Victorian Energy Consumer and User Alliance (VECUA)

Submission to the AER

AER Preliminary 2016-20 Revenue Determinations for the Victorian DNSPs

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1 Summary Of Key Points

1.1 Price Impacts

There are a number of drivers that should result in significant reductions in the Victorian distributors' 2016-20 prices. The AER's preliminary determinations do not reflect those drivers and would result in the distributors' prices being retained at excessive levels.

1.2 Return on Capital (Rate of Return)

The AER's proposed 'return on capital' allowances are well in excess of the efficient level, due to:

- The AER's insufficient consideration of relevant "market data and other evidence", despite the AER's explicit obligations to consider such information under the Rules
- The AER's failure to consider the impacts of asset indexation in its calculation of the distributors' 'return on equity' allowances
- The AER inappropriately exercising its discretion in favour of the networks
- The AER having insufficient regard to stakeholders' critiques of its 'Market Risk Premium (MRP) and 'Equity Beta' estimation approaches
- The AER having insufficient regard to stakeholders' critiques of its 'return on debt' estimation approach

Overall, the AER's WACC determinations predominantly focused on responding to the networks' ambit WACC claims, whilst having minimal regard to the views of consumers and other stakeholders.

As demonstrated by the recent extraordinary $10.3 billion sale price for TransGrid (over 160% of its current regulatory value), the energy networks' statements to investors are very different to their statements to the AER. The AER needs to devote much more attention to the former, rather than the latter.

A materially preferable decision would incorporate a fuller consideration of the above evidence, together with and a more balanced application of the AER's discretion towards the long-term interest of consumers. This would result in significantly lower cost of capital allowances that would best meet the National Electricity Objective, whilst still delivering very generous returns to the Victorian distributors.

1.3 Capital Expenditure

1.3.1 Augmentation Capex

There are a number of major deficiencies in the AER's proposed augex allowances, including:

- Insufficient consideration of the implications of the distributors' growing levels of excess capacity and the significant declines in the distributors' asset utilisation levels
- Insufficient scrutiny of augmentation capex for "pockets of demand growth – including insufficient verification of local demand forecasts and insufficient demonstration of associated capacity constraints

- Insufficient consideration of the distributors' capital efficiency and the prudency /efficiency of the distributors' proposed augmentation capex projects
- Insufficient consideration of the unsustainability of the AER's proposed RAB growth levels

The AER needs to revise it augmentation capex allowances by performing more detailed assessments and having greater regard to the above considerations.

1.3.2 Customer Connection Capex

- The AER identified a number of major deficiencies with the distributors' customer connection capex forecasts, thereby requiring the AER to develop alternative forecasts
- However, rather than developing genuine alternative forecasts, the AER set the distributors' connection capex allowances by trending forward their connection capex spend from the 2011-15 regulatory period
- The AER is required to develop genuine alternative connection capex forecasts, rather than basing its allowances on the distributors' record-high 2011-15 spend levels

1.4 Replacement Capex

The AER is proposing to provide record-high repex allowances over the next regulatory period, despite the Victorian distributors having undertaken major repex programs over the past two regulatory periods.

This submission outlines a number of deficiencies in the AER's repex determinations, including:

- Insufficient consideration of actual asset condition information
- Insufficient consideration of the distributors' major repex programs over the previous period – which have effectively 'pre-installed' a large proportion of their repex needs for the next period
- An over-reliance on the AER's Repex Model - which is heavily reliant on asset age, trend analysis and an acceptance of the networks' past asset replacement practices
- An over-reliance on trending forward the distributor's record-high repex spend from the 2010-15 regulatory period, despite evidence that the distributors' repex spend levels during that period were inefficient
- Insufficient consideration of the impacts of the networks' increasing excess capacity and declining asset utilisation levels
- Insufficient demonstration of the performance outcomes (e.g. system performance outcomes) that the AER's major repex allowances will deliver

The AER needs to revise it replacement capex allowances by performing more detailed assessments having greater regard to the above considerations.

1.4.1 Non-Network Capex

- Rather than determining efficient expenditure allowances, the AER predominantly determined the Victorian distributors' non-network capex allowances on the basis of their record-high spend during the 2011-15 regulatory period
- The AER is required to determine its allowances based on efficient costs – not on the basis of distributors' historical costs – which have not been demonstrated to be efficient

1.4.2 Capitalised Overheads

- The AER has not assessed the efficiency of the Victorian distributors' capitalised overheads
- The AER simply set the distributors' capitalised overhead allowances on the basis of their proposed expenditure, with some minor adjustments to retain the distributors' proposed direct/indirect capex ratios
- The AER's proposed allowances would result in the distributors' overhead ratios varying from 11.7-25%
- The AER needs to determine capitalised overhead allowances based on benchmark efficient costs, not on the distributors' proposed allowances

VECUA therefore expects the AER to determine efficient capitalised overheads allowances, based on benchmark efficient costs.

1.5 Operational Expenditure

The AER is proposing to provide opex allowances for the Victorian distributors well above the efficient levels. The key deficiencies in the AER's opex assessments include:

1.5.1 Base Year Opex

- Despite extensive evidence of material inefficiencies in some Victorian distributors' base year opex levels, the AER has accepted all five Victorian distributors' proposed base year opex levels as being efficient.
- The AER's decision to apply the "revealed cost" method to its determination of base year opex levels for all Victorian distributors is fundamentally flawed, as it does not reflect the material differences in the Victorian distributors' efficiency levels identified by the AER's benchmarking.
- The distributors' base year opex allowances should be set on the basis of benchmark efficient levels, informed by the AER's opex benchmarking results.
- The AER's proposed base year opex allowances have also had insufficient regard to:
    - The Victorian distributors' dramatic productivity declines over the previous regulatory period
    - The major increases in the Victorian distributors opex levels over the previous regulatory periods
    - The opex reductions that should be realised from the Victorian distributors' major capex expenditure programs over previous regulatory period

1.5.2 Labour Price Change

- The AER is proposing to provide real labour price increases for the Victorian distributors over the next 5 years.
- In general, employers only allow labour costs to rise above CPI if they are accompanied by offsetting productivity improvements. However, the AER is proposing zero productivity improvements for all five Victorian distributors over the next 5 years.
- The AER's labour price change determinations have not considered the specific drivers of labour prices in the Australian electricity network sector.
- The AER needs to determine efficient labour price change factors for the Victorian distributors, taking into account:
    - The electricity network sector is currently in a major contraction phase - industries in contraction do not face real labour price increasing drivers
    - The evidence that demonstrates that the Victorian distributors' current labour costs are excessive
    - The interaction between labour price change and productivity change – i.e. real labour price increases need to be compensated by offsetting productivity improvements

Appropriate consideration of the above issues will confirm that the Victorian distributors' labour prices should be reducing rather than increasing.

1.5.3 Productivity

The AER's decision to apply zero productivity improvements to the Victorian distributors over the next 5 years is illogical and is not supported by the evidence.

It conflicts with:

- The AER's expectation that the distribution sector will deliver positive productivity improvements over the next regulatory period
- The Victorian distributors' proposals – with Jemena proposing positive productivity growth factors
- The AER's intention to apply real labour price increases over the next 5 years – the provision of real labour price increases without offsetting productivity improvements will result in further ongoing declines in the distributors' productivity levels

The AER needs to determine positive productivity change factors for the Victorian distributors, aimed at bringing their productivity back into line with their previous productivity levels and into line with the levels being achieved by the electricity transmission, gas distribution and other asset intensive industry sectors.

2 The Victorian Energy Consumer and User Alliance (VECUA)

The *Victorian Energy Consumer and User Alliance (VECUA)* is an alliance of energy consumer advocacy groups, covering the interests of all consumer cohorts including residential, small business and large energy users.

VECUA was formed to provide formal submissions to the Australian Energy Regulator (AER) during the Victorian Distributors' 2016-20 revenue determination process.

VECUA's formation was initiated by the Energy Users Association of Australia (EUAA).

In facilitating this collaborative initiative, the EUAA sought to include consumer advocacy groups that would otherwise be unable to contribute to or develop comprehensive submissions of this nature.

By ensuring that all consumer cohorts (residential, small and large business consumers) are effectively consulted and their specific interests represented, VECUA's submissions aim to be comprehensive, well balanced and more compelling to the AER than individual submissions.

VECUA comprises the following consumer advocacy groups:

- The Alternative Technology Association (ATA) - a not-for-profit organisation that enables, represents and inspires people to live sustainably in their homes and communities
- The Consumer Utilities Advocacy Centre (CUAC) - a specialist consumer organisation established in 2002 to represent Victorian energy and water consumers in policy and regulatory processes
- The Energy Users Association of Australia (EUAA) - a non-profit consumer advocacy group seeking competitive, reliable and sustainable energy supply for all energy users
- The Moreland Energy Foundation (MEF) - a non-profit organisation that works with communities, partners and governments to implement sustainable energy projects
- The St Vincent de Paul Society (Victoria) - provides welfare and support services to Victorians in need
- The Total Environment Centre (TEC) – a non-profit environmental advocacy group that has been engaging and campaigning with governments, communities and businesses since 1972

3 Putting the AER's Preliminary Decisions into Context

3.1 Price Increases During The Previous Regulatory Period

The Victorian distributors' prices increased significantly over the previous regulatory period, presenting significant hardship for residential consumers and major competitiveness challenges for Victorian businesses.

As the AER is well aware, numerous reviews have concluded that a large proportion of those price increases were unnecessary and arose from the AER's provision of excessive allowances, including:

- **Weighted Average Cost of Capital (WACC) allowances** well in excess of efficient funding costs, enabling the networks to achieve extraordinary profitability levels
- **Excessive capex allowances** – based on overblown forecasts
- **Excessive opex allowances -** based on the distributors' historical opex costs rather than benchmark efficient costs

3.2 What We Should Be Seeing - Significant Price Reductions

The Victorian distributors are currently experiencing very different business drivers compared to the circumstances that they claimed to exist when the AER last determined their revenues in 2009.

There are a number of drivers that should result in significant reductions in the Victorian distributors' 2016-20 revenues and prices, including:

- **Significantly lower cost of capital requirements** - current costs of finance are significantly lower than the record high cost of capital allowances that the AER set for the distributors for the 2011-15 regulatory period. Consequently, significantly lower rates of return are now more appropriate
- **The 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
- **Excess system capacity** - over-investment in the networks over recent regulatory periods has resulted in major levels of excess system capacity and declining network utilisation
- **Lower network reliability expectations** – the distributors' investments over the previous two regulatory periods are now delivering reliability levels well in excess of consumers' 'willingness to pay' levels

The above drivers should result in the Victorian distributors' prices reverting to the price levels (in real terms) that applied prior to the previous regulatory period.

3.3 The AER's Preliminary Revenue Determinations

Disappointingly, the above drivers have not been appropriately reflected in the AER's preliminary revenue determinations. Rather than delivering the major price reductions that consumers justifiably expect, the AER's preliminary revenue determinations would result in the Victorian distributors' prices being retained at excessive levels.

As stated by Ed Willett, previous AER Board Member – *"network prices remain too high"*. [1]

This unacceptable outcome arises from a number of major deficiencies in the AER'S preliminary determinations, including:

The ongoing provision of excessive 'return on capital' allowances – due to:

- The AER's insufficient consideration of relevant "market data and other evidence", despite the AER's explicit obligations to consider such information under the Rules
- The AER's failure to consider the impacts of asset indexation in its calculation of the distributors' return on equity allowances
- The AER inappropriately exercising its discretion in favour of the networks
- The AER having insufficient regard to stakeholders critiques of its MRP and equity beta estimation approaches
- The AER having insufficient regard to stakeholders critiques of its 'return on debt' estimation approach

The ongoing provision of excessive capex allowances - due to:

- Insufficient consideration of the implications of the distributors' growing levels of excess capacity and declining system utilisation
- Insufficient scrutiny of augmentation capex for "pockets of demand growth
- Insufficient consideration of actual asset condition information
- Insufficient consideration of the distributors' major repex programs over the previous period – which have effectively 'pre-installed' a large proportion of their repex needs for the next period
- The AER predominantly basing its capex allowances on the distributors' 2011-15 spend levels, rather than determining efficient expenditure allowances

The ongoing provision of excessive opex allowances - due to:

- The AER determining the distributors' opex allowances on the basis of historical costs, rather than "benchmark efficient" costs
- Errors of judgment in the AER's determination of rate of change factors – including the provision of real labour price increases with no offsetting productivity improvements

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

1 Australian Energy Regulator Annual Report 2014–15

4 Revenue and Price Impacts

4.1 The AER's Preliminary Revenue Allowances

As outlined in the table below, the AER is proposing to provide total revenues of $10.41 billion (nominal) over the next 5 years – amounting to an overall increase of 13% compared to the Victorian distributors' 2011-15 revenue allowances, with individual increases of between 7.1-16.5%.

AER's Proposed Revenues Compared to Previous Regulatory Period Allowances ($ Nominal)

Distributor	2011-15 Revenue Allowances	AER Preliminary Determinations	AER Percentage Increases
AusNet Services	$2,478 M	$2887.5 M	16.5 %
CitiPower	$1,324 M	$1,418 M	7.1 %
Jemena	$1,054 M	$1,167 M	10.7 %
Powercor	$2,687 M	$3,098 M	15.3 %
United Energy	$1,669 M	$1,841 M	10.3 %
Total	**$9,211 M**	**$10,411 M**	**13 %**

4.2 The AER's Estimated Price Impacts

The AER has estimated that its preliminary determinations will deliver price reductions to consumers of 1.5-3% in 2016, followed by ongoing price increases of around CPI in future years.

The AER's Estimated Price Impacts on 2016 Customer Bills

Distributor	AER Percentage Reductions
AusNet Services	2.0 %
CitiPower	1.5 %
Jemena	3.0 %
Powercor	1.6 %
United Energy	2.2%

It is important to note that the distributors' actual prices will be highly dependent on the actual energy delivered by their networks. In the next regulatory period the Victorian distributors will be regulated

under a ‘revenue cap’ framework, which means that they will receive guaranteed revenues irrespective of the energy delivered by their networks.

The ‘revenue cap’ form of regulation effectively insulates the distributors from volume risk, by passing that risk on to customers - i.e. if the actual energy delivered is lower than the networks’ forecasts, then the networks will increase their prices to recover their guaranteed revenues.

Furthermore, the networks' prices could also be significantly impacted by their new “cost reflective tariff structures” currently being assessed by the AER.

VECUA considers that the sensitivity of the Victorian distributors’ prices to the above issues have not been appropriately reflected in the AER’s communications of the estimated price impacts of its preliminary determinations.

