13 February 2015

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Submission to NSW DNSP revised revenue proposal to AER draft determination (2014 to 2019)

Thank you for the opportunity to provide the Energy User Association of Australia's (EUAA) perspectives on the NSW DNSP's response to the AER's draft determination.

The EUAA is encouraged by the approach that the AER has taken in the consideration of the network business's draft determinations and in particular its use of benchmarking data, albeit still a work in progress. We humbly submit that the AER remain firm in the face of strident opposition as the arguments put forward by the networks to grow their RAB comes at the cost of consumers and users struggling to cope with escalating electricity costs.

We hope you find the enclosed EUAA response of assistance to the AER's determination process and welcome further dialogue or clarification on any of the matters raised.

Please do not hesitate to contact me should you require any clarifications or further information regarding this submission.

Yours sincerely

Philip Barresi
Chief Executive Officer
Energy Users Association of Australia (EUAA)

EUAA Submission

AER 2015-19 Draft Revenue Decision

NSW DNSPs' Revised Revenue Proposals

13 February 2015

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1 EXECUTIVE SUMMARY & KEY RECOMMENDATIONS

1.1 Price Impacts

There are a number of drivers that should result in the NSW DNSPs' prices reducing to the price levels that applied prior to the previous regulatory period.

The AER's draft determinations are not reflecting those drivers and would result in the NSW DNSPs' prices being retained at the average levels that applied during the previous regulatory period.

1.2 Return on Capital

The NSW DNSPs are extraordinarily profitable, achieving return on equity levels of 4-5 times the levels that the AER assumed in its previous return on equity allowances.

These returns are well in excess of the returns being achieved by the best performing ASX50 entities, despite the NSW DNSPs being amongst the least efficient entities in the National Electricity Market.

The AER's draft WACC determination of 7.15% is excessive, and is based on inappropriate cost of equity input parameters and the provision of an inappropriate record-high debt margin.

The AER's draft WACC determination would continue to deliver extraordinary windfall profits to the networks over the next regulatory period.

Recommendation 1

This submission outlines extensive evidence together with detailed recommendations that demonstrate that an overall WACC of around 5.5% would best meet the National Electricity Objective, whilst still delivering very generous returns to the NSW DNSPs.

1.3 Capital Expenditure

The AER's replacement capex assessment approach was too high level and did not apply the degree of rigour required to address the major deficiencies identified with the networks' forecasts.

This submission outlines evidence that demonstrates the need for the AER to undertake a more thorough review that takes into account asset condition, risk assessment and previous replacement spend information.

Recommendation 2

Applying a more appropriate degree of scrutiny to the networks' replacement capex needs would identify that reductions to the AER's draft replacement capex allowances of between 23-48% are required.

The AER has not subjected the networks' proposed augmentation capex to a sufficient degree of scrutiny. The AER's draft augmentation capex allowances were heavily reliant on the demand forecasts provided by the networks - forecasts that are not supported by AEMO.

This submission outlines evidence that demonstrates the need for the AER to undertake a more thorough review that takes into account credible demand forecasts, the networks' excess capacity and consumers' willingness to pay for reliability.

Recommendation 3

Applying a more appropriate degree of scrutiny to the networks' augmentation capex needs would identify that reductions to the AER's draft augmentation capex allowances of between 37-55% are required.

The AER has not subjected the networks proposed connection capex, non-network capex and capitalised overheads to an appropriate degree of scrutiny.

Recommendation 4

Applying a more appropriate degree of scrutiny to the networks' connection capex, non-network capex and capitalised overheads would identify that further reductions to the AER's draft allowances are warranted.

1.4 Operational Expenditure

The AER's benchmarking identified opex efficiency gaps of 55% for Ausgrid, 52% for Essential Energy, and 39% for Endeavour Energy.

The AER has inappropriately added highly conservative adjustments that have increased the NSW DNSPs' target opex level by between 14.6-17.1%.

Those adjustments are inconsistent with the AER's obligations under the National Electricity Law (NEL) and the National Electricity Rules (NER), and would deliver "windfall gains" to the NSW DNSPs of around $1 billion over the next regulatory period.

The NSW DNSPs are making many emotive, unsubstantiated and exaggerated claims regarding the safety and reliability implications of the AER's draft opex decisions.

This submission provides extensive evidence that demonstrates that those claims do not stand up to scrutiny, and that they do not explain how interstate DNSPs are able to deliver higher levels of safety and reliability performance for less than half of the costs of the NSW DNSPs.

Recommendation 5

The AER should strongly refute the unsubstantiated claims being made by the NSW DNSPs regarding the safety and reliability impacts of the AER's draft opex determination.

1.5 Labour Costs

The AER's decision to apply real price growth factors to the NSW DNSPs' labour prices was based on the use of inappropriate labour price forecasts that do not reflect the specific drivers of the electricity network sector.

Recommendation 6

The AER needs to use labour price forecasts that are specific to the electricity network sector. Such forecasts will confirm that labour costs should be reducing, rather than increasing.

1.6 Productivity

The AER's draft determination has not applied any productivity factors to the NSW DNSPs' opex

Recommendation 7

The EUAA expects the AER to apply productivity change rates to the NSW DNSPs' opex allowances, aimed at bringing their productivity back into line with the productivity levels being achieved by other asset intensive industry sectors.

1.7 Efficiency Benefit Saving Scheme (EBSS)

The EUAA is not confident that the AER will be able to apply the EBSS scheme to deliver genuine efficiency improvements that are in consumers' long-term interests.

Recommendation 8

The EUAA recommends that the AER should not apply the EBSS to any networks in its current revenue determinations.

1.8 Service Target Performance Incentive Scheme (STPIS)

The EUAA considers that an asymmetrical incentive scheme is needed to take account of the networks' excess capacity, and would more appropriately balance the risks to both consumers and the DNSPs.

Recommendation 9

The EUAA recommends that the AER applies an asymmetrical incentive of +1% to -3%.

1.9 Demand Management Incentive Scheme (DMIS)

The AER must consider consumers' willingness to pay for any costs resulting from the DMIS.

The NSW DNSPs claims that their consumers are supportive of their proposed demand management initiatives are untested and have not been demonstrated through any credible willingness to pay studies.

Recommendation 10

The AER needs to ensure that its decisions regarding the application of a new DMIS and any associated demand management expenditure allowances, deliver clear tangible cost benefits to consumers.

2 Putting the AER's Draft Decisions into Context

2.1 Recent Electricity Price Increases

As the AER is well aware, Australia's electricity prices have risen dramatically in recent years.

Since 2007, Australia has recorded the world's highest increases in electricity prices, resulting in Australia's electricity prices now being amongst the highest in the world[1].

This is presenting major competitiveness challenges to Australian businesses and significant hardship for residential consumers.

As the AER is well aware, numerous reviews have concluded that a large proportion of the dramatic price increases were unnecessary and arose from deficiencies in the design and implementation of the regulatory framework - deficiencies that resulted in the AER approving excessive rates of return, over-investment and inefficient expenditure on electricity network infrastructure.[2]

2.2 Outcomes from the NSW DNSPs' Previous Revenue Determinations

This submission demonstrates that the AER provided excessive expenditure allowances for the NSW DNSPs during the previous period, including:

- Weighted Average Cost of Capital (WACC) allowances well in excess of their actual cost of capital
- Excessive augmentation capex - driven by the networks' over-estimation of load forecasts
- Excessive replacement capex – resulting in the premature replacement of assets
- Excessive opex – the NSW DNSPs have been spending opex between 45-61 per cent as efficiently as interstate DNSPs
- Excessive incentive scheme payments - due to the AER setting targets well above the efficient level

As outlined in the charts overleaf, this resulted in the NSW DNSPs' revenues and prices more than doubling during the previous period, and they are seeking to increase their revenues over the next regulatory period.

All deliberations on this revenue determination must be considered within that context.

[1] UBS estimates 2013, Electricity Prices in Australia: An International Comparison, EUAA, 2012

[2] Electricity Network Regulatory Frameworks: Productivity Commission Enquiry Report, 9 April 2013
AEMC Final Position Paper: National Electricity Amendment (Economic Regulation of Network Service Providers) Rule 2012
Putting the customer back in front: How to make electricity cheaper. Grattan Institute, December 2012
Update Paper 8: Transforming the Electricity Sector. Garnaut R. (2011)

Figure 1: Ausgrid total revenue

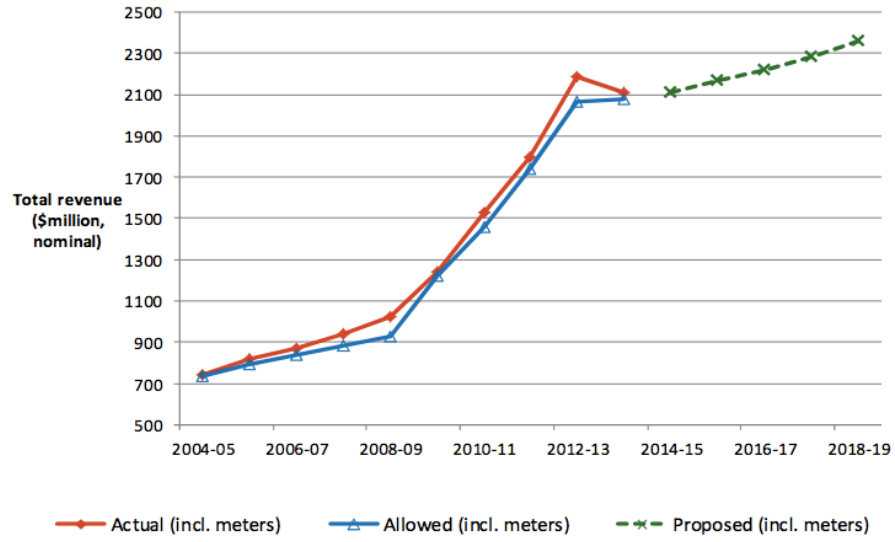


Figure 2: Endeavour Energy total revenue

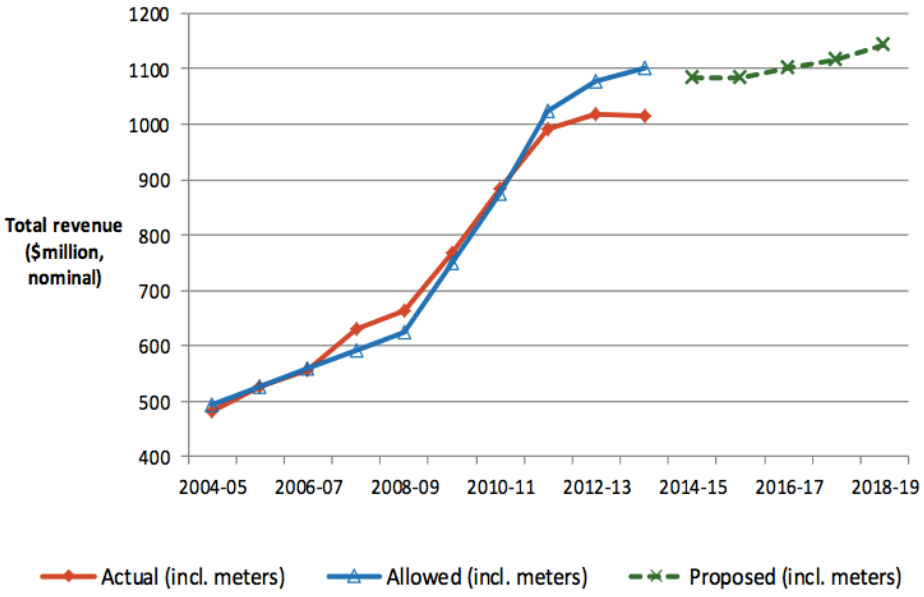
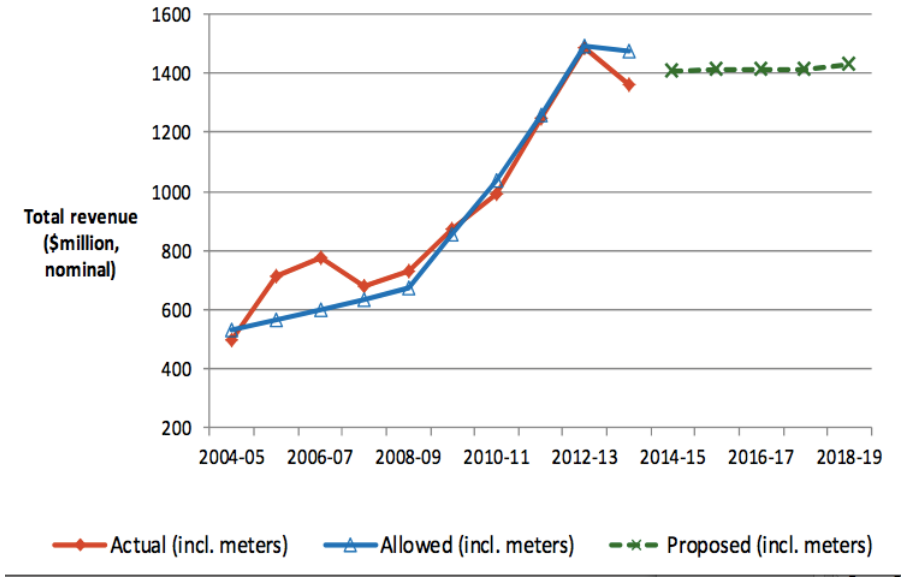


Figure 3: Essential Energy total revenue



2.3 What We Should Be Seeing - Significant Price Reductions

The NSW distributors are currently experiencing very different business drivers compared to the circumstances that they claimed to exist when the AER last reviewed their revenue proposals in 2008.

In particular, there are a number of drivers that are producing significant downward pressure on costs, including:

- **Significantly lower cost of capital requirements** - the current costs of finance are significantly lower than the record high cost of capital allowances that the AER set for the distributors for the 2009-14 period. Consequently, significantly lower rates of return are now more appropriate
- **The significant downturn in electricity demand and consumption** - demand and consumption dropped over the previous regulatory period and are expected to remain flat over the next period
- **Less onerous network security and reliability standards** – the major network investments over the previous two regulatory periods are now delivering reliability levels well above the requirements of the revised reliability standards introduced in 2014, and well in excess of 'consumers' willingness to pay' levels
- **Excess system capacity** - over-investment in the networks over the previous two regulatory periods has resulted in major levels of excess capacity and declining network utilisation
- **The NSW Government Network Reform Program** - aimed at delivering major savings in capital and operating costs across the NSW electricity network businesses

The above drivers should result in the NSW DNSPs' prices reverting to price levels that applied prior to the previous regulatory period.

