment G - CEG "*WACC estimates*", page 27.

- In addition to this, there is insufficient liquidity in the Australian cross currency basis swap market to hedge the exchange rate risk for such a large debt issuance in the US market immediately following such an issuance. Therefore the NSW DNSPs would be exposed to an extraordinarily high level of currency risk over the three month period before the debt issuance could be completed. One standard deviation in the AUD/USD rate over this period could increase the combined debt obligation of the NSW DNSPs (based on a notional debt portfolio of 60 per cent of forecast RABs) by close to $1 billion. The maximum shift over a three month period is likely to be two standard deviations leading to a potential increase in the combined debt obligation of the NSW DNSPs of close to $2 billion; and
- In both the domestic and offshore scenarios, it is unlikely that the NSW DNSPs or bank counterparties to swap transactions would be able to engage in swap contracts without a Credit Support Annex (CSA) in place. This would expose the NSW DNSPs to even greater funding risks in the event that collateral is called in accordance with a CSA.

The advice from UBS supports the view that the costs of moving away from Essential Energy's existing portfolio approach to debt management would have been, and continue to be prohibitively high for the NSW DNSPs, and therefore would result in inefficiently high debt costs.

Cost of equity

In determining our proposed cost of equity of 9.98 per cent, we have had regard to relevant estimation methods, financial models, market data and other evidence.[26] We have also used an approach that leads to a consistent application of financial parameters within the return on equity.[27]

The Sharpe-Lintner CAPM estimates the cost of equity as follows:

$$\text{Cost equity} = \text{risk free rate} + \beta e \times [E(rm) - \text{risk free rate}]$$

One approach is to populate the CAPM using an estimate of the forward looking required return on the market based on the historical average realised real return on the market. The AER has termed this approach the "Wright approach".

CEG has applied this approach in estimating the required return on the market consistent with NERA's update to the Brailsford et. al. data.[28] NERA estimates the average real realised return on the market, inclusive of the value of imputation credits, from 1883 to 2011 is 8.84 per cent. Adding currently expected inflation of around 2.50 per cent to the historical average results in a realised real return on the market of 11.56 per cent. Given prevailing interest rates in December 2013 (4.34 per cent) this implies a market risk premium of 7.22 per cent. CEG has applied this approach and estimate a cost of equity for a benchmark DNSP of 10.3 per cent to 11.3 per cent (depending on whether an equity beta of 0.8 or 1.0 is used).

Another approach that relies on the historical average realised return on the market is to assume that the market risk premium is constant over time and to use the historical average realised excess return on the market (i.e. in excess of the 10 year risk fee rate) as a proxy for the prevailing market risk premium.

CEG has estimated the cost of capital using this approach. For our proposed cost of equity, we use:

- A long term average of yields on ten year Commonwealth Government Bonds of 4.78 per cent as a proxy for the risk-free rate. This is a nominal risk free rate estimate using data from 1883 to 2011 to be consistent with the period over which they calculate our proposed estimate of historical excess returns and an implied market risk premium.[29] (For our high case we have estimated the risk free rate over a ten year period consistent with the benchmark efficient approach to estimating the cost of debt. This provides a risk free rate estimate of 5.17 per cent).

[26] NER, clause 6.5.2(e)(1).
[27] NER, clause 6.5.2.(e)(3).
[28] See Attachment G - CEG "*WACC estimates*", page 8.
[29] See Attachment G - CEG "*WACC estimates*", page 8.

- An equity beta of 0.8 based on long term empirical estimates prepared by Strategic Finance Group Consulting (SFG) and CEG.[30] We note that empirical evidence from NERA consulting using the Black CAPM framework suggests that empirical estimates of the equity beta within the Sharpe-Lintner CAPM framework are likely to understate the return on low beta stocks (i.e. stocks with an equity beta estimate of less than one). NERA's analysis suggests that the best estimate of the cost of equity for a benchmark efficient energy network firm within the Sharpe-Lintner CAPM framework is given by using an equity beta of one (equivalent to assuming the expected return on the market portfolio is the best predictor of the efficient benchmark cost of equity).[31]
- An excess return to the market portfolio of stocks relative to the risk free rate of 6.5 per cent (often referred to as the market risk premium) based on historical excess returns to stocks above the risk free rate over the period 1883 to 2011.

This approach provides a cost of equity of 9.98 per cent using the CAPM framework. This is very similar to the estimate arrived at following the Wright approach (10.26 per cent). For the purpose of this transitional regulatory proposal we have adopted the lower of the two.

We have also had regard to other estimates by CEG of the cost of equity not based on historical averages. These include:

- using the Dividend Growth Model (DGM) to estimate the market risk premium in order to estimate the CAPM cost of equity (9.70per cent to 12.06 per cent)[32];
- using the DGM to directly estimate the cost of equity for the benchmark firm (11.18 per cent); and
- using the Fama French model to estimate the cost of equity for the benchmark firm (11.61 per cent).

We note that most of these estimates fall above the top end of the range used in this transitional regulatory proposal. Therefore, we consider our cost of equity of 9.98 per cent to be a conservative estimate in the context of all the relevant estimation methods, financial models, market data and other available evidence.

Indicative estimate of capital and operating expenditure

The indicative capital and operating expenditures for standard control services in the transitional year are $552 million (in 2013-14 dollars) and $469 million (in 2013-14 dollars) respectively. A further summary of our plans for expenditures in the transitional year and subsequent regulatory control period is set out in Chapter 4.

Table 3-5 below shows the annual indicative expenditure forecast over the 2014-19 regulatory control period relating to the provision of standard control services. The forecast expenditure profile highlights a reduction in capital and operating expenditure requirements from the current regulatory control period, reflecting Essential Energy's continuing commitment to be prudent and efficient with investments and operations.

It is important to note that these expenditure forecasts are indicative only at this stage. We will provide our proposed expenditure for the 2014-19 regulatory control period in greater detail in our substantive regulatory proposal. This is due to be submitted to the AER on 31 May 2014.

Table 3-5: Indicative expenditure plans relating to the provision of standard control services ($M, 2013/14)

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Capital expenditure	552	499	500	482	472	2,505
Operating expenditure	469	456	441	439	439	2,243

Estimated cost of corporate tax

To estimate the cost of corporate income tax we have used the current corporate tax rate of 30 per cent, and assumed a value for imputation credits of $0.25 per dollar of tax paid. This estimate is based on a pay-out ratio for

[30] See Attachment G - CEG "*WACC estimates*", page 8.
[31] NERA, *Estimates of the zero-beta premium*, June 2013, page 39.
[32] Associated with a theta of 0.35.

imputation credits of 70 per cent[33] and the latest estimate of the market value of distributed imputation credits from consultant Strategic Finance Group (SFG)[34] of 0.35.[35] The estimated cost of corporate income tax has been calculated using the AER's PTRM and is outlined in table 3-2 above.

Regulatory depreciation

Essential Energy has estimated revenue allowances for regulatory depreciation based on the AER's preferred approach to calculating regulatory depreciation. This uses straight line depreciation that divides asset values by the remaining life for each asset. Remaining lives for each class of asset have been estimated as a weighted average of the remaining life of existing assets. The depreciation of new assets has been estimated according to the standard life for that asset. This average is weighted by the value of assets as at 30 June 2014. We note that this gives greater weight to new assets and therefore extends the remaining life for each class of assets.
Straight line depreciation is offset by indexation of the RAB within the building blocks framework set out in the NER. This is reflected in the revenue allowances for regulatory depreciation outlined in table 3-2 above.

Proposed EBSS carry over amount

Essential Energy has applied the EBSS scheme outlined by the AER in its final determination for the current regulatory control period. This provides estimated carry over amounts for the 2014-19 regulatory control period as set out in table 3-2 above. Further information on the calculation of the EBSS amounts can be found at Attachment C.

Total Revenue for DUOS Charges

In the sections above, we outlined the amount we propose to be the annual revenue requirement for standard control services in the transitional year, and the inputs used in this calculation.

In accordance with the approach preferred by the AER in relation to the setting of indicative charges for the transitional year, we have aggregated the annual revenue requirement for standard control services (from table 3-1) with reclassified alternative control services (excludes public lighting) and unclassified services to calculate the total indicative bundled revenue[36] for the purpose of setting DUOS tariffs for the transitional year.

This 'bundled revenue' is shown in table 3-6 below. Essential Energy nominates this 'bundled revenue' to be the amount that will be recovered via DUOS charges for the transitional year. The AER will effectively make a decision, either to accept or otherwise amend, on this nominated amount in its determination for the transitional year.