5 Return on Capital (Rate of Return)

5.1 The Victorian Distributors' Return on Capital Proposals

VECUA's previous submission outlined a number of concerns with the Victorian Distributors' 'return on capital' proposals.

5.1.1 Proposed Departures from the AER's Rate of Return Guideline

All five Victorian distributors proposed major unjustified departures from the AER's *Rate of Return Guideline*, resulting in much higher Weighted Average Cost of Capital (WACC) allowances than appropriate.

VECUA's previous submission outlined that:

- The AER's *Rate of Return Guideline* was developed through extensive consultation over a 12-month period with a broad range of stakeholders, including the Victorian distributors.
- By contrast, the Victorian distributors' proposed departures were not submitted to any rigorous analysis or stakeholder consultation.
- Most of the information used by the Victorian distributors to support their proposed departures was already considered by the AER during the development of AER's *Rate of Return Guideline*.
- The distributors did not demonstrate how their proposed departures and the resulting record-high equity risk and debt risk premiums would better achieve the rate of return objective.

5.1.2 The Victorian Distributors' Return on Equity (ROE) Proposals

The previous VECUA submission outlined VECUA's concerns with the Victorian distributors' 'return on equity' proposals:

- The AER's guideline uses the 'foundation model' approach to estimating the return on equity - an approach that adopts the *Sharpe-Lintner CAPM (SL-CAPM)* as its primary ROE model, with three other ROE models also being used to inform the AER's interpretation of the *SL-CAPM.*
- The Victorian distributors rejected the AER's foundation model approach, arguing instead for approaches that used all four ROE models separately, with the results combined in a weighted average.
- This resulted in the Victorian distributors proposing ROE allowances of 9.87 - 9.95%, almost 3% higher than the AER's most recent ROE determinations of 7.1%.
- The Victorian distributors' proposals would have resulted in equity risk premiums (return on equity minus risk free rate) of around 7.3%, which is:
    - 60% higher than the 4.55% equity risk premium provided by the AER in its most recent decisions
    - 40% higher than the 5.2% equity risk premium that the AER provided to the Victorian distributors during the previous regulatory period - in the midst of the Global Financial Crisis

- The distributors' proposed "multi-model" approaches were excessively complex, involving highly speculative assumptions that were open to bias and likely to increase the risk of disputes with the AER.

- The distributors' ROE proposals lacked credibility - the distributors were unable to demonstrate any track-record of their proposed ROE models having been applied by regulators for assessing returns for regulated networks.

- The distributors' ROE proposals lacked transparency, with no independent validation having been performed on their proposed ROE estimation approaches.

- The distributors did not engage with consumers or other stakeholders to explain why their ROE models and the resulting record-high equity risk premiums would better achieve the rate of return objective.

5.1.3 The Victorian Distributors' Return on Debt Proposals

The Victorian distributors proposed return on debt percentages of 5.39 - 5.67 %, based on major departures from the AER's *Rate of Return Guideline.*

The most significant departures related to the process by which the cost of debt assessment is transitioned from the "on the day" approach to the "10-year rolling average" approach. The distributors also proposed departures regarding data sources, averaging periods, credit ratings and approaches to data extrapolation.

The previous VECUA submission outlined VECUA'S concerns with the Victorian distributors' 'return on debt' proposals:

- The distributors proposals resulted in debt risk premiums (nominal debt less the nominal risk free rate) of around 3%, which was:
    - Around 67% higher than the 1.8% debt margin the AER provided in its recent SAPN decision
    - Similar to the debt margin that the AER provided to Australian networks for the previous regulatory period – i.e. during the Global Financial Crisis
    - Over 3 times the debt margin that was provided by the Essential Services Commission (ESC) for the 2006-10 regulatory period
    - Around 5 times the debt margin currently being provided by Ofgem for the UK networks
- The distributors' proposed approaches were overly complex involving subjective judgments that were highly likely to increase the risk of disputes with the AER
- The distributors did not engage with consumers or other stakeholders to explain why their alternative approaches to determining 'return on debt' allowances would better achieve the rate of return objective.

The AER also received submissions from various stakeholders, including the AER Consumer Challenge Panel (CCP3), which strongly criticised the Victorian distributors' WACC proposals and concurred with VECUA's criticisms.

Overall, the AER's preliminary determinations have acknowledged and endorsed the majority of VECUA's critiques of the distributors' 'return on capital' proposals.

5.2 The AER's WACC Determination Approach

5.2.1 Insufficient Consideration of "Market Data and Other Evidence"

The Rules require the AER to take into account "market data and other evidence" when making its return on capital determinations. [2]

The previous VECUA submission outlined evidence that that demonstrated that:

- Australia's electricity networks are far more profitable than the AER assumes
- Equity markets and investors are valuing the networks significantly higher than their regulated asset bases (RABs) – with some valuations at over 160% 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 is inappropriately applying the discretion it has been provided under the 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

These points were reinforced in submissions from various stakeholders, including the AER Consumer Challenge Panel (CCP3), which strongly criticised the AER for having insufficient regard to "real world outcomes", despite the AER's obligations to consider such information under the Rules. [3]

Many of the stakeholders' criticisms referred to the paper submitted by the AER Consumer Challenge Panel (CCP) to the AER Board in July 2014, which highlighted a variety of information that the AER should consider when making its WACC determinations. [4]

As outlined in the following sections, the AER continued to have insufficient regard to that information when setting its preliminary WACC determinations for the Victorian distributors.

5.2.2 The AER's Inappropriate Focus on the Distributors' WACC Proposals

The 2012 rule changes provided the AER with more flexibility in its application of the Rules, increasing the AER's ability to exercise greater discretion and judgment on the best approach to achieve the rate of return objective. [5]

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[2] NER, clause 6.5.2(c)

[3] AER Consumer Challenge Panel (CCP3) Submission on the Victorian distributors 2016-20 Revenue Proposals, September 2015
AGL Submissions to the AER on the NSW Electricity Distribution Networks 2014-19 Revenue Proposals, August 2014
PIAC submission to the Australian Energy Regulator's NSW electricity distribution network price determination, August 2014

[4] Consumer Challenge Panel, Smelling the roses and escaping the rabbit holes: the value of looking at actual outcomes in deciding WACC, July 2014

[5] NER, cl.6.5.2(c) and 6A6.2(c); NGR, r.87(3)

The rule changes made it very clear that the AER's WACC determinations should not be constrained by the networks' proposals.

Rather, the AER is explicitly required to exercise its discretion to achieve the outcome that best meets the long-term interests of consumers.

Whilst the AER is required to consider the networks' views, it must also take account of the views of consumers and other stakeholders.

However, the AER's WACC determinations predominantly focused of responding to the networks' ambit WACC claims, whilst having minimal regard to the views of consumers and other stakeholders.

This was predicted in the CCP paper referred to earlier.[6] In that paper, the CCP urged the AER to focus on outcomes and avoid being sucked into the *"ever deepening rabbit hole of arcane theoretical debate on WACC parameters"*; as to do so would be to lose touch with the over-riding rate of return objective.

However, that is exactly what has occurred in the current round of network revenue determinations.

Rather than focusing on the rate of return objective and responding to the deficiencies of its WACC determination approach outlined by various stakeholders, the AER has devoted an inordinate amount of scarce resources, putting together thousands of pages to counter the networks' ambit WACC claims and attempting to justify its default WACC parameters.

VECUA considers that those resources would have been much better devoted to consideration of the above evidence which would have resulted in the AER determining 'return on capital' allowances that are truly in consumers' long-term interests.

VECUA concurs with the observations of the CCP3 panel that the AER's focus on countering the networks WACC proposals and defending its default WACC parameters is alienating consumers and other stakeholders from the network revenue determination process.

5.2.3 The Implications of the Recent TransGrid Sale

In November 2015, the NSW transmission entity was sold (99 year lease) for $10.3 billion – a sale price that amounted to over 160% of its current regulated asset base (RAB) value.

Throughout the recent TransGrid revenue determination process, TransGrid made many assertions that the AER's approach to determining its return on equity allowances would not enable TransGrid to recover efficient financing costs or to attract equity investors – claiming that it would result in lower investment in the network and a significant increase in TransGrid's financing risks.

The extraordinary sale price achieved by TransGrid makes a mockery of those claims.

VECUA refers the AER to the *Spark Infrastructure* equity investment prospectus, which outlines why investors are willing to pay such a large premium above the networks' book values. [7]

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[6] Consumer Challenge Panel, Smelling the roses and escaping the rabbit holes: the value of looking at actual outcomes in deciding WACC, July 2014

[7] Spark Infrastructure - Equity Investment in TransGrid and Equity Raising, 25 November 2015

As outlined in various submissions to the AER over recent years, the Australian energy networks' statements to the AER are very different to their statements to investors. VECUA is extremely disappointed that the AER's WACC determinations continue to focus on the former rather than the latter.

5.3 The AER's WACC Determinations

Despite receiving various critiques of its WACC determination approach, the AER continued to apply the same approach to its WACC determinations for the Victorian distributors.

The table overleaf outlines the AER's Preliminary WACC determinations for the Victorian distributors, broken down to the key WACC components.

WACC Parameters	AER Preliminary Determinations
Nominal risk free rate	2.76 %
Equity risk premium	4.55%
Market Risk Premium (MRP)	6.5 %
Equity beta	0.7
Nominal post–tax return on equity	7.3 %
Nominal pre–tax return on debt	5.16-5.33 %
Nominal vanilla WACC	**6.02 – 6.12 %**

The only difference between the AER's WACC determinations for the Victorian distributors and its recent WACC determinations was that the risk free rate increased from 2.55% to 2.76 %, thereby increasing the overall WACCs.

5.3.1 Return on Equity

The AER's Preliminary Decisions have applied an equity risk premium (return on equity minus risk free rate) of 4.55%, which is similar to the equity risk premium that the AER provided to the distributors during the previous regulatory period – **i.e. in the midst of the Global Financial Crisis.**

VECUA's perspectives on the AER's return on equity determinations are outlined overleaf.

5.3.1.1 The AER's Failure to Consider The Impacts of Asset Indexation in its Return on Equity Determinations

VECUA draws the AER's attention to the previous advice from the AER Consumer Challenge Panel (CCP2), which outlined a highly material issue regarding the AER's failure to consider the impact of asset indexation when calculating its 'return on equity' allowances. [8]

In essence, the AER's methodology for the determination of its percentage return on equity is based on the assumption that the networks' assets are valued at historical costs.

However, in practice, the networks apply annual asset indexation to their regulatory asset bases (RABs), and allocate the cumulative value of their asset indexation to a 'revaluation reserves' account within their total equity.

The AER's calculation of its return on equity allowances does not reflect this reality.

When calculating its return on equity allowances, the AER incorrectly multiplies its percentage ROE to an equity base that includes 'revaluation reserves' - i.e. the AER is multiplying its percentage ROE to an incorrect equity base.

The CCP acknowledged that there are different approaches to addressing this issue, and didn't claim to have the definitive answer.

However, the CCP has advised the AER that to correct this error and provide appropriate ROE allowances, the AER needs to either:

- Alter its methodology for the calculation of its percentage ROE return to reflect that it will be applied to an equity base that is artificially inflated; or
- Remove the value of revaluation reserves from the equity base when calculating its return on equity allowances

The CCP demonstrated the materiality of the issue in relation to the AER's 'return on equity' determinations for Energex, outlining that:

- Over the previous regulatory period, the AER's return on equity allowance for Energex was around $1 billion higher than the required level
- This resulted in Energex achieving actual return on equity levels of 19-35%, compared to the AER's theoretical allowance of 10.84% - i.e. Energex achieved actual return on equity levels of 2-3 times the level assumed by the AER
- Over the next regulatory period, the AER is proposing to provide total 'return on equity' allowances to Energex of around $1.25 billion higher than the required level
- This will result in Energex achieving annual return on equity levels of around 25.5% over the next 5 years – around 3.6 times the AER's theoretical 7.1% return on equity

[8] CCP2 (Hugh Grant) Submission to the AER on the AER's Preliminary Revenue Determinations for the Queensland Distributors'

These are clearly extraordinary returns and well in excess of the returns being achieved by Australia's best performing ASX50 entities.

This issue is clearly highly material to the AER's determination of return on equity allowances for the Victorian distributors.

VECUA is therefore disappointed that the CCP's advice has not been considered by the AER when developing its preliminary WACC determinations for the Victorian distributors.

VECUA therefore calls upon the AER to correct its methodology to take into account the impact of asset indexation in its determination of efficient return on equity allowances for the Victorian distributors for the next regulatory period.

5.3.1.2 Market Risk Premium (MRP)

The Victorian distributors proposed Market Risk Premiums (MRPs) of 8.17% compared to the AER's recent MRP determinations of 6.5%.

The previous VECUA submission provided a critique of the distributors' MRP proposals, together with a critique of the AER's MRP determination approach.

It outlined that the regulatory framework for Australia's monopoly energy networks provides an extremely low business risk environment, demonstrating that the market risk premium (MRP) should be set at the bottom of the AER's guideline range (i.e. 5.0% or below).

The AER also received submissions from other stakeholders that concurred with VECUA's critiques.

The AER concurred with VECUA's critiques of the distributors' MRP proposals, but continued to apply an MRP of 6.5% as per its recent determinations.

VECUA is very disappointed that the AER has had insufficient regard to stakeholders' criticisms of its MRP determination approach.

5.3.1.3 Equity Beta

The Victorian distributors proposed an equity beta of 0.82.

VECUA's previous submissions included critiques of both the distributors' and the AER's approaches to estimating equity beta.

The AER concurred with VECUA's critiques of the distributors' proposed equity beta, but continued to apply an equity beta of 0.7 as per its recent determinations – i.e. the top end of the 0.4-0.7 range outlined in the AER's *Rate Of Return (ROR) Guideline*.

VECUA'S previous submission referred to Professor Olan Henry's April 2014 expert report [9], commissioned by the AER as part of its Better Regulation Program, which produced calculations of empirical estimates of equity beta consistent with the AER's Guideline.

[9] Henry O. T., Estimating Beta: An Update, April 2014

Over the past year, the AER has received numerous submissions that also referred to the Professor Henry report, providing compelling evidence that the AER should be applying an equity beta of 0.4 or lower.

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.

Importantly, Professor Henry's results included distributors that were regulated under a 'price cap' – i.e. it includes distributors that were subjected to volume risk. However, the AER will apply a 'revenue cap' to the Victorian distributors, thereby insulating them from any volume risk. This further strengthens the argument for an equity beta of 0.4 or below to be applied to the Victorian distributors.

VECUA considers that the AER has not provided any substantial evidence that supports its decision to apply an equity beta significantly higher than Professor Henry's estimate of 0.4.

5.3.2 Return on Debt

The AER's preliminary determinations propose to provide 'return on debt' allowances of 5.16 - 5.33%.

