

8 August 2014

Mr Andrew Reeves
Chair
Australian Energy Regulator
GPO Box 520
Melbourne VIC 3001

Dear Mr Reeves

NSW DNSPs' Response to the AER's Issues Paper

The NSW Distribution Network Service Providers, Ausgrid, Endeavour Energy and Essential Energy (the NSW DNSPs) are pleased to provide this submission to the Australian Energy Regulator's (AER) Issue Paper. The Issues Paper, along with the customer overview paper and the public forum held by the AER on 10 July 2014, are key tools in the engagement of customers with the regulatory process and the making of the distribution determination.

The Issues Paper was introduced into the regulatory framework as part of the Australian Energy Market Commission's (AEMC's) rule change package in November 2012 as a further tool in achieving a transparent regulatory determination process. The AEMC noted that:

A key to effective regulation is the reduction of regulatory risk by providing transparent and timely processes for regulatory determination.

To reduce regulatory error under the current regulatory determination process, all stakeholders are permitted to provide submissions at various points throughout the process.¹

The NSW DNSPs consider that regulatory error is reduced or the scope for regulatory error is minimised when interested stakeholders are well informed on the DNSPs' regulatory proposals, the context in which our regulatory proposal are set and the objectives that we are striving to achieve in the regulatory period under consideration. Our regulatory proposals explain these matters in detail and are fully supported by attachments and supporting materials.

Nevertheless, the Issues Paper is an important tool in distilling the key issues (from the AER's perspective) of our proposal so as to focus customers' attention and resources. The Issues Paper also contains the AER's initial observations on these issues and seeks customers' feedback.

As such, to ensure an informed debate, our submission focuses on giving customers an overview of our position with respect to the various initial observations that the AER has made and to guide customers to parts of our regulatory proposals where we have provided further details. We hope through this process customers are better equipped in considering the issues that the AER has raised. Where relevant, we also address some of the common themes that emerged from customers' questions at the public forum.

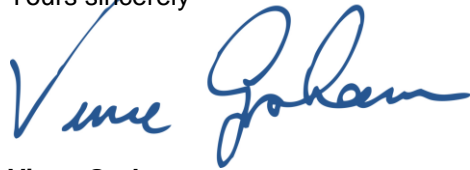
¹ AEMC 2012, Economic Regulation of Network Service Providers, and Price and Revenue Regulation of Gas Services, Final Position Paper, 15 November 2012, p124

In the main, the structure of this submission follows the structure of the AER's Issues Paper. The responses to the matters raised in the Issues Paper are set out in Attachment 1.

Attachment 2 contains a paper published by the Energy Networks Association entitled 'Assessing proposals for electricity network write-downs'². This paper supports our discussion on the value of the regulated asset base.

If you would like to discuss this response further please contact Mr Mike Martinson, Group Manager Regulation at Networks NSW on (02) 9249 3120 or via email at michael.martinson@endeavourenergy.com.au.

Yours sincerely



Vince Graham
Chief Executive Officer
Ausgrid, Endeavour Energy and Essential Energy

Attachment 1 – Responses to the matters raised in the Issues Paper

Attachment 2 – Assessing proposals for electricity network write-downs

² Garth Crawford, Energy Networks Association, Assessing proposals for electricity network write-downs, August 2014

Attachment 1 – Responses to the matters raised in the Issues Paper³

Why are the networks proposing to increase prices?

In the Issues Paper, the AER made a number of observations on the NSW DNSPs' proposals for the 2014-19 period. These are:⁴

- Each of the NSW DNSPs proposes to increase their revenues compared to the revenues they are currently allowed to earn. The effect of this proposal is an average annual price increase of around 2 per cent in nominal dollar terms;
- The NSW DNSPs' asset bases are larger than they were five years ago and this will add to the cost of running the networks; and
- In the case of Ausgrid, actual revenue for 2009-14 is consistently above the 'approved revenue'.

Whilst the AER has raised a number of important issues, this submission aims to assist customers to understand and respond to the issues raised by the AER by providing guidance and assistance to understand our proposal and the regulatory framework within which the AER must make its determination.

Discussion of the 2009-14 regulatory control period must be framed in its proper context

The environment and operating circumstances under which the DNSPs operate are constantly evolving; and with that the regulatory framework also evolves to adapt and cater for changing circumstances.

We consider that it is important not to lose sight of the regulatory framework and the environment and circumstances of the time when discussions about the 2009-14 period are made. These discussions need to be cognisant of:

- The regulatory framework applicable to the 2009-14 period and the AER's distribution determination for that period, especially since some of the effects of the application of that framework and/or of the AER's decisions only manifest themselves in the forthcoming period; for example, the Efficiency Benefits Sharing Scheme; and
- The environment and the circumstances of the DNSPs at the time of submitting the 2009-14 regulatory proposal. At that time, the NSW DNSPs needed to address the legacy of previous regulatory decisions that resulted in an under-investment in their network. Significant prudent investments were made to reduce safety risks and improve reliability in a climate of significant demand growth and new licence conditions. We were also experiencing the impact of the global financial crisis at the time of the 2009-14 proposal.

³ AER, Issues Paper, NSW electricity distribution regulatory proposals, 2014-15 to 2018-19, 11 July 2014

⁴ AER, Issues Paper, NSW electricity distribution regulatory proposals, 2014-15 to 2018-19, 11 July 2014, pages 7-9.

This need was recognised by the AER at the time of making its distribution determination for the 2009-14 period. The AER stated that:⁵

Each business plans to significantly increase its capital investment over the next five years. The AER's analysis confirms the need for, and efficiency of, an increased investment allowance, cognisant that this increased investment will result in higher user charges. These price increases are, however, less than those estimated in the AER's draft decision of last year, largely because the return on capital has been reduced to reflect lower interest costs and weaker economic conditions.

Our commitment to customers for the 2014-19 regulatory control period

Whilst price increases in the 2009-14 period were needed to fund necessary investment in our network, the NSW DNSPs recognise the impact that these price increases have had on our customers. Leading into the 2014-19 revenue determination process, management has taken proactive measures to limit the impact of price on customers in the last year of the current regulatory period (i.e. 2013-14) and to limit the magnitude of price increases in the next regulatory period to the rate of change in the Consumer Price Index (CPI). These measures are:

- For the 2013-14 financial year, Ausgrid reduced its price changes further than was required by the AER's distribution determination for the year. This resulted forgone revenue of \$48 million for the year; and
- In line with reduced demand, considerable improvement in security of the network and favourable reliability performance, management appropriately modified capital programs to respond to actual conditions experienced in the period. This has resulted in a lower value of the regulatory asset base, the benefits of which flows to customers through lower prices in the 2014-19 period.

Continuing with this effort to alleviate pricing pressures on customers, one of our overarching objectives for the 2014-19 period is to strive to contain average increases in our share of customers electricity bills at or below the annual forecast rate of CPI. In addition, our other overarching objectives are to continuously improve safety performance and maintain the reliability and sustainability of the electricity distribution networks.

We note the analysis prepared by the AER of our proposed price paths over the next five years, which is depicted in figure 1 of the Issues Paper. The NSW DNSPs have not had the chance to examine the AER's underlying calculation; however, it appears that this analysis, which shows an annual average price change of around 2 percent in nominal dollar terms, is consistent with the analysis presented by the NSW DNSPs in our overview papers. This is with the exception of Endeavour Energy, for which it appears the AER have included Ancillary Network Services (ANS) revenue in calculating the price movements of Distribution Use of System (DUOS) charges and metering. This and other potential discrepancies are detailed in Table 3 of this response.

An average 2 per cent annual price change in nominal dollar terms means customers can expect a reduction in "real" terms in our share of a customer's electricity bill for the next five years, assuming

⁵ AER, News Release 05/09, 30 April 2009. See also AER, EnergyAustralia distribution determination 2009-10 to 2013-14, 28 April 2009, pp ix to x.

the rate of inflation is in the middle of the RBA’s inflation target range of 2-3 per cent on average.⁶ The respective price paths of the NSW DNSPs are reproduced in figures 1 to 3 below.

Figure 1: Movement in Ausgrid’s share of electricity bills

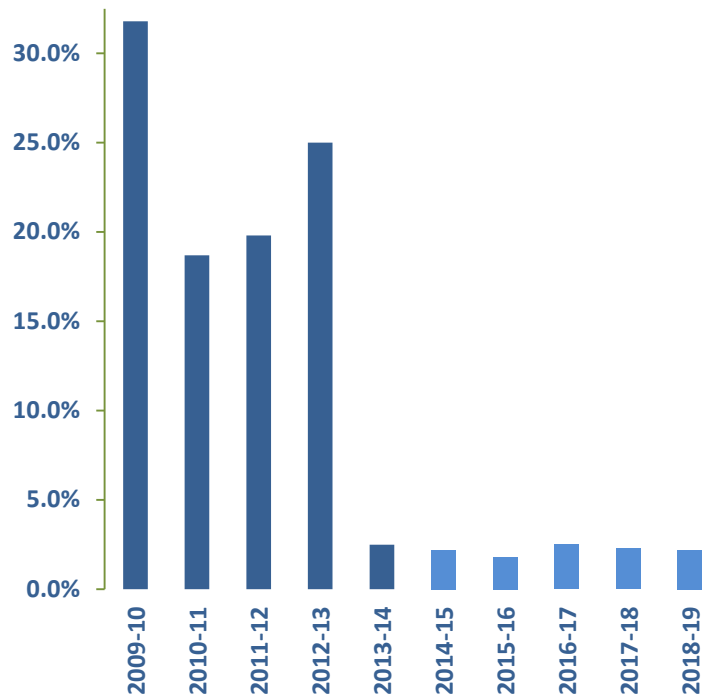
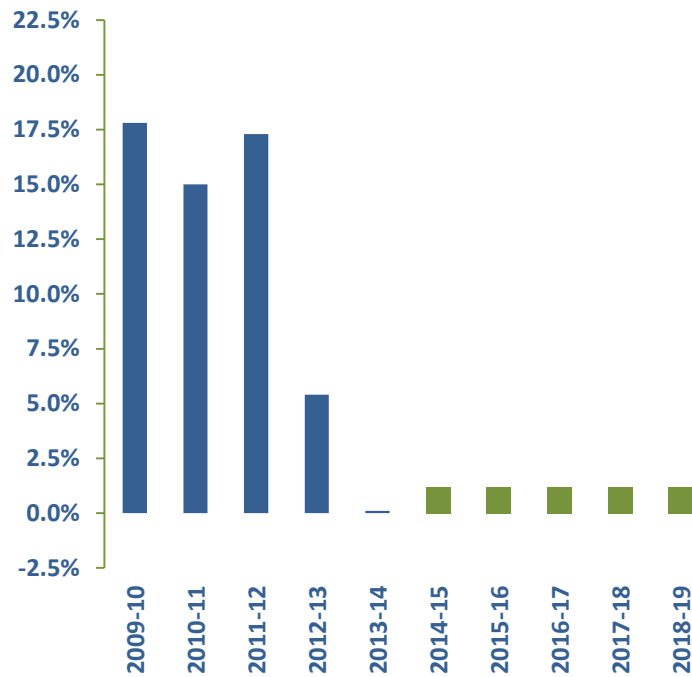
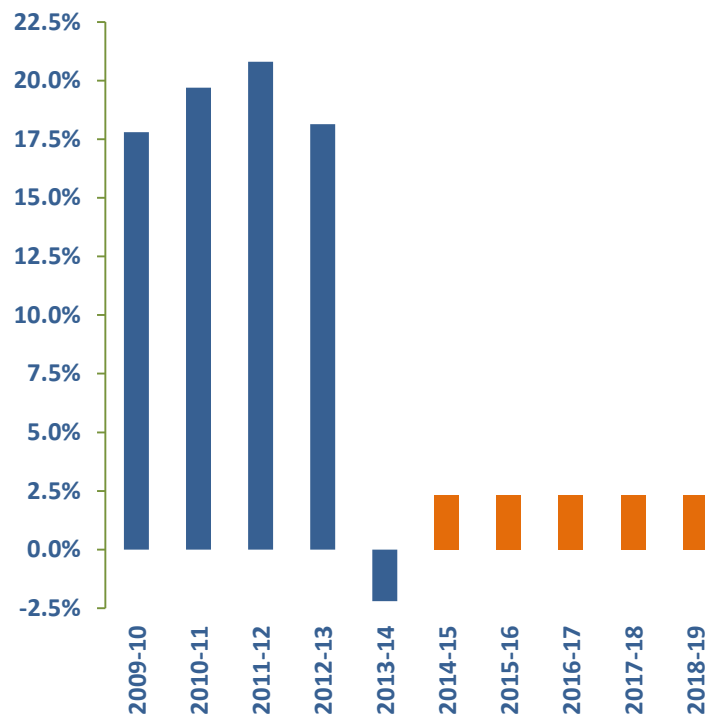


Figure 2: Movement in Endeavour Energy’s share of electricity bills



⁶ See <http://www.rba.gov.au/inflation/inflation-target.html>, viewed 23 July 2014.