Table 3-6: Total indicative bundled revenue for pricing in the transitional year ($M, nominal)

	2014-15
Standard control services annual revenue requirement	**1,293**
Alternative control services[37]	**70**
Unclassified services[38]	**1**
Total bundled revenue	**1,363**

Note: Totals may not add due to rounding

Indicative Charges and Typical Bill Impacts

Essential Energy is striving to contain average increases in our share of customers' electricity bills at or below CPI over the 2014-19 regulatory control period. We have examined our strategies, processes and procedures to identify scope for savings. Our proposed annual revenue requirement for the transitional year and the subsequent regulatory control period reflects our commitment to alleviate price pressures and our ongoing effort to be effective

[33] NERA, *The payout ratio,* June 2013, page 13.
[34] SFG was engaged by the Energy Networks Association (ENA), of which Essential Energy is a member, to advise on the AER Rate of Return guideline consultation process.
[35] SFG, *Updated dividend drop-off estimate of theta*, June 2013, pp. 31.
[36] Net of revenues expected from separate miscellaneous and monopoly prices and from third party damage recovery
[37] Net of revenues expected from separate miscellaneous and monopoly charges
[38] Net of revenues expected from third party damage recovery

and efficient in everything we do, without compromising on the safe, sustainable and reliable supply of electricity. In the sections below we:

- Provide indicative DUOS charges for the transitional year. These charges reflect the recovery of the total bundled revenue outlined in table 3-6 above; and
- Outline typical bill impacts for residential and small business customers.

In providing indicative DUOS charges and typical bill impacts for the transitional year, the total bundled revenue from table 3-6 has been used in the smoothing process. Where we have estimated the typical bill impacts for our customers in table 3-8 below, we have also added back the expected metering services charges that customers will face over the subsequent regulatory control period. This is so our customers can get visibility of the full bill impact they are likely to face over the 2014-19 regulatory control period, rather than just the standard control services price movements. While metering services are classed as alternative control services from 1 July 2014, they will still be a component of the typical bill for most customers.

Estimate of Consumption

In smoothing the required revenue over the 2014-19 regulatory control period, Essential Energy has considered forecasts of energy consumption. Figure 3-2 below shows a comparison of forecast energy volumes for the 2014-19 regulatory control period against allowed and actual/estimated volumes in the current regulatory control period.

The National Institute of Economic and Industry Research forecasts that on average, our customers will continue to reduce their use of electricity by 1.6 per cent over the five years commencing 1 July 2014 in Essential Energy's network. The forecast reduction in consumption is a consequence of the continuing take-up of domestic solar photo voltaic technology, the wind-up of the NSW Solar Bonus Scheme, the impact of the high Australian dollar on Australian manufacturing, the uptake of energy efficient appliances, increased building standards, and the continuing impact of double-digit electricity price increases from July 2009 to July 2012.

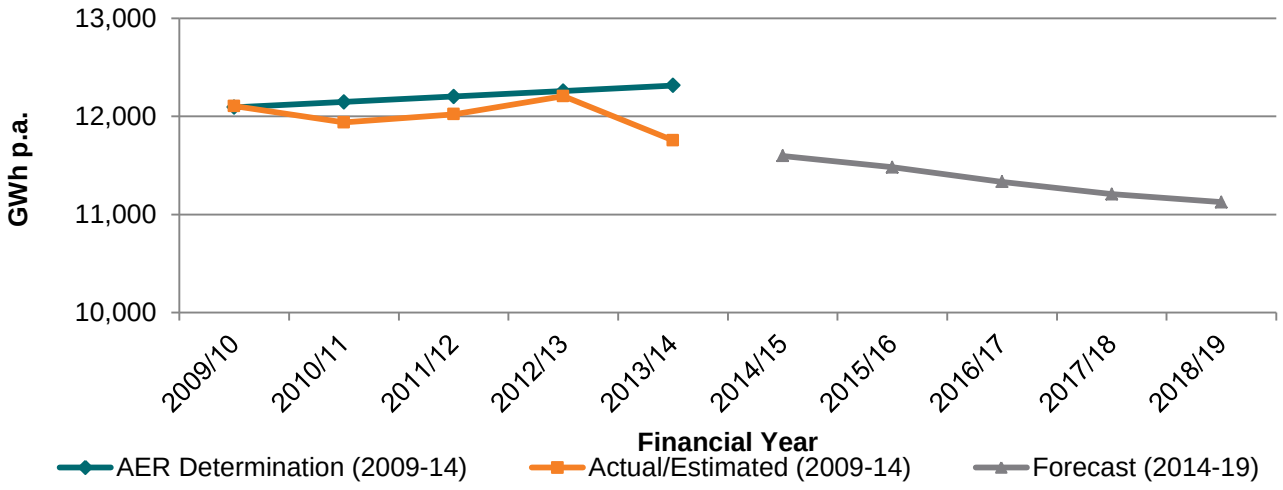

Figure 3-2: Energy Volumes 2009-10 to 2018-19

A useful indication of how average charges could move over the 2014-19 regulatory control period is demonstrated in table 3-7 below. This average change in charges is based on our latest forecast of energy consumption for the 2014-19 regulatory control period described above. However, energy consumption is difficult to forecast. Actual consumption over the regulatory period is likely to differ from our forecast and therefore:

- If energy consumption falls below our forecast, average charges will need to increase more than shown in table 3-7.
- If energy consumption rises above our forecast, average charges would decline below what is shown in table 3-7.

Table 3-7: Change in average distribution charges based on latest energy forecasts (% change in real charges)

	2014-15	2015-16	2016-17	2017-18	2018-19
Average change in distribution charges (real)	-0.01%	-0.01%	-0.01%	-0.01%	-0.01%

Note: This forecast does not incorporate changes in the relative contribution of each tariff and/or tariff component to overall distribution revenues over the regulatory control period. This may change based on energy consumption and pricing decisions each year.

Indicative charges

Clause 11.55.2(b)(b)(2) of the NER requires us to provide indicative charges for direct control services for the transitional year. The indicative charges below are proposed in accordance with the approach set out in Appendix 1. Indicative charges, based on our nominated total bundled revenue for the transitional year and our latest forecast of energy consumption, are outlined in table 3-8 below. Table 3-8 also outlines the percentage change in DUOS charges between 2013-14 and 2014-15.

Table 3-8: Indicative DUOS charges for 2014-15 (average $/MWh)

Nominal	2013-14	2014-15	% change
Low Voltage	$148.51	$152.21	2.49%
High Voltage	$74.90	$76.77	2.49%
Sub-transmission	$28.42	$29.13	2.49%
Unmetered	$89.40	$91.63	2.49%
CRNP	$5.42	$5.55	2.49%

Whilst these charges provide an early indication of our commitment to our customers for the 2014-19 regulatory control period, they are indicative only at this stage. The actual charges that customers will receive for the transitional year are dependent on:

- The AER's decision on allowed revenue for the transitional year;
- Updated energy consumption forecast; and
- Any changes in the relative portion of revenues recovered from each tariff and tariff component.

Essential Energy also notes that the charges outlined above are only a portion of the total network use of system (NUOS) charge to customers. NUOS charges also include the cost of services provided by NSW Transmission Network Service Providers (notably TransGrid), as well as the recovery of an amount to satisfy obligations under the NSW Climate Change Fund. These components are largely outside our control.

Typical bill impacts

Table 3-9 below illustrates bill impacts for a typical residential customer and small business customer. The figures assume that energy consumption is constant for the customer between 2013-14 and 2014-15. The typical annual bill for 2014-15 is based on the total bundled revenue from table 3-6, enabling a like for like comparison as customers will incur charges related to standard control services and alternative control services in their network bills for both 2013-14 and 2014-15.

Table 3-9: Typical customer average annual bill impacts

	Typical annual bill 2013-14 ($nominal)	Typical annual bill 2014-15 ($nominal)	% change (nominal)
Residential customer[39]	$1,282.80	$1,314.72	2.49%
Small business customer[40]	$4,435.03	$4,545.39	2.49%

[39] Residential customer on tariff BLNN2AU using 7MWh per annum

[40] Small business customer on tariff BLNN1AU using 23MWh per annum

4. BUILDING AND MAINTAINING OUR NETWORK

The following sections outline Essential Energy's capital and operating expenditure plans for the 2014-19 regulatory control period. The indicative forecast capital and operating expenditures summarised in this chapter are for standard control services only. The proposed capital and operating expenditures are consistent with, and have been taken into account in, the proposed annual revenue requirement set out in chapter 3. All amounts in this chapter are exclusive of alternative control services and unclassified services unless otherwise stated.

Investment during the current regulatory period was driven by the need to meet licence conditions and refurbish ageing assets. Essential Energy's investment approach for the 2014-2019 regulatory control period will continue to focus on meeting the needs of our customers.

To ensure that our assets are managed to meet the needs and expectations of our customers, we have carried out customer value workshops. This customer engagement research builds on our experience, adding insight to the type of relationship and benefits needed to successfully operate as a network services business. Essential Energy's research clearly affirms the active role customers continue to play in informing network investment opportunities. The outcomes of this research have been assessed and adopted throughout the transitional regulatory proposal, incorporating what we have learnt from customers into what we need to achieve as a business.

Essential Energy is committed to alleviating pricing pressures on customers over the next regulatory control period. Processes and procedures have been examined closely in order to identify scope for savings. Our focus on reducing the burden and hardship on our customers has seen significant capital expenditure reductions over the 2013 and 2014 financial years, and substantial reductions throughout the next regulatory control period.