This represents a debt margin (nominal debt less the nominal risk free rate) of around 2.6%, which is:

- Similar to the debt margin that the AER provided to Australian networks for the previous regulatory period **– i.e. during the Global Financial Crisis**
- Around 40% higher than the 1.8% debt margin the AER provided in its recent preliminary decision for SAPN
- Over 3 times the debt margin that was provided by the ESC for the 2006-10 regulatory period
- Around 5 times the debt margin currently being provided by Ofgem for the UK networks

The previous VECUA submission provided a detailed critique of the distributors' and the AER's approaches to estimating the return on debt.

The AER concurred with VECUA's critiques of the distributors' return on debt estimates, but did not alter its own approach.

5.3.2.1 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.

5.3.2.2 The AER's Lack of Consideration of the Networks' Actual Debt Costs

It is well known that the Australian networks' actual borrowing costs are much lower than the costs assumed by the AER.

VECUA's previous submission provided evidence that the Australia's networks' actual debt costs have consistently been significantly lower than the costs that the AER assumes, resulting in the networks realising billions of dollars in 'windfall profits'.

Various stakeholders, including the AER Consumer Challenge Panel, have repeatedly criticised the AER for not considering how the actual costs of debt incurred by the networks compares with the AER's theoretical debt costs.

VECUA is extremely disappointed that the AER has had insufficient regard to those critiques.

VECUA concurs with the CCP3 recommendation that the AER should benchmark the networks' actual debt costs to inform its 'return on debt' allowances.

VECUA asserts that the AER's preliminary 'cost of debt' allowances are well in excess of the actual debt costs that the Victorian distributors' will incur, and will result in the distributors continuing to achieve extraordinary windfall profits over the next regulatory period.

5.4 VECUA's Overall Perspectives on the AER's Return on Capital Determinations

In summary, VECUA considers that the AER's preliminary return on capital allowances are well in excess of the efficient level, due to:

- The AER's insufficient consideration of relevant "market data and other evidence"
- The AER's failure to consider the impacts of asset indexation in its return on equity determinations
- The AER inappropriately exercising its discretion in favour of the networks
- The AER having insufficient regard to stakeholders critiques of its MRP and equity beta estimation approaches
- The AER having insufficient regard to stakeholders critiques of its 'return on debt' estimation approach

VECUA considers that a materially preferable WACC decision would incorporate a fuller consideration of the above evidence, together with and a more balanced application of the AER's discretion towards the long-term interest of consumers.

VECUA considers that this would result in significantly lower cost of capital allowances that would best meet the National Electricity Objective, whilst still delivering very generous returns to the Victorian distributors.

6 Capital Expenditure

6.1 The Victorian Distributors' Proposed Capex

The previous VECUA submission outlined a number of drivers that are producing significant downward pressure on the distributors' capex requirements for the next regulatory period, including:

- **The 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
- **Excess system capacity** - over-investment in the networks over the past decade has resulted in major levels of excess system capacity, declining network utilisation and reducing network ages
- **Lower network reliability expectations -** the distributors' major network investments over the previous two regulatory periods are now delivering reliability levels well in excess of consumers' 'willingness to pay' levels

In light of these drivers, VECUA asserted that the Victorian distributors' capex requirements should revert to the levels that applied prior to the previous regulatory period.

VECUA's previous submission demonstrated that the above drivers were not reflected in the distributors' proposals, which proposed record-high capex levels compared to their historical averages.

As outlined in the table below:

- The Victorian distributors proposed a total of $7.16 billion in capex – an overall increase of 17.4% compared to the distributors' actual capex spend over the previous regulatory period
- All five Victorian distributors proposed higher total capex allowances compared to the previous regulatory period, with increases of 4-33%.

Total Proposed Capex Compared to Previous Regulatory Period ($2015)

Distributor	2011-15 Actual Capex	Proposed 2016–20 Capex	Proposed Percentage Increases
AusNet Services	$1,890 M	$1,964 M	4 %
CitiPower	$ 720 M	$ 850 M	18 %
Jemena	$ 700 M	$ 841 M	20 %
Powercor	$1,750 M	$2,331 M	33 %
United Energy	$1,040 M	$1,195 M	15 %
Total	**$6,100 M**	**$7,163 M**	**17.4 %**

6.2 Capex Overspend During the Previous Regulatory Period

The previous VECUA submission provided a critique of the Victorian distributors' over-spend of their capex allowances during the previous regulatory period.

As outlined in the table below, four of the five Victorian distributors over-spent their capex allowances over the previous period, with overspends of 22 - 40%.

Capex Over-Spend During the Previous Regulatory Period

Distributor	2011-15 Total Capex Allowances ($2015)	2011–15 Actual Total Capex ($2015)	Percentage Overspend
AusNet Services	$1,550 M	$1,890 M	22
CitiPower	$840 M	$720 M	-14
Jemena	$500 M	$700 M	40
Powercor	$1,500 M	$1750 M	17
United Energy	$820 M	$1040 M	27
Total	**$5,210 M**	**$6,100 M**	**17**

The distributors' proposals provided very scant details of the reasons for their capex overspends.

VECUA therefore urged the AER to review the reasons for the distributors' capex over-spend during the previous period, and to incorporate the findings into the AER's assessment of the distributors' capital efficiency and the AER's determination of efficient capex allowances for the 2016-20 regulatory period.

That analysis was not performed by the AER in its preliminary determinations.

6.3 The Victorian Distributors' Capital Efficiency

The National Electricity Rules (NER) requires the AER to have regard to its annual benchmarking report.[10]

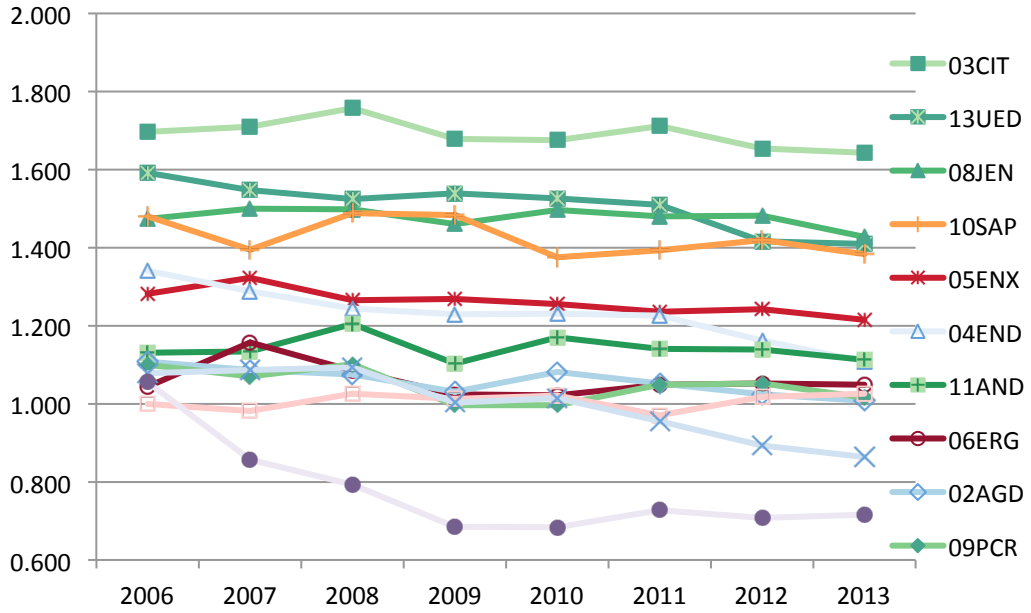
The AER's preliminary determinations included some observations of the Victorian distributors' relative capex efficiency performance, based on the AER's 2014 annual benchmarking report results.

However, the AER's capex assessment did not rely on its benchmarking results other than to gain a high level insight into the distributors' proposals – i.e. the AER did not use its benchmarking results deterministically in its capex assessments.

The diagram overleaf shows a measure of partial factor productivity of capital from the AER's 2014 benchmarking report. It demonstrates that Powercor and AusNet Services are amongst the lesser performers in this metric.

[10] NER, cl. 6.5.7(e).

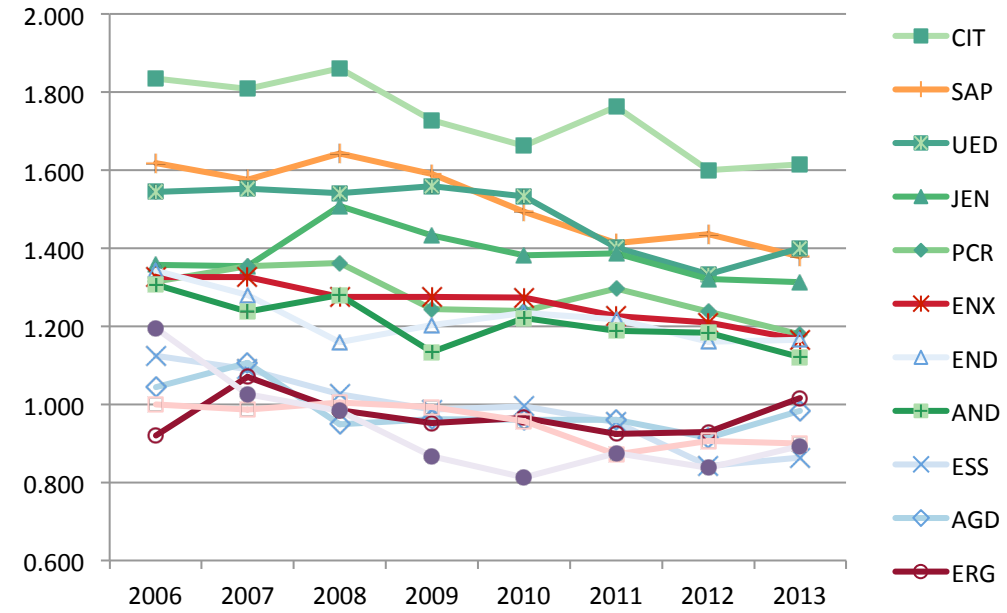
Partial factor productivity of capital (transformers, overhead and underground lines)



Source: AER, *Electricity distribution network service providers: Annual benchmarking report*, November 2014, p. 33.

The diagram below shows the distributors' performance on Multilateral Total Factor Productivity (MTFP) benchmarking. It illustrates that AusNet Services is amongst the lesser performers in this metric.

Multilateral total factor productivity



Source: AER, *Electricity distribution network service providers: Annual benchmarking report*, November 2014, p. 31.

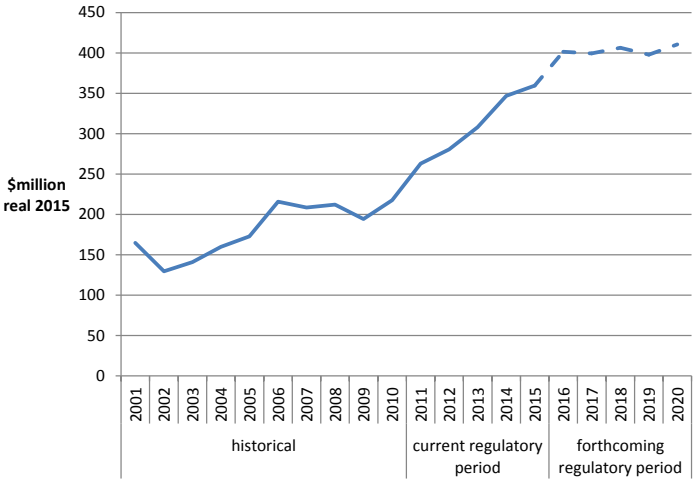
VECUA considers that the AER should have had greater regard to its capital benchmarking results when determining its capital expenditure allowances.

6.4 The Victorian Distributors' Historical Capex Trends

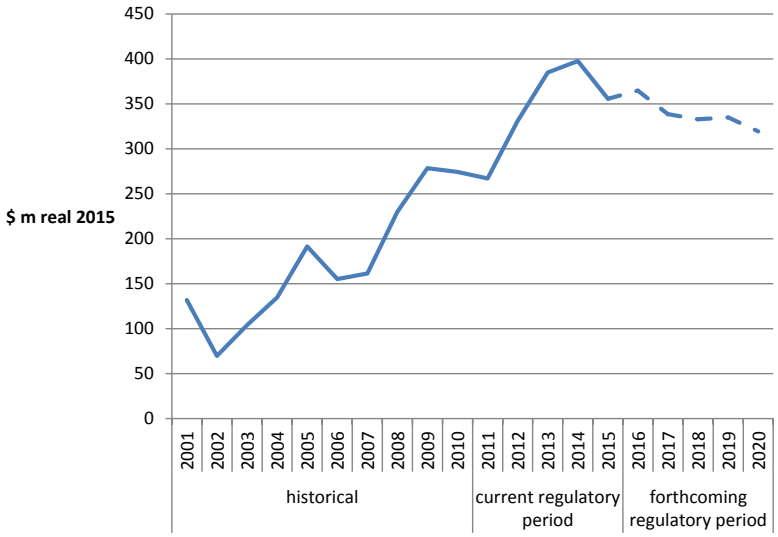
The AER compared the Victorian distributors' capex proposals with their long-term historical capex trend.

The diagrams below illustrate the Victorian distributors' historical/ proposed capex between 2001 and 2020. [11] They illustrate that all five Victorian distributors' capex forecasts are significantly higher than their historical spend levels.