Figure 3: Movement in Essential Energy's share of electricity bills



Value of the regulatory asset base and forecast revenue

Without restating the full mechanics of the 'building block' approach used to derive a DNSP's revenue for the forthcoming period⁷, it is sufficient to note that a large portion of the forecast revenue for the next period includes the recovery of past capital investment approved by regulators.

Also the mechanics of the AER's RAB roll forward model also play a significant part in the rate of increase in the RAB value. The use of straight line depreciation, includes a component of 'appreciation' for indexation of the asset value, which is combined with the use of a weighted average remaining life that is recalculated every 5 years. This approach effectively defers the depreciation of the RAB by allowing it to increase at the rate of inflation. We acknowledge this helps ensure we only recover the present value of our costs and the approach is somewhat constrained by Rule requirements.

The majority of the NSW DNSPs' capital expenditure, like all capital investments made by other Australian distribution and transmission businesses, is in infrastructure assets with long lives, typically from 40 to 60 years. These investments are recouped over the life of these assets. Therefore, the forecast revenue for the forthcoming period for the NSW DNSPs reflects a significant recovery of past investments and is one of the necessary costs of providing services to customers.

As the AER noted, the NSW DNSPs' asset bases are larger than they were five years ago. Figures 5 to 7 of the Issues Paper also compare the values of the NSW DNSPs' regulatory asset base over time from 2004/05 actual values to forecast values to the end of 2018/19. Regarding the increase in the size of the asset bases, we have the following observations:

⁷ For further details of the building block approach, please see chapter 4 of the NSW DNSPs' regulatory proposals.

- The value of the RAB simply reflects value of the assets we need to provide safe, secure and reliable services to customers;
- The larger value of the asset base as at 2014 simply reflects the addition of capital investments made during the 2009-14 period to the value as at 2009; and
- Forecast annual capital investments are greater than forecast annual depreciation, resulting in an increase in the value of the asset base during the 2014-19 period.

The NSW DNSPs note that our expected capital investment in the 2009-14 period is lower than the efficient level approved by the AER. Several factors contributed to this underspend including, but not limited to, the proactive steps undertaken by management to review the need for capital investments as a result of lower than expected growth in demand, considerable improvement in security of the network and favourable reliability performance.⁸

We highlight, however, that customers will benefit from this lower than approved capital investment through lower prices than would otherwise have been the case if the NSW DNSPs had invested at the levels approved by the AER. For instance, Ausgrid's expected capital investment for the 2009-14 period is about 21% below that approved by the AER, providing an estimated reduction of approximately \$51 per annum to the average customer in the 2014-19 period. Capital investment for the 2009-14 period for Endeavour Energy and Essential Energy is also substantially below the approved capital investment, being 12 per cent and 21 per cent respectively.

Despite the need to recoup these past investments and the need for expenditure to operate and maintain a safe and reliable network, the NSW DNSPs have embarked on an efficiency drive to ensure that the impacts on customers are minimised. This commitment is reflected in the forecast price change for the 2014-19 period as illustrated in figures 1 to 3 above for the three NSW DNSPs. These figures show that the expected annual change in network charges is below CPI over the 2014-19 period.

Over recent years several parties have proposed 'write-downs' of the regulatory asset bases of electricity network businesses as a means of reducing prices for customers. The Energy Networks Association (ENA) has undertaken analysis of several 'write-down' scenarios and has published its results in the paper 'Assessing proposals for electricity network write-downs'⁹. This analysis shows that far from benefiting customers, asset write-downs would likely generate higher network tariffs. The ENA's paper is provided for information at Attachment 2 to this submission.

Revenue collected in the current period

During the AER's public forum there were questions asked about Ausgrid over-recovering its revenue allowances. We make the following comments to provide the appropriate facts and context.

In the past 10 years, regulators did not determine a revenue allowance, rather they set a limit to how much prices were allowed to increase under a weighted average price cap. The NSW DNSPs did not exceed the price cap at any point in time. To ensure compliance, the NSW DNSPs made publicly

⁸ See chapter 5 of each NSW DNSPs regulatory proposal and associated attachments and supporting documents for further explanations of variations between actual and forecast capex for the 2009-14 period.

⁹ Garth Crawford, Energy Networks Association, Assessing proposals for electricity network write-downs, August 2014

available pricing proposals to the regulator each year and received approval before setting new prices on 1 July.

It should also be noted that the discussion of this issue at the public forum did not highlight the fact that Endeavour Energy and Essential Energy earned revenues below those expected for the 2009-14 period. This helps to demonstrate:

- As acknowledged by the AER, it is not unusual for a DNSP to earn above the forecast revenue under the price cap, it is equally true that a DNSP could also have earned less as was the case with Endeavour and Essential in the 2009-14 period; and
- That under a price cap, the AER is unable to return to customers any over-recovery of revenues earned by Ausgrid. However, it is equally true under the price cap that Endeavour Energy and Essential Energy would also not be able to recover any revenue shortfall.

The analysis also ignores the fact that in net present value terms, \$200 million of approved costs across NSW were excluded from customer charges for the 2009-14 period due to the 'non net present value' smoothing approach used by the regulator at that time.

Whilst this is not the appropriate place to deliberate on the merits of a price cap versus a revenue cap, we note that the AER in the past expressed views that Ausgrid's prices under the weighted average price cap have improved economic efficiency.¹⁰

Drivers of capital expenditure for 2014-19

In the Issues Paper, the AER made some high level observations on the underlying drivers of the NSW DNSPs' proposed capital program for the 2014-19 period. The AER noted that:

- Despite a substantial replacement program over the 2009-14 period, the distributors argued that the average age of the network continues to increase and that replacement capex for the 2014-19 period is needed to maintain the age of the assets within an acceptable range; and
- Ongoing falls in consumption and slow or negative growth in peak demand should require lower capex. The AER also states that despite a decline in growth in electricity demand across the networks during the 2009-14 period, the distributors have proposed material amounts of growth related capex in the 2014-19 period.¹¹

We address these observations below. We note, however that the NSW DNSPs fully explain the circumstances and drivers of their capital programs over the 2014-19 period in their respective regulatory proposals as well as in attachments and supporting documents to the proposals. Therefore, it is important to consider the substantiation we have provided in forming a judgement on our proposed capital investment for the next period.

Nevertheless, we have the following brief comments on the AER's high level observations on our capital program.

¹⁰ AER 2012, preliminary positions, Framework and approach paper, Ausgrid, Endeavour Energy and Essential Energy, Regulatory control period commencing 1 July 2014, Appendix B, p.124, June

¹¹ Pages 12 and 34 of the Issues Paper.

Replacement capex is based on the condition of the assets

As detailed in the NSW DNSPs' regulatory proposals, the average age of the assets is a useful, but high level indicator of investment need. The NSW DNSPs conduct detailed technical analysis of asset condition to determine replacement needs.

In section 5.3 of its proposal, Ausgrid identified the drivers of its 2014-19 capital program. One of these drivers is asset condition and safety. In section 5.2 of its regulatory proposal, Ausgrid stated that:

Average age is a high level but relatively simplistic indicator of the health of the network. Our asset management strategy is based on in-depth condition assessment and analysis at the detailed asset class level.

Ausgrid provided details and discussion around the age of their assets in its regulatory proposal to demonstrate the effect of the 2009-14 capital program and the nature of that program over the period. Ausgrid also noted that in a network with the volume of assets Ausgrid operates, and with an aged profile distorted by the rapid expansion of the 1960s, renewal of assets must take place overtime.

Recognising the simplicity of age profile as an indicator, Ausgrid further discussed corrective and breakdown failure statistics as another indicator of the health of its network. Importantly, Ausgrid noted that:

These high level indicators of increasing asset age in most asset classes and steady or slightly increasing failure rates support the outcome of our detailed condition based replacement planning.

Consistent with the views of Ausgrid, Endeavour Energy and Essential Energy noted in their proposals that the average age of their respective networks will also continue to increase over the 2014-19 period. Whilst Endeavour Energy targets a high level weighted average remaining life of the network asset base (50% +/- 5%) this only represents a check of the detailed condition based assessment underpinning its replacement program. It should be noted that Endeavour Energy's detailed technical assessment resulted in an average annual replacement expenditure of \$156 million compared to the \$189 million output from the repex modelling tool. Endeavour Energy's proposed volume of expenditure is forecast to result in an increase in the average age of assets of 7.1%, but remain within an acceptable range.

Despite the significant inroads made by Essential Energy during the 2009-14 period, the average age of the 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. Essential Energy's approach to asset renewal is becoming increasingly strategic and sophisticated; for example, LIDR technology is currently being rolled out over the distribution network. Early results indicate significantly more defects have been found than originally estimated meaning the replacement expenditure proposed by Essential Energy may be underestimated.

Any reduction to the proposed replacement capex will result in further increase to average asset ages, compounding the problem of an ageing network, and transferring costs and problems to future generations.

Localised peak demand matters

The Issues Paper appears to have confused energy consumption and peak demand in some of its observations on the underlying drivers of our proposed capital program. To be clear, energy

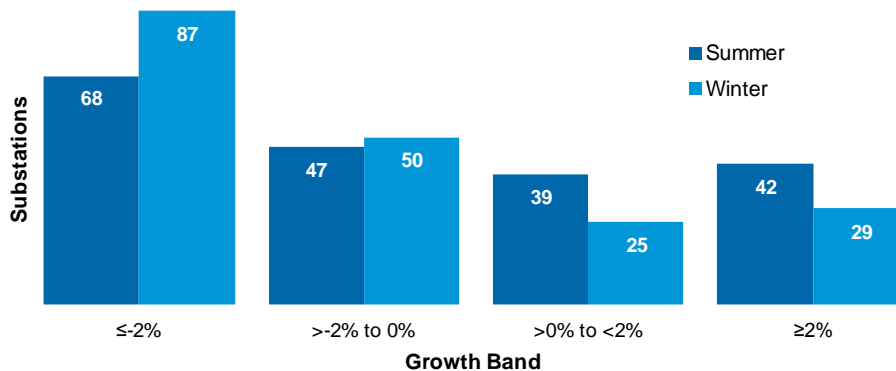
consumption does not drive the need for capital investment, it is the peak demand that is the relevant driver.

Each of the NSW DNSP’s regulatory proposals provide forecast peak demand for the 2014-19 period and outline some of the key challenges, specifically localised pockets of peak demand growth.

For Ausgrid, Figure 15 of its proposal (and figure 19 of the Issues Paper) highlights the forecast peak demand for the 2014-19 period. As noted above, further details supporting this forecast are provided in chapter 5, associated attachments and supporting documents to this chapter. In this submission, we highlight the following:

- While Ausgrid has forecast moderate increases in system wide peak demand (average of 1.18% per annum for summer and 1.24% for winter), pockets of localised demand growth is a factor driving the need for capital investment in the 2014-19 period; and
- Figure 16 of Ausgrid’s proposal (reproduced below at Figure 4) illustrates the diversity of demand across its network. It shows that over 40 zone substations are experiencing growth rates of more than 2% per annum on average. Ausgrid’s capital investment for 2014-19 therefore focuses on ensuring that there is sufficient capacity to meet these localised growths in demand.

Figure 4 – (Ausgrid) Annualised growth rates for FY 2010-14



Localised peak demand growth also represents a key capex driver for Endeavour Energy. As detailed in its regulatory proposal (pages 56-57 and supporting attachments), Endeavour Energy’s network area contains two of the largest greenfield growth areas in NSW (and Australia) in the North-West and South-West centres. Over the coming 20 years, Endeavour Energy will need to sufficiently invest in its network to cater for approximately 180,000 new dwellings across these growth centres.

Essential Energy also highlighted localised peak demand growth in its regulatory proposal (pages 45-47 and supporting attachments and information). While forecast growth in overall system peak demand for Essential Energy is lower than in the past, there is significant diversity between local network areas. This means that the majority of its capacity investment is in specific areas, such as the North and South coast of NSW, where demand is growing. At a local distribution feeder level, there is often little apparent correlation to system wide load or demand forecasts. Although Essential Energy is forecasting a significant reduction in expenditure on sub-transmission assets, there is still forecast expenditure on distribution assets to ensure it can connect new customers and loads at a local level.