2.4 The AER's Draft Determinations

Rather than delivering the major price reductions that consumers justifiably expect, the AER's draft determination would result in the NSW DNSPs' prices being retained at the average levels that applied during the previous regulatory period.

This unacceptable outcome arises from major deficiencies in the AER'S Draft Determinations, including:

The provision of an excessive WACC allowance – based on insufficient consideration of relevant information, and an inappropriate application of the discretion that the AER has been afforded under the Rules

The provision of excessive capex allowances - due to insufficient scrutiny of the DNSPs' capex proposals

The provision of excessive opex allowances - due to the AER applying inappropriate adjustments to the DNSPs' efficient base year opex determinations

The EUAA's detailed perspectives on the above issues are outlined within this submission.

3 Return on Capital

3.1 The NSW DNSPs' Extraordinary Profitability

The Rules require the AER to consider the networks' actual profitability when making its WACC determinations.

Various stakeholders, including the EUAA, have consistently outlined that the NSW DNSPs' actual profitability is much higher than the returns assumed by the AER's WACC determinations.

A key deficiency in the AER's return on equity determinations is that they fail to appropriately consider the impact of the network valuation rules on the networks' 'equity'.

The network valuation rules allow the networks to inflate their asset values each year by CPI indexation - an approach that is unique to Australia. These arrangements have resulted in grossly inflated asset values and 'equity' levels.

The networks typically account for their asset indexation within "revaluation reserves". The networks' "revaluation reserves" now account for a very high proportion of their 'book equity'.

It is very important to note that the AER's methodology for determining the networks' return on equity allowances is based on benchmarks that assume that the networks' assets are valued at their actual historic costs - i.e. the AER's calculations do not consider that the networks' equity includes asset revaluation reserves.

The table overleaf illustrates the implications of the asset indexation rules on the NSW DNSPs' 2012/13 'return on equity':

Table 1: NSW DNSP net profit after tax and return on equity

	Ausgrid		**Essential Energy**		**Endeavour Energy**	
Net Profit After Tax	$706.2 M		$350.1 M		$306.5 M	
	Return on Equity		**Return on Equity**		**Return on Equity**	
Equity (including revaluation reserves)	$4,190.5 M	16.9%	$1946.8 M	18%	$1586.2 M	19.3%
Equity (excluding revaluation reserves)	$1201.3 M	**58.8%**	$787.2 M	**44.5%**	$657.9 M	**46.6%**
Contributed Equity	402.1 M	176%	130.5 M	268%	$335 M	91.5%

The AER's return on equity allowances (excluding revaluation reserves) for the NSW DNSPs' for the previous regulatory period was 11.82%.

However, as illustrated in the above table, the NSW networks' return on equity levels (excluding revaluation reserves) were between 44.5% - 58.8% - **i.e. the NSW DNSPs' actual return on equity was around 4-5 times the level that the AER assumed in its return on equity allowances**.

The above table also indicates that:

- The NSW DNSPs achieved returns on their "inflated equity" of between 16.9 % - 19.3%
- The NSW DNSPs achieved returns on their 'contributed equity' of between 91.5% - 268%
- Ausgrid and Essential Energy's equity levels (including revaluation reserves) have grown to 10-15 times their contributed equity

It is also very important to note that the NSW DNSPs' actual returns are around 30% higher than the above figures, as their owner (the NSW government) also collects their 'tax payments'.

These are clearly extraordinary returns and are well in excess of the returns being achieved by the best performing ASX50 entities. Importantly, these returns are being achieved despite the NSW networks being amongst the least efficient DNSPs in the National Electricity Market (NEM).

The EUAA notes that the NSW DNSPs' are currently making a number of unsubstantiated, emotive and exaggerated claims regarding the consequences of the AER's draft determinations on their financial sustainability and the safety and reliability of their operations.

The EUAA has responded to those claims within the relevant sections of this submission.

With regard to financial sustainability, as outlined within this submission, the AER's draft determination would result in the NSW networks continuing to deliver excessive returns over the next regulatory period.

3.2 The AER's Draft Rate of Return Determination

The table below outlines the AER's draft WACC determinations for the NSW DNSPs.

The AER's draft determination provides an overall rate of return of 7.15 per cent, based on a total return on equity of 8.1% and a return on debt of 6.51%.

Table 2: The AER's Draft Rate of Return Decision for the NSW DNSPs

	2015–19 NSW DNSPs' proposals	**2015–19 AER draft decision**
Nominal risk free rate (cost of equity)	4.78%	3.55%
Equity risk premium	5.33%	4.55%
MRP	6.5%	6.5%
Equity beta	0.82	0.7
Gearing ratio	60.0%	60.0%
Inflation forecast	2.50%	2.50%
Nominal post–tax return on equity	10.11%	8.1%
Nominal pre–tax return on debt	7.98%	6.51%
Nominal vanilla WACC	**8.83%**	**7.15%**

3.2.1 The AER's Draft Return on Equity Determination

The AER's Return on Equity determination approach can be summarised as follows:

The AER used the Sharpe–Lintner capital asset pricing model (SLCAPM) as the foundational model for estimating expected equity returns.

There are two key input parameters for the SLCAPM model – the Market Risk Premium (MRP) and the Equity Beta.

In accordance with its Rate of Return Guideline, the AER applied a MRP of 6.5, and an equity beta of 0.7.

This resulted in an equity risk premium (ERP) of 4.55% - i.e. the product of the 6.5% MRP and the 0.7 equity beta.

The AER then determined a total return on equity of 8.1% by adding the risk free rate of 3.55% (the prevailing risk free rate 20 days prior to the draft decision) to the 4.55% ERP.

3.2.2 The AER's Draft Return on Debt Determination

The AER determined its return on debt estimate by using the "trailing average" approach, in accordance with the AER's Rate of Return (ROR) Guideline.

This is a change from the AER's previous approach, which was to apply an "on-the-day" approach.

The AER's return on debt estimate incorporates a transition from the "on-the-day" approach to the new "trailing average" approach.

The AER adopted a 10 year term for the return on debt with a BBB+ credit rating.

The AER uses the debt yields from a third party data provider for estimating the return on debt. The AER reviewed the data from Bloomberg (BVAL curve) and the RBA and decided that neither of the curves were directly implementable in their published form.

However, the AER applied an average of the two data series in its determination of the DNSPs' return on debt allowances.

This resulted in an estimated return on debt allowance of 6.51 per cent.

3.2.3 The EUAA's Perspectives on the AER's WACC Determination Approach

The EUAA is deeply concerned that the AER's application of its new Rate of Return guideline to the NSW draft determinations has resulted in the provision of excessive WACC allowances.

The EUAA considers that this is the result of insufficient consideration of relevant information, together with the inappropriate application of the discretion that the AER has been afforded under the Rules.

3.2.4 Insufficient Consideration of Relevant Information

The new rules provide the AER with a good deal of flexibility and discretion in determining the appropriate rate of return. The AER is required to consider to a range of factors, including "relevant estimation methods, financial models, market data and other evidence". [3]

The EUAA and other stakeholders have consistently drawn the AER's attention to relevant information that the AER needs to consider when making its WACC determinations.

As outlined within the EUAA's submission to the Senate Inquiry into the Performance and Management of Electricity Network Companies[4], all of the available evidence demonstrates that:

- Australia's electricity networks are far more profitable than the AER assumes
- Equity markets and investors are valuing regulated businesses significantly higher than their regulated asset bases (RABs) – with some valuations at over 150% of RAB
- Lenders are lending to the regulated business at significantly lower rates than the 'cost of debt' allowances provided by the AER
- The AER has inappropriately applied the discretion it has been provided under the new rules, by selecting WACC input parameters at the top end of the possible ranges
- The AER has consistently set higher WACCs than other comparable regulators in Australia and overseas

[3] NER, clause 6.5
[4] EUAA Submission - Senate Inquiry into the Performance and Management of Electricity Network Companies, November 2014

3.2.5 Inappropriate Use of the AER's Discretion

The recent rule changes were aimed at providing the AER with additional strength and flexibility, providing high-level principles to guide the estimation, and leaving the judgment as to the best approach to the AER's discretion.

However, in applying the new rules to the NSW DNSPs' WACC determinations, the AER has inappropriately selected WACC input parameters at the top end of the possible ranges.

The EUAA recommends the AER exercise its discretion in a more balanced manner.

The EUAA hereby provides our specific comments on the AER's determination of the individual WACC parameters.

3.2.6 Risk Free Rate

The AER's draft WACC determination has incorporated a risk free rate of 3.55%. This was calculated (in accordance with the AER Rate of Return Guideline) as the prevailing risk free rate 20 days prior to its draft decision.

The AER has no discretion over the determination of the risk free rate, and that the risk free rate has reduced by 0.75% since the date of the AER's Transitional Decision.

It is also noted that the risk free rate is the only return on equity parameter that has changed compared to the AER's its transitional decision - **i.e. the only difference between the AER's Transitional WACC determination and its Draft WACC determination is due to changes in the risk free rate**.

The EUAA is extremely disappointed that the AER has not made any adjustments to the WACC parameters over which it has some discretion, despite the extensive evidence that demonstrates that the AER's WACC parameters are delivering cost of capital allowances well in excess of the networks' actual cost of capital.

3.2.7 Market Risk Premium (MRP)

The EUAA's previous submission[5] provided evidence to support a market risk premium (MRP) being set at the bottom of the range (i.e. 5.0%).

As the AER is aware, that position was supported within various stakeholders' submissions[6] that highlighted that the regulatory framework for Australia's monopoly networks provides an extremely low business risk environment, and that an MRP of significantly below 6.5% is more appropriate.

3.2.8 Equity Beta

The AER's draft determination incorporated an equity beta of 0.7 – i.e. the top end of the range of the 0.4-0.7 range outlined in the AER's Rate Of Return (ROR) Guideline.

As outlined in the EUAA's previous submission, Professor Olan Henry's April 2014 expert report [7] commissioned by the AER as part of its Better Regulation Program, produces calculations of empirical estimates of equity beta that are consistent with the AER's Guideline.

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[5] EUAA Submission to NSW DNSPs' 2014/15-18/19 Revenue Proposals
[6] Henry O. T., Estimating Beta: An Update, April 2014
[7] Henry O. T., Estimating Beta: An Update, April 2014

Professor Henry recommended an equity beta range of 0.3 to 0.8, slightly wider than the range specified in the AER's Guideline. Of the nineteen calculations on which Professor Henry based his recommended range, most of the calculations were clustered at the lower end, with fourteen calculations between 0.3 and 0.5, as outlined in the table below.

Table 3: Equity betas calculated by Professor Olan Henry, rounded and ordered by value

Table 2	0.3 0.3 0.3 0.3 0.3 0.6 0.7 0.9 1.0
Table 14	0.4 0.5 0.5 0.5 0.5
Table 16	0.4 0.4 0.4 0.5 0.7

Consequently the EUAA considers that an equity beta at the low end of the AER's ROR Guideline range (i.e. 0.4) more accurately reflect the empirical data available.

Submissions by various stakeholders have also suggested that a lower equity beta would be much more appropriate.

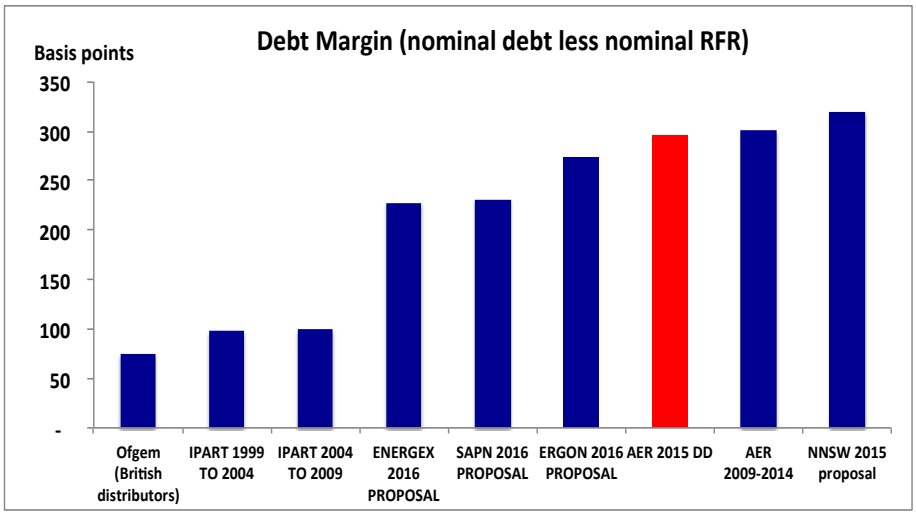
3.2.9 Return on Debt

The AER's draft return on debt allowance of 6.51% represents a debt margin (nominal debt less the nominal risk free rate) of 2.96%.

The chart below highlights how this debt margin compares with previous debt margin allowances provided by the AER and other regulators. [8]

This highlights that the AER is proposing to provide a debt margin of the same level that it provided for the previous regulatory period – i.e. the record high debt margin that the AER provided to the networks during the GFC, and significantly higher than any previous debt margin allowance provided to date.

Figure 4: Debt margin



[8] CCP Presentation to AER Public Forum, 8 December 2014

3.2.10 The Use of BBB+ Ratings

The AER claims that it has used BBB+ ratings in the development of its return on debt allowances.

However it is well understood that due to limitations in the availability of Australian BBB+ data, in practice BBB ratings are used. Consequently the AER's cost of debt determination has predominantly been based on more expensive debt ratings – i.e., the AER has provided significantly higher cost of debt allowances than appropriate.

In addition, it is also well known that the DNSPs' actual borrowing costs are much lower than the costs implied by their credit ratings. For example, the NSW DNSPs are provided with debt based on the NSW Treasury Corporation credit rating of AAA.