Powercor Total Capex - Historical and Forecast

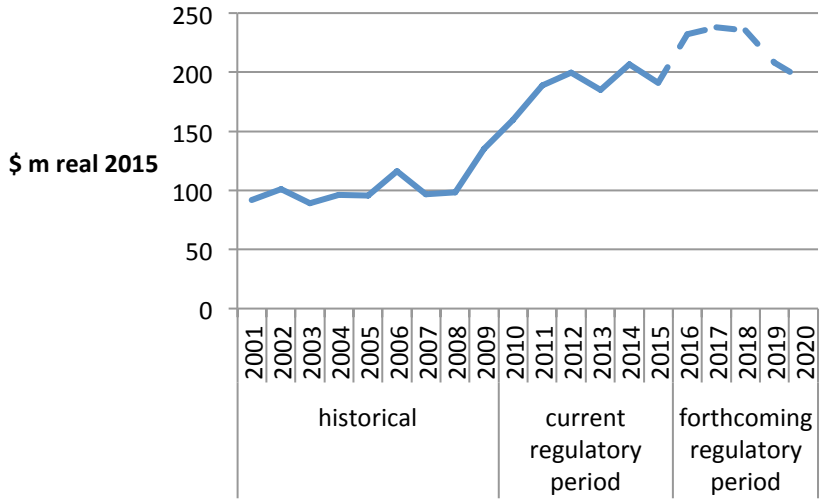


AusNet Services Total Capex - Historical and Forecast

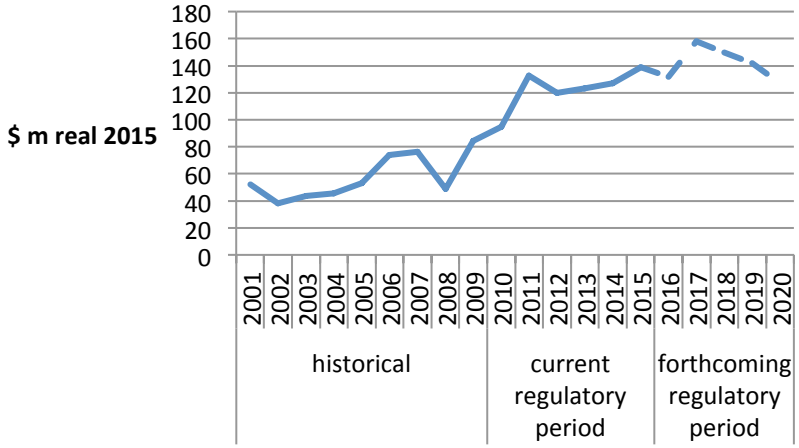


[11] AER Preliminary Determinations

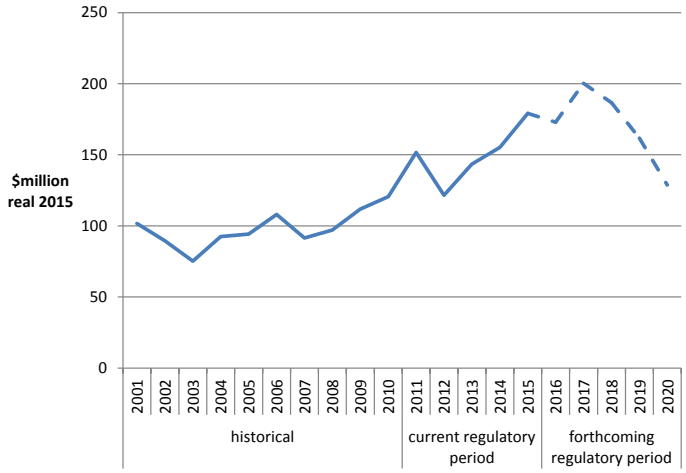
United Energy Total Capex - Historical and Forecast



Jemena Total Capex - Historical and Forecast



CitiPower Total Capex - Historical and Forecast



6.5 The Distributors Demand and Energy Forecasts

6.5.1 The Victorian Distributors' Poor Demand Forecasting Record

VECUA's previous submission highlighted that the peak demand and energy delivered forecasts used by the Victorian Distributors to justify their record-high capital investment programs for the previous regulatory period were subsequently proven to be overblown.

Rather than increasing significantly, as predicted by the distributors, peak demand and energy delivered both reduced during the previous regulatory period.

As outlined in the table below (derived from the AER's recently published 2011-13 performance report for electricity distributors) [12], the Victorian distributors have consistently over-estimated their peak demand projections.

Victorian Distributor's 2011-13 Peak Demand Forecasts Versus Actual Peak Demand

	2011		2012		2013	
	Forecast	Actual	Forecast	Actual	Forecast	Actual
AusNet Services	1874	1728	1959	1786	2046	1908
CitiPower	1510	1421	1552	1397	1593	1495
JEN	1099	1079	1130	996	1162	959
Powercor	2481	2263	2557	2161	2652	2321
United Energy	2359	2052	2424	2142	2495	2205

It is important to note that when the AER set the capex allowances for the Victorian distributors for the previous period, there were many submissions from stakeholders that strongly challenged their forecasts. [13]

It is also very important to note that the Victorian distributors were rewarded with windfall profits for their forecasting errors, as their revenue allowances included returns and depreciation on load-driven capex that they did not incur.

6.5.2 Customer Numbers

The table overleaf identifies the Victorian distributors' forecast growth in customer numbers compared with their historic growth rates over the previous two regulatory periods. The networks' proposed growth rates were broadly in-line with their recent historic growth rates, with the exception of CitiPower and Jemena, who both forecasted higher growth rates than their historical trends.

[12] AER 2011-13 performance report for electricity distributors, 30 June 2015

[13] For example, see CUAC Response to the Victorian distribution businesses regulatory proposals, 17 February 2009

Historic and Forecast Growth in Customer Numbers

Distributor	2006–2010	2010–2014	2016	2017	2018	2019	2020
AusNet Services	1.62%	1.50%	NA	1.61%	1.57%	1.49%	1.46%
CitiPower	1.26%	1.25%	2.00%	1.60%	1.60%	1.60%	1.60%
Jemena	1.37%	0.71%	NA	1.24%	1.24%	1.25%	1.25%
Powercor	1.88%	1.70%	1.70%	1.80%	1.80%	1.80%	1.80%
United Energy	0.85%	0.96%	1.00%	1.00%	1.10%	1.00%	1.00%

6.5.3 Peak Demand

VECUA's previous submission outlined that the Victorian distributors' peak demand forecasts were much higher than AEMO's forecasts.

It outlined that AEMO's latest forecast (50 per cent Probability of Exceedance (POE)) forecasted that Victoria's peak demand will drop to around 20% below the previous 2009 peak over the next 5 years. [14]

The table below compares each of the distributors' peak demand forecasts (10 per cent Probability of Exceedance (POE)) with AEMO's specific forecasts for the networks. All of the distributors forecasted much higher rates of growth than AEMO's projections (e.g. Powercor forecasted an annual growth rate of 3.54%, compared to AEMO's forecast growth rate of 0.27%).

Forecast Annual Growth in Peak Demand (Summer, 10% POE) [15]

Distributor	Period	Distributors' Forecasts Annual Growth	AEMO Forecasts Annual Growth
AusNet Services	2015–2020	1.07%	–0.09%
CitiPower	2015–2024	2.38%	0.40%
Jemena	2015–2024	1.46%	–0.10%
Powercor	2015–2024	3.54%	0.27%
United Energy	2015–2024	2.05%	0.14%

[14] AEMO National Electricity Forecasting Report 2015

[15] AER Issues Paper, Victorian Electricity Distribution Pricing Review, 2016 to 2010, Table 3.2, Page 11

6.5.4 Energy Distributed

VECUA'S previous submission outlined:

- Victoria's energy consumption has declined over the past 5 years, and AEMO is forecasting that energy consumption will be relatively flat over the next regulatory period.[16]
- Four of the distributors were forecasting faster rates of growth in the future than has occurred in the past (e.g. CitiPower forecasted an annual growth rate of 2.16% over the next 5 years, compared to a growth rate of 0.02% over the previous 5 years).
- Only AusNet Services forecasted lower demand in the future compared to the past.
- AusNet Services has used a different forecasting methodology to the other distributors, having incorporated actual interval meter data in its methodology
- Concerns that AEMO has consistently over-estimated its energy forecasts in recent years and identification of issues that VECUA considers are likely to result in AEMO's latest forecasts also being over-stated.

VECUA's submission outlined VECUA's expectation that the AER would substitute the distributors' demand and energy delivered forecasts with credible independent forecasts.

6.6 The Distributors' Capex Forecasting Methodologies

The previous VECUA submission outlined a number of deficiencies with the distributors' capex forecasting methodologies, including:

An Over-Reliance on 'Bottom Up' Forecasting Methodologies

The distributors' capex forecasts were overly reliant 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 distributors' capex forecasts appeared to be based on risk-averse and excessively conservative risk assessments that systematically overstate project risks and costs.

An assessment of the limited cost-benefit information provided by the distributors identified that their underlying risk assessments were excessively conservative and did not reasonably justify their key assumptions.

[16] AEMO National Electricity Forecasting Report 2015

In addition, the distributors' risk assessments were predominantly qualitative in nature. For example, the distributors did not quantify or appropriately demonstrate the risks associated with network performance in their capex proposals.

Inadequate Project Justifications

A number of the distributors' proposed capex projects and programs were poorly justified, e.g.:

- Insufficient justifications of the demand drivers for augmentation projects
- Insufficient justifications of asset conditions for replacement capex
- Insufficient and inconsistent justifications of reliability drivers and consumers' willingness to pay for reliability capex
- Inadequate provision of cost-benefit analyses
- Insufficient consideration of the networks' excess system capacity and declining system utilisation

Non-Credible Assumptions

A number of the distributors' proposed capex projects were based on unreliable assumptions, overstated benefits and insufficient consideration of relevant costs.

In particular, the distributors' key assumptions in relation to demand, customer forecasts, reliability drivers and labour escalation rates were strongly biased towards over-estimating their capex requirements.

The AER concurred with most of VECUA's critiques of the distributors capex forecasts.

6.7 VECUA's Previous Recommendations for the AER's Capex Assessment Approach

The previous VECUA submission also included a detailed critique of deficiencies in the capex assessment approach that the AER applied to its recent capex determinations.

It outlined VECUA's expectations regarding how the AER should address those deficiencies in the development of substitute capex forecasts for the Victorian distributors, including:

- Incorporating a more appropriate combination of top down and bottom up modeling, including
  - A detailed review and critique of the distributors' bottom-up forecasts
  - Supplementing 'bottom up' forecasts with 'top-down' assessments (e.g. economic benchmarking, trend analysis, engineering reviews) to ensure that an appropriate level of overall restraint has been brought to bear
- Incorporating more appropriate risk assessments and cost-benefit analyses
- Incorporating more credible assumptions regarding demand and customer forecast, reliability drivers, escalation rates, etc.
- Greater consideration of the growing levels of excess capacity and the significant declines in the distributors' asset utilisation levels

- A more detailed analysis of the distributors claimed "pockets of demand growth", informed by credible localised demand forecasts and local network constraint information
- Ensuring consistency with AEMO's most recent *Value of Customer Reliability (VCR)* results
- Ensuring that asset replacements are based on robust assessments of actual asset condition and previous replacement spend information, together with risk assessments that transparently identify the risks of replacement versus alternative options

The AER has incorporated the above recommendations to varying degrees in the development of its alternative capex forecasts.

The remaining capex sections of this submission focus on VECUA's residual concerns regarding the AER's capex assessment approach.

6.8 The AER's Preliminary Capex Determinations

As outlined in the table below the AER is proposing to provide a total of $5.25 billion in capex allowances over the next 5 years - representing a slight increase compared to the distributors' total capex allowances for the previous 5 years.

The AER's Proposed Total Capex Allowances

Distributor	AER Preliminary Determinations
AusNet Services	$1,495 M
CitiPower	$ 659.1 M
Jemena	$ 670.8 M
Powercor	$1,610.3 M
United Energy	$814.8 M
Total	**$5,249 M**

6.9 Load-Driven Capex

Despite AEMO forecasting that Victoria's demand will remain flat over the next decade, all five Victorian distributors proposed significant levels of load driven capex over the next 5 years.

6.9.1 The Victorian Distributors' Augex Proposals

VECUA's previous submission outlined detailed concerns with the distributors' augmentation capex proposals, including:

- The distributors' demand forecasts were well in excess of AEMO's most recent forecasts
- The distributors' proposed augex levels appeared very high considering the declining/flat load trends and the reduced need for safety and reliability capex that drove their major capex increases in the previous regulatory period
- The distributors' augex proposals did not appropriately consider their excess system capacity and declining system utilisation levels
- The distributors provided very scant justifications or evidence for the augex proposals for addressing their claimed "pockets of demand growth"
- Issues with the distributors' project justifications and the prudency and efficiency of a number of their proposed augmentation capex programs
- Inconsistencies in the distributors' use of *Value of Customer Reliability (VCR)* estimates

6.9.1.1 VECAU'S Previous Recommendations for the AER'S Augex Review

In light of the above issues, VECUA'S previous submission asserted that the Victorian distributors' augex proposals were materially overstated.

It outlined VECUA's expectations regarding the AER's augex assessment methodology, including:

- Substituting the networks' demand forecasts with credible independent forecasts
- Detailed assessments of the implications of the distributors' declining utilisation and excess network capacity levels
- Effective assessments of the distributors' proposed augmentation capex for "pockets of demand growth – informed by credible local demand forecasts and taking into account local system utilisation and excess capacity levels
- Detailed assessments of the prudency and efficiency of the distributors' key augmentation capex programs
- Ensuring the appropriate use of the most recent VCR/consumer 'willingness to pay' studies

The AER acknowledged VECUA's concerns and addressed VECUA's recommendations to varying degrees in its augex determination process.

6.9.2 The AER's Augex Determination Process

The AER's augex determination approach involved a combination of top-down and bottom-up assessment techniques:

The AER's 'Top Down' assessments included:

- Trend analyses of the distributors' demand-related capex
- Consideration of trends in demand and network utilisation

The AER's 'Bottom Up' considerations included

- Technical reviews of the distributors' forecasting framework
- Reviews of the distributors' major demand-driven projects and programs.
- Technical reviews of selected projects

6.9.3 The AER's Augex Assessments - Key Findings

The AER's key findings from its augex assessments included:

Demand Forecasts

- The Victorian distributors' demand forecasts were over-stated
- All of the available evidence concludes that the distributors' maximum demand levels will remain flat over the 2016–20 period

Pockets of Demand Growth

- There may be parts of the Victorian distributors' networks that require augmentation due to localised demand growth
- Augex is only required to address localised demand growth in areas of the networks where assets are very highly utilised

Asset Utilisation

- The distributors' forecasted increases in network utilisation over the next regulatory period were overstated, and consequently their augex forecast were overstated
- Applying more realistic demand forecast concludes that the distributors' network utilisation levels over the next regulatory period will remain similar to the levels during the previous regulatory period

Project and Program Reviews

- Taking into account the above findings, the AER concluded that some of the distributors' proposed projects were either unjustified or should be deferred

Reliability Capex Justifications

- Some distributors were inappropriately using out of date VCR figures for their project justifications
- A number of proposed projects were based on AEMO's 2013 VCR values, rather than the significantly lower values identified in AEMO's 2014 VCR results
- Consequently, the AER concluded that some proposed reliability-driven projects were either unjustified or should be deferred

6.9.4 The AER's Augmentation Capex Allowances

The table below outlines the AER's preliminary augex determinations compared with the distributors' proposed augex and the distributors' actual augex spend during the previous period.