There are also significant elements of the growth capex program that are not driven by demand growth directly. These elements include supply security projects, voltage constraints and standards compliance, protection constraints and standards compliance, and power quality issues. Drivers of

these elements are only partially related to demand growth and are not related at all to overall network average demand growth.

Capacity capex is also driven by connections

The AER notes that the NSW DNSPs propose a material amount for growth related capex in the 2014-19 period despite a decline in electricity demand across the network.¹²

As explained above, whilst localised demand growth is a contributing driver to our capacity driven capex for the 2014-19 period, this capex is also driven by the need to connect new customers. For example, Figure 18 of Ausgrid’s proposal (reproduced below at Figure 5) compares capacity driven capex in the 2009-14 period with the forecast for the 2014-19 period.

Figure 5 – (Ausgrid) Change in capacity driven investment (\$million, 2013/14)

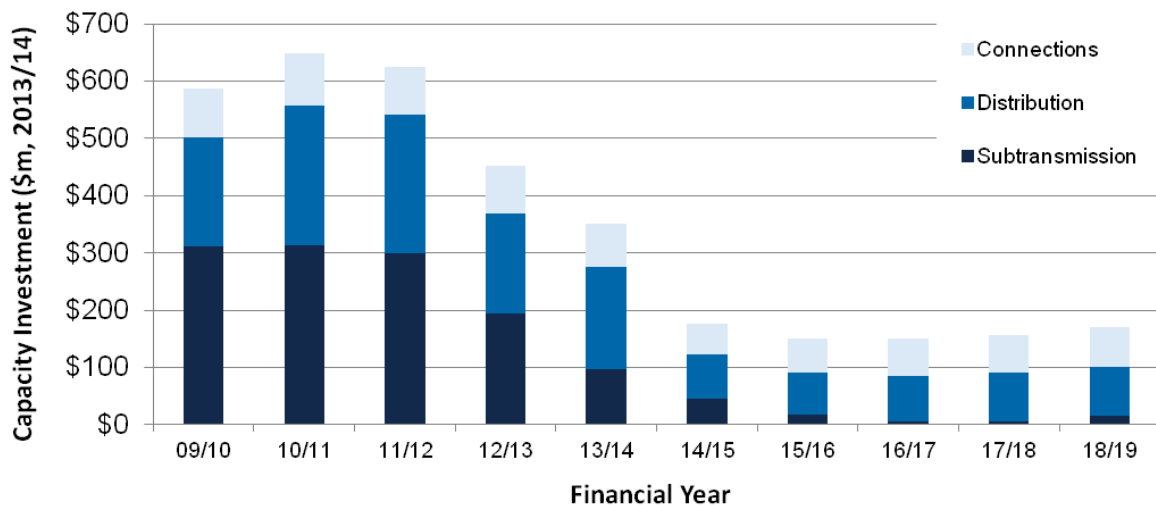


Figure 5 shows:

- A significant decline in capacity driven capex for the period;
- Growth related capex (the dark blue and semi-dark blue) shifts from the sub-transmission assets (dark blue) to distribution assets (semi-dark blue), consistent with localised demand growth; and
- Customer connection capex is a significant portion of the total proposed capacity driven investment for the 2014-19 period.

We have incorporated amended licence conditions in our proposed capex

The AER’s Issues Paper raises a question as to whether the NSW DNSPs have incorporated the amended (reduced) licence conditions in our proposed capex programs for the 2014-19 period. Each of the NSW DNSPs confirm that as part of substantive reductions to the forecast capex program compared to the 2009-14 period, the amended licence conditions have been factored in. However, it should be noted that whilst the amended licence conditions provide more flexibility, the reduction is more largely driven by the NSW DNSPs moving towards “maintenance” of the network after a period of peak investment. As stated in Ausgrid’s regulatory proposal:

¹² AER Issues Paper, page 34

In recognition of the likely increased flexibility this will enable, Ausgrid has adjusted the basis for its subtransmission planning and chosen more aggressive input assumptions for its modelled capacity investment programs.¹³

We have not forecast capex to proactively increase reliability. The Reliability and Performance licence conditions that came into effect on 1 July 2014 amend the Design, Reliability and Performance licence conditions that were in effect over the course of the 2009-14 period by removing the schedule that defined supply security criteria that were required to be implemented.

In considering whether our proposals incorporate these changes, it must be recognised that the criteria specified (N-1 for medium to large loads, N-2 for CBD loads) represent good planning practice that have always been our aspiration to implement and will continue to be implemented in the future. The removal of these criteria simply provide the NSW DNSPs with flexibility around the amount of risk that we are prepared to take as N-1 capacity is exceeded and hence the timing of investment.

The large volume of capital expenditure that was required to meet the licence condition supply security requirements in the last period reflected the need to “catch up” on investment by the specified date of 30 June 2014. Having achieved this level of security there is only a need to invest in further network augmentation to meet ongoing growth in demand. The drop in augmentation capex that is seen between the 2009-14 period and the 2014-19 period reflects the move from “catch up” to “maintenance” mode and is more of a reflection of the improvements made during the 2009-14 period rather than a direct result of the licence condition amendments.

For Ausgrid, forecast reliability investment is \$28 million (\$2013-14) for 2014-19 compared to an expected expenditure of \$63 million (\$2013-14) for 2009-14, a reduction of approximately 50%.¹⁴ Ausgrid further explained how it has incorporated the amended licence conditions in a supporting document to the proposed forecast capex.¹⁵

Similarly, Endeavour Energy explains in its regulatory proposal the impact of the 2009-14 investment program and the change in licence conditions. In the Regulatory Information Notice (RIN) accompanying their proposal, Endeavour Energy identified a direct reduction of \$92.3 million (\$2013-14) to its capex forecast as a consequence of achieving the specified planning criteria for 2009-14.

It can also be clearly demonstrated that Essential Energy has incorporated this change in its capex forecast. For the 2014-19 period, Essential Energy forecast capex of \$155 million (\$2013-14) for reliability. This represents a substantive reduction to the \$559 million (\$2013-14) spent during the 2009-14 period.

Forecast operating expenditure

The AER raised three key issues in relation to the NSW DNSPs' forecast opex for the 2014-19 period. The AER asks:

1. Is the workforce larger than necessary?

¹³ Ausgrid's regulatory proposal, 30 May 2014, page 38.

¹⁴ Ausgrid's regulatory proposal, 30 May 2014, Figure 17, page 42.

¹⁵ Ausgrid's supporting document to Chapter 5 of the regulatory proposal, titled 'ID88032_Area Planning_131216.pdf'

2. Who should bear the additional costs of surplus resources resulting from a reduction in the capital program between the 2009-14 period and the forthcoming 2014-19 period?
3. Similarly, who should bear the 'loss of synergy' costs?

The NSW DNSPs have to date made demonstrable productivity improvements through substantial reductions to the size of their workforces as the capital program reduces in volume. Employee numbers are forecast to continue to decline to efficient levels over the 2014-19 period at a sustainable rate and in accordance with enterprise agreements. Workforce reductions which have already occurred and which are forecast to occur have been incorporated into the NSW DNSPs opex and capex forecasts. Importantly as explained further below, any stranded costs associated with the transition to a smaller workforce have not been passed onto customers.

Ausgrid's proposed forecast capex for the 2014-19 period is 37% lower than the actual capex it expects to incur in the 2009-14 period.¹⁶ The lower forecast capex program therefore will not require as many resources as were needed to deliver the approved capex program of the 2009-14 period. These resources were tasked with the delivery of the capital program of the 2009-14 period and were fully funded by the approved capex allowance of this period.

As a result of the reduction in capital investment in the 2014-19, these resources became surplus to requirements and therefore become stranded costs to the business. These stranded costs predominantly relate to the labour costs of resources that were needed to deliver the substantial capital program in the 2009-14 period as well as other costs, including labour costs of support services (e.g. administrative functions).

Table 1 shows the indicative amounts of these stranded costs for the 2014-19 period for the NSW DNSPs.

Table 1 – Stranded costs for 2014-19 period

\$M (nominal)	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Ausgrid	18.4	20.0	52.5	48.3	44.3	183.5
Endeavour	16.3	23.8	25.5	26.0	27.7	119.3
Essential	16.0	16.4	16.8	17.4	18.0	84.6

Recognising the concerns of our customers about affordability, the NSW DNSPs have been proactive in ensuring that our proposed forecast opex for the 2014-19 period minimises the impact on our customers in terms of network charges. To this end the NSW DNSPs have not incorporated the additional costs ('stranded costs') resulting from a reduction in the capital program in the proposed opex forecasts for the 2014-19 period.

As noted on page 59 of Ausgrid's proposal:

Ausgrid's operating environment and circumstances will change...coupled with the significant reduction in the forecast capital investment program for the 2014-19 period, Ausgrid is facing

¹⁶ Ausgrid's regulatory proposal, 30 May 2014, page 30.

a pool of excess resources and other stranded costs, despite the prudent action we undertook in outsourcing additional required resources through the alliance partners. This prudent action has minimised the cost impacts of a reduced capital program on the operating expenditure required for the 2014-19 period but the impact is still putting upward pressure on the cost base. Whilst this may be the case, it is important to note that in this proposal Ausgrid has not sought any funding from customers for the costs of stranded resources (i.e. stranded labour costs and support costs) resulting from a reduced capital program in the next period [emphasis added].

Consequently, the NSW DNSPs (and their shareholder, the NSW Government) are bearing the costs of these stranded resources. Furthermore, the exclusion of these stranded costs can be equated to an 'inbuilt' efficiency saving within the proposed forecast opex in that we must find efficiency savings in our businesses to fund these stranded costs (whilst they remain in place) as we have not asked customers to fund these costs.

Nevertheless, because of the impact on the cost base, the NSW DNSPs must take prudent action, within the confines of the Fair Work Act, to restructure the business to ensure a sustainable and efficient cost base going forward. In this respect, the NSW DNSPs' proposed opex forecasts for 2014-19 include restructuring costs to reduce the size of the workforce, which primarily relate to voluntary employee redundancy. We note that we are legally obliged to pay voluntary redundancy costs when staff exit the businesses.

For Ausgrid, this initiative will deliver significantly lower labour costs as well as reduced support costs such as information technology, property, finance, and human resources, etc., with customers benefiting through lower prices.

As stated by Endeavour Energy on page 88 of its regulatory proposal:

...investment prioritisation creates a step-up in our operating expenditure compared to our base year and reflects the costs of redundancy and undertaking additional maintenance expenditure. These are the efficient costs that a prudent business would require to manage the significant reduction in capital expenditure. A business cannot alter its operational size without incurring these transitional costs.

Similarly for Essential Energy on page 78 of its regulatory proposal:

The ramp-down in investment and the cessation of the TSA give rise to an inevitable need to evolve our business and to restructure our organisation so that an efficient and sustainable level of resource is achieved such that previously shared fixed costs are now for a network only business. Cost restructuring is a legitimate option and a well-accepted practice by businesses in response to changing needs and circumstances. In our case, it is a prudent course of action having regard to the interests of our customers and our long-term financial viability.

While it is a prudent option that ensures customers will not bear the financial burden of maintaining a workforce and other support costs (e.g. property / IT) in excess of requirements, Essential Energy nevertheless is an employer with certain legislative obligations to its employees, some of whom have been with us for a long period of time. We must meet these obligations.

These implementation costs are legitimate expenditure that Essential Energy needs to recover as the efficient costs of providing standard control services. These initiatives represent a prudent option that will result in ongoing cost savings that will ultimately benefit our customers through lower charges. With the departure of these employees, Essential

Energy will have a significant lower labour cost profile as well as reduced support costs such as information technology, property, finance and human resources.

In summary, we reiterate that our opex forecasts in relation to stranded costs resulting from the reduced capex program are not included in our forecast opex and hence will not be borne by customers. However, we have included our legal obligation to pay for voluntary redundancy when staff exit the business and the increased maintenance opex associated with a substantially reduced capex program. These costs are captured in the proposed forecast opex.

Ausgrid Retail Sale “Loss of Synergy” Costs

In relation to ‘loss of synergy costs’ from Ausgrid’s retail sale, on page 56 of its proposal, Ausgrid explains the ‘loss of synergy’ costs which have been factored into their proposed forecast opex for the 2014-19 period. Until the date of the sale of Ausgrid’s (then EnergyAustralia’s) retail business, Ausgrid was an integrated network/retail business. Ausgrid (and hence ultimately customers) were able to benefit from the scale and scope of an integrated business in that some fixed operating costs (such as property, management, IT) were shared between the network and retail businesses. This meant that ultimately customers also enjoying these benefits as a lower allocation of shared costs translated into a lower network charge.

At the time of the 2009-14 regulatory proposal, Ausgrid foreshadowed the impact of a sale of its retail business on the costs of providing network services. Ausgrid nominated in the 2009-14 regulatory proposal a ‘retail project event’ as a nominated pass through event, the occurrence of which would have had a material increase in the cost of providing network services.