The outcome of the above discrepancies was demonstrated by the *Energy Users Rule Change Committee (EURCC) in its* 2011 rule change proposal [9]. In that proposal, the EURCC performed an analysis of the differences between the 'return on debt' allowances and the actual debt costs of Australia's electricity networks, demonstrating that:

- The average actual cost of debt for publicly owned networks was around 350 basis points below the allowances provided by the AER
- The average actual cost of debt for privately owned networks was around 250 basis points below the allowances provided by the AER
- These differences delivered 'windfall profits' to Australia's electricity networks of around $1.2 billion in 2011, resulting in network prices being 12% higher than they would have been if their 'cost of debt' allowances had been based on their actual debt costs

The EUAA strongly asserts that the AER's draft cost of debt allowance of 6.51% is well in excess of the actual debt costs that the NSW DNSPs' will incur, and will result in the networks continuing to deliver extraordinary windfall profits over the next regulatory period. This is clearly not in consumers' long-term interests.

3.2.11 The EUAA's Recommendations on the AER's Return on Capital Determination

In light of the above, the EUAA recommends the following changes to the AER's draft AER's return on capital determination.

Table 4: EUAA recommendations for return on capital

	AER draft decision	EUAA Recommendations
Nominal risk free rate (cost of equity)	3.55%	3.55%
Equity risk premium	4.55%	2.0%
MRP	6.5%	5.0%
Equity beta	0.7	0.4
Gearing ratio	60.0%	60.0%
Inflation forecast	2.50%	2.50%
Nominal post–tax return on equity	8.1%	5.55%
Nominal pre–tax return on debt	6.51%	5.5%
Nominal vanilla WACC	**7.15%**	**5.52%**

[9] Energy Users Rule Change Committee: Proposal to change the National Electricity Rules in respect of the calculation of the Return on Debt, October 2011

4 Capital Expenditure

The NSW DNSPs are currently facing very different business drivers compared to the circumstances that they claimed to exist when they were awarded record-high capex allowances for the previous regulatory period.

There are a number of drivers that are producing significant downward pressure on the networks' capex requirements, including:

- **The significant downturn in electricity demand and consumption** - demand and consumption dropped over the previous regulatory period and are expected to remain flat over the next regulatory period.
- **Less onerous network security and reliability standards** – the major network investments over the previous two regulatory periods are now delivering reliability levels well above the requirements of the revised reliability standards introduced in 2005, and well in excess consumers' willingness to pay levels
- **Excess system capacity** - over-investment in the networks over the previous two regulatory periods has resulted in major levels of excess capacity, declining network utilisation and significantly younger networks
- **Reforms driven by the NSW Government** - aimed at delivering major savings in capital and operating expenditures across the NSW electricity network businesses

In light of these drivers, it is expected that the NSW networks' capex requirements will revert to the levels that applied prior to the previous two regulatory periods.

4.1 Comparison with Historical Capex

Figure 5 to Figure 7 outline the NSW DNSPs' actual/ proposed capex from 2001 to 2019[10]. They illustrate that:

- The DNSPs proposed capex levels are still very high compared to their historical averages
- The networks' proposed capex levels are higher than their capex spend for the 2004-09 period - a period that involved major increases in capex to meet the excessive reliability standards introduced in 2005
- The networks' proposed capex levels are between 2-3.5 times their capex spend levels for the 1999-2004 regulatory period – the period with capex expenditure drivers closest to the current circumstances

Clearly, the networks' proposed capex levels do not reflect the major capex reduction drivers outlined above.

[10] Source: Historical: IPART Regulatory Accounts (prior to 2010/11) and AER Annual RINs (2010/11 to 2013/14)

Figure 5: Essential Energy total capex —historical and forecast for 2014–2019 period

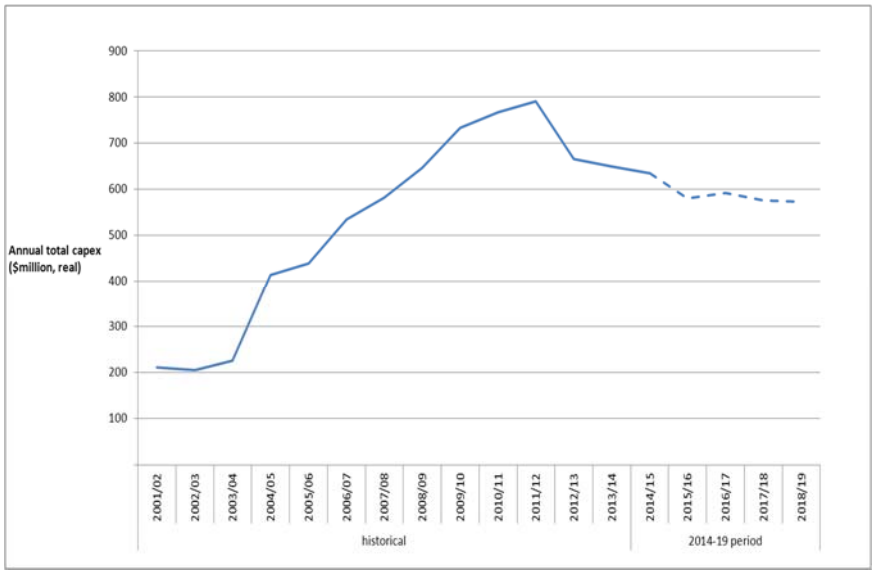


Figure 6: Ausgrid total capex —historical and forecast for 2014–2019 period

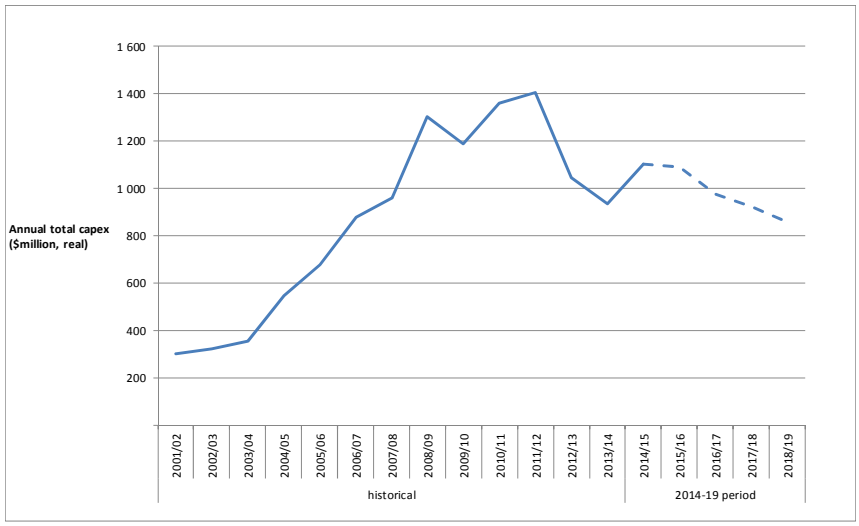
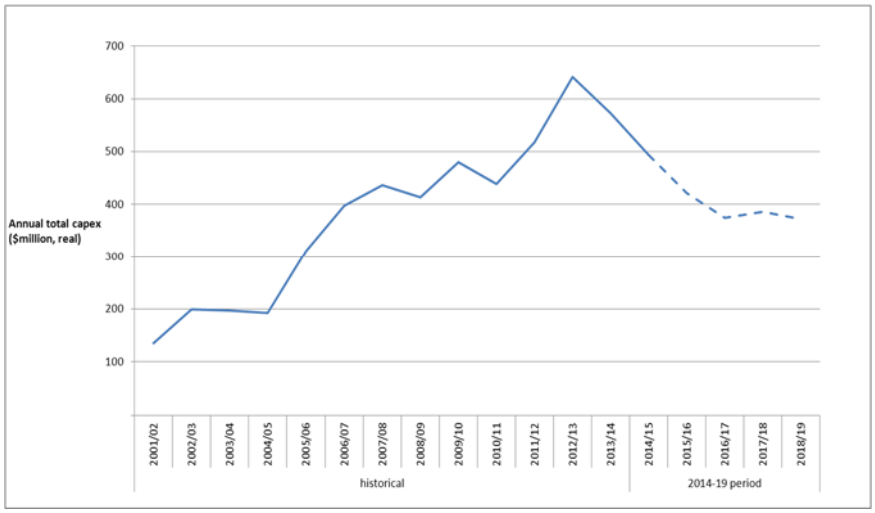


Figure 7: Endeavour Energy total capex —historical and forecast for 2014–2019 period



4.2 The NSW DNSPs' Capex Forecasting Methodologies and Assumptions

To ascertain the reasons for the DNSPs' high capex forecasts the AER performed an analysis of the DNSPs' forecasting methodologies and assumptions.

This analysis identified a number of deficiencies with the networks' capex forecasting methodologies and their associated governance arrangements and assumptions, including:

- **An Over-Reliance on "Bottom Up" Forecasting Methodologies**

The NSW DNSPs' capex forecasts were predominantly based on 'bottom-up' methodologies, with insufficient regard to top-down considerations. Bottom-up assessments have a tendency to overstate expenditure requirements as they do not adequately account for inter-relationships and synergies between projects or areas of work, which are more readily identified at a portfolio level.

Supplementing bottom-up forecasts with top-down assessments is essential for ensuring that some level of overall restraint has been brought to bear.

- **Overly Conservative Risk Management/Risk Assessments**

The DNSPs' capex forecasts were based on risk-averse and excessively conservative risk assessments, together with multiple contingency allowances that systematically overstate project risks and costs

- **Inadequate Project Justifications**

The networks' proposed capex projects were very poorly justified, e.g.:

- Insufficient justifications of the demand drivers for augmentation projects
- Insufficient justifications of asset conditions for replacement capex
- Insufficient justifications of reliability drivers and consumers' willingness to pay for reliability capex
- Insufficient justifications of the prioritisation and timing of projects/programs over both the short and long-term

- **Non-Credible Assumptions**

The manner in which the networks have formulated and applied their key assumptions in relation to demand, customer forecasts, reliability drivers and materials and labour escalation rates was strongly biased towards over-estimating their capex requirements

4.3 Capital Efficiency

The AER's benchmarking results [11] identified that the NSW DNSPs' capital efficiency levels are significantly lower than the levels achieved by other DNSPs in the NEM.

As illustrated in Figure 8 below, the AER's Multilateral Total Factor Productivity (MTFP) results indicate that Essential Energy is the least productive distributor in the NEM and Ausgrid is the fourth least productive.

[11] AER Annual Distribution Benchmarking Report, November 2014

Figure 8: Multilateral total factor productivity for each distributor

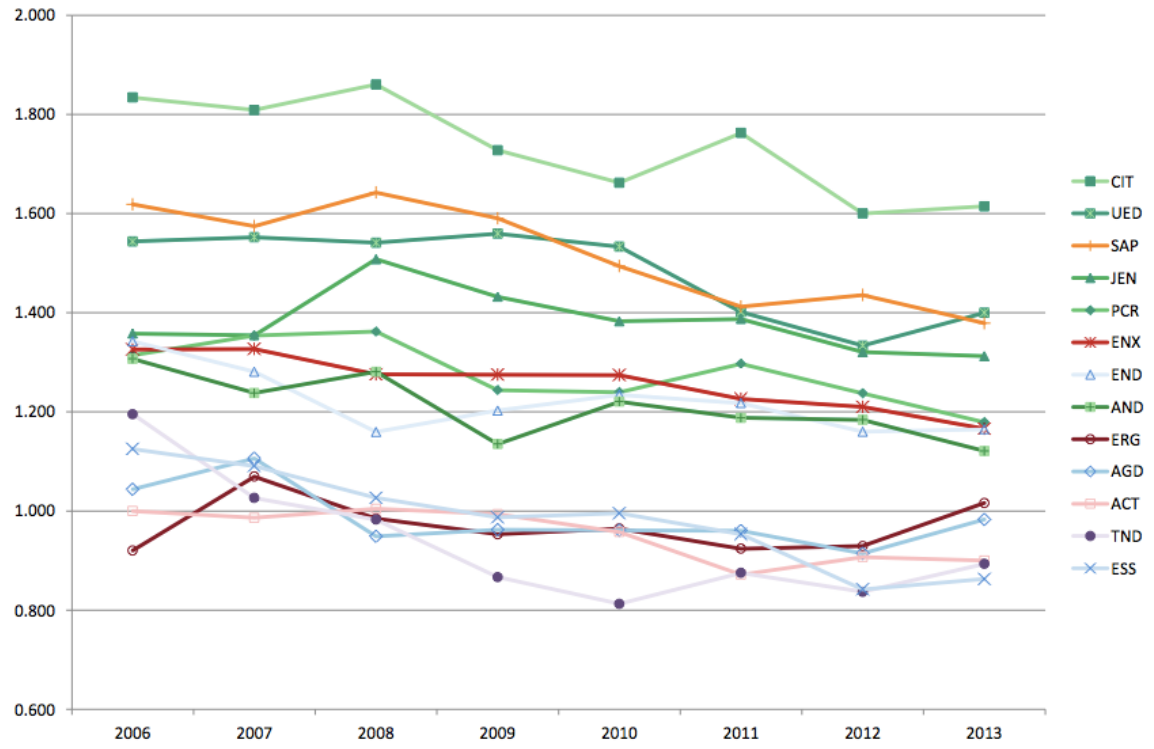
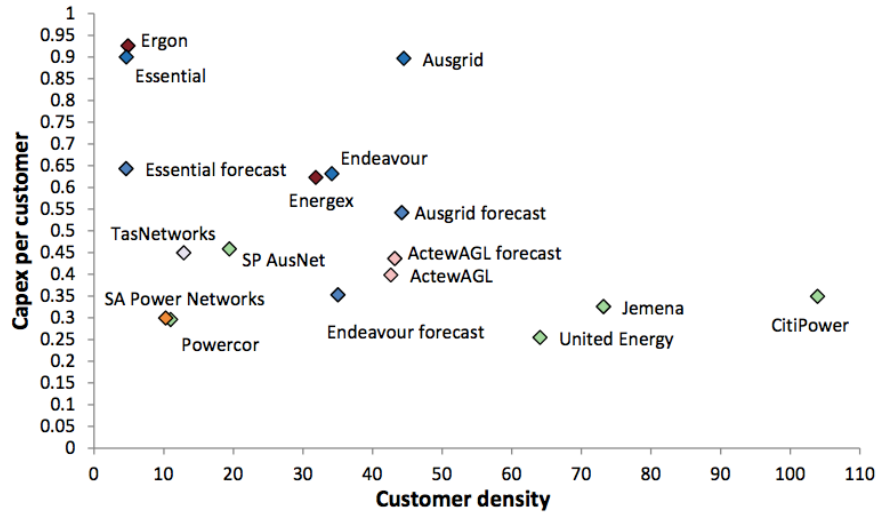


Figure 9 and Figure 10 overleaf illustrate that:

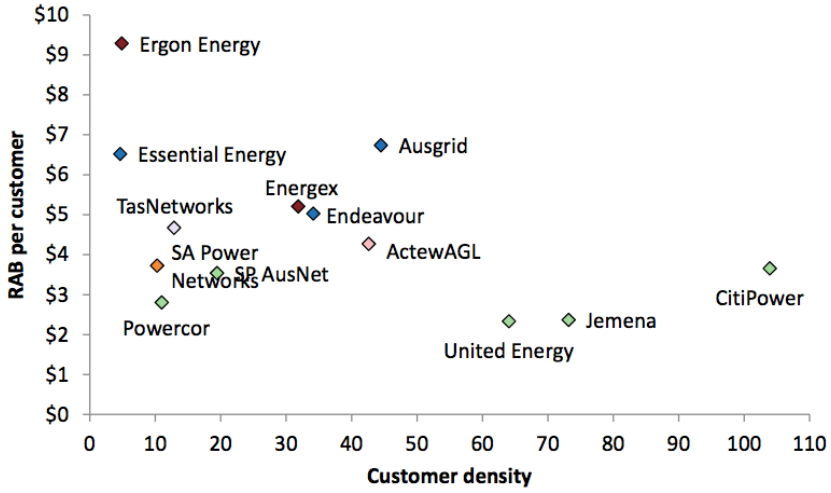
- Essential Energy and Ausgrid had very high levels of 'capex per customer' at around 4 times the levels of the Victorian DNSPs.
- Endeavour Energy's capex per customer was also high at around 2.5 times the levels of the Victorian DNSPs
- Essential Energy and Ausgrid had very high levels of 'RAB per customer' with levels of around 3.5 times the Victorian DNSPs.
- Endeavour Energy's RAB per customer was also high at around 2.5 times the levels of the Victorian DNSPs.