Victorian Distributors' Augmentation Capex ($million, 2015)

Distributor	2011-2015 Actual Augex	Proposed 2016–20 Augex	Proposed Percentage Change	AER Preliminary Determinations	AER Percentage Change
AusNet Services	$460 M	$314 M	- 32 %	$267.4 M	42% reduction
CitiPower	$186 M	$203 M	+ 9 %	$119 M	36% reduction
Jemena	$115 M	$141 M	+ 23% %	$92.5 M	20% reduction
Powercor	$217 M	$362 M	+ 70 %	$241.6 M	11% increase
United Energy	$183 M	$167 M	- 9 %	$127 M	-30% decrease
Total	**$1,161 M**	**$1,187 M**	**+ 2.3%**	**$847.5 M**	**27% reduction**

6.9.5 VECUA's Concerns with the AER's Augex Determinations

Overall VECUA considers that the AER's augex assessment approach was an improvement on its previous approaches. However, VECUA considers that some aspects of the AER's augex assessment approach were insufficient and did not apply the degree of scrutiny required to determine efficient augex allowances.

VECUA'S key concerns with the AER's augex determinations are as follows:

- **Insufficient Scrutiny of Proposed Capex for "Pockets of Demand Growth"**

The distributors claimed that they need to invest in capacity 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.

The distributors' proposals provided very scant justifications or evidence of their "pockets of demand growth" claims.

VECUA's previous submission urged the AER to determine the distributors' augmentation capex needs by utilising credible demand forecasts at the zone substation level, together with a detailed analyses of local capacity constraints taking into account local system utilisation and excess capacity levels.

That level of analysis was performed by the AER to a limited degree.

Whilst the AER has given some consideration to localised demand forecasts, it is not clear whether the AER obtained localised forecasts at the level of detail required, or whether the AER assessed the distributors' capacity constraints at the level of detail required to properly determine the need for network augmentation.

VECUA accepts that a minor level of augmentation capex may be required to alleviate local capacity constraints in the Victorian distributors' networks over the next regulatory period. However, the need for such augmentation projects needs to be justified by sound evidence of local demand growth, together with a detailed demonstration of genuine local capacity constraints.

Such evidence has not been provided within the AER's preliminary determinations.

- **Insufficient Consideration of Excess Network Capacity Levels**

VECUA's previous submission outlined that the Victorian distributors' major investments over the previous regulatory periods have resulted in a large degree of excess system capacity and significant declines in their asset utilisation levels.

VECUA outlined that the AER's recent augmentation capex assessments for the interstate networks did not fully consider the implications of the network's growing excess capacity levels. It outlined VECUA's expectation that the AER would more fully consider the implications of the Victorian distributors excess capacity in its determination of their augmentation capex allowances.

The AER's preliminary determinations for the Victorian distributors acknowledged the unsustainable trends in the distributors' excess capacity levels. However, the AER did not quantify the impacts of this excess capacity, or demonstrate that it has been appropriately considered in its augmentation capex assessments.

- **Insufficient Consideration of Declining System Utilisation**

VECUA's previous submission outlined that the Victorian distributors' major investments in the previous regulatory periods have resulted in significant reductions in asset utilisation.

The AER's preliminary determinations acknowledged the networks' declining utilisation trends, identifying that the vast majority of the distributors' zone substations decreased in utilisation over the previous regulatory period and are forecast to continue to decrease significantly over the next period to historically low levels.

However, those trends did not materially affect the AER's augex determinations.

VECUA considers this to be a major omission in the AER's preliminary determinations. VECUA asserts that system utilisation is much more material to the determination of the networks' efficient augmentation capex needs than the AER's assessments have determined.

- **Insufficient Consideration of the Distributors' Unsustainable RAB Growth**

VECUA's previous submission outlined the unsustainability of the Victorian distributors' RAB growth trends.

The AER's preliminary determinations would result in the continuation of those unsustainable trends, with the Victorian distributors' RABs proposed to grow significantly over the next 5 years, during which their peak demand levels are expected to remain flat.

With the Victorian distributors' returns on their RABs (including depreciation) currently driving around 60% of their prices, the natural outcome of the continuation of these trends is the well documented "death spiral" [17] - i.e. as demand continues to decline and the move towards distributed generation increases, the burden of paying for the networks' costs will be shouldered by a smaller consumer base until those consumers can no longer afford to stay connected to the network.

VECUA considers that the AER's preliminary determinations have not appropriately considered the unsustainability of the network's RAB growth levels.

6.9.6 VECUA's Key Concerns with the AER's Augmentation Capex Allowances

In summary, VECUA consider that the AER's proposed augex allowances are excessive, due to:

- The AER's insufficient scrutiny of augmentation capex for "pockets of demand growth – including insufficient verification of local demand forecasts and insufficient demonstration of associated local capacity constraints
- The AER's insufficient consideration of the implications of the distributors' growing levels of excess capacity and the significant declines in the distributors' asset utilisation levels
- The AER's over-reliance on trend analysis, rather than a focus on efficient costs
- The AER's insufficient consideration of the unsustainability of the distributors RAB growth levels
- The AER's insufficient consideration of the networks' capital efficiency, or the prudency /efficiency of the networks' proposed augex projects

VECUA urges the AER to revise it augmentation capex allowances by performing more detailed assessments and having greater regard to the above considerations.

[17] The Energy Market Death Spiral - Rethinking Customer Hardship, Paul Simshauser and Tim Nelson, June 2012

6.9.7 Customer Connection Capex

All five Victorian distributors proposed increases in their customer connection capex over the next regulatory period, with proposed increases of 9-54%.

VECUA's previous submission outlined VECUA's concerns with the lack of scrutiny that the AER applied to its recent assessments of interstate networks' customer connection capex.

In light of the significant proposed increases in the Victorian distributors' customer connection capex, together with the significant unexplained growth in some of the Victorian distributors' forecast customer numbers, VECUA outlined its expectation that the AER would apply a greater degree of scrutiny to the Victorian distributors' customer connection capex forecasts.

As outlined in the table below, that was performed to some extent, with the AER's preliminary determinations proposing to apply an overall increase of 15.5%, with individual increases of 3.2 - 45%.

Victorian Distributors' Customer Connections Capex ($million, 2015)

Distributor	2011–15 connection capex	Proposed 2016–20 connection capex	Proposed Percentage Increase	AER Preliminary Determinations	AER Percentage Change (compared to 2011-15 spend)
AusNet Services	$ 339 M	$ 368.2 M	9 %	$ 368.2 M	9 % increase
CitiPower	$ 292 M	$ 332 M	14 %	$ 236.2 M	19.1% decrease
Jemena	$ 155 M	$ 159.9 M	10 %	$ 159.9 M	3.2% increase
Powercor	$ 500 M	$ 774.1 M	54 %	$ 724.6 M	45% increase
United Energy	$ 219 M	$ 249.1 M	14 %	$ 249.1 M	14% increase
Total	**$1,505 M**	**$1,884 M**	**25.2 %**	**$1,738 M**	**15.5 % increase**

6.9.8 The AER's Customer Connection Capex Assessment Approach

The AER identified a number of deficiencies with the distributors' customer connection capex forecasting methodologies. Overall, the AER concluded that the distributors' forecasts were not credible and could not be relied upon for determining the distibutors' connection capex allowances for the next regulatory period.

Consequently, the AER was required to develop alternative forecasts.

However, rather than developing genuine alternative forecasts, the AER set the distributors' connection capex allowances by trending forward their connection capex spend from the previous regulatory period.

VECUA does not accept that the AER has justified its approach to determining the Victorian distributors' connection capex allowances on the basis of their record-high 2010-15 spend levels.

VECUA asserts that the AER is required to develop genuine alternative connection capex forecasts, rather than basing its capex allowances on the distributors' previous capex spend levels, which have not been demonstrated to be efficient.

6.10 Replacement Capex

6.10.1 The Victorian Distributors' Repex Proposals

Despite having undertaken major replacement capex programs over the past two regulatory periods, all five Victorian distributors proposed record-high levels of repex over the next regulatory period.

As outlined in the table overleaf, the distributors proposed increases of between 32-70% compared to their actual repex spend in the previous period.

Victorian Distributor Replacement Capex Proposals

Distributor	2011–15 repex ($million, 2015)	2016–20 repex ($million, 2015)	Percentage Change
AusNet Services	687	901	32
CitiPower	153	260	70
Jemena	163	224	37
Powercor	443	722	63
United Energy	406	585	44
Total	**1852**	**2693**	**46**

VECUA's previous submission provided a detailed critique of the Victorian distributors' repex forecasts, outlining a number of concerns with the distributors' lack of justifications for their proposed repex increases, including:

- **The Distributors Repex Proposals Were Not Justified On Asset Condition Information**

The distributors' repex proposals provided very scant asset condition information. Rather, their repex proposals were heavily reliant on unsubstantiated statements suggesting that their assets are ageing.

However, VECUA's previous submission highlighted that the Victorian distributors' average asset ages were actually decreasing, rather than increasing as claimed by the distributors.

- **Insufficient Justifications of Risks and Drivers**

The previous VECUA submission asserted that the distributors had not provided any substantial justifications regarding the risks or drivers of their major repex programs.

In particular, VECUA asserted that the Victorian distributors had failed to identify the system performance outcomes that their major replacement capex programs would deliver.

- **Insufficient Consideration Of The Distributors' Major Repex Spend Over The Past Decade**

The previous VECUA submission asserted that the Victorian distributors' repex proposals did not reflect the impact of their major repex programs over the past decade, which VECUA considers have effectively 'pre-installed' a large proportion of their repex needs for the next period.

VECUA urged the AER to consider the prudency of the distributors previous repex spend and the extent to which it represented pre-installation of their future repex needs.

In light of the above issues, VECUA considered that the Victorian distributors' replacement capex proposals are materially overstated and therefore the AER would be required to develop substitute repex forecasts.

6.10.2 VECUA's Previous Recommendations for the AER's Repex Assessment

VECUA's previous submission also outlined a number of concerns with the approach that the AER applied to its recent repex assessments for interstate networks.

VECUA considered that the AER's approach was too high level, was overly reliant on acceptance of the networks' past asset replacement practices and did not apply the degree of rigour required to fully address the major deficiencies with the networks' repex forecasts, such as the issues identified above.

VECUA outlined its expectations that the AER would perform a more thorough review of the Victorian distributors' repex needs, involving:

- A review of actual asset condition information – ensuring that asset replacements are justified on the basis of robust assessments of asset condition
- An assessment of the extent to which the distributors' previous replacement capex programs have 'pre-installed' their replacement capex requirements for the next regulatory period
- Consideration of the networks' increasing excess capacity and declining asset utilisation levels
- Ensuring that alternative options to asset replacement (e.g. revised maintenance strategies, asset refurbishments, life extensions, and other risk mitigation options) are appropriately considered
- Considerations of optimal project timings – including options to defer timings and/or to undertake interim works
- Ensuring that re-use strategies are appropriately considered

6.10.3 The AER's Repex Assessment Approach

The AER applied four techniques to its assessment of the Victorian distributors' repex forecasts:

- Trend Analysis
- Predictive Modeling
- A "Technical Review" (by Energeia) of the distributors' approaches to forecasting, costs, work practices and risk management
- Consideration of asset health indicators

6.10.3.1 Trend Analysis

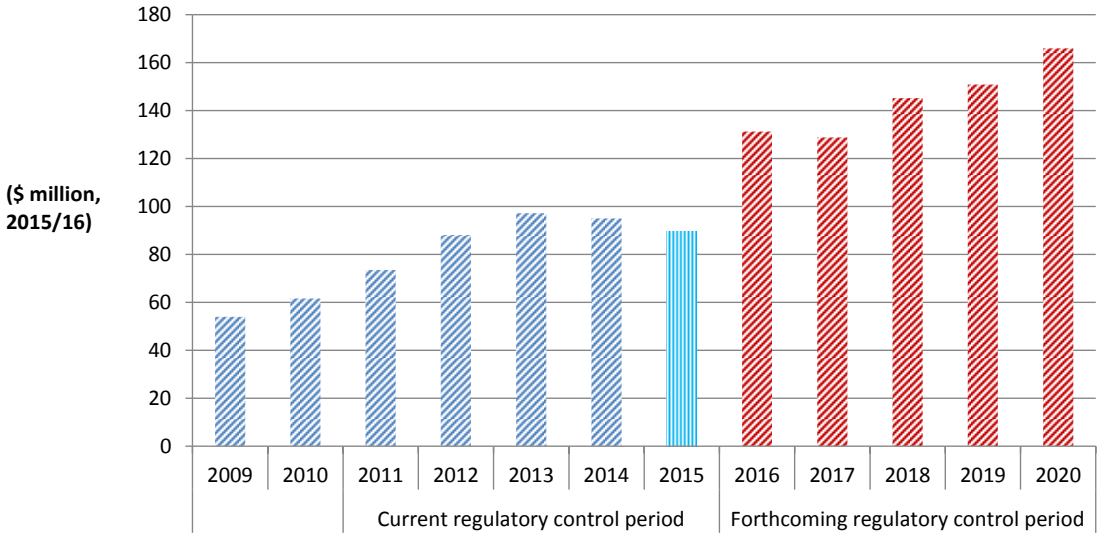
The AER's trend analysis confirmed VECUA's concerns regarding the distributors' proposed repex increases, identifying that the distributors' were proposing repex levels well above their long-term average repex spend levels.

The charts below highlight that the distributors proposed repex levels are significantly higher than their repex spend during the previous period.