Capital Expenditure Plans

Essential Energy forecasts total capital expenditure of $2,505 million (2013-14 dollars) for the 2014-19 regulatory control period. This includes $552 million for the transitional year and $1,952 million for the subsequent regulatory control period.

This indicative total capital expenditure figure is 43 per cent lower (in 2013-14 dollars) than the AER allowance for the current regulatory control period. Figure 4-1 below shows a comparison of indicative forecast capital expenditure for the 2014-19 regulatory control period against allowed and actual/estimated capital expenditure in the current regulatory control period.

The lower capital expenditure is reflective of lower demand forecasts, as well as the initiatives we have implemented to actively reduce the need for capital expenditure and contain average increases in our share of customers' electricity bills at or below CPI. We have reduced our volume of works through enhanced risk management requirements for planning and reduced costs through a stronger focus at both design and delivery stages.

The need for network augmentation has lessened significantly due to a lower overall system peak demand than approved by the AER for the current regulatory control period. It is also lower because we have incorporated an expected reduction in the stringency of our licence conditions in the planning standards used for this transitional regulatory proposal.

The overall investment portfolio has been refined using an investment prioritisation model that produces an assessed risk ranking for all proposed capital expenditure projects and programs. This has been used in parallel with our planning processes to produce the final capital works program for the 2014-19 regulatory control period based on an acceptable level of risk. Reflecting our commitment to offset labour cost increases through efficiency improvements, a zero real cost escalator has been applied to internal labour costs.

While we have sought to minimise expenditure, we still need to incur capital expenditure to maintain the reliability and safety of the network. The majority of our proposed investment is to replace existing network assets that are

reaching the end of life and exhibiting increasing risk of failure. In the current regulatory control period, we have made significant inroads into addressing condition issues. Despite this, the average age of our distribution network has continued to increase, and an ongoing investment program is needed to limit maintenance and breakdown costs, and manage safety (including public safety), environmental and other risks.

We are also investing a modest amount to meet pockets of high demand on our network, including augmentations of the network to meet the needs of new customers. While forecast growth in overall system peak demand is lower than in the past, there is significant diversity between local network areas. This means that the majority of our capacity investment is in specific areas of growing demand or to meet the needs of new customers. Despite the relatively lower level of investment in capacity, we have considered demand management options to defer capital expenditure in a prudent manner wherever possible, and included this in our investment plans.

For illustrative purposes only in order to provide a like for like comparison, figure 4-1 also shows the combined indicative forecast capital expenditure for both standard control services and alternative control services, exclusive of public lighting.

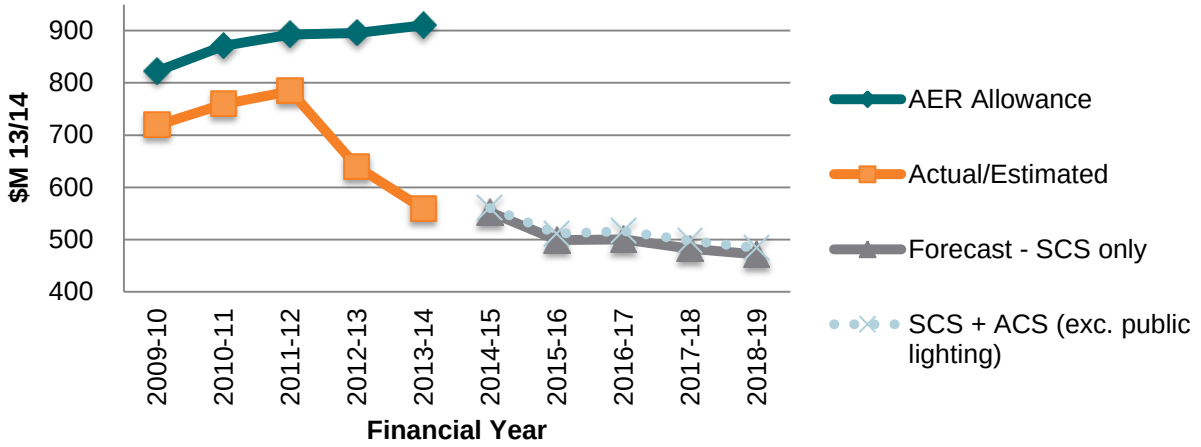

Figure 4-1: Capital expenditure 2009-10 to 2018-19 ($M, 2013-14)

System related capital investment covers all system assets comprising the network. Capital investment is undertaken where the asset strategy indicates a need for asset acquisition, construction, renewal, or capacity augmentation. In line with these requirements, capital expenditure can be broken down into a number of categories. Key components of the strategic planning process for each category are set out in individual asset management plans (AMPs). Essential Energy's key network asset management strategies and forecast capital expenditure program for the next regulatory control period are contained within these AMPs.

The overall investment portfolio has been refined using an investment prioritisation model that produces an assessed risk ranking for all proposed capital expenditure projects and programs. This has been used in parallel with our planning processes to produce the final capital works program for the 2014-19 regulatory control period based on an acceptable level of risk.

Asset management plans

Essential Energy's capital investment program ensures:

- Long term sustainability of network condition, asset utilisation, supply security, and network performance;
- Adequate capacity for customer connections and peak demand growth, achieved through either capacity augmentation of existing assets or the construction of new assets;
- Timely replacement or refurbishment of ageing and obsolete assets that have become unserviceable, frequently fail in service, have deteriorated to an unsafe or risky condition, or where the present value cost of maintaining the asset exceeds the cost of replacement;
- Maintenance of reliability and quality of supply to meet our customer expectations;
- Environmental, safety, infrastructure security and legal responsibilities are met;

- Acquisitions of property and easements for future network development; and
- Availability of a number of miscellaneous corporate and non-system items for the continued efficient management and support of the electricity distribution business, including information technology systems, motor vehicles, plant, and other non-system assets.

The capital investment program proposed by Essential Energy in the transitional regulatory proposal is consistent with the delivery of the above outcomes.

The AMPs are strategic business plans, used to manage the network assets and deliver service levels to meet stakeholder requirements. Essential Energy has developed 14 AMPs which cover all of Essential Energy's network assets. Each AMP defines the life cycle of a specific group of assets and covers the major drivers of expenditure. The groupings have been chosen to ensure that synergies between assets can be maintained, and to allow the best mix between operating and capital expenditures.

Each AMP defines the service levels applicable to the asset group, based on stakeholder requirements and then compares asset capability and current performance to determine if there is a gap. Targets are defined based on the asset capability and service gap and strategies are developed to achieve the targets.

These AMPs are supported by a set of strategic plans, planning reports and individual investment cases. The planning process produces a detailed annual capital expenditure program and sets priorities for capacity augmentation, and supply security, quality and reliability over the investment horizon to 2018-19.

Regional planning reports

Essential Energy's regional planning reports identify major sub-transmission projects, which may include the augmentation of existing assets or the construction of new assets. The plans encompass forward projections of peak demand and customer growth, and they identify the assets on the network that are projected to exceed their limits and the sub-transmission and distribution network development projects required. This aspect of planning also incorporates Essential Energy's demand side management activities aimed at containing or reducing the customer load presented to the network, and also involves specific developments to maintain security of supply. A bottom up approach is adopted, with each constraint separately assessed and an individual project report developed.

Distribution network growth strategy

Distribution growth is not a simple extrapolation of global demand forecasting. The sheer scale of Essential Energy's network coverage results in a collection of extremes to be serviced - rural versus urban centres, a multiplicity of communities and industry, population migration to coastal areas, and climatic extremes from inland to coastal, snowfields to sub-tropical forests. This range of extremes turns global averages into statistics that are not always useful at a micro level of decision making.

Historical load growth resulting from factors including uptake in air conditioning and modern appliances, is complicated by the reduction in power quality tolerance, caused by the advent of electronics and integration of microprocessors within appliances. Most of the expansion in demand has imposed added burden on 40 to 50 year old assets that were designed and constructed in a period far removed from the standard of living and customer expectations present today.

Demand management strategic plan

The decision to apply demand management or to augment the network remains an issue of:

- Economic efficiency;
- Technical feasibility;
- Timing;
- Service preferences;
- Application of sound industry commercial practice; and
- Determination of the optimum means of providing supply capacity to customers.

Performing analysis and consultation around all of these areas to ensure a balanced outcome to the business, and our customers in terms of the provision of a safe, efficient and reliable electricity supply is a significant and ongoing process.

A distribution annual planning report (DAPR) is prepared and published by Essential Energy. This document provides historical and forecast peak load data and capacity information for all zone substations, and discloses where a network constraint is forecast to occur within five years. The information allows customers and energy service providers to consider whether they may be able to assist in addressing a network constraint through the implementation of demand management initiatives. This approach actively seeks to minimise barriers and disincentives to the adoption of demand management options.

Reliability and quality of supply strategic plans

The reliability and quality of supply strategic plans address the supply reliability, quality and security aspects of Essential Energy's electricity distribution network business. They detail the specific asset management strategies, commitments, actions, and the level of expenditure aimed at ensuring that supply reliability, quality and security is compatible with minimum standards, and to address identified customer requirements.