Figure 9: Capex per customer (000's, $2013-14) vs customer density



Source: AER analysis.

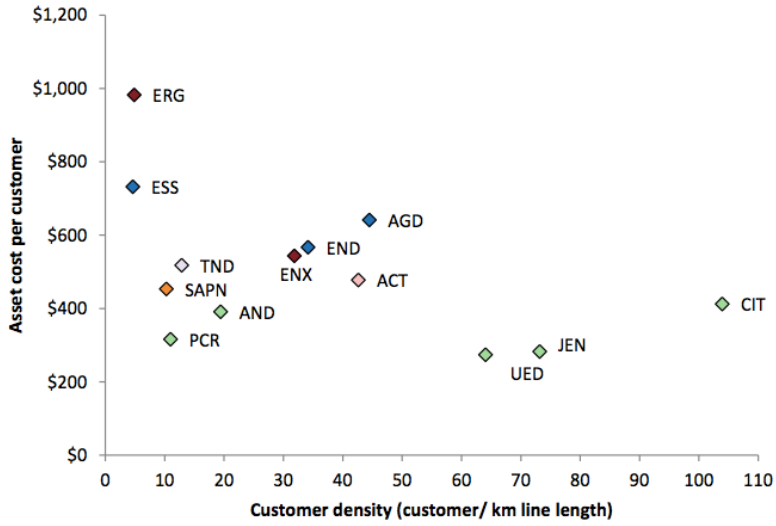
Figure 10: RAB per customer (000's, $2013-14) vs customer density



Source: AER analysis

Figure 11 overleaf illustrates that the NSW DNSPs had high asset costs per customer, with levels of between 2-2.5 times the costs of the Victorian DNSPs.

Figure 11: Asset cost per customer compared to customer density (average 2009-2013)



The above evidence indicated that there was the potential for significant efficiencies to be found in the NSW DNSPs' forecast capex, and that their forecasts were unlikely to meet the capex objective.

The AER was therefore required to develop substitute capex forecasts.

4.4 The AER's Substitute Capex Forecasts

The EUAA outlines below our perspectives on the AER's capex assessment approach and the conclusions it reached for each element of the DNSPs' capex.

4.4.1 Replacement Capex

Replacement capex is more predictable than growth-related capex. In general, repex levels are expected to remain relatively constant over time.

Figure 12 to Figure 14 outline the NSW DNSPs' networks' historical and proposed replacement capex. These charts highlight that all three NSW DNSPs are proposing major increases in their replacement capex spend.

Figure 12: Essential energy's historic actual and proposed repex for 2014–2019 period ($2014)

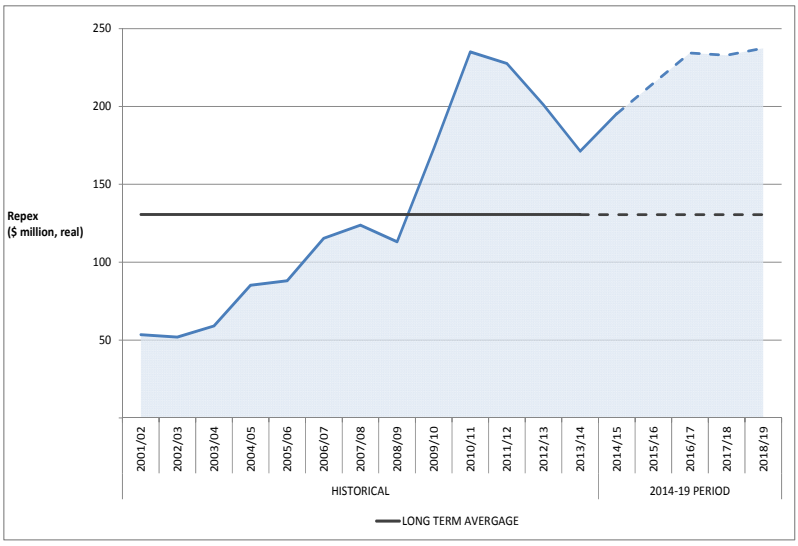


Figure 13: Endeavour Energy's historic actual and proposed repex for 2014–2019 period (real $ million June 2014)

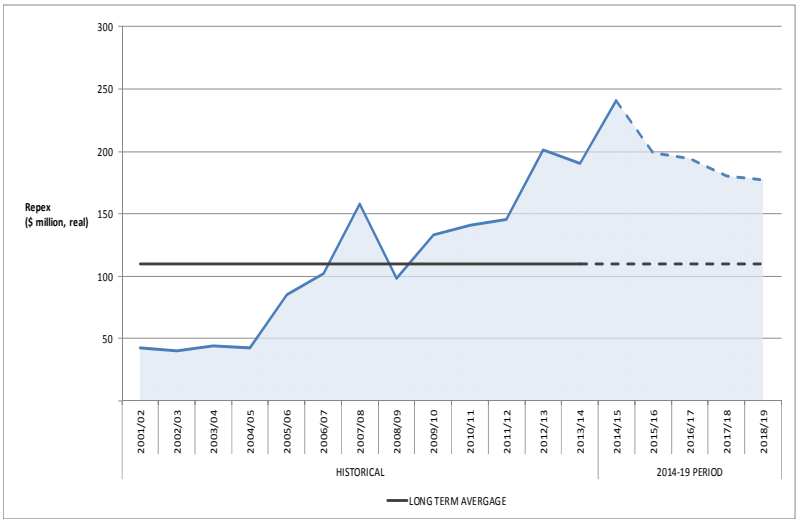
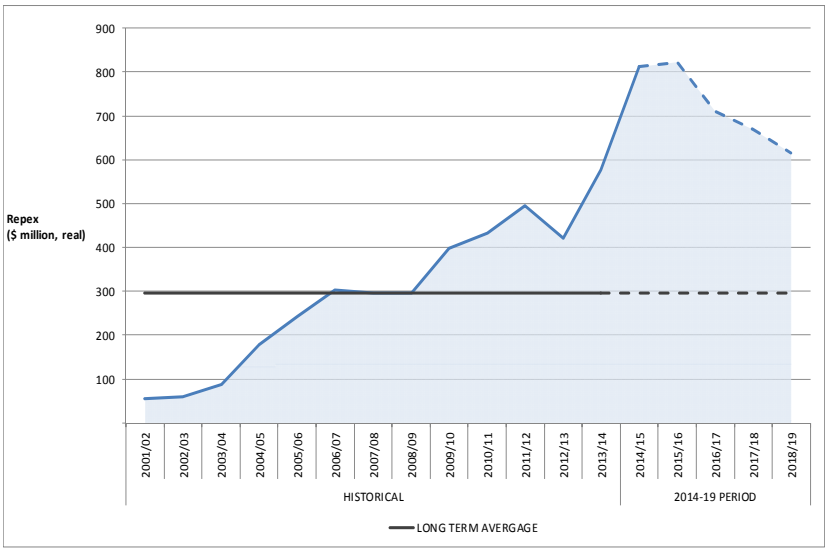


Figure 14: Ausgrid's historic actual and proposed repex for 2014-19 period (real $ million June 2014)



The AER identified a number of issues with the NSW DNSPs' repex proposals, including:

- The networks' forecast repex significantly exceeded their historical averages
- The networks' repex proposals compared unfavourably with other DNSPs in the NEM being higher on a number of benchmarks, taking into account their different network sizes and other circumstances
- The networks' repex proposals were based on overly conservative risk criteria that systematically overstated their costs and did not adequately justify the timing of their proposed repex at the project or program levels
- Network health indicators concerning asset conditions did not support the DNSPs' significant increases in proposed repex. Rather, the networks' proposals inappropriately relied on network age and condition information that was inconsistent and contradictory
- The engineering reviews performed by the AER's independent experts found that there were systemic issues with the networks' repex forecasts that resulted in their proposals significantly overstating their repex needs.
- The independent experts' reports identified that the networks are highly likely to be routinely replacing many assets earlier than necessary
- The networks' substantial increases in spare network capacity during the previous regulatory periods provides an operating environment that should reduce the rate of deterioration of their assets over the next regulatory period

In light of the above evidence, the AER concluded that the NSW DNSPs' replacement capex proposals were significantly overstated and that their actual replacement requirements are materially lower.

Consequently, the AER was required to develop substitute replacement capex forecasts.

4.4.2 The AER's Substitute Replacement Capex Forecasts

The AER's substitute replacement capex forecasts determined total replacement capex allowances for the NSW DNSPs of over $3.1 billion, as outlined in the table below.

Table 5: The AER's Draft Replacement Capex Allowances ($2013-14):

	NSW DNSPs Proposals	AER Draft Determinations	Reduction
Ausgrid	$3,107 M	$1768.9 M	43.1%
Essential Energy	$856.0 M	$675.8 M	21.1%
Endeavour Energy	$1020.7 M	$661.0 M	35.2%
Total	**$4,984 M**	**$3,105 M**	**37.7%**

4.4.3 The EUAA's Perspectives on the AER's Draft Repex Allowances

The EUAA considers that the AER's approach to assessing the NSW DNSPs' repex allowances represented an improvement compared to the approach that the AER applied to its previous determination.

However, the EUAA considers that the AER's repex assessment approach was too high level and that the AER did not apply the degree of rigour required to fully address the major deficiencies with the networks' repex forecasts identified above.

This is particularly concerning in light of the record-high levels of repex proposed by the DNSPs.

The EUAA outlines below the key issues that it believes the AER did not appropriately consider in its draft repex determinations.

4.4.4 Asset Age Trends

The networks' proposals did not provide any substantial justifications for their major proposed increases, other than some unsubstantiated statements suggesting that their assets are ageing.

However, the AER's analysis of the networks' asset age trends concluded that that the residual lives of the DNSPs' assets have been relatively stable. In fact, the AER's analysis concluded that the residual life of Ausgrid's assets has been increasing since 2006.

4.4.5 Asset Condition

The DNSPs' repex proposals provided very scant details of asset condition information.

It is well understood that average asset age is a very simplistic indicator and not a credible measure of the "health" of a network. Credible asset replacement justifications need to be based on robust assessments of asset condition, together with risk assessments that transparently identify the risks of replacement versus alternative options (e.g. revised maintenance strategies, refurbishments and other risk mitigation options).

Such assessments were not provided within the NSW DNSPs' repex proposals and were not performed by the AER in its draft repex determinations.

The EUAA considers that this is a very critical omission in the AER's draft repex determinations.

The EUAA expects the AER to undertake a much more thorough assessment of the networks' actual asset condition information; involving robust, transparent and independent assessments of asset condition and risk assessment information.

The AER's assessment also needs to:

- Compare the risks of replacement versus alternative options and ensure that alternative options to asset replacement (e.g. revised maintenance strategies, asset refurbishments, life extensions, and other risk mitigation options) have been appropriately considered
- Consider timing considerations – including options to defer timings and/or to undertake interim work
- Ensure that re-use strategies have been appropriately considered

4.4.6 System Utilisation

System utilisation is a key consideration that the AER needs to take into account in its determination of replacement capex allowances.

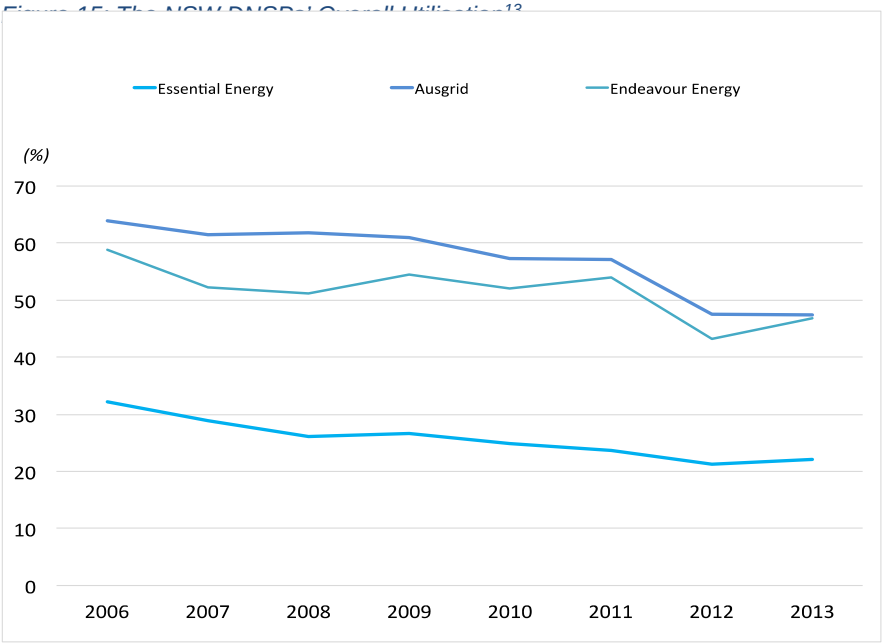
The chart overleaf outlines the declines in the DNSPs' system utilisation over the past 7 years.