The AER accepted this nominated pass through event and stated that:

If the NSW electricity retail businesses are privatised the DNSP’s cost of providing direct control services may increase due to the loss of synergies.¹⁷

We also note that on 11 January 2012, Endeavour Energy applied to the AER for the pass through of cost increases resulting from the sale of Endeavour Energy’s retail business. The AER accepted this application and approved a pass through amount of \$48.8 million.¹⁸

The critical point to note is that the AER has recognised the ‘loss of synergy’ cost resulting from the sale of the NSW DNSPs’ retail business as a legitimate increase in the costs of providing network services, both in its draft and final distribution determinations and its approval of Endeavour Energy’s pass through application.

Therefore, with the cessation of the Transitional Service Agreement (TSA), the costs of providing network services in the 2014-19 period will increase due to the loss of synergy of an integrated network/retail business. The cessation of the TSA has a direct impact on the operational areas of the NEM data operations business units, emergency contact centre as well as support areas such as finance, human resources, IT, property and management.

¹⁷ AER, EnergyAustralia, draft distribution determination, 2009-10 to 2013-14, November 2008, p280. The AER confirmed its draft decision in the final decision, see the final decision on 28 April 2009, page 283.

¹⁸ AER letter - Approval of Endeavour Energy retail project event pass through application – 23 March 2012

Despite having incorporated these 'loss of synergy' costs into the forecast opex for the 2014-19 period, NSW DNSPs do however recognise the impact of this cost increase on our customers. To achieve its over-arching goal of affordability to its customers, strategies will be implemented so that all cost increases due to the loss of synergies are fully offset in cost structures early in the 2014-19 regulatory control period.¹⁹

Endeavour Energy achieved off-setting savings through its efficiency programs (Project Challenge and Project Compete) during the 2009-14 period meaning it did not pass-through the amounts approved by the AER.

Customer Engagement

The NSW DNSPs acknowledge customer engagement is a key issue for each distribution determination. We also understand the AER will have regard to how each distributor engaged with its customers and accounted for their long term interests.

Our approach to customer engagement

The NSW DNSPs welcome the AER's customer engagement guideline and framework designed to foster better engagement between network businesses and their customers.

Although we understand the AER's guideline is non-binding, we fully endorse its principles and framework on the understanding it is designed to foster greater engagement between network businesses and their customers, and generate better outcomes for customers as a result of that engagement.

The guideline makes clear the AER's commitment to place customers' long-term interests at the forefront of its considerations.

Our commitment to better serve customers' long-term interests is based on the fact that ultimately our business success depends on how well we meet the needs of our diverse customer and stakeholder base and precedes the publication of the AER's guideline.

Each network business has traditionally promoted broad dialogue with customers using a variety of techniques and used the output of this dialogue to inform their business strategies. Over the past few years, the NSW DNSPs have renewed their customer focus and embarked on a concerted effort to build better value for their customers.

In 2009, Endeavour Energy promised its customers to do all it possibly could to build value for its customers and end rising network charges. Its efficiency program has generated \$185 million in savings over 2009-14 and progressively lowered network price increases for Endeavour Energy's network customers since 2011.

In March 2012, the NSW Government announced a series of far-reaching reforms across the three network businesses in direct response to overwhelming customer feedback that dramatic increases in network charges were hurting many families and businesses. Customers and their advocates made clear to all three businesses via multiple engagement channels that electricity affordability was their number one priority.

¹⁹ See table 32 of Ausgrid's regulatory proposal, 30 May 2014, and Table 6-7 of Essential Energy's regulatory proposal 31 May 2014

These reforms entailed a complete review of business plans and structures, underpinned by efficiency programs targeting improved productivity and reduced operating costs and capital programs.

To date, the reforms have identified more than \$5 billion in savings for the five years ending 30 June 2016 and reined in further increases in electricity network charges to CPI or less for the next five years.

This is a significant outcome for customers and reflects the AEMC's view when considering changes to the rules that the ...” *rules should provide for the outcomes of engagement, not engagement itself.*”

In summary, the NSW DNSPs acted in direct response to feedback from NSW customers by embarking on efficiency and productivity programs. This resulted in each business adjusting their forecast capex and opex programs in their revenue proposals in order to address customers' top priority: electricity affordability.

We did so to address customers' long-term interests and we did so ahead of any requirement by the AER to formalise customer engagement strategies.

Our customer engagement plans

Each business began developing cohesive customer engagement plans²⁰ following NER changes in November 2012 which reflected a desire by both rule makers and different levels of government for a greater emphasis on customer engagement.

In December 2013, the AER's Chairman, Mr Andrew Reeves wrote to Mr Paul Adams, Chairman of the ENA, raising the importance of the effective customer engagement on behalf of the Consumer Challenge Panel, saying:

...”the Consumer Challenge Panel has noted that regulatory proposals need to reflect customers' preferences and consider quality of supply and services versus lower or stable prices. In any customer engagement, networks should communicate clearly to customers the cost and price implications of options put to them.”

Although each network's transitional and substantive proposals were already well advanced, each business made genuine attempts to respond to this request and tailored research and engagement initiatives accordingly.

Here are four examples:

- Ausgrid and Endeavour Energy undertook a large qualitative and quantitative willingness to pay study based on the components of their capital and operating programs and used the results of this research to inform their proposed capital and operating plans. Essential Energy undertook a large research program consisting of both qualitative and quantitative components to understand the investment priorities of its customers with regards to pricing, infrastructure, technology and communications.
- Endeavour Energy held two deliberative planning workshops with residential and small business customers that featured an overview of its capital and operating programs, the costs involved, a rationale for the approach its has taken to date, and a request for customers to identify where they think it needed to improve.²¹

²⁰ www.essentialenergy.com.au/ourplans

²¹ Deliberative planning link to Endeavour Energy's report

- Ausgrid, Endeavour Energy and Essential Energy ran an innovative Facebook campaign targeting social media users which made clear costs and used polls to gauge customers' willingness to pay. The campaign strategy was endorsed by the Networks NSW Leadership Group and Board.
- The change to component-based pricing for street lighting was explained to councils in a forum held by Ausgrid, in one-on-one meetings with each council by Endeavour and in letters from the COO to Essential Energy's councils.

By early to 2013, each network business was well progressed with their engagement plans including steps to:

- Examine other approaches to consultation including UK Power and SA Power Networks;
- Review past consultation approaches for submission process gaps;
- Consider business as usual engagement programs and channels for opportunities to leverage;
- Consider innovative channels to joint stakeholder engagement, such as social media and online platforms;
- Review existing customer research and feedback across the business to form an initial view of customer priorities;
- Commission a major willingness to pay research study (Ausgrid and Endeavour) and a customer value study at Essential Energy;²²
- Form a working group accountable for driving efficient and innovative customer engagement initiatives across the three businesses, beyond business specific initiatives; and
- Segment customer groups and plan specific engagement initiatives relevant to each network business.

Engagement plans were formally approved by the Executive Leadership Team (ELT) of each business in 2013, ahead of the AER finalising its customer guideline. Approval by the ELT signalled a commitment from the most senior people to take an active interest, to provide visible support, and also ensure customer preferences were incorporated into decision making.

Importantly, the plans used a variety of techniques to maximise their reach according to different customer preferences and so reduce the likelihood that groups were excluded from involvement and comment. Direct engagement took place through face to face meetings, customer consultative forums, focus groups, public forum, deliberative planning workshops and an innovative social media campaigns.

Some initiatives were led directly by the Chief Executive Officer in a highly visible demonstration that customers and their advocates had direct access to decision makers on issues of greatest significance.

Surveys were professionally designed and used computer assisted data interviews, supplemented with telephone interviews to reach older customers and time poor small to medium businesses.

The plans committed each business to meaningful and genuine consultation, which required strategic planning, research and adequate resourcing.

²² Wollcott Customer research- Willingness to pay Ausgrid and Endeavour Energy; Essential Energy IPSOS Customer Research

Each engagement plan also described a framework for each business to consider the results of their engagement in their decision making processes and to communicate back to customers and stakeholders what was done as a result.

The frameworks allowed the businesses to develop a very clear picture of customer priorities and enhanced their insights into customer preferences across different customer cohorts.

The outcomes of engagement initiatives helped underpin the key elements of each regulatory proposal.

Across NSW, customers told us their three top priorities were

1. **Affordability**– Across all engagement activity we heard a consistent and very strong message that – the price increases of the past were not sustainable and were especially hurting families and small businesses. Customers also wanted an end to rapid, steep increases preferring smaller, gradual increases over longer periods;
2. **Reliability** – Customers recognised that reliability had improved and were typically satisfied with existing levels of reliability. They did not want to pay more for improved reliability, nor were they prepared to trade off poorer reliability for lower prices. Each business is proposing a level of network investment to maintain network performance, with a focus on investment in areas suffering from the poorest reliability; and
3. **Safety** – Customers value safety and certainly weren't prepared to compromise safety as a trade-off for lower prices. Nor did they want to pay more for a greater focus on public safety campaigns. Customers held strong views that our network would be run so that it is as safe as possible. We understand we have both a statutory duty and a moral obligation of zero harm for staff, the public and contractors on or around our networks.

These priorities were initially identified through comprehensive willingness-to-pay research studies conducted by Ausgrid and Endeavour Energy, and a customer value research study conducted for Essential Energy. The survey methodology included a series of focus groups with residential and business customers to identify initial concerns and interests of customers. The results were distilled and used to inform two separate quantitative studies which explored customers' willingness to pay for services and quality of supply. More than 1,800 residential customers, and more than 600 small to medium businesses completed the on line survey. Telephone surveys were used to target older residents and reach time poor businesses.

We encourage stakeholders to review the full survey reports and summaries of results available on the network businesses' websites.

Business-specific engagement plans were enhanced with an industry-wide engagement program designed to minimise engagement costs while maximising opportunities for customers to engage with us on a broad range of relevant topics in our capital and operating programs. .

We initiated this program because in early 2013, we were asked by the AER's Better Regulation team to be efficient in our engagement efforts and to recognise that the resources of customer representative groups and small businesses were limited. This is consistent with the request from customer groups to the AER to avoid adopting a prescriptive engagement approach which "could discourage service providers from undertaking innovative and meaningful engagement activities that maximise effectiveness (and/or minimise the costs) of that engagement."²³

²³ Page 13, Explanatory Statement Customer Engagement Guideline for Network Service Providers

The industry wide engagement program was approved and monitored by Networks NSW's Chief Executive Officer. It included consultation forums with peak welfare and customer groups, establishment of a retailer forum;²⁴ a forum for electrical and communications contractors²⁵ and information to multiple stakeholders. In line with the AER's Guideline, it also featured an innovative and cost efficient Facebook campaign targeting social media communities who otherwise may have remained disengaged. This campaign was important in reaching customers who would otherwise not have the opportunity to be involved, informed and consulted on the networks' business plans and operations.

How we responded to customer concerns

Networks NSW businesses have described in plain terms the outcomes of their engagement with customers in multiple formats and forums including:

- A plain English overview of their regulatory proposals;
- In dedicated chapters in their full proposals;
- In reports and presentations to the Consumer Challenge Panel;
- In meeting with key customer groups including councils, customer welfare groups, retailers and metering providers; and
- In reports available on their websites

We would especially encourage stakeholders to read the three plain English customer overviews available on each website and feedback reports detailing customer responses to engagement activities. These proposals give a clear account of how we engaged with different customer segments; how we have used the outcome of that engagement to inform our capital and operating plans; and how we plan to improve services to customers.

In the interests of transparency, we have provided as much information as possible in our regulatory proposals and on our websites – on our engagement plans and the outcomes of that activity, on our regulatory documents and links through to AER guidelines and reports – as suggested in the AER best practice guidelines.

www.ausgrid.com.au/yoursay

www.endeavourenergy.com.au/yoursay

www.essentialenergy.com.au/ourplans

The NSW DNSPs have taken a genuine and ongoing commitment to improve and increase their customer engagement. This includes actions to encourage stakeholder and customer participation and education on the three regulatory proposals. This includes letters to key stakeholders including peak industry and customer welfare organisations, local councils and State Members of Parliament to inform them of the businesses' joint social media campaigns, Transitional Regulatory Proposals and Substantive Regulatory Proposals. This correspondence has actively encouraged stakeholders to participate in the regulatory process either directly with the AER or the network businesses.