However, what is not obvious from those charts is that:

- The Victorian distributors' repex spend over the previous period was significantly higher than their repex spend during the prior periods
- The distributors' proposed 2016-20 repex spend levels are around 3 times their long-term average repex spend levels

Powercor - Actual and forecast repex ($ million, 2015/16)



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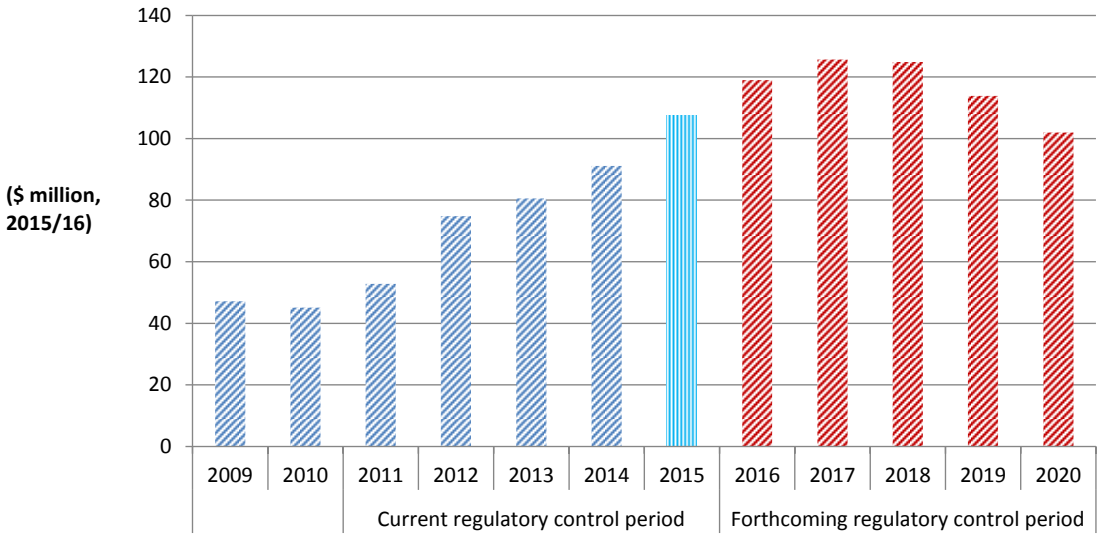
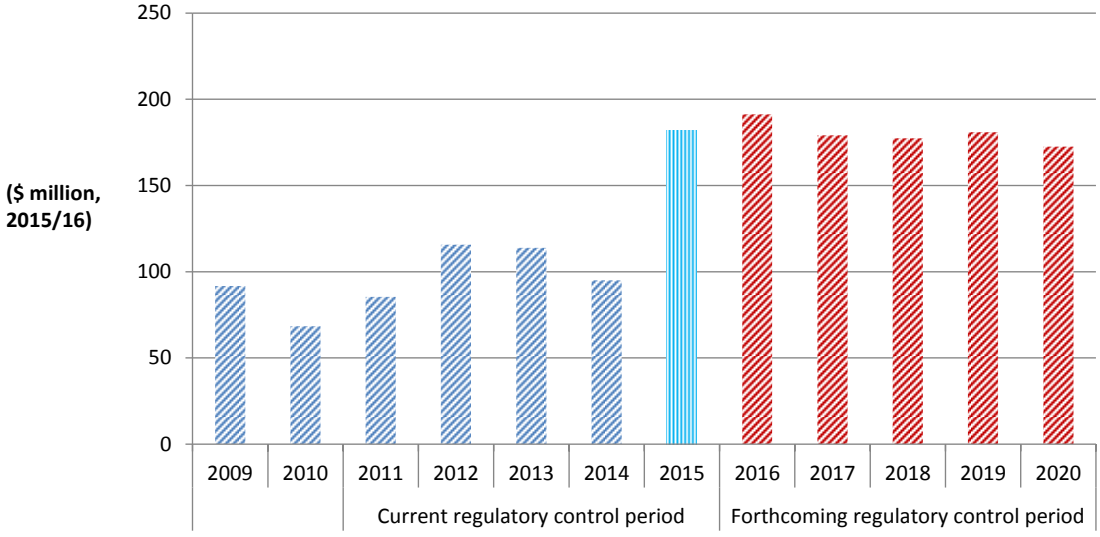
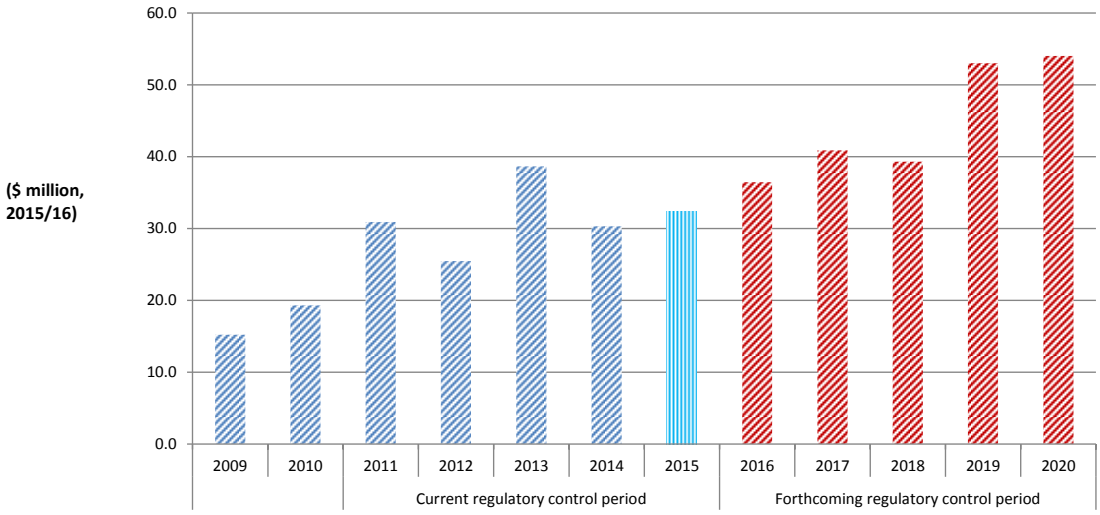
United Energy - Actual and forecast repex ($ million, 2015)



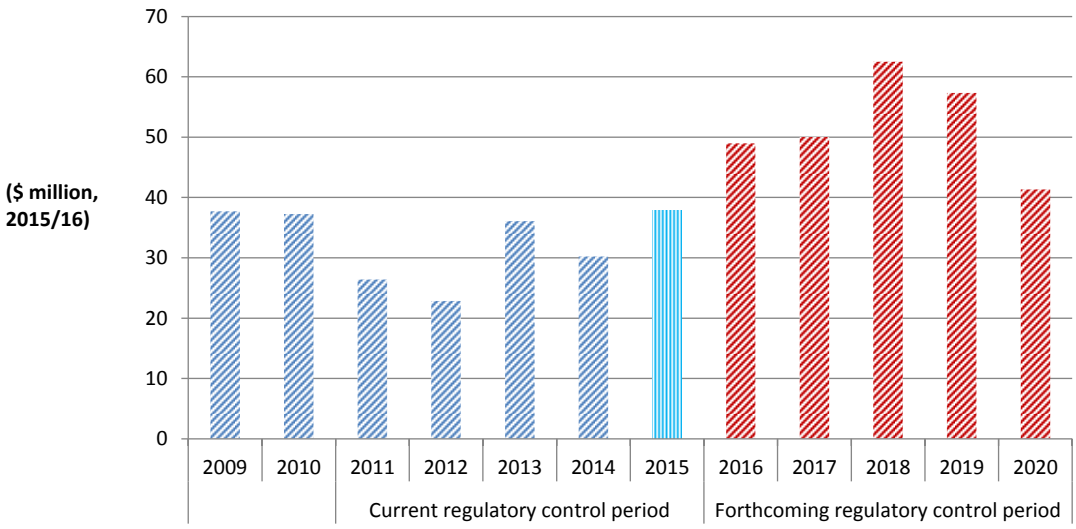
AusNet Services—Actual and forecast repex ($ million, 2015/16)



Jemena- Actual and forecast repex ($ million, 2015)



CitiPower - Actual and forecast repex ($ million, 2015)



6.10.3.2 Predictive Modeling (The AER's Repex Model)

The AER used predictive modeling (the AER's repex model) to estimate 'business as usual' repex for its modeled repex categories - poles, overhead conductors, underground cables, service lines, transformers and switchgear; accounting for around 63% of the Victorian distributors' proposed repex.

The AER's repex model aims to predict the volume of assets that may need to be replaced over the next 20 years – based on the number and age of assets in commission, the assumed asset replacement ages and their corresponding unit costs.

Importantly, the AER's repex model uses asset age as a proxy for asset replacement drivers. [18]

The data used in the model is derived from the distributor's regulatory information notice (RIN) responses and from the outcomes of the AER's unit cost and replacement life benchmarking across all distributors in the NEM.

The AER's predictive modeling assumes that the distributors' recent repex practices are reflective of efficient future requirements.

The AER's estimates use the distributors' forecast unit costs, but 'calibrates' the distributors' forecast replacement volumes to reflect volumes of replacement capex that are consistent with the distributors' recent replacement practices.

The AER's predictive modeling identified a number of major flaws with the Victorian distributors' forecasting assumptions that severely damaged the credibility of the distributors' repex proposals, particularly in relation to their assumed asset lives and unit costs.

6.10.3.2.1 The Distributors' Assumed Asset Lives

The AER's analysis identified major anomalies with the Victorian distributors' assumed asset lives.

In essence, it confirmed that the distributors' proposals had assumed asset lives much shorter than they actually achieve in practice.

Using the lives provided within the Victorian distributors' RIN responses resulted in repex estimates that greatly exceeded the distributors repex forecasts – with estimates amounting to around 15 times the distributors' repex forecasts.

The AER concluded that the distributors' asset life estimates significantly understated their actual asset lives.

6.10.3.2.1.1 Standard Asset Lives?

VECUA's previous submission outlined that there are major variations in the "standard asset lives" being used by Australia's electricity networks. These variations have major implications for the networks' repex, depreciation, and 'return on capital' allowances.

VECUA asserted that the AER is providing the networks with too much discretion in the setting of asset lives and that the AER needs to enforce greater consistency in the determination of "standard asset lives", rather than continuing to allow the networks to choose asset lives that optimise their returns for each revenue reset.

This was reinforced by the submission from the AER Consumer Challenge Panel (CCP3), which highlighted major variances across the distributor's stated asset lives and anomalies in the Victorian distributors' data.

The CCP also supported the AER enforcing a more standardised approach to determining asset lives across the networks.

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[18] AER, Electricity network service providers, Replacement expenditure model handbook, November 2013, p. 10.

6.10.3.2.2 Unit Replacement Costs

The AER's repex modeling identified that the Victorian distributors' proposed unit costs significantly over-estimated their repex needs compared to forecasts that the AER developed using the distributors' actual unit costs for the previous regulatory period.

The AER concluded that the distributors historical costs reflected a more realistic expectation of future unit costs. Consequently, the AER adopted the distributors' historical unit costs for the purpose of calculating its 'business as usual' repex estimates.

6.10.3.3 Technical Reviews

The AER engaged *Energeia* to perform a top-down review of the Victorian distibutors repex proposals focusing on the AER's modeled asset categories.

The key findings of the *Energeia* review included:

- The Victorian DNSPs' proposed repex programs (excluding bushfire expenditure) were, on average, more than 50% higher than the prudent and efficient levels approved by the AER
- Energeia found significant issues with the demonstrated efficiency and prudency of each DNSPs' proposed repex
- There were significant opportunities for efficiencies to be realised in the optimisation of investment triggers and replacement mix and timing
- AusNet Services had included repex to improve its safety performance above levels recommended by the VBRC, previously approved by the AER and/or funded by Victorian government
- None of the DNSPs appear capable of efficiently optimising their safety expenditure to maximise safety performance at least cost
- AusNet Services' volume forecast did not provide an industry standard quantitative model projecting its repex
- There was significant variation in the unit prices for similar assets, suggesting differences in relative efficiency
- United Energy's and AusNet Services' unit price forecasts appeared to be substantially and significantly higher than current prices
- United Energy's focus on SAIDI as its key reliability metric driving its repex left the door open to driving up the more direct repex key performance indicator of SAIFI above the level necessary for compliance
- Overall, the Victorian distributors lacked awareness or the ability to trade-off equivalent safety risks across assets to arrive at a lowest average cost for a given level or performance, or more desirably, a higher level of safety for the same cost

In essence, the Energeia technical review highlighted that the Victorian distributors had materially overstated their repex needs.

6.10.3.4 Asset Health Indicators and Comparative Performance Metrics

The AER's preliminary determinations include a number of statements that emphasise the criticality of the distributors' repex allowances being determined on the basis of actual asset condition information.

However, to inform its understanding of the distributors' asset condition, the AER only considered two very high-level indicators:

- Trends in the remaining service life
- Trends in asset utilisation

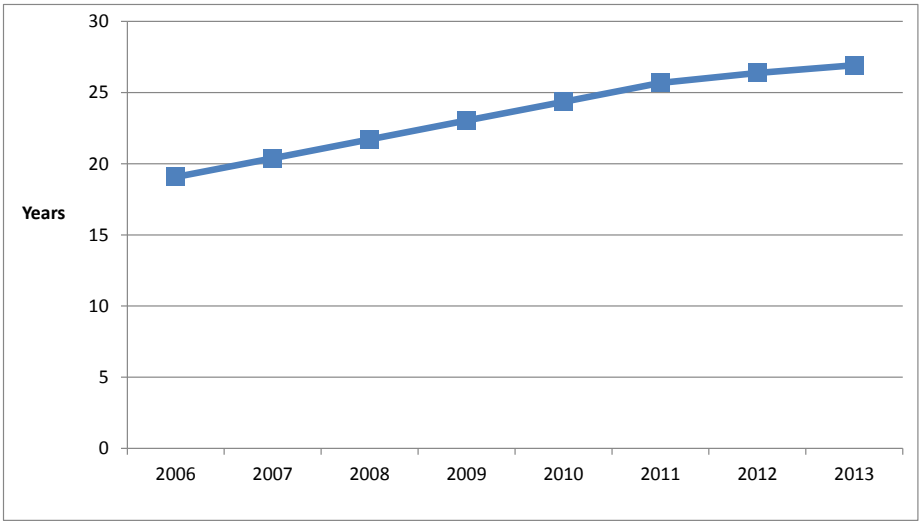
Importantly, these indicators did not materially impact on the AER's repex determinations, which were predominantly based on the conclusions from its repex model.

6.10.3.4.1 Trends in the Remaining Service Life of Network Assets

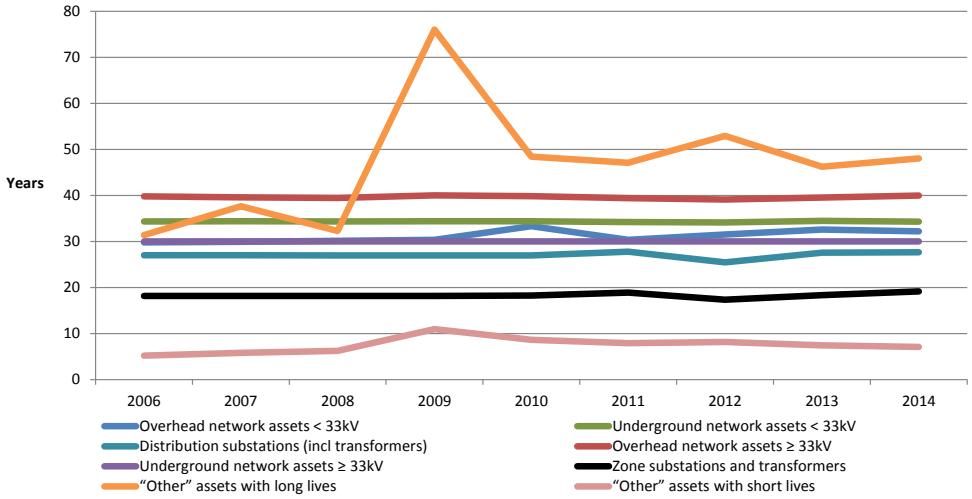
The AER performed a trend analysis of the distributors' residual asset lives.