The AER's draft determinations acknowledged the networks' declining utilisation and the significant growth in the networks' excess capacity.

The AER's draft determinations also acknowledged that the major increases in the networks' spare capacity, together with flat/declining load trends, means that the NSW DNSPs' assets will be ageing at reduced rates compared to previous periods.

However, the above issues did not materially affect the AER's repex determinations. As stated by the AER:

"Consideration of trends in the networks' asset utilisation - was only used to a limited extent in this assessment" [12]



The EUAA considers that the above issues are much more material to the determination of the networks' repex needs than the AER's assessment has determined.

The EUAA therefore expects the AER to apply greater scrutiny to the DNSPs' repex needs, taking into account the implications of the networks' declining utilisation and excess network capacity.

4.4.7 Replacement Spend in Previous Periods

As highlighted above, the NSW DNSPs have proposed record high levels of replacement capex spend, despite having undertaken major replacement capex programs over the previous regulatory periods.

Whilst the AER's assessment of the DNSPs' repex proposals acknowledged these trends, the EUAA does not consider that the AER's draft repex determinations have fully considered the impacts of the DNSPs' major replacement capex programs over previous regulatory periods.

In particular, the EUAA asserts that the DNSPs' previous replacement capex programs have effectively 'pre-installed' of a good deal of their replacement capex requirements for the next regulatory period.

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12 AER Draft Decisions for the NSW DNSPs , November 2014

13 CCP Submission to NSW DNSPs Revenue Proposals

4.4.8 The EUAA's Recommendations on the AER's Draft Repex Determinations

The EUAA expects the AER to perform a more thorough review of the DNSPs' repex needs, involving the following considerations:

- Robust assessments of asset condition and risk assessment information
- Comparisons of the risks of replacement versus alternative options (e.g. revised maintenance strategies, asset refurbishments, life extensions, and other risk mitigation options) and ensuring that such alternatives have been appropriately considered
- Accounting for the implications of the networks' declining utilisation and excess network capacity
- Taking into account the extent to which the DNSPs' previous replacement capex programs have 'pre-installed' their replacement capex requirements for the next regulatory period
- Timing considerations – including options to defer timings and/or to undertake interim work
- Ensuring that re-use strategies have been appropriately considered

The EUAA believes that the above reviews will identify the need for reductions to the AER's draft repex determinations, within the ranges outlined in the following table:

Table 6: Expected range of repex

	AER Draft Determinations	EUAA Expected Range	Reduction
Ausgrid	$1768.9 M	$1,000 – 1,200 M	32 - 43 %
Essential Energy	$675.8 M	$350 - $420 M	38 - 48 %
Endeavour Energy	$661.0 M	$460 - $510 M	23 – 30 %
Total	**$3,105 M**	**$1810 - $2,130 M**	**37.7%**

4.5 Augmentation Capex

The AER identified a number of deficiencies with the NSW DNSPs' augmentation capex proposals, including:

- The networks' major investments in the previous regulatory periods have resulted in significant reductions in asset utilisation
- There is a large degree of excess capacity in the network that remains to be more efficiently utilised, ahead of additional augmentation investment. The NSW DNSPs' capex proposals did not take this excess network capacity into account
- The networks' demand forecasts were based on out-dated demand forecasts
- The networks' forecasts being did not sufficiently take into account the impact of the changes to the NSW licence conditions design standards that took effect on 1 July 2014
- The networks' proposed augmentation capex did not take into account the most recent changes to the value of customer reliability (VCR)

In light of the above evidence, the AER concluded that the NSW DNSPs' augmentation capex proposals were significantly overstated and that their actual augmentation capex requirements are materially lower.

Consequently, the AER was required to develop substitute augmentation capex forecasts.

4.5.1 The AER's Substitute Augmentation Capex Forecasts

The AER's substitute augmentation capex forecasts determined total augmentation capex allowances of $1.2 billion, as outlined in the table below.

Table 7: The AER's Draft Augmentation Capex Allowances ($2013-14)

	NSW DNSPs Proposals	AER Draft Determinations	Reduction
Ausgrid	$509 M	$376.4 M	26 %
Essential Energy	$744.6 M	$475.2 M	36 %
Endeavour Energy	$426.1 M	$351.8 M	17.4 %
Total	**$1.68 bn**	**$1.2 bn**	**28.3%**

The EUAA has a number of concerns with the AER's draft augmentation capex allowances. The EUAA's key issues of concern are outlined below.

4.5.2 The NSW DNSPs' Previous Demand Forecasts

As the AER is aware, the demand forecasts used by the NSW DNSPs to justify their record-high capital investment programs for the previous regulatory period were subsequently proven to be dramatically overblown. Rather than increasing significantly, as predicted by the networks, peak demand and energy delivered both reduced during the previous period.

It is important to note that when the AER set the capex allowances for the NSW DNSPs for the previous period, there were many submissions from stakeholders (including submissions from the EUAA) that strongly challenged their forecasts.

It is also very important to note that the DNSPs were rewarded with 'windfall profits' of around $1 billion over the previous period for their over-forecasting errors, as their revenue allowances included returns and depreciation on capex that they did not incur. [14]

All credible energy forecasters (including AEMO) are predicting that the recent flat/declining peak demand and energy consumption trends will continue over the next regulatory period, due to:

- Consumers responding to higher electricity prices by reducing energy use and adopting energy efficiency measures
- Increasing penetration of distributed generation, including commercial and residential photovoltaic (PV) generation
- Subdued economic growth and weaker energy demand from the manufacturing sector

[14] CCP Submission to NSW DNSPs' Revenue Proposals

- Subdued population growth
- The impacts of new building regulations on energy use and efficiency

4.5.3 The DNSPs' 2015-19 Demand and Energy Forecasts

Contrary to the above projections, as outlined in the diagrams below, the NSW DNSPs are forecasting dramatic reversals of their peak demand trends over the next regulatory period.

Figure 16: Ausgrid– proposed peak demand[15][16]

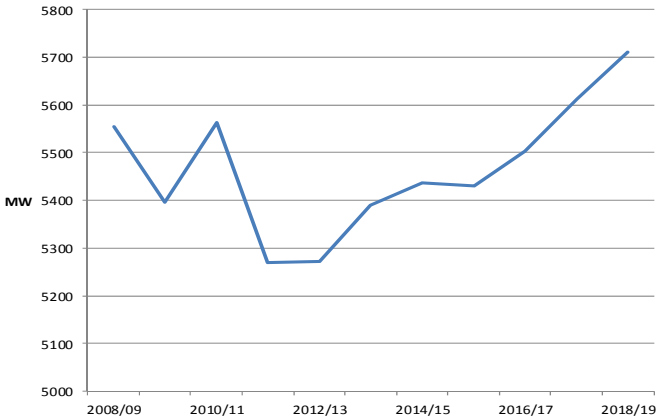
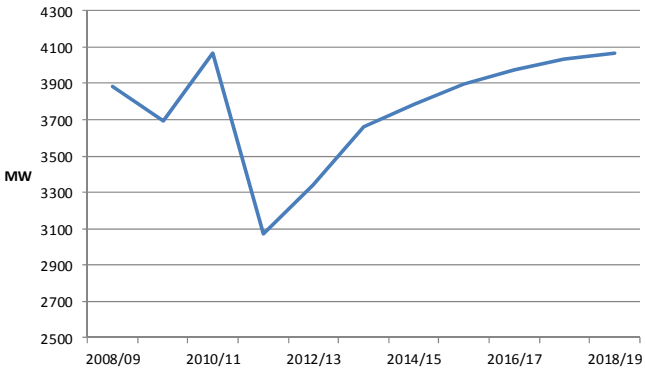
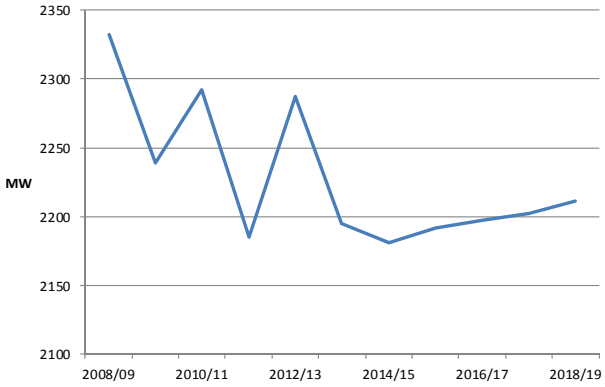


Figure 17: Endeavour Energy – proposed peak demand[17][18]



15 Ausgrid, Regulatory information notice, table 5.3, May 2014.
16 Weather corrected, 50 per cent POE, network coincident maximum demand.
17 Source: Endeavour Energy, Regulatory information notice, table 5.3, May 2014.
18 Weather corrected, 50 per cent POE, network coincident maximum demand.

Figure 18: Essential Energy – proposed peak demand[19][20]



The NSW DNSPs' demand projections are not supported by AEMO's most recent forecasts.

The EUAA therefore expects the AER to substitute the networks' demand forecasts with forecasts provided by credible independent forecasts.

The EUAA considers that this is essential, particularly in light of the NSW DNSPs' track records in realising extraordinary windfall profits from their previous demand forecasting errors.

4.5.4 The AER's "Demand Adjustments"

The AER's augmentation capex forecasts were heavily reliant on the demand forecasts provided by the NSW DNSPs.

The EUAA acknowledges that the AER made some minor "demand adjustments" to the DNSPs' proposed augmentation capex.

However, those adjustments were made by the AER in response to updated demand forecasts provided by the DNSPs.

In making these adjustments the AER simply applied a pro-rata reduction to the DNSPs' proposed augmentation capex – based on the assumption that their capex needs were directly proportional to their peak demand forecasts.

In effect, the AER accepted the DNSPs' original augmentation capex proposals and has not subjected them to any scrutiny.

The EUAA expects the AER to apply a much greater degree of scrutiny to the DNSPs' augmentation capex forecasts.

The EUAA notes that the DNSPs are claiming that their proposed augmentation capex is needed to meet "pockets of demand growth" in their networks, despite declining demand through the rest of their networks, and despite the significant number of substations that expect negative demand growth during the next period.

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19 Raw network coincident maximum demand. Essential Energy did not submit weather corrected maximum demand data.

20 Source: Essential Energy, Regulatory information notice, May 2014.

Whilst the EUAA understands that there are likely to be areas in the networks that have genuine capacity expansion needs, the EUAA does not consider that the AER's assessment process has appropriately scrutinised the networks' augmentation capex justifications.

4.5.5 Excess Network Capacity

As outlined above, the NSW DNSPs' major capex programs over the previous decade have produced significant levels of excess capacity, and significant declines in network utilisation.

For example, the networks' RAB/Peak Demand ratios have more than doubled over the past 7 years.

The AER's draft decisions acknowledged the unsustainable trends in the networks' excess capacity.

As stated by the AER:

> *"Taken together with the low demand growth, this suggests there is excess capacity in the network that needs to be utilised ahead of additional augmentation investment"*

However, the AER did not quantify the impacts of this excess capacity and did not demonstrate that it has been appropriately considered in its augmentation capex assessments.

The EUAA's analysis of the AER's draft determinations indicates that these unsustainable trends will continue.

For example, the AER's draft determination would result in Endeavour Energy's RAB growing by 27% over the next period – a period over which demand trends are expected to remain flat.

With the NSW DNSPs' returns on their RABs currently driving around 70% of their prices, the natural outcome of the continuation of these trends is the well documented "death spiral" [21] - i.e. as demand continues to decline and the move towards distributed generation increases, the burden of paying for the networks' costs will be placed on a smaller consumer base until those consumers can no longer afford to stay connected to the network.

Consequently the EUAA does not consider that the AER's draft augmentation capex determinations have fully taken into account the impacts of the networks' excess capacity.

The EUAA expects the AER to revise its draft augmentation capex allowances to ensure that the DNSPs' excess capacity is much more efficiently utilised ahead of any additional augmentation investment.

4.5.6 The Impacts of the Reduced Reliability Standards

A key driver of the NSW DNSPs' major capex programs over the previous two regulatory periods was meeting the excessive system security and reliability requirements that were introduced in 2005.

As the AER is aware, these standards have been the subject of extensive criticism by various stakeholders since their introduction, as they have been a key driver of the NSW DNSPs' over-investment and excessive price increases over the past 2 regulatory periods.

The NSW Government revised the reliability standards on 1 July 2014 moving to a less deterministic approach and requiring an economic cost/benefit approach to be undertaken to take into account the value consumers place on reliability.

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[21] The Energy Market Death Spiral - Rethinking Customer Hardship, Paul Simshauser and Tim Nelson

In essence, the new reliability standards require the NSW DNSPs to take account of consumers' expectations in terms of reliability of supply and affordability – i.e., they should only be undertaking reliability capex where the benefits clearly outweigh the costs.

Various estimates have been made regarding the anticipated cost reductions arising from the removal of the NSW design planning requirements.

For example:

- The Australian Energy Market Commission (AEMC) estimated that "capex could reduce by $140 million under the modest reduction scenario to $530 million under the extreme reduction scenario' over a five year timeframe for the three NSW DNSPs.[22]
- The Australian Energy Market Operator (AEMO) estimated that "NSW customers could save up to $50 a year on their electricity bills from 2015 without any detrimental effect to current reliability levels" [23]

It is important to note that the networks' previous capex programs have delivered a very high level of excess network capacity that will ensure that they significantly exceed the requirements of the new reliability standards for many years to come.

As noted by the AEMC:

> *"We note that significant investment has been made since the NSW distribution reliability requirements were increased in 2005 and that future investment will be incremental in order to maintain reliability at the current level"*

As outlined in the AER's draft determinations, the AER considers that the NSW DNSPs' reliability capex levels should revert to the levels that existed prior to the licence conditions being introduced: As stated by the AER:

> *"Given the recent changes in licence conditions, we consider the period prior to 2005 should be the benchmark for assessing the level of capex for the 2009–2014 regulatory control period"*

In light of the above issues, minimal reliability-driven capex should be required for the next regulatory period.