The network businesses are also continuing their engagement activity with stakeholders and customers. For example, Ausgrid is continuing to hold stakeholder briefings at locations throughout its

²⁴ Retailer forum presentation 2 May 2014

²⁵ NECA forum presentation 6 June 2014

network area. The AER and Consumer Challenge Panel were invited to attend the Sydney briefing. In addition, changes to the organisational structure of each business have been approved to include the new senior role of Customer Services Manager to provide dedicated management of customer engagement.

All businesses will also be holding ongoing briefings with stakeholders on operational issues and policy matters such as future and long term tariff strategies.

NER Obligations

The AER notes that customer engagement is a key issue for its distribution determination and the AER will have regard to how the distributor engaged with its customers and accounted for their long term interests. The AER also notes that:

Under the rules, customer engagement is a factor we can consider when making our revenue determination. (page 19)

The AER cited clause 6.8.2(c1) of the NER in support of this statement. On this point, we only wish to note that this clause refers to a requirement for the NSW DNSPs' regulatory proposals to be accompanied by an overview paper which summarises the regulatory proposal in reasonably plain English. We consider this clause to be a compliance requirement with respect to the scope of our regulatory proposal. It does not deal with the exercise of the AER's function in respect of the making of a distribution determination. As such it does not offer a basis for the exercise of the AER's decision in making its revenue determination.

The AER also notes:

We will examine whether and how well a distributor considered and responded to customer views, equipped customers to participate in consultation... we may publicly comment on any shortcomings in a distributors' customer engagement that we identify from a regulatory proposal...

On this point, we note the following statement of the AEMC in considering changes to the NER:

*While the final position rules in some areas, such as the expenditure forecasting assessment guideline, require engagement to occur in a certain way, **the rules should provide for the outcomes of engagement, not the engagement itself.** [emphasis added]*

We consider this to be the crux of customer engagement exercises. That is, how have we taken into account customers' concerns in preparing our regulatory proposal, and more precisely, in forecasting our proposed forecast capex and forecast opex. Within the regulatory framework, customer engagement, or more precisely, concerns expressed by customers through our engagement with them, have a role with respect to the AER's decision on whether the forecast capex and opex proposed by the DNSPs meets the capex/opex criteria; in other words, in making a decision on whether the proposed capex and opex should be accepted. Assessing the extent to which the proposed forecast capex/opex addresses customers' concerns (as identified through customer engagement) is only one of 11 different factors that the AER must have regard to in deciding whether to accept the proposed forecast capex and opex.

We made this point not to dilute the value of customers' concerns. On the contrary, as outlined in detail above, the NSW DNSPs have taken significant steps to enhance our customer engagement activities. In addition to ensuring that we operate and maintain a safe and reliable network, we are very conscious of the impact of past price increases have had on our customers. Keeping increases

to average network charges at or below CPI for the 2014-19 period is a key objective of the next period and highlights how we have responded to customers' concerns about prices. Our proposed forecast capex and opex for 2014-19 period have therefore included initiatives aimed at containing impact on customer prices or at offsetting necessary increases so as to minimise price impacts on customers.

Regulated Rate of Return

In its Issues Paper, the AER noted that the NSW DNSPs have proposed that the allowed rate of return be estimated using methods other than those set out in the AER's rate of return guideline. The AER also noted that if the AER's approach were applied, the rate of return may be lower than that being proposed by the NSW DNSPs. The AER sought the views of interested parties on what approach would best achieve the rate of return objective.

At the outset, we note that calculation of the rate of return is a highly complex and technical area, requiring the advice of financial experts, by both the AER and the DNSPs. The rate of return is a critical determinant of a DNSP's required revenue. Consequently, a robust and thorough analysis of the relevant estimation methods, financial models, market data and any other pertinent evidence underpinning the required rate of return would best achieve the rate of return objective contained in the Rules.

We note that there is extensive supporting material, calculation and expert advice provided in our regulatory proposals to substantiate the rate of return that we have proposed. Supported by this extensive evidence, we consider that the rate of return we have proposed best meets the rate of return objective. We strongly urge customers and other interested parties to consider this extensive evidence when forming a view on the regulated rate of return.

The Rules require the AER to make and publish a rate of return guideline setting out the AER's consideration of a number of matters relevant to the calculation of the allowed rate of return. This rate of return guideline is neither binding on the AER in making its distribution determination nor on the NSW DNSPs in submitting their regulatory proposals. The Rules allow departure from the rate of return guideline with the proviso that such departure must be explained by the party proposing the departure.

Specifically, s6.1.3(9) and (9A) of the Rules require the NSW DNSPs' proposals to contain their calculations of the proposed return on equity, return on debt and allowed rate of return for each regulatory year of the regulatory period, in accordance with clause 6.5.2, including any departure from the methodologies set out in the rate of return guideline and the reasons for that departure. The NSW DNSPs' regulatory proposals set out our proposed approach to calculating the return on equity and the return on debt, including our proposed departures from the AER's rate of return guideline and the reasons for departure.

Cost of equity

Our proposed departures from the cost of equity approach set out in the AER's rate of return guideline and the justifications for these departures are outlined below.

Departure from the AER guideline approach to populating the Sharpe-Lintner CAPM

The NSW DNSPs have proposed a departure from the AER's rate of return guideline approach to populating the capital asset pricing model (CAPM). The AER uses what we consider to be

inconsistent estimates of the risk free rate and the market risk premium, which cannot lead to a return on equity commensurate with the allowed rate of return objective.

As outlined in our regulatory proposals, the Sharpe-Lintner CAPM is defined as follows:

$$(1) \text{ Expected return on equity} = \text{Risk free rate} + \beta (\text{Expected return on the market} - \text{Risk free rate})^{26}$$

The AER's guideline approach estimates (Expected return on the market – Risk free rate) in aggregate as the Market Risk Premium (MRP).

By doing this, the AER simplifies the Sharpe-Lintner CAPM to the following:

$$(2) \text{ Expected return on equity} = \text{Risk free rate} + \beta (\text{MRP})$$

In the rate of return guideline, the AER relies primarily on historical data to estimate the market risk premium. While the AER considers other evidence including data from surveys, dividend growth model estimates and survey evidence, it clearly gives significant weight to its historical estimate of the MRP.²⁷ The historical data is estimated as the total annual returns on equity for Australian firms (including both dividends and capital gains) minus the yield on 10 year CGS for each year from 1883-2011. Thus the historical estimate that the AER relies on when estimating the MRP is:

$$\text{MRP} = \text{Average from 1883-2011 of (Historical returns on equity} - \text{Yields on 10 year gov bonds)}$$

Effectively under this approach:

- Historical returns on equity = Expected return on the market
- Yields on 10 year gov bonds = Risk free rate

Given the relationship outlined in equation (1) above, the only internally consistent approach is to use an estimate of the risk free rate that is the same both times it appears in the Sharpe-Lintner CAPM equation. Therefore, if the MRP is primarily estimated using historical data of equity market returns and historical estimates of the risk free rate, then the direct estimate of the risk free rate (which is the first risk free rate value that appears in the Sharpe-Lintner CAPM equation) should be the same historical risk free rate used when estimating the market risk premium.

However, the rate of return guideline states that the AER will use a short term observation of 10 year government bond yields to estimate the risk free rate (specifically an observation period of 20 business days). Therefore, the guideline approach is to rely on a very short-term estimate of the risk free rate the first time it appears in the Sharpe-Lintner CAPM equation, but combine this with a historical estimate of the MRP.

²⁶ β represents the systematic risk of a particular stock – this is measured as the covariance of the stocks returns with the return on the market as a whole.

²⁷ See AER, Rate of return guideline explanatory statement, December 2013, pp. 93-94.

Whatever approach is adopted for estimating the risk free rate and the MRP (long term or short term), it must be applied consistently:

- If a historical estimate of the MRP is used, a historical estimate of the risk free rate should also be used (the preferred and proposed approach submitted by the NSW DNSPs); and
- Alternatively, if a short term estimate of the risk free rate is used, a short term estimate of the MRP must also be used.

The rate of return guideline approach to populating the Sharpe-Lintner CAPM leads to an internally inconsistent estimate of the required cost of equity that is not commensurate with efficient costs of a benchmark efficient energy network business. For this reason we have proposed a departure from this aspect of the rate of return guideline.

Our proposed estimate combines a historical estimate of the risk free rate with a historical estimate of the MRP. This provides an internally consistent cost of equity that is commensurate with the required return on equity of a benchmark efficient firm facing a similar nature and degree of risk as that faced by the NSW DNSPs.

Further details on the NSW DNSPs proposed departure from the rate of return guideline approach to populating the Sharpe–Lintner CAPM can be found at chapter 7 of the Ausgrid, Endeavour Energy and Essential Energy regulatory proposals.²⁸

Departure from the AER guideline estimate of the equity beta

The NSW DNSPs have proposed a departure from the AER's rate of return guideline estimate of the equity beta within the CAPM. The AER's rate of return guideline adopts an equity beta estimate of 0.7 based on a range of 0.4 – 0.7. This range has recently been updated and now provides a range of 0.3 – 0.8.

We consider that the AER's sample for estimating the equity beta is too small and does not produce the most statistically robust estimate for equity beta. The AER's sample includes observations of 9 domestic energy network firms, only 5 of which remain listed today. In addition to this, the beta estimates for firms within the AER's sample vary widely:

- Increasing/decreasing by over 20% within short periods of time;
- Changing significantly based on the regression technique used; and
- Depending on the day, week or month in which the estimates are calculated

Furthermore, the rate of return guideline appears to consider evidence from estimates of equity beta for water utilities, which we consider to be inappropriate. Regulatory estimates of beta for water utilities are based on regulatory estimates of equity beta for energy network firms and equity beta estimates for overseas water utilities.

- Relying on equity beta estimates for domestic water utilities is the same as relying on existing equity beta estimates for domestic energy network firms, leading to circularity of any resulting estimates; and

²⁸ Ausgrid, 2014-19 Regulatory Proposal, May 2014, pp. 80-82; Endeavour Energy, 2014-19 Regulatory Proposal, May 2014, pp. 121-123; Essential Energy, 2014-19 Regulatory Proposal, May 2014, pp. 107-109.

- Equity beta estimates for international water utilities do not provide a robust basis for estimating the systematic risk of energy network firms due to the differing nature of water utility businesses and the regulatory frameworks that apply to them.

In contrast to the AER's approach, we have used estimates of equity beta from domestic energy network firms combined with estimates of the equity beta for comparable energy network firms in the US. There is a large sample of comparable energy network firms from the US, which has been identified by expert economic consultants CEG.²⁹ This list of comparator firms has been analysed by economic experts SFG, along with the evidence from domestic energy network firms and the other available evidence to determine the most statistically robust estimate of equity beta for energy network firms in Australia, which is 0.82.³⁰

The NSW DNSPs propose an equity beta estimate of 0.82, drawing on the significant work of economic experts CEG and SFG consulting. The NSW DNSP's also considered empirical evidence from the Black CAPM framework, which suggests that empirical estimates of equity beta within the Sharpe-Lintner CAPM are likely to under-estimate the required return on equity for stocks with lower systematic risk than the market portfolio (i.e. an equity beta of less than 1). For this reason, the NSW DNSPs considered an equity beta below the most statistically robust estimate of equity beta (0.82) should not be adopted when setting the allowed cost of equity for energy network firms.

For the reasons outlined above, the NSW DNSPs consider that the AER should depart from the rate of return guideline estimate of equity beta, 0.7, and move to an equity beta of 0.82. The NSW DNSPs proposed estimate of equity beta will lead to a cost of equity that is commensurate with the cost of equity for a benchmark efficient energy network firm. The rate of return guideline estimate of 0.7 will not.

Further details on the NSW DNSPs proposed departure from the rate of return guideline estimate of equity beta can be found at chapter 7 of Ausgrid, Endeavour Energy and Essential Energy's regulatory proposals.³¹

Departure from the AER's restrictive version of the "foundation model" approach

The NSW DNSPs propose a departure from the rate of return guideline's restrictive version of the "foundation model" approach to estimating the return on equity. The AER's "foundation model" approach uses the Sharpe-Lintner CAPM to estimate the cost of equity, but does not consider benchmark energy network firm cost of equity estimates from the Black CAPM, or any evidence from the Fama-French 3 Factor Model (FFM). Nor does it consider Sharpe-Lintner CAPM estimates of the cost of equity using a relative risk estimate of the equity beta from the Dividend Growth Model (DGM).

The NSW DNSPs have used a Sharpe-Lintner CAPM estimate of the cost of equity as our base estimate. However, it is necessary to consider this estimate in conjunction with estimates using all

²⁹ CEG, Information on Equity beta from US companies, June 2013. This report is an attachment to the NSW DNSPs regulatory proposals.

³⁰ SFG, Regression based estimates of risk parameters, June 2013. This report is an attachment to the NSW DNSPs regulatory proposals.