Network technology strategic plan

While Essential Energy has for many years utilised targeted automation schemes to improve network service performance, intelligent network concepts increasingly offer a greater capability to understand, meet and shape the changing needs of our customers and the regional communities we serve. In response to our changing environment, Essential Energy is seeking to capture the benefits of intelligent network concepts through a whole of business/whole of network approach that will promote efficient investment in, and the efficient operation and use of our network services for the long term interests of our customers across regional NSW.

Non-system assets

In addition to investing in the electricity network, Essential Energy is also required to invest in non-system assets that support our core activities. These supporting assets are fleet, property, information technology and furniture and fittings. In general, Essential Energy's investment in non-system assets is driven by:

- The condition of the asset;
- A new compliance obligation; or
- Alignment with, or enhancement of, Essential Energy's strategic priorities.

Essential Energy has produced a business plan describing the investment and operational plans over the 2014-19 regulatory control period for each of these non-system assets The business plans are supported by investment cases that explain the rationale for the forecast capital expenditure over the 2014-19 regulatory control period.

Capital expenditure drivers

Table 4-1 below shows the indicative capital expenditure forecasts by driver. In the sections below, the key focus areas of investment for each driver are described.

Table 4-1: Indicative capital expenditure forecasts by driver ($M, 2013-14)

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Growth	215	145	145	146	134	785
Refurbishment	202	259	249	234	241	1,184
Reliability	33	33	33	33	33	166
Compliance	21	22	26	26	26	120
Non System	82	40	46	44	38	250
Total net capex[41]	**552**	**499**	**500**	**482**	**472**	**2,505**

Note: Totals may not add due to rounding

Indicative capital expenditure for the 2014-19 regulatory control period can be broken down into the drivers described below.

[41] Capex is net of capital contributions and asset disposals.

- **Growth.** We augment the network to connect new customers and to address imbalances in supply and demand. We forecast indicative capital expenditure of $785 million for the 2014-19 regulatory control period on growth. There are two drivers:
    - New customer connections. This occurs when a new customer connection necessitates augmentation of the shared network. These new connection works make up most of the forecast capital expenditure in the complete regulatory control period; and
    - Reinforcement. This occurs when the aggregate demand from new and existing customers in an area necessitate augmentation of the shared network. Essential Energy has forecast expenditure designed to accommodate the growth of new and existing customers.
- **Refurbishment.** We undertake renewal and replacement expenditure to ensure compliant infrastructure and maintaining of network reliability. Due to our large overhead distribution network, we expect to spend an indicative $1,184 million for the 2014-19 regulatory control period on refurbishment. The key driver of refurbishment is the degradation of the condition of assets in the network. One of Essential Energy's largest programs is the replacement of wooden poles. We estimate that over 40,000 poles will need to be replaced during this period.
- **Reliability.** We invest to ensure compliance with reliability performance targets as set out in jurisdictional licence conditions. The key program requirement for the complete regulatory control period is work on poorly performing feeders. Of the total forecast $166 million in indicative reliability expenditure, most will go towards strategies aimed at improving the performance of poor performing feeders whilst maintaining current reliability levels in areas that meet licence conditions.
- **Compliance.** The regulatory obligations that drive our investment program include public safety, workplace safety, and environmental legislation. We expect to spend an indicative $120 million for the 2014-19 regulatory control period on compliance. This includes river-crossing project delivery and increased bushfire risk mitigation programs.
- **Non-System Assets.** We plan to invest $250 million in supporting assets to meet network and corporate functions over the 2014-19 regulatory control period. The key drivers of this investment include but are not limited to:
    - When the condition of an existing asset is inadequate to perform its function;
    - If a new compliance obligation necessitates investment in a supporting asset;
    - Improved safety outcomes for our employees, contractors, suppliers and the public; and
    - When a supporting asset will result in an efficiency benefit, resulting in long-term benefits to customers.

Operating Expenditure Plans

Essential Energy's operating expenditure plans have been developed consistent with our corporate objectives of safety, reliability and affordability in the long term interests of customers. Essential Energy's 2011-12 operating expenditure was significantly above the AER approved allowance. The bushfires in Victoria and the resulting Royal Commission into network assets highlighted the need to focus on vegetation management and ensure that clearances are being maintained. This resulted in expenditure on vegetation being $40 million (2013-14 dollars) above the allowance in 2011-12. Vegetation management activities continued to expand in 2012-13, with expenditure increasing to be $70 million (2013-14 dollars) above the AER approved allowance.

The increased focus on vegetation management has led to increased expenditure during the current regulatory control period and a forecast increase in total vegetation management expenditure for the next regulatory control period. This expenditure is required to maintain the safety and security of the network, and to ensure service reliability and quality does not deteriorate. To offset the increase in vegetation management expenditure whilst striving to contain average increases in our share of customers' electricity bills at or below CPI, Essential Energy is forecasting real reductions across all other operating expenditure categories combined with significant efficiency improvements over the next regulatory control period. Many initiatives and business efficiency measures have already been implemented in the current regulatory control period as part of the network reform program described above in chapter 1.

Essential Energy forecasts total operating expenditure of $2,243 million (2013-14 dollars) for the 2014-19 regulatory control period. This includes $469 million for the transitional year and $1,774 million for the subsequent regulatory control period.

This indicative total operating expenditure is 2 per cent lower (in 2013-14 dollars) than actual and estimated operating expenditure in the current regulatory control period. Figure 4-2 below shows a comparison of indicative forecast operating expenditure for the 2014-19 regulatory control period against allowed and 2013-14 actual/estimated operating expenditure in the current regulatory control period. For illustrative purposes only in order to provide a like for like comparison, figure 4-2 also shows the combined indicative forecast operating expenditure for both standard control services and alternative control services, exclusive of public lighting.

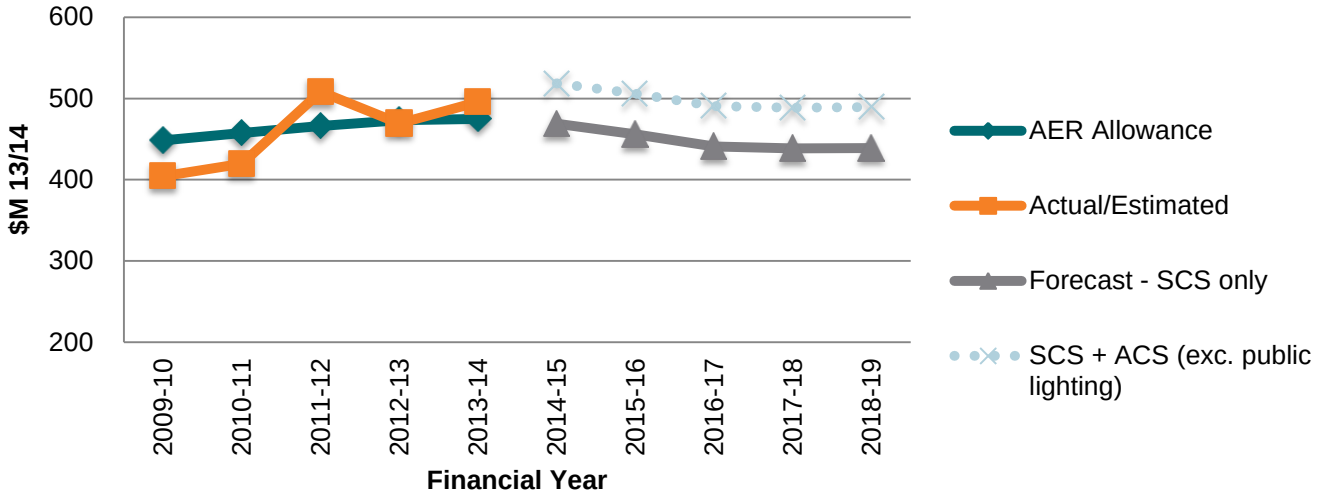

Figure 4-2: Operating expenditure 2009-10 to 2018-19 ($M, 2013-14)

Table 4-2 below shows indicative annual operating expenditure forecasts by category for the 2014-19 regulatory control period. An overview of each major network operating expenditure category is given in the ensuing discussion.

Table 4-2: Indicative operating expenditure forecasts by category ($M, 2013-14)

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Inspections	30	29	29	29	29	147
Maintenance and repair	79	79	78	79	79	393
Vegetation management	166	155	141	141	141	744
Emergency response	83	82	81	82	82	410
Other network costs	107	107	106	103	103	527
Total network costs	**465**	**452**	**436**	**434**	**434**	**2,220**
Debt-raising costs	4	4	4	4	4	20
DMIA	1	1	1	1	1	3
Total forecast opex	**469**	**456**	**441**	**439**	**439**	**2,243**

Note: Totals may not add due to rounding

- **Inspections.** Essential Energy has forecast indicative operating expenditure of $147 million on inspections for the 2014-19 regulatory control period. Routine asset inspection and condition monitoring activities include field and aerial inspection of overhead distribution assets (poles, pole top structures, conductors, substation structures, transformers, high and low voltage switchgear, and other distribution electrical equipment), power line to ground and vegetation clearances, thermography of power line and substation structures, and non-destructive testing of power transformers and switchgear. These activities are critical in assessing the current state of distribution equipment and establishing network safety, risks and liabilities that ultimately determine the maintenance work plan. Chemical preservatives are generally applied to wood poles at the time of inspection. Inspection cycles are based on associated risks and utilise both ground inspections and aerial patrols. Inspection criteria are detailed in asset management policies and

procedures. All private overhead power lines are inspected on the same basis. The inspection of customer connection equipment ensures compliance with relevant legislative and safety requirements.