As outlined in the charts below, the AER's analysis concluded that the distributors' residual asset lives have been relatively stable or improving over the previous regulatory period, and are expected to remain stable through the 2016−20 regulatory period.

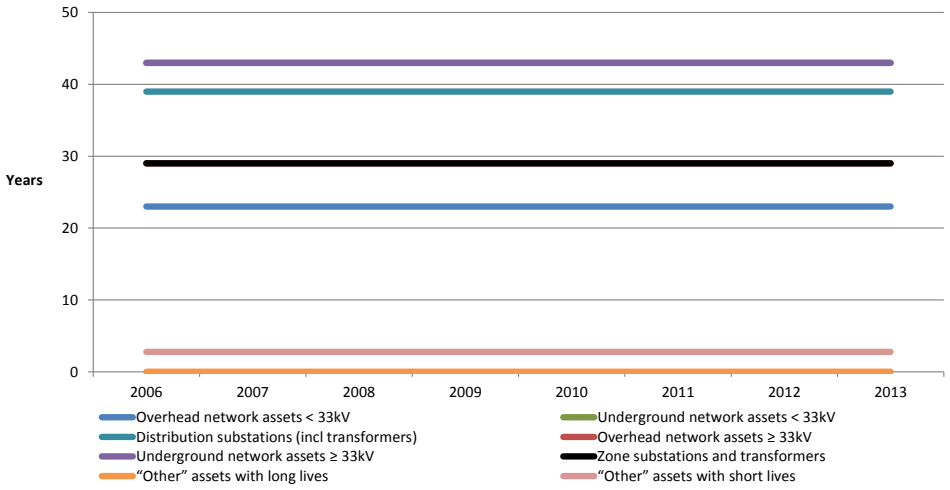
Powercor estimated residual service life network assets



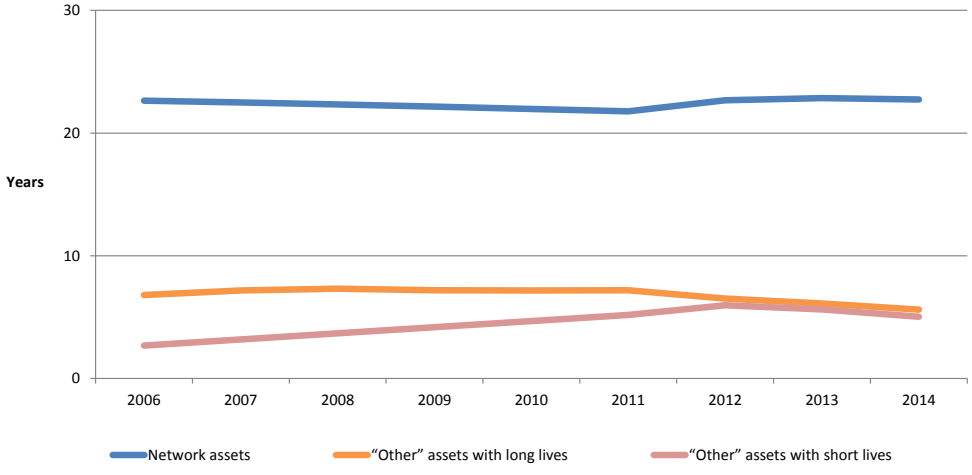
Jemena estimated residual service life network assets



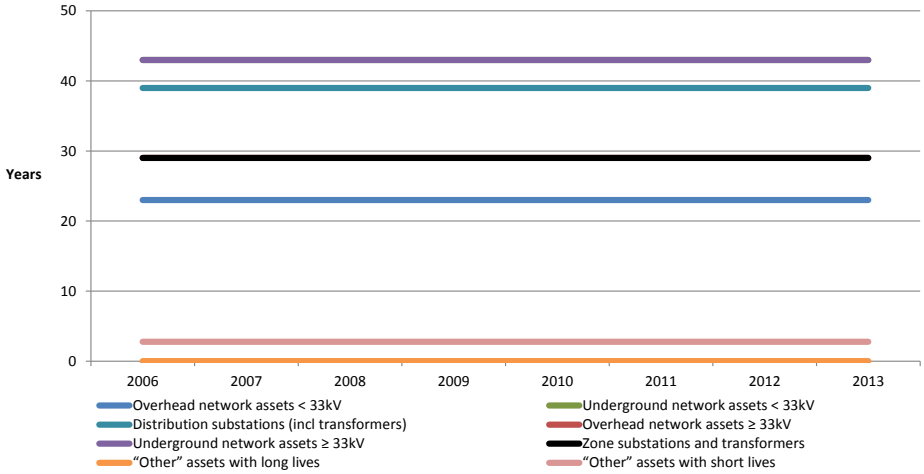
AusNet Services estimated residual service life network assets



CitiPower estimated residual service life network assets



United Energy estimated residual service life network assets



6.10.3.4.2 Asset Utilisation Trends

The key findings of the AER's asset utilisation trend analyses included:

- The Victorian distributors experienced a steady decrease in their utilisation levels over the previous regulatory period
- The distributors have significant spare capacity in their networks based on past investments
- A positive correlation between asset condition and lower network utilisation exists for certain asset classes
- The Victorian distributors' asset utilisation levels are relatively low, and there has been no material deterioration of the distributors' assets in recent years due to high asset utilisation
- The distributors' reducing asset utilisation levels means that their assets are more lightly loaded which is likely to have a positive impact on the distributors' overall asset condition

6.10.3.5 Un-Modeled Repex

The AER's unmodeled repex for SCADA, pole top structures; and "other repex" amounted to around 35% of the distributors' repex.

In essence, the AER's analysis concluded that the majority of the distributors' forecasts for these expenditure categories were unjustified.

However, rather than developing genuine alternative forecasts, the AER predominantly set the distributors' repex allowances on the basis of the distributors' equivalent spend for the categories during the 2011-15 regulatory period.

VECUA considers that the AER has not justified its decision to base its repex allowances on the basis of the distributors' record-high 2011-15 repex spend, as the AER has not assessed or demonstrated the efficiency of those spend levels.

6.10.4 The AER's Proposed Repex Allowances

As outlined in the table below, the AER is proposing to provide total replacement capex allowances for the Victorian Distributors of $2.2 billion.

Victorian Distributor Replacement Capex Comparisons ($million, 2015)

Distributor	2011–15 Actual Repex	Proposed 2016–20 Repex	Proposed Percentage Change	AER Preliminary Determinations	AER Percentage Change
AusNet Services	687	901	32	758	10.3% increase
CitiPower	153	260	70	199	30% increase
Jemena	163	224	37	224	37.4% increase
Powercor	443	722	63	609	37.5% increase
United Energy	406	585	44	414	2% increase
Total	**1,852**	**2,692**	**46**	**2,204**	**19% increase**

6.10.5 VECUA's Key Concerns with the AER's Repex Determinations

In essence, VECUA considers that the AER is proposing to provide repex allowances to the Victorian distributors well above the efficient level.

VECUA's key concerns with the AER's repex determinations are outlined below.

- **Insufficient Consideration of Actual Asset Condition Information**

The AER's repex determinations have not appropriately considered actual asset condition information.

As outlined above, the AER's limited consideration of "Asset Health" indicators, simply involved some cursory observations of asset utilisation and remaining life trends. However, those observations did not materially affect the AER's repex determinations.

Rather, the AER's repex determinations were predominantly reliant on the AER's repex model, which is:

- Heavily reliant on using asset age as a proxy for asset condition
- Heavily reliant on trend analysis
- Heavily reliant on acceptance of the networks' past asset replacement practices and their historical repex spend levels

It is well understood that asset age is a very simplistic indicator and not a credible determinant of "asset health". 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, asset refurbishments and other risk mitigation options).

Such assessments were not performed by the AER in its preliminary repex determinations.

VECUA also asserts that the AER's repex model was never intended to be a deterministic model, and it is therefore inappropriate for the AER to have placed such a heavy reliance on its results in the setting of its repex allowances for the Victorian distributors.

- **Insufficient Consideration of the Distributors' Major Repex Programs Over the Previous Period**

VECUA asserts that the Victorian distributors' repex programs over the past decade have effectively "pre-installed" a large proportion of their repex needs for the next period.

The AER's preliminary determinations acknowledged the importance of considering the impact of the distributors previous repex:

"That said, we have also considered whether the service provider's replacement practices from the last regulatory control period did more than maintain safety, reliability and security of the distribution system, such that applying the business as usual approach for asset replacement may result in replacement practices that provide for expenditure over and above what is necessary to satisfy the capex objectives".

However, this very important consideration was not appropriately taken into consideration in the AER's preliminary repex determinations.

Rather, the AER's proposed repex allowances are predominantly based on trending forward the distributor's record-high repex spend during the 2010-15 regulatory period, despite evidence that the distributors' repex spend levels during that period were inefficient.

- **Insufficient Consideration of Asset Utilisation Levels**

The AER's preliminary determinations acknowledged that the major increases in the networks' spare capacity and their declining asset utilisation trends will result in their assets ageing at reduced rates compared to previous periods.

Despite this observation, the AER did not use the outcomes of its asset utilisation analysis to any significant extent in determining the Victorian distributors' repex allowances.

VECUA considers this to be a very critical omission in the AER's preliminary repex determinations.

VECUA considers that the above conclusions should have resulted in the AER giving far greater consideration to the impacts of asset utilisation in its determinations of efficient repex allowances.

- **Insufficient Justifications of Drivers or Performance Outcomes**

The AER has not demonstrated the outcomes (e.g. system performance outcomes) that its major repex allowances will deliver.

VECUA considers this to be a major deficiency in the AER's preliminary determinations.

- **An Over-Reliance on the Distributors' Record High 2011-15 Repex Spend**

The AER has predominantly based its proposed 2016-20 repex allowances on the basis of the distributors' record-high 2011–15 repex spend levels.

As outlined within this submission, the Victorian distributors significantly over-spent their previous repex allowances and the AER did not perform any reviews of the prudency or efficiency of their previous repex spend.

The AER's preliminary determinations acknowledged the deficiencies in the AER's repex determination processes. However, rather than addressing those deficiencies for its current round of determinations, the AER is expecting stakeholders to accept that it will address them in its next revenue determinations in 5 years time.

As stated by the AER:

"Going forward, this incentive will be supplemented by a Capital Expenditure Sharing Scheme, which will provide a constant incentive to spend efficient capex over the regulatory control period, as well as the ability to exclude capex overspends from the RAB as part of an ex-post review.

These additional arrangements will provide us with greater confidence that the service provider's past replacement practices are likely to reflect efficient and prudent costs, such that business as usual asset replacement approach is likely to be consistent capex objectives.

Finally, the collection of a longer period of data on changes in the asset base as part of our category analysis RIN will provide us with further information into the service providers' asset replacement practices over a longer period of time. This will further inform our understanding of business as usual replacement practice to estimate repex.

More time series data would also strengthen our ability to use benchmarked information (e.g. asset life inputs) in the repex model in the future, which is intended to drive further efficiency in replacement expenditure".

In the meantime, the AER is expecting Victorian consumers to fund over $2.2 billion in repex, a good deal of which VECUA asserts is well in excess of the efficient level.

Consequently, VECUA does not accept that the AER has justified its approach to determining the Victorian distributors' repex allowances on the basis of their record-high 2011-15 spend levels.

The AER is required to develop genuine alternative repex forecasts, rather than basing its allowances on the distributors' previous repex spend levels, which have not been demonstrated to be efficient.

In summary, whilst VECUA acknowledges that the AER's approach to determining the Victorian distributors' repex allowances represents an improvement compared to the approach that the AER applied to its previous repex determinations; VECUA considers that the AER has not applied the degree of rigour required to fully address the major deficiencies with the networks' repex forecasts identified above.

VECUA urges the AER to perform more robust repex assessments incorporating a fuller analysis of the above considerations.

6.11 Non-Network Capex

6.11.1 The AER's Non-Network Capex Determination

As outlined in the table below, the AER is proposing to provide a total of $794 million in non-network capex allowances – an overall 2% increase compared to the Victorian distributors' record-high non-network capex spend during the 2011-15 regulatory period.

Non-Network Capex - Comparisons with 2011-15 Spend ($million, 2015)

Distributor	2011–15 Actual Repex	Distributors' Proposed 2016–20 Repex	Proposed Percentage Change	AER Preliminary Determinations	AER Percentage Change
AusNet Services	224.5	208.6	7% decrease	208.6	**7% decrease**
CitiPower	53.8	104	93% increase	88.1	**64% increase**
Jemena	138.5	137.2	1% decrease	135.9	**1.9% decrease**
Powercor	190.6	262.1	38% increase	226.4	**19% increase**
United Energy	173.2	194.6	12.4% increase	134.6	**22% decrease**
Total	**780.6**	**906.5**	**16.1 % increase**	**793.6**	**2% increase**

6.11.2 The AER's Non-Network Capex Assessment Process

The AER's non-network capex assessment process involved the following:

Trend Analyses

The AER performed trend analyses of:

- The distributors total actual/forecast non-network capex from 2001-2020
- The distributors' actual/forecast spend for four spend categories – IT, Fleet, Buildings & Property and Tools & Equipment capex. This 'category analysis' only covered the distributors' spend levels since 2009 – i.e. it only included one regulatory period of actual spend levels

Where the distributors' forecast capex for a spend category was not materially higher than their actual spend during the 2011-15 regulatory period, the AER accepted their proposed capex levels for those categories in full.

Project Reviews

Where the distributors' proposed capex for a spend category was materially higher than their actual spend for that category during the 2011-15 regulatory period, the AER reviewed some selected project or programs. This involved a high level review of any business cases or supporting documentation provided by the distributors.

Corrections for Asset Disposals

The AER applied corrections to account for asset disposals where the distributors had omitted to do so within their regulatory proposals.

6.11.3 Key Findings and Conclusions from the AER's Assessment

6.11.3.1 Trend Analysis

The charts overleaf summarise the AER's trend analyses results.

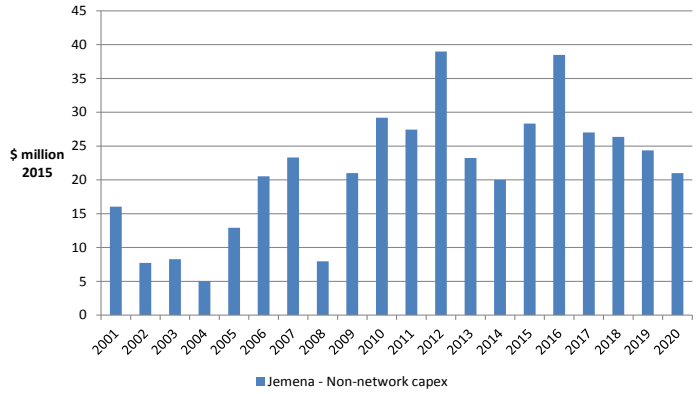
They highlight that:

- The distributors' proposed non-network capex levels were much higher than their average spend levels prior to the previous regulatory period
- The distributors' spend levels for each of the four sub-categories are highly volatile, making it impossible for the AER to ascertain efficient spend levels for each category without a proper longer-term trend analysis.