³¹ Ausgrid, 2014-19 Regulatory Proposal, May 2014, pp. 81, 83-84; Endeavour Energy, 2014-19 Regulatory Proposal, May 2014, pp. 121, 125-126; Essential Energy, 2014-19 Regulatory Proposal, May 2014, pp. 106, 111-112.

other relevant financial models and other evidence. This is an explicit requirement within the Rules [clause 6.5.2(e)(1)] that we do not believe the AER’s rate of return guideline has had proper regard to.

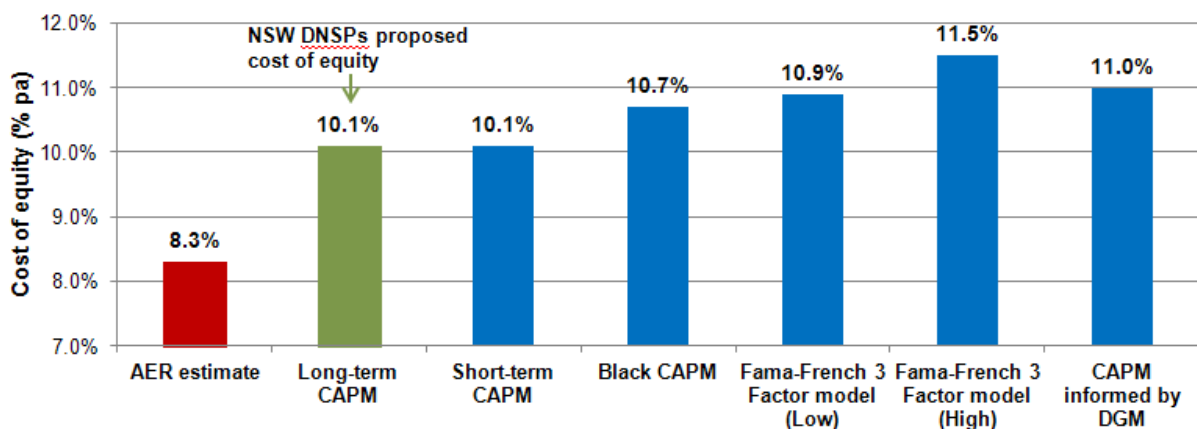
We consider that the Black CAPM, FFM and the DGM informed estimates of the cost of equity are relevant financial models and approaches that should be included in any assessment of the allowed cost of equity for electricity distribution determinations. As outlined in the NSW DNSPs regulatory proposals:

- The FFM has recently been recognised by the Nobel Prize Committee for greatly improving the predictability of stock returns (specifically, an improvement from the Sharpe-Lintner CAPM);
- The FFM is a relevant financial model and estimates of the required return on equity for a benchmark efficient energy network firm that should be considered when setting the allowed return on equity for the NSW DNSPs;
- The Black CAPM is a relevant financial model with significant academic support and recently reliable estimates of the zero beta premium have been developed, which allow a direct estimate of the benchmark efficient cost of equity using the Black CAPM; and
- Using a DGM based estimate of relative risk provides a basis for estimating the equity beta, that is non-regression based and provides a separate basis for estimating the cost of equity using the CAPM, which should be considered when setting the allowed cost of equity for the NSW DNSPs.

Overall, the range for cost of equity estimates considering all relevant financial models and evidence suggests that the rate of return guideline restrictive approach to estimating the cost of equity (using only the Sharpe-Lintner CAPM and regression based estimates of equity beta) does not produce a cost of equity estimate commensurate with the cost of equity for a benchmark efficient energy network firm. Considering all the relevant financial models and evidence as the NSW DNSPs have done within their regulatory proposals illustrates that the AER’s rate of return guideline approach leads to a benchmark efficient cost of equity estimate that is far below what the weight of evidence suggests. A large part of this is due to the internal inconsistency of the AER’s approach to estimating the MRP and the risk free rate, which is discussed above.

Figure 6 below illustrates that the cost of equity estimate that would result if the AER’s restrictive and internally inconsistent approach within the rate of return guideline was applied to the NSW DNSPs is considerably below the cost of equity compared to the weight of relevant evidence available today.

Figure 6: Full range of cost of equity estimates compared to AER guideline approach estimate



Note: The AER estimate is based on a Sharpe-Lintner CAPM approach using a risk free rate averaging period of 20 business days to 30 June 2014, an MRP estimate of 6.5% and an equity beta estimate of 0.7.

Further details on the NSW DNSPs' proposed departure from the rate of return guideline restrictive version of the foundation model approach can be found at chapter 7 of the Ausgrid, Endeavour Energy and Essential Energy regulatory proposals.³²

Cost of debt

The NSW DNSPs' proposed approach for estimating the allowed cost of debt is consistent with the 10 year trailing average approach set out in the rate of return guideline, but departs from the rate of return guideline in two important aspects. The justifications for our departures are outlined below.

Departure from the staged transition to the benchmark efficient trailing average approach

The AER's proposed transition to the trailing average would not meet the requirements of both the Rules and National Electricity Law if applied to the NSW DNSPs as it would result in an allowed return on debt that is:

- Not commensurate with the benchmark efficient cost of debt; and
- Insufficient to allow the NSW DNSPs to recover at least the efficient costs of debt that they would incur in providing network services.

The AER's proposed transition sets the cost of debt allowance as though the NSW DNSPs' refinanced their entire debt portfolios in the first year of the 2014-19 period, and then refinanced 10% of their debt portfolios each subsequent year. As outlined in the NSW DNSPs' regulatory proposals, the costs of re-financing the entire notional debt portfolios of Ausgrid, Endeavour and Essential Energy at or around the same time would be extraordinarily high. This is supported by the advice of UBS, which has stated that transactions costs including credit support agreements and legal costs of such transactions would be inefficiently high. Furthermore, due to the significant size of such debt transactions (based on notional debt portfolios as at 30 June 2014 of \$8.6bn for Ausgrid, \$3.4bn for Endeavour and \$4.1bn for Essential), debt providers would likely take advantage of the refinancing and demand inefficiently high returns on debt.

The rate of return guideline itself recognises the inefficiency of an "on the day" approach to re-setting the return on notional debt portfolios, which is why the guideline concluded that the benchmark efficient approach is to use a 10 year trailing average to set the cost of debt.³³ The trailing average approach mirrors the cost of debt for a firm that prudently manages refinancing risks on debt portfolios by staggering debt issuances and maturities over time.

The NSW DNSPs have consistently issued debt on a staggered portfolio basis, with maturities of 10 years on average. Therefore, the NSW DNSPs currently engage in the benchmark efficient practice. There is no need for a transition from a hypothetical "on the day" refinancing approach to the benchmark efficient trailing average approach. In fact, trying to hedge to the AER's proposed

³² Ausgrid, 2014-19 Regulatory Proposal, May 2014, pp. 83-85; Endeavour Energy, 2014-19 Regulatory Proposal, May 2014, pp. 124-129; Essential Energy, 2014-19 Regulatory Proposal, May 2014, pp. 110-115.

³³ See AER, rate of return guideline, December 2013, pp. 109-110.

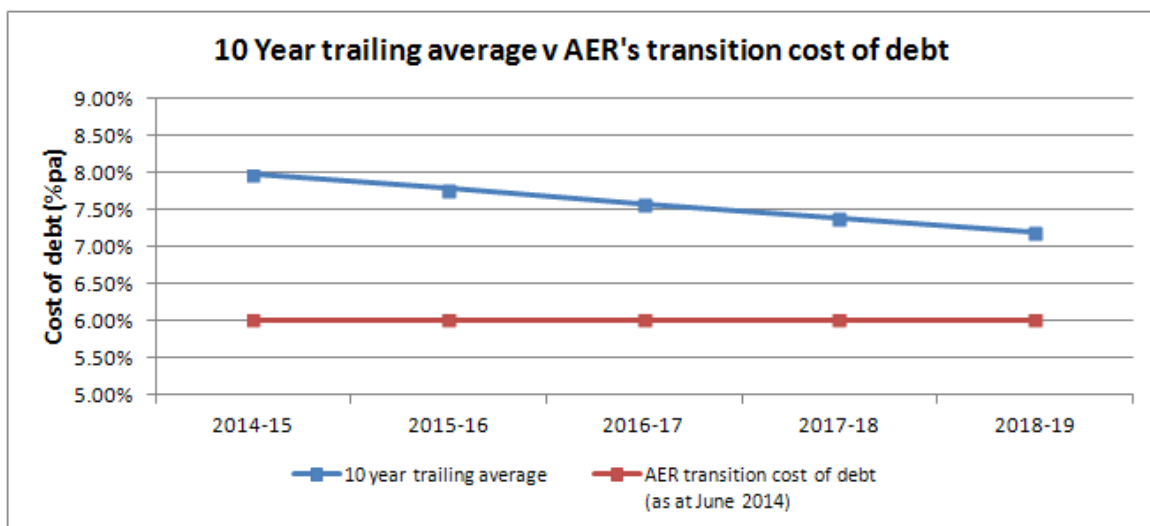
transition approach would incur extraordinarily high costs to re-finance a debt portfolio that is already structured efficiently, only to transition back to the efficient starting point over a 10 year time period.

Based on current rates, the NSW DNSPs would be heavily under-compensated over this 10 year period compared to continuing to engage in the benchmark efficient staggered portfolio approach. Based on the spot rates from the RBA for June 2014, the under-compensation would be approximately \$1.8 billion over the 2014-19 period as outlined in Figure 7 and Table 2 below.

This under-compensation has deteriorated further compared to the substantive regulatory proposals due to recent short-term movements in corporate bond yields. These movements are short term and may not continue into the future. However, if the AER applies its transition approach to setting the cost of debt, significant under or over-compensation could result in a particular energy network determination, simply based on short-term movements in corporate bond yields.

Figure 8 illustrates the significant variability of bond yield estimates over even a few months, which the AER's transition approach leaves businesses and consumers susceptible to.

Figure 7: Difference between benchmark efficient trailing average and AER transition



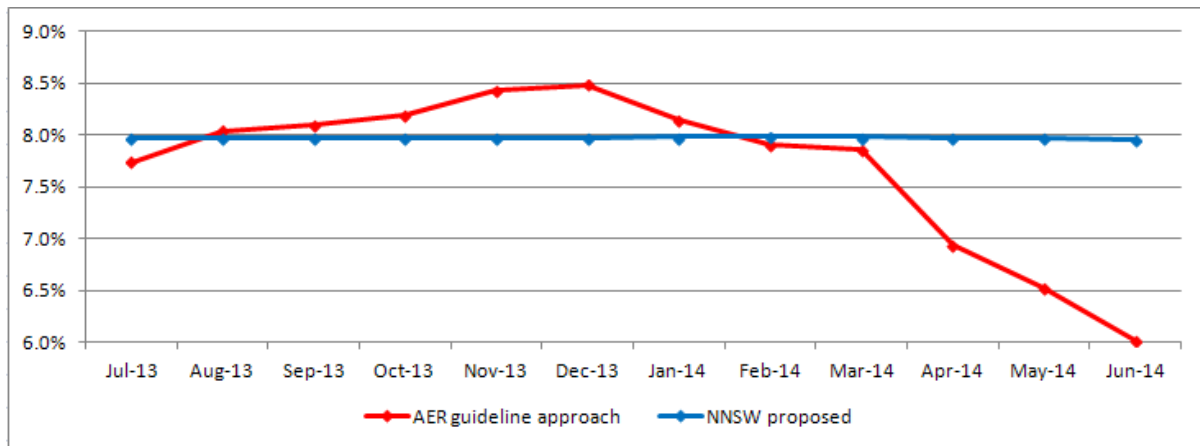
Note: The figure assumes that the current spot rate for 10 year BBB corporate debt of 6.02% will continue into the future. 6.02% is the RBA forecast extrapolated to an effective maturity of 10 years and annualised.

Table 2: Under-compensation from AER's proposed of debt transition

Under-compensation from transition approach (\$ million)						
	2014-15	2015-16	2016-17	2017-18	2018-19	Total 2014-19
AUSGRID	\$ 169	\$ 180	\$ 191	\$ 201	\$ 210	\$ 951
ENDEAVOUR	\$ 66	\$ 71	\$ 74	\$ 78	\$ 81	\$ 370
ESSENTIAL	\$ 80	\$ 86	\$ 91	\$ 96	\$ 102	\$ 455
TOTAL	\$ 314	\$ 336	\$ 357	\$ 375	\$ 393	\$ 1,776

Note: Table 2 assumes the notional debt portfolio outlined in the substantive proposals submitted by Ausgrid, Endeavour and Essential Energy. And the forecast 10 year trailing average cost of debt outlined above at figure 2.