- **Maintenance and repair.** This category covers all maintenance and repair activities on network assets. Essential Energy forecasts spending an indicative $393 million on maintenance and repair during the 2014-19 regulatory control period. This is a stable, on-going maintenance program. Components include maintenance and repair of distribution power line equipment, damaged or inoperable switchgear fuse replacement, distribution substations, and customer service mains.
- **Vegetation management.** Due to the wide expanse and overhead nature of Essential Energy's distribution network, vegetation management is the most significant operating expenditure category in dollar terms. We expect to spend an indicative $744 million on vegetation management during the 2014-19 regulatory control period. Our policy is to clear vegetation from power lines in accordance with ISSC3[42]. Compliance with this policy is a critical control measure associated with management of bushfire risk. The majority of vegetation management work is generated and undertaken in one of two ways:
    - a systematic and regular program of vegetation clearance work carried out on power lines based on a prescribed cutting cycle (referred to as cyclic vegetation clearance); and
    - spot cutting of defects arising from annual aerial patrols carried out to remove higher risk, individual incursions of vegetation into the clearance envelope.

  Spot trimming removes risk quickly but it is not the most efficient measure in the long term. Our strategy is to keep vegetation to allowable standards by moving to a mainly cyclic vegetation clearing process over a period of time. Recent action has been taken to reduce spot trimming backlogs and shift resources into cyclic trimming. We expect the number of problem areas detected through our annual aerial inspections to be significantly reduced in future.

  The total indicative forecast for this regulatory control period has been based on achieving efficiencies through a number of strategic reform initiatives, including the adoption of the approach described above, ensuring appropriate end-to-end management capability and having an adequate vegetation management system as the key enabler. This will deliver the best long-term cost outcome whilst also managing the risks associated with vegetation encroachment on power lines. Forecast work volumes have been determined by statistically significant sampling across the network. Our analysis involves the classification of vegetation density classes and estimating associated unit costs.

- **Emergency response.** This covers fault and emergency repair and restoration of supply for planned and unplanned interruptions caused by events such as storms, equipment failures, acts of vandalism, and vehicle collisions. On notification of a customer supply interruption, Essential Energy dispatches field employees to deal with the fault. We forecast we will spend an indicative $410 million on fault and emergency compliance during the 2014-19 regulatory control period.
- **Other network costs.** The main areas of expenditure include network operating activities including supply interruptions and network control, maintenance and repair of zone substations, network divisional operating expenditure, and customer service. The total indicative forecast on other network costs is $527 million for the 2014-19 regulatory control period.

Essential Energy's forecast operating expenditure for the transitional year and the following four years of the regulatory control period reflects the requirements of the operating expenditure objectives as outlined in Clause 6.5.6(a) of the NER. In particular, our operating expenditure forecasts are designed to:

1. meet or manage the expected demand for standard control services over the regulatory control period;
2. comply with all applicable regulatory obligations or requirements associated with the provision of standard control services;
3. to the extent that there is no applicable regulatory obligation or requirement in relation to:

   (i) the quality, reliability or security of supply of standard control services; or
   (ii) the reliability or security of the distribution system through the supply of standard control services,

[42] Industry Safety Steering Committee, *ISSC 3 Guideline for Managing Vegetation near Power Lines*, December 2005.

to the relevant extent:

> *(iii) maintain the quality, reliability and security of supply of standard control services; and*
> *(iv) maintain the reliability and security of the distribution system through the supply of standard control services; and*

4. maintain the safety of the distribution system through the supply of standard control services.

Efficient base year

Essential Energy has employed a base year forecasting methodology for the majority of operating expenditures. We have used the 2012-13 financial year as the base for forecasting future costs as this is the latest year where actual audited regulatory accounts are available. The reasonableness of this forecasting methodology is dependent on the base year operating expenditure being efficient.

Essential Energy has been able to identify that this base year is efficient because:

- At the last regulatory reset the AER approved a prudent and efficient level of operating expenditure for Essential Energy and the 2012-13 actual expenditure is below the allowed operating expenditure, despite the significant increase required in vegetation management expenditure described above in section 4.2. This was achieved through aggressive efficiency programs and cost reduction initiatives across all operating expenditure categories;
- Essential Energy has a commercial incentive to achieve an efficient level of expenditure whilst still meeting service expectations and regulatory obligations, recognising the non-discretionary nature of a high proportion of expenditure;
- The 2012-13 base year operating expenditure is largely consistent with our 2009-10, 2010-11 and 2011-12 expenditure with the exception of increased vegetation costs summarised earlier; and
- The base year operating expenditure reflects the circumstances, including weather and exogenous events, that could reasonably be assumed to occur over the forthcoming regulatory control period.

Our challenge for the 2014-2019 period

In striving to contain average increases in our share of customers' electricity bill at or below CPI, Essential Energy is forecasting a 4 per cent reduction in average operating expenditure from the base year over the next regulatory control period.

In developing this forecast it has been necessary for Essential Energy to reduce operating expenditure to below the allowance for the current regulatory control period to offset increases in forecast vegetation management expenditure. In addition to the savings that we have already made, additional movements in cost factors will be managed through further productivity and efficiency improvements.

The additional factors that have been considered in developing our forecasts include:

- One off costs;
- Increasing asset base;
- Cost escalators; and
- Reductions in capital expenditure and the trade-off in operating expenditure.

One off costs

Prior to 1 March 2011, Essential Energy was an integrated business that provided both network services and retail services. We provided these services using integrated IT systems and business processes whilst maintaining ring fencing arrangements.

Essential Energy's retail business was sold to Origin Energy on 1 March 2011. Under the terms of the sale, a Transitional Service Agreement (TSA) was agreed between Essential Energy and Origin Energy.

The TSA stipulated the provision of retail related services to Origin Energy retail customers by Essential Energy. Essential Energy provided these services to Origin Energy's customers using the same resources, systems and processes that it employed to provide services to its own retail customers prior to the sale. The last of the services provided by Essential Energy to Origin Energy concluded on 3 January 2014.

On termination of the TSA, our costs of providing standard control services increased due to the loss of scale and scope of being an integrated network and retail business. These 'loss of synergy' costs have been factored into the forecast operating expenditure for the 2014-19 regulatory control period. The AER recognised this potential 'loss of synergy' in its draft 2009-14 NSW distribution determination. In accepting the 'Retail project event' (i.e. sale of the retail business) as a nominated pass through event, the AER stated:

> *"If the NSW electricity retail businesses are privatised the DNSP's cost of providing direct control services may increase due to loss of synergies."*[43]

Essential Energy also operated a gas network in Wagga Wagga and surrounding areas until it was sold to Envestra in October 2010. The gas network continued to operate under a transitional arrangement until the end of August 2011 and utilised many of the same IT systems and business processes as the electricity network. While the scale of the gas network business is smaller than the retail electricity business, the selling of the gas network business has also resulted in a loss of synergy that has had to be borne by the electricity network business.

Increasing asset base

Most of the forecast operating expenditure is associated with the existing asset base. However, growth related capital expenditure increases the size of the network and the number of assets to be maintained, operated and managed. Accordingly, there is a need to establish a relationship between growth related capital expenditure and real increases in operating and maintenance expenditure.

Cost escalators

The base year operating expenditure reflects the current prices of cost inputs. Forecast operating expenditure needs to account for changes to the price of cost inputs in order to reasonably reflect a realistic expectation of the cost inputs required to achieve the operating expenditure objectives in the next regulatory control period. These price increases may not necessarily be at the same rate as the CPI, due to a number of factors.

To demonstrate our commitment to minimising charges for our customers, Essential Energy will undertake initiatives to improve the productivity of the workforce such that the net increases in labour costs are confined to 2.50 per cent, the expected level of CPI. This means that our forecast operating expenditure contains zero real labour cost escalation for internal labour. This additional productivity measure means that customers will enjoy a benefit of $110 million ($ 2013-14) over the 2014-19 regulatory control period.

Reductions in capital expenditure and the trade-off in operating expenditure

Due to the substantial reduction proposed in forecast capital expenditure for the next regulatory control period, Essential Energy has marginally increased forecast operating expenditure in recognition that maintenance requirements and the allocation of common costs to SCS will increase.

The lower forecast capital expenditure program will also mean not as many resources will be required as compared to the number needed to deliver the approved capital expenditure program in the current regulatory control period. These resources were previously tasked with the delivery of the capital program and therefore their costs were fully funded by the capital expenditure allowed by the AER for the current regulatory control period. These now stranded costs are a legitimate cost to be recovered as part of Essential Energy's operating expenditures. However, we have initiatives in place that will remove these stranded costs during the 2014-19 regulatory control period.