The AER is claiming that its draft determinations have addressed the implications of the reduced reliability standards by applying adjustments of 15% to Ausgrid and Endeavour Energy's forecasts and an adjustment of 20% to Essential Energy's forecast.

However, the EUAA does not consider that these adjustments sufficiently reflect the networks' reduced reliability-capex requirements.

4.5.7 The Value Consumers Place on Reliability

In October 2014, AEMO published the results of its national *Value of Customer Reliability (VCR) review*. [24] The VCR represents, in dollars per kilowatt-hour, the willingness of customers to pay for the reliable supply of electricity.

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22 AEMC, Review of Distribution Reliability Outcomes and Standards, Final Report - NSW Workstream, 31 August 2012, p. vi, http://www.aemc.gov.au/media/docs/NSW-workstream-final-report-160466c4-733b-4cf2-b4e3-4095c6d9819b-0.pdf.

23 AEMO, Submission to AEMC's Review of Distribution Reliability Outcomes and Standards, Draft Report - NSW Workstream, p. 1.

24 http://www.aemo.com.au/Electricity/Planning/Value-of-Customer-Reliability-review

The results of AEMO's study reveal that current VCRs are significantly lower than previous Australian studies.

In general, these lower VCRs indicate that consumers place less value on additional reliability-driven capex and opex if it leads to higher electricity prices – i.e., customers are more accepting of risk in terms of reliability of electricity supply.

This view is strongly supported by EUAA members. The EUAA does not support further unnecessary expenditure on reliability-driven capex, other than in specific areas in the networks where performance is particularly poor.

Based on our review of the AER's draft determination, the EUAA does not believe that the AER has appropriately considered consumers' willingness to pay for the networks' proposed reliability-driven capex, and we assert that the majority of the proposed projects would not pass credible cost/benefit tests.

We therefore expect the AER to update its capex forecasts by more appropriately reflecting the recent changes to NSW network planning and reliability standards, together with assessments of consumers' willingness to pay.

4.6 The EUAA's Recommendations on the AER's Augmentation Capex Allowances

In summary, the EUAA's recommendations on the AER's draft augmentation capex determinations are as follows:

- The AER needs to substitute the networks' demand forecasts with forecasts provided by credible independent forecasters
- The AER needs to subject the DNSPs' capex proposals to a higher degree of scrutiny, taking into account the networks' excess capacity and declining asset utilisation
- The AER needs to update its augmentation capex forecasts to more fully consider the implications of the reduced reliability standards and consumers' willingness to pay

The EUAA expects that performing the above assessment will identify the need for reductions to the AER's draft augex determinations, within the ranges outlined in the following table:

Table 8: The EUAA's Augmentation Capex Recommendations ($2013-14):

	AER Draft Determinations	EUAA Expected Range	Reduction
Ausgrid	$376.4 M	$170 - $230 M	39 - 55 %
Essential Energy	$475.2 M	$230 - $310 M	35 - 52 %
Endeavour Energy	$351.8 M	$160 - $220 M	37 - 54%
Total	**$1.2 billion**	**$560 - $760 M**	**37- 53 %**

4.6.1 Customer Connection Capex

The AER did not challenge the NSW DNSPs' forecast customer connections and capital contributions capex, and accepted their proposed capex levels in full.

The AER's justification for accepting the DNSPs' proposed customer connections capex was:

"The AER considered that they were "consistent with the forecast drivers in construction activity in commercial and industrial, and multi-dwelling residential premises"

The AER's rationale for accepting the DNSPs' proposed capital contributions capex was:

"We also accept proposed capital contributions forecast as we consider it is consistent with the DNSPs' forecast level of connection works which we are also accepting. We consider that capital contributions are mostly driven by connection and augmentation works"

The EUAA does not accept that the AER has subjected the DNSPs' connection capex proposals to an appropriate degree of scrutiny.

The EUAA appreciates that the AER has limited resources. However, there are a number of uncertainties in the networks' customer connection forecasts and the AER has received various submissions challenging the assumptions that underly their forecasts.

The EUAA expects the AER to consider those submissions and to apply a greater degree of scrutiny to the networks' forecasts.

4.6.2 Non Network Capex

The AER made some minor adjustments to the DNSPs' proposed non-network expenditure:

Table 9: The AER's Draft Non-Network Capex Allowances ($2013-14)

	NSW DNSPs Proposals	AER Draft Determinations	Reduction
Ausgrid	$307.6 M	$279.2 M	9.2%
Essential Energy	$306.4 M	$306.4M	-
Endeavour Energy	$176.4 M	$163.3 M	7.4 %
Total	**$790.4 M**	**$748.9 M**	**5.3%**

The EUAA does not accept that the AER has subjected the DNSPs' non-network capex forecasts to an appropriate degree of scrutiny.

The EUAA appreciates that the AER has limited resources. However, there are a number of uncertainties in the networks' forecasts and the AER has received various submissions challenging the assumptions that underly their forecasts.

Based on a review of the critiques of the NSW DNSPs' non-network forecasts, the EUAA considers that reductions in the order of the levels outlined in the table below are warranted.

Table 10: The EUAA's Recommendations on Non-Network Capex Allowances ($2013-14)

	AER Draft Determinations	EUAA Recommendations	Reduction
Ausgrid	$279.2 M	$195.4	30%
Essential Energy	$306.4M	$229.8M	25%
Endeavour Energy	$163.3 M	$114.3M	30%

4.6.3 Capitalised Overheads

The AER applied some reductions to the NSW DNSPs' proposed capitalised overheads.

The AER's calculation of its allowances was based on maintaining the DNSPs' historical ratios of capitalised overheads to total overheads, as follows:

- 19% for Ausgrid
- 13% for Endeavour Energy
- 32 % for Essential Energy

The EUAA does not consider that the AER's approach to determining the DNSPs' capitalised overheads is appropriate, as:

- The ratios chosen by the AER are excessive and highly variable
- The AER is required to establish costs based on efficient costs – not historical costs.

The EUAA expects the AER to determine efficient capitalised overheads costs, taking into account of the overhead levels of other DNSPs in the NEM

5 Operational Expenditure

5.1 The AER's Opex Assessment Approach

In its assessment of the NSW DNSPs' opex proposals, the AER adopted the well recognised *base-step-trend* approach, i.e.:

- **Determination of the efficient base year opex** - using various techniques including benchmarking, trend analysis, category analysis, etc.
- **Determination of rate-of-change factors** - determination of escalation factors to take account of likely changes to efficient opex over the regulatory period due to price changes, output and productivity
- **Application of step changes** – adjusting the base year expenditure to account for any other forecast cost changes over the regulatory control due to new regulatory obligations

The EUAA notes that the NSW DNSPs are currently challenging some aspects of the AER's opex assessment approach.

We hereby outline the EUAA's perspectives on the AER's opex assessments and the NSW DNSPs' criticisms of the AER's assessment approach.

5.2 Determination of Efficient Base Year Opex

5.2.1 The AER's Benchmarking Results

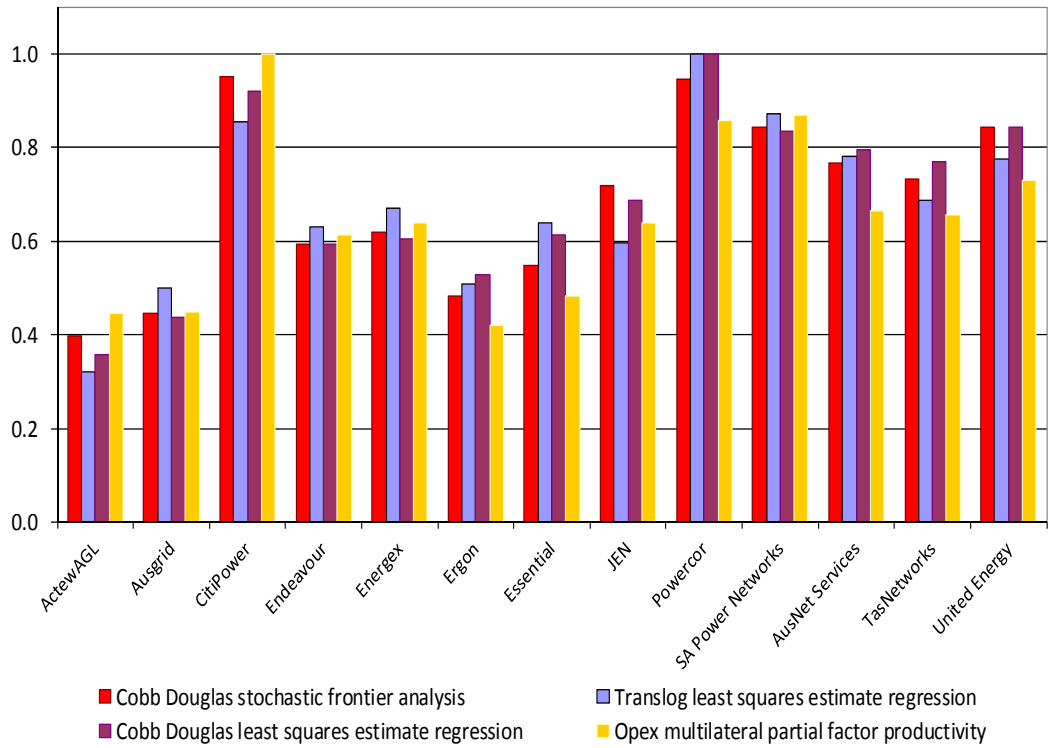
The Rules formally require the AER to undertake benchmarking to assess the relative efficiencies of network businesses, and to apply the outcomes of the benchmarking in its determination of efficient base year costs for the networks.

As outlined in the diagrams below, the AER's benchmarking results [25], identified very large efficiency gaps between the NSW DNSPs and the frontier performers, CitiPower and Powercor - two Victorian DNSPs with contrasting metropolitan and rural coverage similar to Ausgrid and Essential Energy.

As outlined in the Table 4.2 overleaf, the AER's benchmarking results identified efficiency gaps of around 55% for Ausgrid, 52% for Essential Energy, and 39% for Endeavour Energy, i.e.:

- Ausgrid spends opex about 45 per cent as efficiently as the most efficient service providers in the NEM
- Essential Energy spends opex about 48 per cent as efficiently as the most efficient service providers in the NEM
- Endeavour Energy spends opex about 61 per cent as efficiently as the most efficient service providers in the NEM

Figure 19: DNSP Average Cost Efficiency Scores, 2006-2013



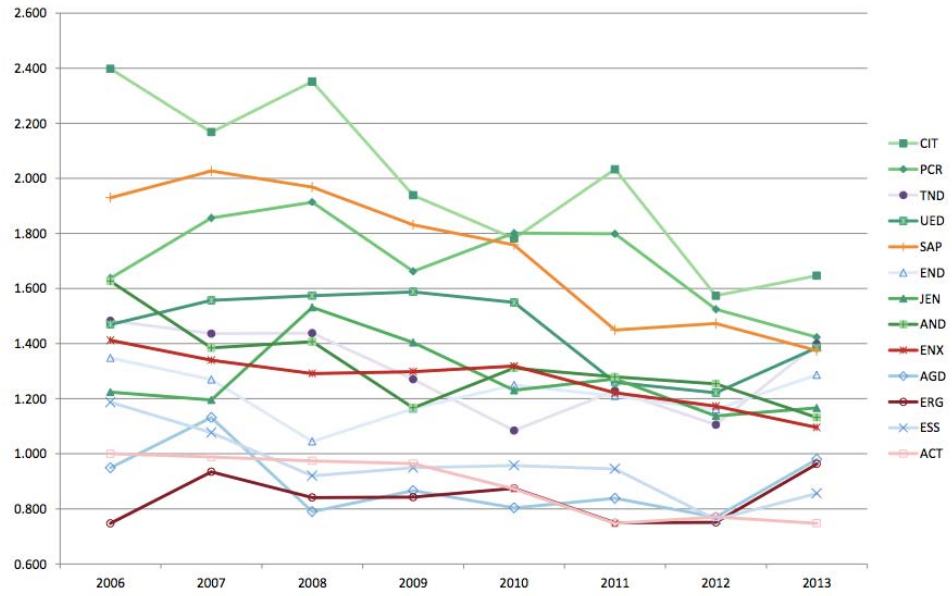
[25] AER 2014 Annual distribution benchmarking report - November 2014

Table 11: DNSP opex efficiency scores and implied opex reductions to reach full efficiency (2006-2013)

DNSP	*Average opex efficiency score*	*Implied opex reduction to reach full efficiency*
CIT	1.000	0%
SAP	0.869	13%
PCR	0.857	14%
UED	0.730	27%
AND	0.665	34%
TND	0.657	34%
JEN	0.639	36%
ENX	0.639	36%
END	0.613	39%
ESS	0.482	52%
AGD	0.449	55%
ACT	0.445	56%
ERG	0.422	58%

The opex efficiency trend graph below demonstrates that Ausgrid and Essential Energy have consistently been amongst the least efficient distributors in the NEM. Endeavour Energy's efficiency is also relatively low.