Figure 8: Short term variability of corporate bond yields over the past 12 months



The unacceptable short term variability of the AER’s debt transition is highlighted in Figure 3 as the combined revenues of the NSW DNSPs over the 2014-19 period would reduce by almost \$2 billion if calculated in June 2014 compared with the revenues if calculated in March 2014 – a period of only three months.

For the reasons outlined above, the NSW DNSPs have proposed to depart from the rate of return guideline transition approach to setting the cost of debt. The rate of return guideline transition approach would not provide a return on debt that is commensurate with the cost of debt for a benchmark efficient energy network firm. If applied to the NSW DNSPs, the transition approach to setting the cost of debt would be in breach of the Rules and the National Electricity Law.

Further details on the NSW DNSPs proposed departure from the rate of return guideline transition approach to setting the cost of debt can be found at chapter 7 of Ausgrid, Endeavour Energy and Essential Energy’s regulatory proposals.³⁴

Departure from the AER’s assumed benchmark credit rating of BBB+

The NSW DNSPs have proposed to depart from the rate of return guideline benchmark credit rating assumption of BBB+. As outlined in the NSW DNSPs regulatory proposals, the AER’s sample of regulated Australian utility firms over the period 2002 to 2013 results in a median credit rating from 2009 onwards of BBB (rather than BBB+). Prior to 2009, the median credit rating was BBB+.

In our regulatory proposals, we have proposed to use a benchmark credit rating assumption of BBB+ prior to 2009 and a benchmark credit rating of BBB from 2009 onwards when estimating the 10 year trailing average cost of debt. This is consistent with the data on benchmark credit ratings within the AER’s own sample of firms.

³⁴ Ausgrid, 2014-19 Regulatory Proposal, May 2014, pp. 72-78; Endeavour Energy, 2014-19 Regulatory Proposal, May 2014, pp. 108-116; Essential Energy, 2014-19 Regulatory Proposal, May 2014, pp. 92-101.

Further details on the NSW DNSPs proposed departure from the rate of return guideline assumed credit rating can be found at chapter 7 of Ausgrid, Endeavour Energy and Essential Energy's regulatory proposals.³⁵

Annualising RBA bond yield estimates

The AER's Issues Paper on the NSW DNSPs regulatory proposals notes that we have annualised the RBA's bond yield estimates, but states that this has already been done by the RBA prior to publishing the yields. However, email correspondence between the RBA and CEG indicates that the RBA uses semi-annual payment frequency throughout their corporate bond series. On this basis, it is appropriate to annualise corporate bond yield estimates from the RBA.

Extrapolating to a 10 year maturity

The AER's Issues Paper notes that we have extrapolated the RBA's corporate bond yield estimates to an effective term to maturity of 10 years. There is a simple reason for this - within the sample of bonds used by the RBA, some bonds are greater than 10 years maturity and more bonds are less than 10 years. The RBA's estimation technique tries to weight these different bonds to target a maturity of 10 years. However, the effective term to maturity ends up lower due to the greater number of bonds with a maturity less than 10 years.

The RBA publishes both the "target tenor" and the "effective tenor" of each of its bond yield estimates. This enables researchers to estimate a yield on bonds with an "effective tenor" of 10 years, which is the process we have used to derive our proposed cost of debt of 7.98%. The process we have relied on is outlined in a report by economic experts CEG, which is provided as an attachment to our regulatory proposals.³⁶

Imputation credits

The NSW DNSPs have proposed to depart from the AER's rate of return guideline estimate for the value of imputation credits. We agree with the payout ratio estimate in the final rate of return guideline (the estimate of the percentage of imputation credits actually distributed each year), which is approximately 70%. However, we disagree with the guideline approach to estimating the value of each distributed imputation credit.

The value assigned to imputation credits in the AER's post-tax revenue model (PTRM) directly reduces allowances for tax that needs to be paid on profits earned by equity investors. This reduction to tax allowances is made on the assumption that distributed imputation credits provide a stream of value to shareholders. However, regulated businesses still need to pay the full amount of tax (reducing funds available for distribution to shareholders).

For example a 30% tax rate needs to be paid by regulated businesses on their taxable profits. If the AER assumed that the value of imputation credits was 25% of this tax allowance, the regulated business would only be allowed to recover 22.5% not the full 30% tax liable to be paid to the Australian Tax Office. Therefore 7.5% of the actual tax liability would be funded out of the return to equity holders. This 7.5% shortfall in the equity return would be assumed to be streamed to equity

³⁵ Ausgrid, 2014-19 Regulatory Proposal, May 2014, pp. 70-71; Endeavour Energy, 2014-19 Regulatory Proposal, May 2014, pp. 104-105; Essential Energy, 2014-19 Regulatory Proposal, May 2014, pp. 91-92.

³⁶ See CEG, WACC estimates, a report for NSW DNSPs, May 2014, pp. 48-49.

investors through imputation credits to achieve a total post-tax return equivalent to that set by the AER in a regulatory determination.

We consider that the relevant value of distributed imputation credits to be applied in regulatory determinations is the **market value to investors**. That is, the value to equity investors of imputation credits, which is not in the control of regulated businesses. If this is not the case, then allowances for tax expense will be set too low and the resulting return on equity will be too low to achieve the return on equity required by investors to invest funds in regulated energy network businesses.

The rate of return guideline place excessive weight on the “equity ownership” approach and tax statistics estimates to estimate the value of distributed imputation credits. The equity ownership approach only provides the percentage of shareholders that are actually Australian residents and therefore able to access imputation credits. However, there are many reasons why domestic investors may still be unable to access imputation credits (for example the 45-day holding rule). In addition to this, there is a time value of money consideration, because shareholders must wait until their tax returns are processed before they can access imputation credits.

The NSW DNSPs have proposed that the market value of imputation credits is the correct value to use in the regulatory context and is consistent with the clarification to the Rules made by the AEMC on this matter.

As outlined in our proposals, there are a number of dividend drop-off studies that estimate the market value of imputation credits and the most reliable and up to date study is a 2013 study by SFG.³⁷ The market value of distributed imputation credits provided by this study is 0.35, and has previously been endorsed by the Australian Competition Tribunal. Combined with a payout ratio estimate of 0.7, the overall estimate of imputation credits for use in the regulatory context is 0.25.

Issues raised at the AER Public Forum (10 July 2014)

Approach to managing stranded metering asset costs

Each of the NSW DNSPs regulatory proposals outline the approach we propose for managing stranded metering asset costs. Such an approach was proposed and is needed to give proper effect to the AER’s decision to re-classify type 5-6 metering services from standard control services to alternative control services.

Ausgrid’s proposed exit fees are shown in table 19 of Attachment 8.15. Similarly, these fees are shown in table 41 of Endeavour Energy’s regulatory proposal and in table 7 of Attachment 8.4 of Essential Energy’s proposal.

Whilst these exit fees are needed to recover past investments made by the NSW DNSPs in metering assets, we recognise the impact these fees may have on contestability and competition in the metering markets. We are willing to work with the AER and interested stakeholders to find appropriate solutions that balance the interests of the NSW DNSPs and customers. We also note that such solutions need to be mindful of the impact on the AER’s decisions on classification of services in the

³⁷ See SFG, Updated dividend drop-off estimate of theta, 7 June 2013. This report is provided as an attachment to our regulatory proposals.

Framework and Approach and may necessitate a departure from this decision in the distribution determinations.

Public Lighting

Essential Energy does not currently recover the full costs of providing public lighting services. Under-recovery of public lighting service provision is not sustainable and has resulted in significant losses in this area for Essential Energy during the 2009-14 period. Essential Energy has proposed more cost-reflective prices to ensure effective, efficient and compliant operations. The proposed prices, if approved by the AER, will result in substantial increases that will bring Essential Energy's prices to cost reflective levels in line with the rest of NSW. We note the Customer Challenge Panel's wish that they would like to see contestability in public lighting services. Fully cost reflective charges are a first and important step in being able to achieve contestability in public lighting services.

It is also worth noting improvements made by Essential Energy in relation to communicating and sharing information with councils. An Information Portal was released to Councils in January 2012, introducing a digital solution to providing hard copy reports and significant data sets. The Portal is a bidirectional communication tool where Councils can request information and reports but also receive regular reports, for example, monthly inventory reports, annual performance reports and reports relating to lights out, reported date and rectified date.

Each Council has a unique login to the portal and a nominated representative. When information is delivered into the portal, an email notification is sent to the nominated representative of the council notifying them the information is available to be downloaded.

Customer Challenge Panel (CCP)

In addition to the AER's Issues Paper, members of the CCP recently presented data and various benchmarks at the AER public forum on the NSW DNSPs proposals (10 July 2014). The NSW DNSPs have concerns with the veracity and accuracy of the information presented by the CCP.

Whilst discussions have been held with both the AER and CCP the underlying data and models used to produce the analysis have not been provided. This has made it difficult for the NSW DNSPs to meaningfully address the questions raised in the CCP presentation. It is our position that in order for the AER and other stakeholders to rely on the recommendations and observations of the CCP, that the relevant data must be disclosed and subject to scrutiny. In the absence of this, little, if any weight should be assigned to the components of any CCP presentation which relies on unverified data.

It is our understanding that the CCP are subject to the same requirements as any other stakeholder making a submission on the NSW DNSPs regulatory proposals. Whilst we support this position, it is worth noting that the CCP have had a public and active role in the determination process to date and have been able to ask questions and obtain information from the NSW DNSPs.

As a result of this, the CCP are in a position of significant influence and authority from the perspective of customers. Therefore, it is in the interests of all stakeholders for the CCP to form their views and make submissions in a measured, transparent and robust manner.

The NSW DNSPs would like to consult further with the AER and CCP to examine the analysis presented at the public forum in more detail. Whilst we are not currently in a position to provide amended figures without access to the data and models, table 3 below sets out our preliminary views and concerns with CCP Presentation 2.

Table 3 - Preliminary views and concerns with CCP Presentation 2

DNSP	Slide ³⁸	Issue	Response
All	2	An inappropriate pricing comparison is made using a mixture of information that is unverifiable.	<p>The source of the data, the tariffs used (i.e. defining the ‘average household’), the exchange rate used for Great Britain prices, the conversions and how the averages were calculated were not provided or clarified so the accuracy cannot be verified. Additionally, we strongly suspect that the Victorian figures are at the very least exclusive of metering (which would add approximately 2 cents per kWh).</p> <p>We suggest the AER rely on the comparison provided in the Networks NSW Public Forum presentation (available on the AER’s website).</p> <p>Notwithstanding this, NSW is compared to Victoria and Great Britain. NSW covers 3.4 times the land area of Victoria despite having only 1.3 more customers (Essential alone covers 3.2 times the area whilst having only 0.3 times the customers). NSW covers 3.3 times the land area of Great Britain whilst only having 0.1 times the customers. This, and many other fundamental differences, invalidates the comparison as a measure of efficiency.</p>
All	3	Unverifiable information regarding profits and income tax equivalents presented.	<p>This data is difficult to validate with no sources or calculations/conversions provided.</p> <p>The middle column for each DNSP is based on an estimated figure not calculated by the AER or any DNSP. This estimate combines benchmark data with actual data which is misleading (the benchmark ROE determined by the AER for 2009-14 and actual gearing). The third column is presented as “surplus” return when it is in fact a generated figure from comparing actual NPAT to the misleading estimate.</p> <p>Debt Guarantee Fees and Income Tax Equivalents are presented as 174% of actual dividends paid to Treasury. This is a misleading statement. The ownership of the NSW DNSPs has no impact on the income tax paid. Regardless of whether the DNSPs are privately or publicly owned a 30% income tax rate is applied and the</p>

³⁸ Of CCP Presentation 2, AER Public Forum, 10 July 2014

			<p>same tax rules apply. The only difference is that the NSW DNSPs taxes are returned to the state government by the federal government. This has no impact on electricity prices whatsoever.</p>
All	4	Misleading statements and unverifiable information	<p>The graphical representation of revenue cannot be verified without its source or calculations/conversions being provided.</p> <p>The statement made at the top of the graph is misleading when applied to both the 2004-09 period and the 2009-14 period. In the 2004-09 period, throughput was much larger than expected, but the over recovery of revenue was much less than represented by the graph. In the 2009-14 period, throughput is less than expected and this has resulted in revenue recovery being less than allowed by the AER.</p>
All	5	An inappropriate RAB comparison is made using a mixture of information that unverifiable.	<p>See response to slide 2 above. Also, source data not provided nor the calculations used to convert the dollars and to develop an average for NSW, Victoria or Great Britain.</p> <p>Whilst the data cannot be verified, based on the latest AER state of the energy market report, the NSW RAB per connection is only 1.8 times that of Victoria, not 3 times as stated in the presentation and is in the \$4,500 to \$5,800 range rather than \$6,000 - \$8,000.</p> <p>Irrespective of the data used, this comparison reveals nothing as to the relative efficiency of the distributors included. It merely illustrates the significant differences between the distributors. If this measure was done on a 'per km' basis for instance, Essential and Ergon would likely appear to be the most "efficient".</p> <p>The inclusion of Great Britain in this comparison is particularly misleading given London alone has a population 1.1 times greater than that of NSW within an area of land covering only 0.002 times that of NSW. It also ignores the different regulatory framework of Great Britain and the fact that a significant amount of capex has historically been expensed to reduce the RAB, up to 50% of replacement expenditure historically.</p>
All	6	This slide presents capitalised spend in a misleading way.	<p>This graph is presented in a way that suggests the NSW DNSPs are only proposing slightly less capex in the forthcoming period and this is only due to the removal of</p>