Efficiency improvements

Through the efficiency improvements that have already been implemented, and the savings from Networks NSW' cost reduction initiatives, Essential Energy is forecasting that costs will be approximately 4 per cent below the

[43] AER, *NSW distribution determination 2009-10 to 2013-14 draft decision,* 21 November 2009, pp. 280.[is there a quote that can be include}

efficient base year levels on average over the next regulatory control period. A further round of productivity and efficiency gains has been factored in to operating expenditure forecasts to ensure that the upward cost pressures identified above can be controlled.

Overall, the productivity and efficiency improvements necessary to deliver these gains will see a real cost reduction of $296 million or 11 per cent over the next regulatory control period. Figure 4-3 below demonstrates the results of this concerted effort to find efficiency savings for our customers. It shows that without this effort, the operating expenditure required over the 2014-19 regulatory control period would be $296 million higher due to upward cost pressures. For illustrative purposes only in order to provide a like for like comparison, figure 4-3 shows the combined indicative forecast operating expenditure for both standard control services and alternative control services, exclusive of public lighting.

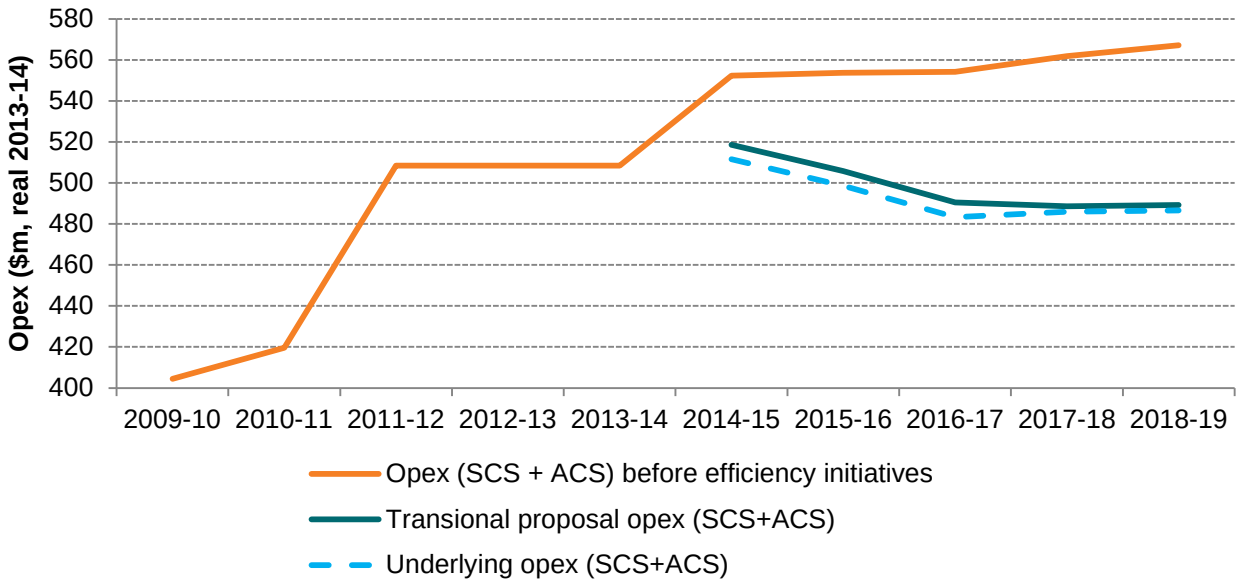

Figure 4-3: Operating expenditure productivity and efficiency savings 2014-15 to 2018-19 ($M, 2013-14)

5. PRICES FOR OTHER SERVICES

In the chapters above, Essential Energy outlined the information relevant to standard control services. In this chapter, we set out some relevant information for those services classified as alternative control services from 1 July 2014. These services are:

- Type 5-6 metering services;
- Public lighting services; and
- Ancillary network services.

Whilst these services have changed classification from 1 July 2014, the revenues needed to recover the costs of providing some of these services in the transitional year are aggregated with the revenue for standard control services. This is in accordance with the AER's preferred approach which is outlined in chapter 2 and Appendix 1. As a result, it is expected that the AER will make an adjustment in the subsequent regulatory control period to charges for these services to account for the under or over recovery of revenue in the transitional year.

Type 5-6 Metering Services

Metering services is one of the terms developed by the AER to group classes of services provided by NSW DNSPs. Customers currently pay for their metering service in the bundled charges they receive for standard control services. The AER has reclassified metering services associated with Type 5 and 6 metering installations provided by NSW DNSPs from 1 July 2014, with the intention of establishing separate prices for these services.

However, the AER's preferred approach for the transitional year is to maintain existing cost allocations. This means we will continue to recover the costs of providing these services through the bundled DUOS charges. As a result, we have delayed proposing separate prices that will apply from 1 July 2015 until our substantive regulatory proposal is lodged in May 2014.

The revenue amount for type 5-6 metering services for the transitional year that we have nominated to be recovered through the bundled revenue is $58 million in unsmoothed terms. This revenue is to recover the following costs needed to provide type 5-6 metering services:

- The value of the metering services RAB;
- Forecast operating expenditures to deliver metering services; and
- Forecast capital expenditures to deliver metering services.

We provide a summary of these inputs in the sections below.

Activities undertaken to deliver metering services

In their stage 1 F&A paper published in March 2013, the AER outlined four sub-categories of metering services relating to Type 5 and Type 6 meters. These sub-categories are defined as:

- Meter provision. The capital costs of purchasing the meters;
- Meter maintenance. Covers works to inspect, test, maintain, repair and replace meters;
- Meter reading. Refers to quarterly or other regular reading of a meter; and
- Metering data services. Services incorporating the collection, processing, storage and delivery of metering data and the management of relevant National Meter Identifier (NMI) Standing Data in accordance with the Rules.

Establishing a separate type 5-6 metering services RAB

In the current regulatory control period, all metering assets form part of Essential Energy's total RAB for standard control services. The standard control services RAB represents the regulatory value of all the assets purchased

and installed by Essential Energy to provide network-related services to customers44. We have identified an opening RAB value for type 5-6 metering assets as at 1 July 2014 of approximately $99 million as shown in table 5-1 below.

Table 5-1: Indicative opening value of metering services RAB as at 1 July 2014 ($M, Nominal)

Asset Class Name	Opening Asset Value
Type 5-6 metering assets - system	90.5
Type 5 -6 metering assets – non-system	8.4
Total metering services RAB	**99**

Indicative forecast operating expenditure

The operating cost components include meter maintenance and emergency work, meter reading, meter services and an allocation of other shared operating expenditure. Table 5-2 below details the indicative forecast operating expenditures required to provide Type 5 & 6 metering services. It must be noted that the forecast operating costs are indicative only and will be finalised in our substantive regulatory proposal due for submission in May 2014.

Table 5-2: Indicative operating expenditures for Type 5 and Type 6 metering services ($ million, 2013-14)

Service Category	2014-15	2015-16	2016-17	2017-18	2018-19	TOTAL
Meter services[45]	6.7	6.7	6.6	6.7	6.7	33.3
Meter reading	19.4	19.5	19.6	19.8	20	98.3
Meter maintenance & emergency work	2.9	2.9	2.8	2.7	2.7	14.0
TOTAL	29.0	29.0	29.0	29.2	29.4	145.6

Indicative forecast capital expenditure

The annual forecast capital expenditure is shown below in table 5-3.

Table 5-3: Indicative capital expenditures for Type 5 and Type 6 metering services ($ million, 2013-14)

	2014-15	2015-16	2016-17	2017-18	2018-19	TOTAL
Meter replacements	4.1	9.4	9.8	13.3	9.8	46.4
New meters	2.5	2.4	5	2.4	2.4	14.7
TOTAL	6.6	11.9	14.8	15.7	12.2	61.2

Forecast volumes

The Rules require us to provide an indicative estimate of demand (including customer numbers, energy demand and maximum demand) for Type 5 and 6 Metering Services. The two factors that provide the best indicative estimate of demand for metering services are the number of existing connections, and the number of new connections that occur during the regulatory control period, rather than demand. This is because the forecast number of connections provides the indication of revenue that will be recovered from providing type 5 and 6 metering services. Table 5-4 below provides Essential Energy's existing Type 5 and 6 metering population and table 5-5 includes forecast new connections for the 2014-19 regulatory control period. The meter replacements in table 5-6 are also relevant as they affect forecast capital expenditure as set out in table 5-3, however they do not impact on the total number of connections.

Table 5-4: Essential Energy's type 5 and 6 metering population (FY14)

Essential Energy's Type 5 and 6 Metering Population	Totals
Essential Energy NMIs	807,450
Essential Energy Meters	1,454,568

[44] The RAB value is not necessarily the same as the 'accounting' value

[45] The AER had categorised the cost of meter provision as capital.