Figure 20: Opex efficiency trend graph



The graphs overleaf indicate that:

- Essential Energy had the second highest "opex per customer" in the NEM, at around 3 times the costs of the Victorian networks
- Essential Energy had the second highest "total cost per customer" in the NEM, at around 3 times the costs of the Victorian networks
- Endeavour Energy and Ausgrid's "total costs per customer" are around 2-3 times the costs of the Victorian networks

Figure 21: Opex per customer vs customer density (2009 - 2013)

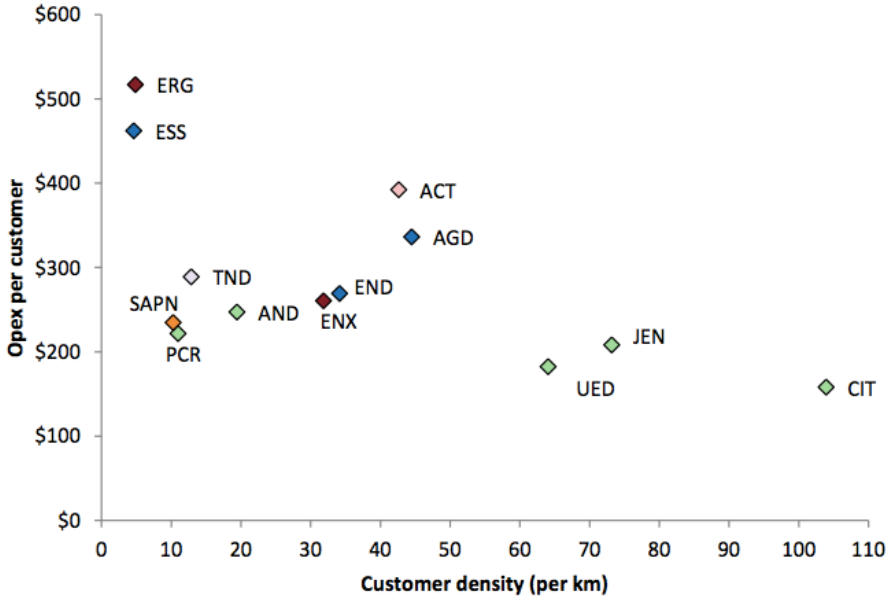
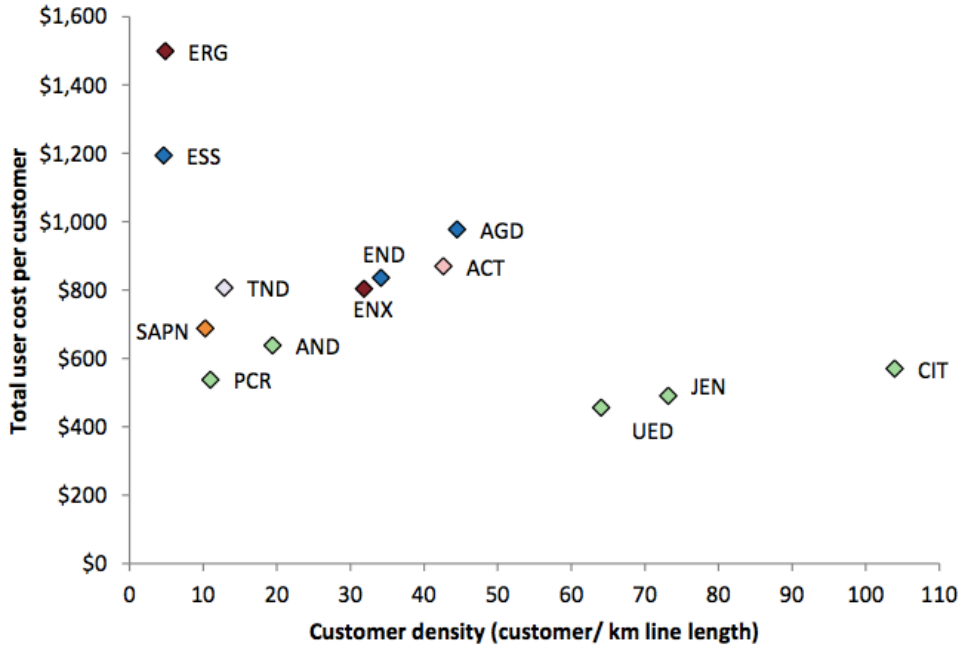


Figure 22: Total cost per customer compared to customer density (average 2009 - 2013)



5.2.2 Labour and Workforce Practices

The AER examined potential sources of inefficiencies that might explain the gaps in operational efficiency. As labour costs account for a large proportion of the DNSPs' opex, the AER engaged Deloitte Access to perform a detailed review the NSW DNSPs' labour and workforce practices.

Some key findings from that review included:

- Labour costs are being impacted by unionised workforce that are relatively inflexible, high-cost and unproductive compared to their peers

- Labour inefficiencies and uncompetitive enterprise agreements
- Inflexible workforces with limited ability to innovate or respond to changing circumstances
- Poor management of labour costs – for example in relation to overtime

These findings have been reinforced by the media statements of the Chief Executive of Networks New South Wales.[26]

> *"The second systemic issue is deeply embedded in the public-sector culture. Public ownership, politically powerful unions and amenable management have all combined to deliver union agreements that drive higher labour costs and higher electricity bills."*
>
> *"Labour costs are about 70 per cent of our operating costs. Labour costs and labour productivity are important drivers of electricity network charges. For many years under government ownership, NSW unions have exercised a "shadow management" role, entrenching unproductive and uncompetitive work practices."*
>
> *"Unions have spent the past two decades opposing a change of ownership of the "poles and wires" businesses in NSW. They have done this not to serve the interests of the community but to protect their labour monopoly. The greatest threat to the long-term job security of current employees is not a potential change of ownership but the uncompetitive union agreements that inevitably will drive the safe outsourcing of existing jobs. Make no mistake, change is inevitable. Our employees deserve union leaders who will provide the leadership to sustain their jobs, not destroy them."*
>
> *"Selling off electricity networks will give NSW cheaper power bills"*

5.2.3 The AER's Development of Substitute Opex Forecasts

The above evidence identified that the NSW DNSPs' base year opex levels are materially inefficient.

Consequently, the AER was required to develop substitute forecasts.

In its development of the substitute opex forecasts, the AER followed a 3 step process:

- Identification of benchmark efficient opex
- Application of operating environment adjustments
- Determination of the benchmark comparison point

5.2.3.1 The AER's Determination of Benchmark Efficient Opex

The AER determined its estimates of the efficient base year opex for each of the NSW DNSPs based on the results of its benchmarking - resulting in the identification of efficient base year opex levels of:

- 55% below Ausgrid's base year opex
- 52% below Essential Energy's base year opex
- 39% below Endeavour Energy's base year opex

[26] Vince Graham - Chief Executive of *Networks NSW articles in The Australian, October 2014*

The EUAA endorses the AER's methodology for the determination of the DNSPs' efficient base year opex levels and considers that it is in accordance with the AER's obligations under the National Electricity Law (NEL) and the National Electricity Rules (NER).

5.2.3.2 Operating Environment Adjustments

The AER then performed an extensive analysis to determine whether the benchmark efficient costs need to be adjusted to account for operating environment factors, not accounted for in its benchmarking.

This involved the detailed assessments of 35 'operating environment factors' identified by the AER, DNSPs and other stakeholders.

That analysis identified 3 factors that the AER considered required operating environment adjustments:

- Differences in subtransmission configurations
- The impacts of different occupational health and safety regulations
- Differences in the cost of managing bushfire risk

As outlined in the table below, the AER calculated that total adjustments of between 0.6-3.6% should be applied to account for these operating environment differences.

Summary of material operating environment adjustments for the NSW DNSPs

Service provider	Subtransmission adjustment	OH&S regulations	Bushfire regulations	Total
Ausgrid	5.5%	0.5%	-2.4%	**3.6%**
Endeavour	5.0%	0.5%	-2.4%	**3.1%**
Essential	2.5%	0.5%	-2.4%	**0.6%**

The EUAA considers that the criteria and assessment methodology adopted by the AER to determine the need and magnitude of the above operating environment adjustments was reasonable. We commend the AER on the rigour that it applied to this analysis.

However, rather than applying the above adjustments, the AER then decided to apply very conservative total operating environment allowances of 10% to all three NSW DNSPs.

The AER did not provide any justification for these major adjustments. In fact, in its draft determinations, the AER acknowledged the weaknesses of its decision: [27]

> *"Based on the available evidence, we are of the view that it is reasonable to assume that the opex of the benchmark Victorian and South Australian DNSPs would be considerably less than 10 per cent higher if they had to operate under the same system sub-transmission intensiveness as the NSW DNSPs and if they faced the same occupational health and safety regulations as the NSW DNSPs"*

[27] AER Draft Decisions for the NSW DNSPs

> *"Nonetheless, we propose to make a conservative allowance of a 10 per cent input margin on the benchmark Victorian and South Australian DNSPs to cover these factors. This includes allowance for a number of factors that, while individually not significant, may collectively be significant"*

The EUAA does not accept that the AER has justified the adoption of its major adjustments to the operating environment allowances for the NSW DNSPs, and considers that such adjustments are inconsistent with the AER's obligations under the National Electricity Law (NEL) and the National Electricity Rules (NER).

5.2.3.3 Determination of the Benchmark Comparison Point

The frontier benchmark for the NEM DNSPs is CitiPower [28] which has an efficiency score of 0.95. CitiPower is closely followed by Powercor, with an efficiency score of slightly less than 0.95.

However, in determining the cost efficiency target for the NSW DNSPs, the AER decided not to adopt the frontier DNSP as the benchmark. Instead, the AER decided to apply a modified benchmark point calculated as the weighted average of the efficiency scores in the top quartile.

The weighted average efficiency score of the five Victorian and South Australian DNSPs with efficiency scores greater than 0.75 is 0.86.

Consequently, the AER reduced the efficiency benchmark by 9 percentage points compared to the frontier DNSP efficiency score.

Again, the AER did not provide any substantial justifications for choosing this significantly lower efficiency target, other than stating:

> *"Adopting a conservative approach allows for general limitations of the models with respect to the specification of outputs and inputs, data imperfections and other uncertainties"*

The AER also acknowledged the weaknesses of this decision:

> *"This is equivalent to allowing an additional margin on the frontier DNSP's input use of 10 per cent in calculating the benchmark for the NSW/ACT DNSPs (0.95/1.1 = 0.86) and is thus a relatively generous allowance"*

The EUAA does not accept that the AER has justified its adoption of the major reduction in the benchmark comparison point, and consider that this adjustment is inconsistent with the AER's obligations under the National Electricity Law (NEL) and the National Electricity Rules (NER).

The NEL/NER require the appropriate benchmark reference point for efficient opex to be set at that of an efficient service provider. The AER's benchmarking has concluded that CitiPower's score of 95 per cent represents the efficiency at which the benchmark efficient firm would be using its opex to provide core network services.

The combined effect of the above two changes – i.e., the 10% allowance for operating environment differences, together with the change to the benchmark comparison point, has resulted in reducing the target benchmark level of efficiency by between 14.6 - 17.1%.

As outlined in the table below, this will result in delivering "windfall gains" to the NSW DNSPs of around $1 billion over the next 5 years, i.e.:

---

[28] Note – the AER determined the frontier benchmark based on Australian service providers only. If the AER had included international service providers in its calculations, CitiPower would not be the frontier business.

- $80 million per annum for Ausgrid
- $50 million per annum for Endeavour Energy
- $60 million per annum for Essential Energy

As the AER acknowledged in its draft opex determinations for the NSW/ACT DNSPs:

> *"A number of conservative decisions in favour of the DNSPs have been made in arriving at these figures. These include conservative setting of the benchmark as the weighted average of top quartile DNSPs rather than the frontier DNSP and extra allowances for operating environment factors not explicitly included in the models.*

The EUAA is extremely disappointed that whenever the AER applies discretion to its regulatory decisions, it consistently chooses to apply that discretion heavily in favour of the networks' interests, and not in consumers' interests.

Table 12: Impacts of the AER's Adjustments on the Target Opex for NSW DNSPs

	Ausgrid	**Endeavour**	**Essential**
DNSPs' Proposed base opex (adjusted)[a]	488.6	224.0	414.9
Benchmarking estimate of efficient base opex	268.6	165.7	223.2
Difference Between DNSPs' Proposed Opex and Benchmark Efficient Costs	**241.0**	**72.6**	**204.4**
Percentage opex reduction required to reach full efficiency[b]	**49%**	**32%**	**49%**
AER's modified opex target incorporating the AER's 10% Operating Environment Adjustment and the Modified Benchmark Comparison Point	325.9	201.0	270.8
Difference between AER modified target and proposed base opex	**162.7**	**23.0**	**144.1**
Percentage opex reduction applied by the AER	**33.3%**	**10.3%**	**34.7%**

The above adjustments will result in unnecessarily price increases for NSW consumers of around 4% above the prices that would apply if the AER applies the Rules. This is clearly not in consumers' long-term interests.

In summary, the EUAA considers that the AER's adjustments to the NSW DNSPs' 'operating environment factors' and the 'benchmark comparison point' are inconsistent with the AER's obligations under the National Electricity Law (NEL) and the National Electricity Rules (NER).

The EUAA therefore strongly opposes those adjustments and expects the AER to revise its determination of the efficient base year opex levels to the levels that apply without those adjustments, as outlined in the table below:

Table 13: The EUAA's Recommendations on the NSW DNSPs Efficient Base Year Opex

	AER Draft Determination	**EUAA's Recommendation**	**Reduction**
Ausgrid	$325.9 M	$278.3 M	14.6%
Essential Energy	$270.8 M	$224.5 M	15%
Endeavour Energy	$201.0 M	$170.8 M	17.1%

5.3 Rate of Change

The AER applied rate of change factors to account for:

- Price Change
- Output change
- Productivity change

5.3.1 Price Change

5.3.1.1 Labour Price Change

In determining its labour price change factor for the NSW DNSPs, the AER adopted the average of Deloitte Access Economics' and Independent Economics' wage price index (WPI) forecasts for the *Electricity, Gas, Water and Waste Services (EGWWS)* industry.

This approach determined that real price growth factors should be applied to the NSW DNSPs' labour prices.

The EUAA considers that the above forecasts do not reflect the specific drivers of the electricity network sector, which is in contraction due to declining demand for its services.

It is important to note that the Networks NSW CEO's public statements highlighted that the NSW DNSPs' labour costs are significantly higher than the efficient level.

The AER must ensure that the NSW DNSPs are not allowed to continue with their previous approach of effectively treating EBA outcomes as a "pass through".

The AER needs to determine efficient allowances for the NSW DNSPs' labour costs that better reflect consumers' the long-term interests.

The EUAA considers that the labour costs should be reducing rather than increasing.

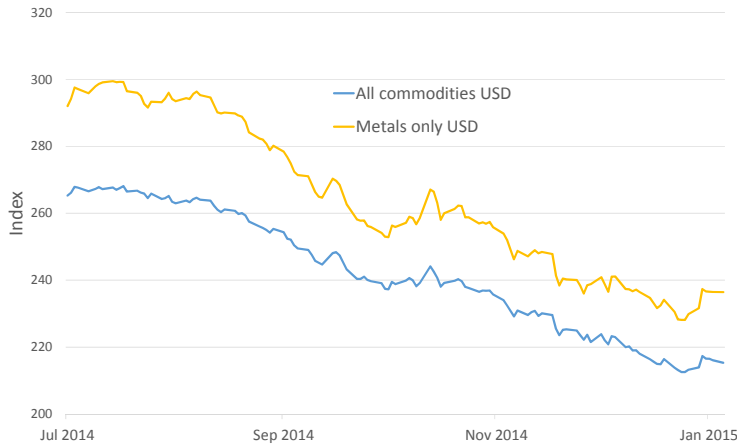
5.3.1.2 Non-Labour Price Change

In determining its non-labour price change factors for the NSW DNSPs, the AER adopted CPI.