			<p>metering. Whilst the source of the data is not provided the slide indicates that the graph uses a change in RAB basis. This is a misleading use of irrelevant information that does not represent the capex of the DNSPs.</p> <p>The relevant information would be the proposed capex compared to that allowed and/or spent during the 2009-14 period. As stated in the NNSW presentation at the public forum, the combined capex of the DNSPs is 45% below that allowed for the 2009-14 period in real terms.</p>
All	7	An inappropriate opex comparison is made using a mixture of information that is misleading or unverifiable.	See response to slide 5 above. As detailed in the response to slide 5, this comparison is of little value and provides no indication of efficiency let alone a negative one. It makes little sense to compare a rural network with extremely low customer density such as Essential to small, highly dense urban networks for instance.
All	8	Inappropriate analysis and conclusions regarding Networks NSW cost reduction initiatives.	<p>Similar to other slides, the accuracy of the data cannot be verified as sources and calculations are not provided or explained.</p> <p>The slide provides a notional estimate of the headcount reduction across the NSW DNSPs and the cost impact of this. The statement ignores the fact that the headcount reductions are across both opex and capex, with most of the impact being seen in the significant capex reductions. It also ignores the fact that opex forecasts would have been significantly higher without these reductions as explained in the regulatory proposals of each NSW DNSP.</p>
All	9	EBSS amounts of distributors questioned.	These amounts have been calculated by the distributors strictly in accordance with the EBSS guideline as published by the AER. The carryover amounts are a function of the AER's model. The commentary with the graph ignores the benefits customers receive through sharing of efficiencies and reduced allowances in future periods.
All	10	This slide contains false and misleading information regarding the cost of debt.	<p>This slide purports to include the actual cost of debt from the 2012-13 annual report of each business. The figures reported are incorrect and cannot be verified.</p> <p>The cost of debt is only a subset of the overall rate of return and the actual cost of</p>

			<p>debt for an individual business is irrelevant to the AER. If the allowance were to be based on actual costs this would provide no incentive to businesses to efficiently raise funds. Actual gearing levels have no impact on the WACC as the AER have adopted a benchmark cost of debt allowance. This analysis represents a departure from that Guideline with no explanation as to why such a departure is justified.</p>
All	11	Inaccurate conclusions regarding energy density.	<p>Source data and calculations are not provided and statements made without reference to supporting information. Specifically, “NSW DNSPs project big bounce back in energy density” – this cannot be verified. The NSW DNSP proposals project a small recovery in consumption near the end of the 2014-19 period.</p> <p>Additionally the slide states that a revenue cap provides “strong incentives to over-forecast demand and consumption.” This statement is misleading and cannot be substantiated by the DNSPs or the AER analysis in adopting a revenue cap.</p> <p>Overstating consumption forecasts would lead to significant customer price shocks and the NSW DNSPs have been very mindful of this in developing their forecasts. Irrespective of this, there is no incentive to over or under state consumption under a revenue cap as revenue recovery is guaranteed.</p> <p>The energy forecasts proposed by each DNSP were derived from independent forecasts and are almost identical to those produced by AEMO.</p>
All	12	Inaccurate and misleading statements.	<p>Summary comments 1-3 are not substantiated, particular in light of the data issues addressed above.</p>

Other matters

Interrelationships between components of the AER's decision

On pages 16 and 17 as well as in attachment 5, the AER discusses the interrelationship between the different components of the annual revenue requirement and asked the question of how the AER should balance the interrelationship between the building block components.

This is a decision for the AER to make. We note that the AER's decision on the NSW DNSP's annual revenue requirement for the 2014-19 period must be performed in accordance with the provisions of the NER, specifically Part C of Chapter 6. Part C of Chapter 6 prescribed the building blocks of the annual revenue requirement and the requirements for the calculation of each of these building blocks. The AER must take into account these requirements in making its constituent decisions under clause 6.12.1 of the NER.

Specifically, clause 6.12.3 (d) of the NER states that the AER:

*Must approve the total revenue requirement for a Distribution Network Service Provider for a regulatory control period, and the annual revenue requirement for each regulatory year of the regulatory control period, as set out in the Distributor Network Service Provider's current building block proposal, if the AER is satisfied that those amounts have been properly calculated using the post-tax revenue model **on the basis of the amounts calculated, determined or forecast in accordance with the requirements of Part C of this Chapter 6.**[emphasis added]*

The AER states that 'in some cases, the separate building block components may be substitutes, so that increasing one may lead to decreasing another' (page 49). We seek further clarification from the AER on this. In our view, whilst a decision on one building block component (or a constituent decision under clause 6.12.1) may have a *consequential impact* on another building block, we do not consider that the building block components can be substitutes. Each of the inputs into the calculation of a building block component of the annual revenue requirement (for example, a decision on the allowed rate of return is an input into the calculation of the return on capital component of the annual revenue requirement) must be decided within the confines of the relevant requirements under Part C of Chapter 6 of the NER.

Applicable National Rules

We consider the version of the National Electricity Rules applicable to the assessment of our regulatory proposal is version 62, the version in operation at the time of submitting our regulatory proposal.³⁹

Potential discrepancies in data

In the Issues Paper the AER uses various data and graphs to illustrate its observations on our regulatory proposals. We have not had an opportunity to review the accuracy of the underlying data, however, we note that there appears some discrepancies in the data presented or the representation

³⁹ Version 62 started on 17 April 2014 and ends on 30 June 2014. See <http://www.aemc.gov.au/Energy-Rules/National-electricity-rules/Historical-versions>

about this data. We note these in Table 4 below for customers' benefit should these discrepancies have some bearing on customers' views on the issues highlighted by the AER.

Table 4 – Potential Data Discrepancies

DNSP	Page	Figure/Table	Issue	Response
Endeavour	7	Figure 1	Endeavour Energy proposed price path does not reconcile to that proposed.	<p>The AER appear to have relied on Attachment 4.02c to our proposal. This attachment is analysis supporting an adjustment made in our proposed PTRM and should therefore not be presented as our ‘proposed’ revenue and prices.</p> <p>Notwithstanding, the amount used by the AER includes Ancillary Network Services in addition to metering, which means it is not comparable to Ausgrid or Essential Energy.</p>
Essential	7	Figure 1	Essential price path is exclusive of meters, whilst Ausgrid and Endeavour are inclusive	Essential’s price path inclusive of meters was provided in the substantive regulatory proposal, at table E-1 for example, contrary to footnote 4 of the AER’s Issues Paper.
All	9	Figures 2-4	Total revenue does not reconcile to that proposed for 2014-19 by Endeavour or the amount allowed for 2006/07-2008/09 for the NSW DNSPs	<p>The allowed revenue inclusive of meters for the previous regulatory control period (2004-09) does not include approved pass through amounts.</p> <p>For Essential Energy, the actual revenue reported is incorrect for the 2004-09 period, particularly in 2005-06 and 2006-07, and the allowed revenue line does not pick up the correct smoothed revenues.</p> <p>In addition, for the 2014-19 period the AER has relied on Attachment 4.02c to Endeavour Energy’s regulatory submission for the proposed revenue inclusive of meters. This attachment</p>

				represents analysis rather than a 'proposed' amount and is also inclusive of Ancillary Network Services meaning it is not comparable to the other NSW DNSPs.
All	15-16	Figures 11-13	Actual, allowed and forecast opex figures are based on inconsistent inputs and do not reconcile to figures in the NSW DNSPs proposals.	The AER has relied on the figures contained in the EBSS worksheet of the Reset RIN. The actual 2009-14 opex sourced from this worksheet is the total opex, the 2009-14 allowance is based on total opex less debt raising costs and the forecast opex sourced from our proposals is based on total opex less debt raising costs and DMIA.
Endeavour	17	Figure 17	Building block breakdown of proposed revenues for 2014-19 does not reconcile to the amount proposed by Endeavour Energy	As noted above, the AER appear to have relied on Attachment 4.02c to our proposal. This includes Ancillary Network Services as well as metering. If this figure is inclusive of these amounts for all three DNSPs to enable a like-for-like comparison it should be labelled as such (i.e. inclusive of metering and ANS). This would represent analysis rather than a DNSP's 'proposed' revenue as these items (metering and ANS) do not form part of the 'building blocks'.
Endeavour	31	Table 2	The table headings do not match the figures quoted for Endeavour Energy	The 36% figure quoted for Endeavour Energy is 2014-19 proposed capex compared to 2009-14 actuals. The table heading suggests the comparison is to the 2009-14 allowance. If so, the correct figure is 43%.
Endeavour	33	Figure 18	The capex does not appear to reconcile to Endeavour Energy's proposal for the 2009-14	The figure suggests that Endeavour Energy has spent above the capex allowance in the final two years of the 2009-14 period by

			period.	<p>several million dollars. As per figure 14 of Endeavour’s substantive regulatory proposal the difference to the allowance for these two years is \$0.7m and \$0.9m (\$13-14) respectively.</p> <p>This is primarily due to the figures sourced from table 2.1.1 of the Reset RIN. This table is in nominal dollars and has not been converted into 2013-14 dollars. In addition to this, Endeavour Energy cannot reproduce the AER’s 2009-14 capex allowance figures (in \$2013-14). This is most likely attributable to a difference in conversion methodologies. Endeavour Energy will provide their suggested approach to the AER for further discussion.</p>
All	34	Table 3	The replacement capex quoted for 2014-19 does not reconcile to that proposed by the NSW DNSPs.	<p>The figure quoted is sourced from the RINs, table 2.1.1, this amount does not represent the NSW DNSPs proposed expenditure and is simply data provided in accordance with the AER’s RIN definitions.</p> <p>Table 2.1.1 of the RIN includes separate lines for capitalised network overheads, capitalised corporate overheads and a balancing item. Each DNSP has a different accounting treatment for these lines and the resulting comparison is inaccurate. The fully allocated data in our regulatory proposal provides a more accurate comparison.</p> <p>In Ausgrid’s regulatory proposal, \$3,232M (\$13-14) of replacement capex is proposed for the 2014-19 period. This represents a proportion 73% of our standard control services</p>

				<p>capex.</p> <p>In Endeavour Energy’s regulatory proposal, specifically table 18, \$922.8M (\$13-14) of replacement capex is proposed for the 2014-19 period. This represents a proportion of 53%.</p> <p>In Essential’s regulatory proposal, specifically table 5-5, \$1,215M (\$13-14) of replacement capex is proposed for the 2014-19 period. This represents a proportion of 47%.</p>
All	34	Table 4	The growth capex quoted for 2014-19 does not reconcile to that proposed by the NSW DNSPs.	<p>The figure quoted is sourced from the RINs, table 2.1.1, this amount does not represent our proposed expenditure and is simply data provided in accordance with the AER’s definition.</p> <p>Table 2.1.1 of the RIN includes separate lines for capitalised network overheads, capitalised corporate overheads and a balancing item. Each DNSP has a different accounting treatment for these lines and the resulting comparison is inaccurate. The fully allocated data in our regulatory proposal provides a more accurate comparison. A further issue is that this table picks up data from the RIN that is a combination of growth and reliability capex. Reliability capex is not related to demand so conclusions drawn in comparing these numbers to the demand forecast will be incorrect.</p> <p>In Ausgrid’s regulatory proposal, \$717M (\$13-14) of augmentation capex is proposed for the 2014-19 period. This represents a proportion of 16% of our standard control services capex. Included in the 16%, is 5% of our capex which is driven by</p>

new customer connections.

In Endeavour Energy's regulatory proposal, specifically table 18, \$429.3M (\$13-14) of growth capex is proposed for the 2014-19 period. This represents a proportion of 25%.

In Essential's regulatory proposal, specifically table 5-5, \$751M (\$13-14) of growth capex is proposed for the 2014-19 period. This represents a proportion of 29%.