Table 5-5: New connection numbers 2014-19

	Type 5/6 New CT Connected Customers	Type 5/6 New Direct Connected Customers	Type 5 New NET Solar Installations	TOTAL
NMIs	2,500	31,223	72,318	106,041

Table 5-6: Meter replacement numbers FY15 – FY19

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Meter replacements	54,319	71,527	112,227	81,348	68,852	388,273

Public Lighting Services

Public lighting services encompass the provision, construction and maintenance of public lighting and emerging public lighting technology. Essential Energy provides public lighting services to over 100 customers, including councils, community groups and government associations. There are over 150,000 public lights in Essential Energy's network area, typically installed on major and minor roadways. A conventional public light comprises four main components, namely a lamp, a luminaire, a support structure, and a connection to the low voltage electricity network.

Each installation is treated individually from a charging perspective and each can attract a capital charge and a maintenance charge. Where Essential Energy has funded the installation customers pay both charges, however some customers choose to purchase public lighting assets outright and only pay us to perform maintenance activities.

Explanation of how charges have been established and/or escalated in accordance with the NER

The transitional NER specify that the charges for public lighting services that are provided by Essential Energy in the transitional year must be the 2013-14 charges escalated by CPI.[46] In accordance with the requirements of the transitional NER, for the purposes of our 2014-15 annual pricing proposal, we will apply the CPI to each published 2013-14 public lighting charge using the following formula:

$$Charge_{2014-15} = Charge_{2013-14} x (1 + CPI)$$

Indicative estimate of demand

The transitional NER stipulate that where the control mechanism that is to apply to a direct control service includes a price cap or a price control, Essential Energy must provide an indicative estimate of demand (including customer numbers, energy demand and maximum demand). The AER has decided that the control mechanism for alternative control services from 1 July 2014 is a cap on the price of individual services.

Rather than the number of customers, it is the number of public lighting connections that is relevant to the determination of public lighting revenue. Table 5-1 below provides an indicative estimate of the number of connections for the complete regulatory control period.

Table 5-1: Indicative estimate of public lighting connections for the 2014-19 regulatory control period

	2014-15	2015-16	2016-17	2017-18	2018-19
Public lighting connections (total)	151,000	152,000	153,000	154,000	155,000

An indicative estimate of energy demand and maximum demand have not been provided, as these have no bearing on public lighting charges or the revenue received from each customer. Consequently, these estimates have no relevance to the AER's determination of public lighting prices.

Indicative prices for transitional year

There are three categories of public lighting charges:

[46] NER, clause 11.56.3(j).

1. A fixed capital charge for assets installed prior to 2009;
2. An annuity capital charge for assets installed post 2009; and
3. A maintenance charge that is applied to all assets.

Attachment D contains the indicative prices for public lighting services for the transitional year.

Ancillary Network Services

The list of customer specific and customer requested services that the AER has categorised as ancillary network services are comprised of the following:

- Non-routine services provided by Essential Energy for which there is currently an applicable regulated charge (called miscellaneous and monopoly price),
- Non-routine services currently provided by Essential Energy for which there is currently no applicable charge; and
- New non-routine services that have recently commenced for which there is no applicable charge.

The AER's preferred approach for setting the indicative charges for the transitional year is to:

- Adjust the 2013-14 miscellaneous and monopoly fees by CPI;
- Only set new cost-reflective charges for the recently commenced services; and
- Retain existing cost allocations, that is, the total cost of providing existing ancillary network services less the amount forecast to be recovered through miscellaneous and monopoly fees, is recovered through DUOS charges.

The above approach is applied for the transitional year only with a minor modification in relation to new services as outlined below. From 1 July 2015 separate charges for all ancillary network services will be set to recover the efficient costs of providing the service from the customer using that service.

Method used to establish prices

Existing miscellaneous and monopoly services

In accordance with the AER's preferred approach and clause 11.56.3(j) of the NER, we have applied a CPI of 2.50%[47] to each existing charge as at 2013-14 using the following formula:

$$Charge_{2014-15} = Charge_{2013-14} x (1 + CPI)$$

The resulting 2014-15 charges for existing miscellaneous and monopoly services (which will be known as ancillary network services from 1 July 2014) are shown in Attachment E.

Prices for services that have recently commenced

With the commencement of the new National Energy Customer Framework in NSW on 1 July 2013, NSW DNSPs are required to modify the services they provide in relation to processing connection applications and making a corresponding connection offer to our customers. These are not entirely new services however there are elements of the services that have changed and will result in additional costs for NSW DNSPs. In the interests of reducing complexity in the transitional year and to enable better engagement with affected stakeholders prior to the commencement of the new charges, we are deferring proposing cost reflective charges for these services until the substantive regulatory proposal in May 2014.

Forecast Volumes

We are required to provide an indicative estimate of demand (including customer numbers, energy demand and maximum demand) for ancillary network services. The variable that provides the best indicative estimate of demand for ancillary network services is the number of services that are forecast to be provided. This is because

[47] Essential Energy has used a CPI of 2.50% as a placeholder. This is to be updated when the data is available to calculate the actual CPI in accordance with chapter 10 of the Rules.

the forecast number of services provides an indication of the revenue that will be recovered from providing ancillary network services. Similarly, the revenue is not determined by an application of the price cap to demand as revenue has no correlation to demand, but instead is determined by the number of services requested by customers. The forecast volumes for these services in 2014-15 is based on volumes of services charged in 2012-13 and can be found in Attachment E.

6. COMPLIANCE AND REPORTING ARRANGEMENTS

In this section we propose reporting arrangements on the recovery of designated pricing proposal charges and jurisdictional scheme amounts such as the NSW Climate Change Fund (CCF). We also address how we intend to comply with the revenue cap control mechanism that will apply to our standard control services.

Jurisdictional schemes are specified in the NER or by the AER and refer to programs established under state legislation. These programs require that we pay certain amounts to a person or into a fund established by legislation. The NER allow us to recover these amounts from customers as part of their electricity bills.

Reporting on Recovery of Designated Pricing Proposal Charges and Jurisdictional Scheme Amounts

Designated pricing proposal charges include the transmission related charges payable to TransGrid, avoided transmission use of system (TUOS) charges payable to certain generators, and inter-distributor payments.

Jurisdictional scheme amounts are amounts which Essential Energy is required to pay under jurisdictional legislation. They have been recognised as amounts which may be recovered under the NER as part of our annual pricing proposal. There are currently three jurisdictional schemes relevant to Essential Energy that are recognised in the NER; the NSW solar bonus scheme (SBS)[48], the NSW CCF and the Queensland solar rebate.

Essential Energy proposes that the AER should use the same unders and overs account mechanism to report the recovery of designated pricing proposal charges and jurisdictional scheme amounts as that used to report TUOS charges and CCF payments during the current regulatory control period. The proposed unders and overs account mechanism ensures that these charges and scheme amounts are passed through to customers in a manner that ensures they pay no more or less than required.

The mechanism also includes an adjustment on outstanding balances that is consistent with the allowed rate of return. The under or over recovery calculated by this mechanism is passed through to customers through an adjustment in annual prices. It will be reported in the pricing compliance model submitted to the AER as part of the annual pricing proposal.

Further detail and examples on the proposed mechanisms are included in Attachment H.

Demonstration of Compliance with Control Mechanism for Standard Control Services

The control mechanism to apply to standard control services for the 2014-19 regulatory control period is a revenue cap. The AER's proposed formula for the revenue cap is set out in the stage 1 F&A paper. We have included the AER's approach and our proposed demonstration of compliance in Attachment H.

[48] During the current regulatory control period all payments made under the NSW solar bonus scheme have been recovered by NSW DNSPs through payments to and from the NSW CCF

APPENDIX 1

Constraints imposed by the transitional NER

Essential Energy's transitional regulatory proposal must comply with the requirements of the transitional NER.[49] However, two provisions of the NER constrained Essential Energy in giving proper effect to the AER's classification of services applicable from 1 July 2014. The relevant provisions are:

- For the purpose of the application of clause 6.15.2(7) of the transitional chapter 6, the transitional year must be treated as if it were the last regulatory year of the current regulatory control period, and not as a separate regulatory control period.[50]
- Clause 6.15.2(7) states that costs which have been allocated to a particular service cannot be reallocated to another service during the course of a regulatory control period.

The combined effect of the above clauses means that the way costs are allocated in the current regulatory control period must be maintained for the transitional year. In other words, costs cannot be reallocated between standard control services and alternative control services in the transitional year. However, complying with the above requirements of the NER mean that proper effect cannot be given to the AER's classification of services for the transitional year.