The AER's rationale for its decision was predominantly based on regulatory simplicity – i.e. avoiding the difficulty of attempting to predict movements in commodity prices and exchange rates. Whilst the EUAA understand these difficulties, we are concerned that the prices of a number of the DNSPs' non-labour inputs are trending downwards and consequently the application of CPI is likely to over-estimate their costs.

During the current financial year, the prices for commodities (including copper, aluminium and steel) have fallen considerably. For example, the CBA Australian Commodities Price Index (illustrated below) has fallen by around 25% over the past 7 months.

Figure 23: CBA Australian Commodities Price Index



The EUAA expects the AER to demonstrate that the benefits of regulatory simplicity outweigh the risks of excessive non-labour price changes.

5.3.2 Output change

The AER's determination of output change factors for the NSW DNSPs was based on the weighted average increase in:

- Customer numbers (67.6% weighting)
- Circuit length (10.7% weighting)
- Ratcheted Maximum Demand (21.7 % weighting)

The AER's rate of change approach assumes that changes in the above outputs result in direct proportional changes in opex – i.e., the AER assumes that a 10 per cent increase in the weighted average output change results in a 10 per cent increase in opex.

Whilst the EUAA acknowledges that the above output variables may have some impact on opex, we do not accept that they have the direct proportional change that the AER's calculation determines.

The EUAA also notes that the NSW DNSPs are proposing various alternative output change factors.

The EUAA does not consider that the NSW DNSPs have justified the use of these proposed additional factors.

We also strongly disagree with the networks' proposed 'installed capacity' factors. Such factors would result in the provision of increased opex for newer assets, rather than the reduced opex required due to their lower maintenance costs. This is an issue that the EUAA believes that the AER should have applied greater scrutiny to in its assessment of 'operating environment adjustments'.

Irrespective, we expect the AER to determine output change factors on a consistent basis across all DNSPs.

5.3.3 Productivity

In its draft determinations, the AER applied a zero per cent productivity change.

The AER's rationale for applying zero per cent was that it *"considered past performance to be a good indicator of future performance under a business as usual situation".*

We note that from 2006–13 the electricity distribution sectors' productivity significantly declined. However, we consider that there are a number of reasons for that decline - particularly the AER's provision of excessive opex allowances, which we believe has been a strong driver of the networks' inefficient labour practices. Such factors must not be used to justify poor productivity outcomes in future years.

EUAA Members operate within asset intensive industry sectors that have delivered positive opex productivity growth during the 2006–13 period. We do not accept that there is any justification for the electricity distribution sector to have lower productivity expectations than those sectors.

We therefore expect the AER to determine positive productivity change rates for the NSW DNSPs, aimed at bringing their productivity back into line with the productivity levels being achieved by other asset intensive industry sectors.

5.4 The NSW DNSPs' Criticisms of the AER's Draft Opex Determination

The EUAA notes that the NSW DNSPs' have made a number of criticisms of the AER's opex determination approach.

The EUAA hereby provides its perspectives on the DNSPs' key criticisms:

5.4.1 The NSW DNSPs' Claims that Benchmarking is Untested and Unreliable

The NSW DNSPs are claiming that benchmarking is untested and an unreliable tool that should not be used by the AER in its regulatory decision making

In the EUAA's view, those assertions are incorrect.

Benchmarking is an accepted and proven technique in regulatory practice. For example, the UK regulator (Ofgem) has effectively applied benchmarking in its revenue determinations for over 20 years.

All regulators that use benchmarking acknowledge its imperfections, and take those imperfections into account in their regulatory decision-making. As outlined above, the AER has acknowledged its imperfections by applying an extremely conservative approach to its application.

It is important to note that when Ofgem introduced benchmarking to its opex determinations 20 years ago, the UK networks raised the same criticisms that are currently being raised by the Australian DNSPs. Those criticisms were rejected by Ofgem.

It is also important to note that for many years Ofgem's benchmarking techniques and datasets were nowhere near as sophisticated as the AER's benchmarking techniques, yet Ofgem still made extensive use of its benchmarking results in its decisions.

The only criticism that the EUAA has of the AER's use of benchmarking is that it should have applied it to its previous regulatory decisions.

Numerous stakeholders, including the EUAA, have advocated for many years that the AER should have applied benchmarking to its previous determinations, and that the AER was required to do so under the previous Rules.

The EUAA asserts that if the AER had applied benchmarking to its previous determinations then the NSW DNSPs' would not be so far removed from the efficiency frontier.

5.4.2 The NSW DNSPs' claims that the AER has placed undue weight on benchmarking

The NSW DNSPs are asserting that the AER has placed undue weight on benchmarking.

In the EUAA's view, that assertion is incorrect.

Benchmarking was one of many consideration in the AER's assessment of the efficiency of the NSW DNSPs' opex, which also involved:

A review of 'operating environment factors' - the AER reviewed 35 operating environment factors to determine whether it was necessary to provide any adjustments to the the base year opex determined by the benchmarking results

A review of labour and workforce practices – which identified numerous examples of inefficient practices

A review of the DNSPs' vegetation management practices – which discovered major inefficiencies in the DNSPs' contractor management and reactive approaches to vegetation clearance

Direct comparison benchmarking – the AER made a number of direct comparisons with the outputs and costs of other DNSPs. These analyses identified that:

- Ausgrid incurred similar total costs to the sum of opex incurred by all Victorian networks, despite Ausgrid serving only 61% of the customers and having having only 29% of the circuit length of all Victorian networks
- Essential Energy incurred similar total opex to the sum of Powercor and SA Power Networks, despite Essential Energy serving only 54 % of the customers and operating a network that experiences only 47 % of the peak demand of Powercor and SA Power Networks' combined networks
- Endeavour Energy incurred similar total opex to the sum of Powercor and United Energy, despite Endeavour Energy serving only 66% of the customers and operating a circuit which is only 39% of the length of Powercor and United Energy's combined circuits

Category Analyses – involving comparisons of the costs of different service providers on discrete categories of opex, including labour, overheads, maintenance, emergency response and vegetation management expenditure. This analyses identified that the NSW DNSPs have higher costs relative to most of their peers for the categories examined

5.4.3 The NSW DNSPs' Claims that the AER has not appropriately considered public and employee safety

The NSW DNSPs' are making many unsubstantiated emotive and inflammatory claims that the AER has disregarded employee and public safety considerations in its draft base year opex determinations, suggesting that they will be unable to comply with their WH&S obligations, and citing concerns regarding increased bushfire risk.

In the EUAA's view, these claims are unfounded and grossly exaggerated, as:

- The AER's determinations involved an extensive analysis of the NSW DNSPs' workplace health and safety obligations and applied adjustments to account for their specific WH&S obligations
- The AER's determination also involved an extensive analysis of the NSW DNSPs' specific bushfire risks and regulations and provided adjustment to account for their specific regulations

5.4.4 The DNSPs' Claims that the AER did not take account of individual circumstances

The NSW DNSPs have asserted that the AER did not take account of their individual circumstances.

This assertion is incorrect.

As outlined above, the AER performed an extensive analysis to determine whether the DNSPs' benchmark efficient costs needed to be adjusted to account for individual circumstances not accounted for in its benchmarking.

This involved the detailed assessments of 35 'operating environment factors' identified by the DNSPs and other stakeholders, and resulted in the AER making specific adjustments to accommodate for those circumstances.

5.5 Step Changes

The AER decided not to include any step changes in its alternative opex forecasts.

In essence, the AER declined the NSW DNSPs' proposed step changes as they related to activities that the AER had explicitly considered in determining the networks' efficient base level opex.

The EUAA agrees with this position – i.e., the networks' proposed step changes have already been accounted for in the AER's determinations of efficient base year opex.

6 Incentive Schemes

6.1 Efficiency Benefit Saving Scheme (EBSS)

6.1.1 Outcomes from the Previous Regulatory Period

The AER has determined that the NSW DNSPs are entitled to bonuses of $354 million under the EBSS for not fully spending their opex allowances during the previous period.

Whist the EUAA supports incentive schemes that deliver genuine efficiency improvements and long-term benefits to consumers, it is clear from the outcomes of the EBSS to date that the AER is consistently setting opex allowances well above the efficient level.

Since the EBSS scheme was introduced, many stakeholders (including the EUAA) have expressed major concerns regarding the asymmetrical outcomes, requesting the AER to review the outcomes and to reconsider the design of the scheme and the AER's approach to determining efficient opex costs.

Many stakeholders have also recommended that the AER should no longer apply the scheme, as they are not confident that the AER will be able to refine the scheme to deliver genuine efficiency improvements that are in consumers' long-term interests.

6.1.2 The AER's Decision Not to Apply the EBSS to the Next Regulatory Period

The purpose of the EBSS is to encourage service providers to become more efficient.

In deciding whether or not to apply the EBSS to the Queensland DNSPs, the AER is required to consider whether the likely benefits to consumers are sufficient to warrant any rewards or penalties incurred under the scheme. [29]

The EUAA notes that the AER has decided not to apply the EBSS scheme to the NSW DNSPs. The AER's rationale for that decision was predominantly based on the fact that the AER determined, through benchmarking, that the NSW DNSPs' base opex levels are materially inefficient, and therefore placed less weight on their revealed costs in its determination of their efficient base year costs.

In essence, the AER concluded that the NSW DNSPs will face strong incentives to make efficiency improvements while their actual opex is higher than that of a benchmark efficient service provider, and consequently there is no need to apply an EBSS to further strengthen those incentives.

Whilst the EUAA agree with those conclusions, we point out that the AER's justification for not applying the EBSS scheme to 'inefficient networks' is, in itself, an acknowledgement of the serious deficiencies in the AER's previous opex determinations.

The AER's benchmarking results confirm that the AER's decision to not apply benchmarking to its previous revenue determinations (despite being required to under the Rules) has resulted in the AER providing excessive opex allowances of up to 60% above the efficient level. This has very serious implications for the ongoing application of the EBSS scheme to all networks.

Irrespective, the EUAA recommends that the AER should not apply the EBSS to any networks in its current revenue determinations, as we are not confident that the AER will be able to apply the scheme to deliver genuine efficiency improvements that are in consumers' long-term interests.

6.2 Service Target Performance Incentive Scheme (STPIS)

Whilst the EUAA has some concerns with the asymmetrical outcomes from the STPIS scheme to date, the EUAA acknowledges that a well-designed STPIS scheme should be able to provide safeguards to consumers whilst incentivising appropriate levels of reliability performance.

The EUAA agrees with the AER's decision not to apply the guaranteed service level component (GSL) as the NSW DNSPs are subject to jurisdictional GSL arrangements.

The EUAA also agrees with the AER's proposed performance targets for System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI), which reflect some reductions below the DNSPs' latest 5-regulatory year average performance levels.

The EUAA considers that these adjustments are reasonable and will enable the benefits of the reliability improvement resulting from past capital expenditures to be retained.

The EUAA also agrees with the AER's position that the incentive rates under the scheme should be based on the VCR values published by AEMO in September 2014, as we consider that AEMO's VCR

[29] NER, clause 6.5.8(a).

values were determined through a robust method and represent the best available information for this purpose.

However, the EUAA does not agree with the AER's decision to cap revenue at risk under the scheme at ±2.5%. In light of the asymmetrical outcomes of the STPIS scheme to date, the EUAA recommends that the AER applies an asymmetrical incentive of +1% to -3%. The EUAA considers that an asymmetrical incentives scheme is needed to take account of the networks' excess capacity, and would more appropriately balance the risks to both consumers and the DNSPs.

6.3 Demand Management Incentive Scheme (DMIS)

The AER's draft determination acknowledged the importance of demand management and the need for the existing demand management incentive arrangements to be reformed. The AER noted that the COAG Energy Council is currently considering a series of rule changes proposed by the AEMC Power of Choice review, examining distributor incentives to pursue efficient alternatives to network augmentation. This is expected to include new rules and principles guiding the design of a new DMIS.

The AER's draft determination also acknowledged that a demand management incentive scheme such as the scheme proposed by the NSW DNSPs could be effective.

In light of the above issues, the AER has proposed:

- To continue to apply Part A of the Demand Management Innovation Allowance (DMIA) – providing $12 million in DMIA allowances, comprising $5 million for Ausgrid, $3 million for Essential Energy and $3 million for Endeavour Energy
- Not to apply either Part B of the DMIA or the D-factor scheme until the outcomes of the Power of Choice rule changes become clearer

The AER's rationale for these decisions is that it does not wish to pre-empt consultation on the AEMC's review of the current demand management arrangements by commencing a separate consultation process on a new DMIS before the outcomes of the review are finalised.

Given the uncertainty of the current Power of Choice rule change process, the EUAA will restrict its comments to high-level principles that it expects the AER to apply to its decisions regarding the application of any new DMIS and associated demand management allowances during the next regulatory period.

6.3.1 Benefits to Consumers?

The Rules require the AER to have regard to several factors in developing and implementing a DMIS for the Queensland distributors. One of those factors is "benefits to consumers", which is defined as:[30]

> *"the need to ensure that benefits to electricity consumers likely to result from the scheme are sufficient to warrant any reward or penalty under the scheme; and*
>
> *the willingness of customers to pay for increases in costs resulting from implementing a DMIS"*

This means that the AER must consider consumers' willingness to pay for any costs resulting from the DMIS.

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30 NER, clause 6.6.3(b).

The NSW DNSPs are claiming that their consumers are supportive of their proposed demand management initiatives. However, these claims are untested and have not been demonstrated through any credible willingness to pay studies.

In addition, the EUAA draws the AER's attention to the critiques contained within various submissions on the NSW DNSPs' past DMIA expenditure, most of which do not support the ongoing provision of DMIA allowances.

The EUAA therefore expects the AER to ensure that its decisions regarding the application of a new DMIS and any associated demand management expenditure allowances deliver clear tangible cost benefits to consumers.