AER's preferred approach

The NSW DNSPs have had discussions with the AER on the approach to fulfilling the NER requirements for the transitional regulatory proposal, particularly the provision of indicative charges. On 11 December 2013, the AER wrote to Networks NSW outlining their view of a preferred approach to setting indicative prices for the transitional year.[51] The AER's letter stated that:

> *This letter sets out the views of the AER staff on this topic (i.e. how alternative control services prices should be set for the transitional regulatory year). These views have not been endorsed by the AER and are provided by staff to assist you in formulating your views. (However) our preferred approach…. seeks to comply with the rules and minimise significant changes that would impact on customers in the transitional year. In practical terms it makes sense for as few changes as possible to be made in the transitional year. This is because there will be limited or no opportunity to consult with the stakeholders on any potential changes.*[52]

We understand the approach preferred by the AER's staff is:

- For public lighting services, charges for the transitional year are the 2013-14 prices escalated by CPI as at the end of the current regulatory control period. This is to comply with clause 11.56.3(j) of the NER.
- For metering services, the AER considers that new charges should not be established for the transitional year as the transitional NER prevents the reallocation of costs from standard control services to alternative control services for the transitional year. Instead, we understand that the AER prefers to leave the costs of providing metering services within the standard control services cost pool, with these costs to be recouped through charges for standard control services (i.e. DUOS tariffs). This approach is the same as how metering services costs are currently being recovered, as they are classified as standard control services in the current period.
- For those ancillary network services with existing charges, the AER prefers to apply CPI to these charges, consistent with their interpretation of clause 11.56.3(j) of the NER.
- For those ancillary network services currently being provided, but where there are no existing charges and the costs are currently captured as part of the standard control services cost pool, the AER prefers to leave

49 Clause 11.56.2(a) of the Rules.
50 Clause 11.56.3(i)
51 Letter from the General Manager, Network Regulation, AER.
52 AER's letter of 11 December 2013, pp1-2.

the costs of providing these services in the standard control services cost pool and recovered through DOUS tariffs for the transitional year.

- For new ancillary network services (i.e. those not being provided in the current regulatory control period), new cost reflective charges should be established.

Essential Energy's consideration

We agree with the AER that the NER are complex and contain an anomaly that renders the preparation of the transitional regulatory proposal more complicated than initially envisaged. In the interest of minimising changes in the transitional year, Essential Energy has adopted the substance of the AER's approach. Of significance, we note the AER's staff view that its preferred approach complies with the NER, and on this basis we consider that our compliance with the NER will not be jeopardised in implementing the substance of the approach preferred by the AER's staff.

However, to avoid any unintended consequences of this approach, and to provide clarity for the regulatory proposals of the subsequent regulatory control period (and the AER's determination thereof), Essential Energy considers the following clarification must be made to the scope of this approach. These clarifications are necessary because the AER's approach effectively seeks to maintain the status quo, despite the reclassification of some services from 1 July 2014. The clarifications needed are:

a) The AER's classification of services applicable from 1 July 2014 (as per the stage 1 F&A paper) remains applicable.

b) Essential Energy will propose an amount to be the annual revenue requirement for standard control services in the transitional year (as required by 6.8.2 and amended by 11.55.2(b)). The AER will make a constituent decision on this amount as required under 11.56.1(b) and in accordance with 11.56.3(b) to (f).

c) For the purpose of complying with clause 11.56.2(b)(6), Essential Energy will provide a summary of the plan for expenditures for standard control services only, as defined in the AER's stage 1 F&A paper.

d) This amount (as accepted or determined by the AER) will be the amount used for:

   i. Adjusting the annual revenue requirement for standard control services in the subsequent regulatory control period as set out in 11.56.4(h). To avoid doubt, this amount will be the amount for the purpose of clause 11.56.4(i)(1).

   ii. Calculating the under or over recovery of revenue (as compared to actual revenue) in the transitional year in demonstrating compliance with the control mechanism for standard control services applicable from 1 July 2014.

   Essential Energy considers the above clarifications are consistent with the AER's approach, as in its letter of 11 December 2013, they contemplated the clear delineation of revenues associated with the provision of standard control services and alternative control services. The AER stated that:

   > *"A reconciliation of the costs of these services (i.e. type 5-6 metering services) will be required to the extent that the standard control building blocks require an adjustment as part of the AER's final distribution determination for the subsequent regulatory control period."*

   We set out further details and examples of how the adjustment and calculation of under and over recovery would operate in chapter 6.

e) Essential Energy will add to the amount proposed to be the annual revenue requirement for standard control services in the transitional year, the revenue needed to recover the costs of providing reclassified alternative control services and unclassified services (as they are defined in the AER's stage 1 F&A paper). For clarity, public lighting revenues will not form part of this bundled revenue.

   This bundled revenue[53] will be nominated as the total revenue to be recovered through DUOS charges for the transitional year. This amount will effectively be accepted or otherwise amended by the AER in its transitional determination. For the avoidance of doubt, the total bundled amount only has the effect of setting DUOS charges for the transitional year and nothing else.

[53] Net of revenues expected from separate miscellaneous and monopoly charges and from third party damage recovery

We note that this bundled revenue includes the costs of emergency recoverable works for the transitional year (net of any revenue expected to be recovered through third parties). This inclusion was not raised by the AER in its letter of 11 December 2103. The AER's approach rests on the fact that the NER prevent the reallocation of costs between services in the transitional year. For this same reason, we consider that costs relating to emergency recoverable works, which are classified as standard control services in the current regulatory control period but unclassified by the AER from 1 July 2014, should also be left in the standard control services cost pool in the transitional year and recovered through the bundled DUOS charges for the transitional year.

Further, in relation to this aggregation into bundled revenue in the transitional year, it must be noted that:

i. The fact that these revenues need to also recover costs relating to alternative control services and unclassified services does not render ineffective the AER's classification of these services from 1 July 2014 onwards.

ii. The bundled revenue[54] will not to be used in adjusting the annual revenue requirement of standard control services in the subsequent regulatory control period (as per clause 11.56.4(h)-(j)), or in calculating the under or over recovery of standard control services revenue for the transitional year.

iii. The aggregation into bundled revenue is for the transitional year only, and is only for the purpose of setting the DUOS charges in that year. In relation to the requirements of clause 11.56.2(b)(5), the indicative revenue requirements for the transitional year and the subsequent regulatory control period will be the revenue relating to the provision of standard control services (as they are defined in the AER's stage 1 F&A paper).

iv. The recovery of revenue needed to cover the costs of providing reclassified alternative control services in DUOS charges is for the transitional year only, and an adjustment will be made to the prices for alternative control services in the subsequent regulatory control period for the under or over recovery of alternative control services in the transitional year. Separate alternative control prices will be established for the subsequent regulatory control period.

[54] i.e. the total revenue aggregated from the annual revenue requirement for standard control services and the revenues needed to recover the costs of alternative control services and unclassified services.

ATTACHMENTS TO THE TRANSITIONAL REGULATORY PROPOSAL

- A: Post-Tax Revenue Model
- B: Roll Forward Model to support indicative RAB value at the beginning of the transitional year
- C: EBSS calculation
- D: Indicative price list for public lighting services
- E: Indicative price list for ancillary network services
- F: Proposed connection policy
- G: Competition Economics Group “WACC Estimates”
- H: Compliance and reporting arrangements

GLOSSARY

Term	Definition
($ nominal) [for paragraphs]	$XXXXX million ($ nominal) This is the dollar of the day
($ million) [for tables]	Nominal dollars for table/figure captions e.g. Opening RAB ($ million, nominal)
(2013 – 14 dollars)	$XXXXX ($2013-14) Real dollars. This denotes the dollar terms as at 30 June 2014
($ million, 2013-14) [for tables]	Real dollars for table/figure captions e.g. Table 13 – Forecast area plans capex ($ million, 2013-14)
ACS	Alternative control services
AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
AMP	Asset Management Plan
ARR	Annual Revenue Requirement
CAPEX	Capital Expenditure
CCF	Climate Change Fund
CPI	Consumer Price Index
Current regulatory period	Regulatory control period of 1 July 2009 to 30 June 2014.
DAPR	Distribution Annual Planning Report
DMIA	Demand Management Innovation Allowance
DMEGCIS	Demand Management and Embedded Generation Connection Incentive Scheme
DNSP	Distribution network service provider
DUOS	Distribution
EBSS	Efficiency benefit sharing scheme
F&A	Framework and approach
IPART	Independent Pricing and Regulatory Tribunal of NSW
NEL	National Electricity Law
NEM	National Electricity Market
NEO	National Electricity Objective
NER	National Electricity Rules
NMI	National Metering Identifier
NUOS	Network Use Of System
Pass through event	Per the Transitional NER
PTRM	Post tax revenue model
RAB	Regulatory asset base
RFM	Roll Forward Model

Rules	National Electricity Rules
SCS	Standard control services
STPIS	Service target performance incentive scheme
Subsequent regulatory control period	Regulatory control period 1 July 2015 to 30 June 2019
Substantive regulatory proposal	The proposal for the 2014-19 regulatory control period due to be submitted in May 2014
Transitional NER	Division 2 of Chapter 11 transitional provisions for NSW/ACT distribution network service providers for the economic regulation of NSW distribution services for the transitional year
Transitional regulatory proposal	Regulatory proposal prepared in accordance with the transitional NER
Transitional year	The transitional regulatory control period 1 July 2014 to 30 June 2015
TSA	Transitional Service Agreement
TUOS	Transmission Use of System
WACC	Weighted Average Cost of Capital