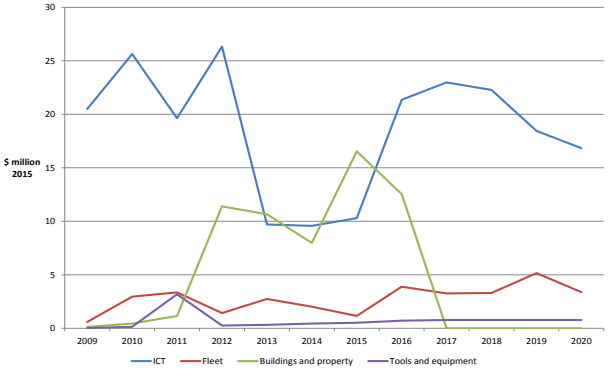
6.11.3.2 Project Reviews

The AER's project reviews resulted in the AER removing some proposed expenditure on the most obvious poorly justified IT projects (e.g. the distributors' proposed "RINS Compliance" and "IT Security" projects).

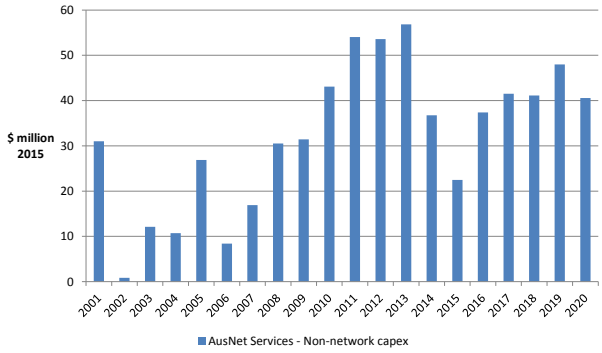
Jemena – Total Non-Network Capex 2001 to 2020 ($million, 2015)



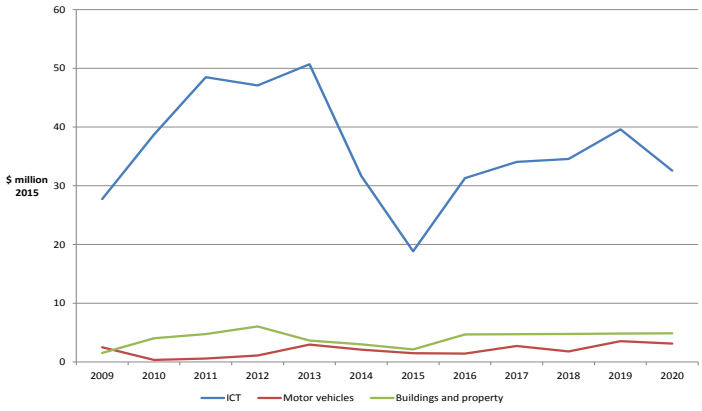
Jemena – Non-Network Capex by Category ($million, 2015)



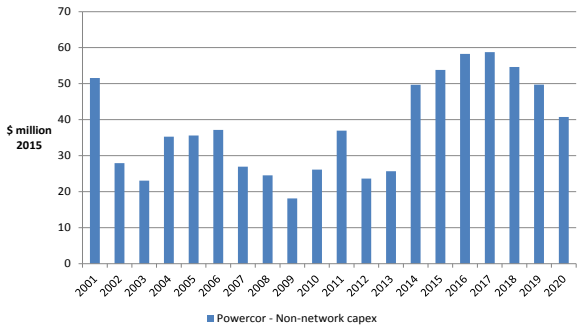
AusNet Services' – Total Non-Network Capex 2001 to 2020 ($million, 2015)



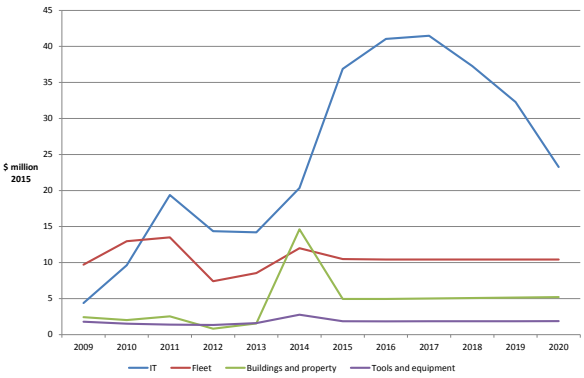
AusNet Services - Non-network Capex by Category ($million, 2015)



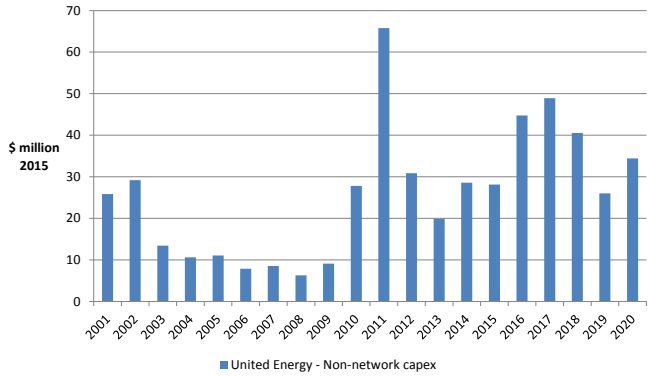
Powercor – Total Non-Network Capex 2000-01 to 2019-20 ($million, 2015)



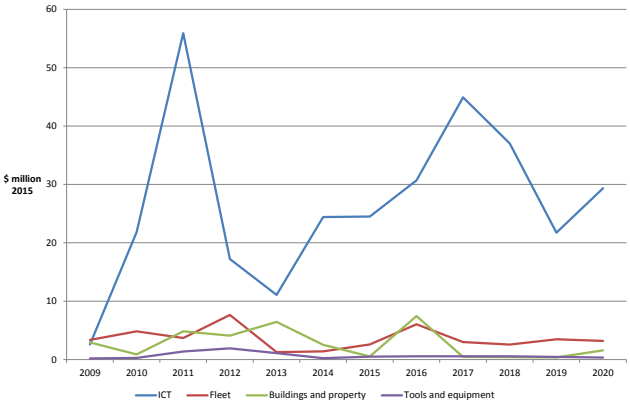
Powercor- Non-Network Capex by category ($million, 2015)



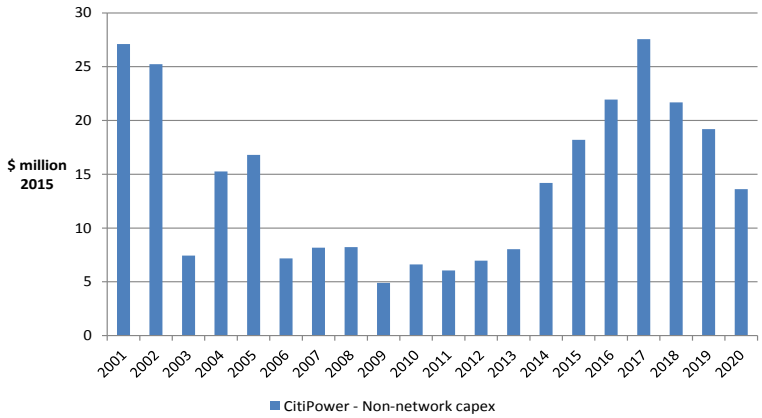
United Energy – Total Non-Network Capex 2001 to 2020 ($million, 2015)



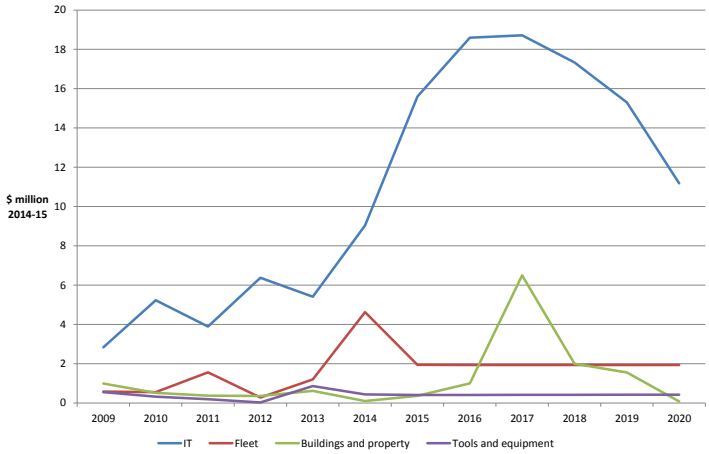
United Energy - Non-Network Capex by Category ($million, 2015)



CitiPower – Total Non-Network Capex, 2001 to 2020 ($million, 2015)



CitiPower - Non-Network Capex by Category ($million, 2015)



6.11.4 VECUA's Key Concerns with The AER's Non-Network Capex Allowances

VECUA has a number of concerns with the AER's non-network capex assessment process and the AER's proposed allowances, including:

Inadequate Trend Analyses

The AER's category analysis only compared the distributors' proposed capex against their record-high spend levels over the 2011-15 regulatory period.

As outlined above, the distributors' 2011-15 non-network capex levels were much higher than their long-term average spend levels.

The distributors' spend levels for each of the sub-categories are highly volatile, making it impossible for the AER to ascertain efficient spend levels for each category without a proper longer-term trend analysis.

The AER is required to set its non-network capex on the basis of efficient levels– not on the basis of the distributors' record high spend levels during the 2011-15 period.

The AER's over-reliance on the distributors' 2011-15 spend levels has resulted in the AER providing non-network capex allowances well in excess of the distributors' long term average spend levels.

VECUA concurs with the CCP3's view that the Victorian distributors' non-network capex spend levels prior to the previous regulatory period are a better reflection of 'reasonable' capex levels. [19]

Project Reviews

As outlined above, the AER's project reviews were only triggered if the distributors' proposed spend for a particular category was materially higher than the distributors' expenditure for the category during the 2011-15 regulatory period.

Furthermore, the AER's high-level project review approach only resulted in the AER challenging the distributors' most obvious ambit claims (e.g. United Energy's "Power of Choice" related IT capex projects and the distributors' ambit claims for "RINS Compliance" projects).

VECUA asserts that this lack of scrutiny resulted in the AER 'waving through' many unjustified projects.

For example, it resulted in the AER 'waving through':

- A 62% increase in Citipower's previous record-high IT capex spend ($65.2 million compared to $40.2 million in the previous period)
- A 33% increase in Powercor's previous record-high IT capex spend ($139.6 million compared to $104.9 million in the previous period)

Insufficient Demonstration of the Business Cases for the Proposed Projects

VECUA's previous submission outlined that many of the distributors' capex programs and projects were very poorly justified, with inadequate provision of cost benefit analyses and insufficient justification of prioritisation and timing of projects.

VECUA concurs with the CCP3's assertion that new IT systems should only be implemented when there is a clear benefit to consumers and that the benefits are integrated into the capex and opex forecasts.[20]

That level of scrutiny was not performed by the AER when determining its non-network capex allowances.

VECUA also considers that the AER has applied insufficient scrutiny to the prudency and efficiency of the proposed project costs.

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19 Consumer Challenge Panel, *Response to proposals from Victorian electricity distribution network service providers*, August 2015, pp. 58-59.

20 Consumer Challenge Panel, *Response to proposals from Victorian electricity distribution network service providers*, August 2015, pp. 56 and 59.

Insufficient Integration of Opex Benefits into the AER's Proposed Opex Allowances

The AER has not sufficiently integrated the expected opex reductions arising from the non-network capex projects into its proposed opex allowances.

For example, the AER effectively 'waved through' the distributors' proposed "Customer Relationship Management (CRM)" and "Smart Grid" IT projects, without reflecting the expected opex reductions in its proposed opex allowances.

6.12 Capitalised Overheads

6.12.1 The AER's Proposed Capitalised Overhead Allowances

As outlined in the table below, the AER is proposing to provide total capitalised overheads to the Victorian distributors of $617.1 million – a 3.2% reduction on the distributors' proposed allowances.

	Distributors' Proposed Capex ($million, 2015)	AER Preliminary Determinations ($million, 2015)	Reductions
Citipower	93.5	86.5	**7.5 %**
Powercor	202.3	197.7	**2.3%**
AusNet Services	172.8	168.5	**2.5%**
Jemena	168.8	164.4	**2.6%**
United Energy*	-	-	**-**
Total	**637.4**	**617.1**	**3.2%**

* United Energy does not capitalise overheads – all of its overhead costs are included in opex

6.12.2 The AER's Capitalised Overhead Assessment Process

The AER did not assess the efficiency of the Victorian distributors' capitalised overheads.

Rather, the AER simply set the distributors' capitalised overhead allowances on the basis of the distributors' proposed expenditure.

The only adjustment that the AER made to the distributors' proposed allowances was to make minor adjustments to retain the distributors' proposed direct/indirect capex ratios.

6.12.3 Fixed Overheads?

The AER assumed that 75 per cent of the distributors; capitalised overheads are fixed and 25 per cent will vary with the size of the direct capital expenses.

The AER has not substantiated its rationale for this assumption, other than stating this it applied the assumption to its determination of the Queensland distributors' non-network capex allowances.

6.12.4 Variations in the distributors' Overhead Ratios

The AER's preliminary determinations result in significant variations in the distributors' overhead ratios. For example, the AER is proposing to approve:

- $164.4 million in capitalised overheads for Jemena, representing 25% of the AER's total capex allowance of $671 million
- $172.8 million in capitalised overheads for AusNet Services, representing 11.7% of the AER's total capex allowance of $1,495 million

6.12.5 VECUA'S Key Concerns with the AER's Capitalised Overhead Allowances

In summary, VECUA's key concerns with the AER's proposed capitalised overhead allowances are as follows:

- The AER has not assessed the efficiency of the Victorian distributors' capitalised overheads
- Rather, the AER simply set the distributors' capitalised overhead allowances on the basis of their proposed expenditure, with some minor adjustments to retain the distributors' proposed direct/indirect capex ratios
- The AER has not substantiated its assumption that 75% of the distributors' overheads are "fixed"
- The AER's proposed allowances result in significant variations in the distributors' overhead ratios – varying from 11.7-25%
- The AER is required to determine its allowances based on efficient costs - not on the distributors' proposed allowances

VECUA therefore expects the AER to determine efficient capitalised overheads allowances, based on benchmark efficient costs - not based on the Victorian distributors' proposed allowances.

7 Operating Expenditure

7.1 The Victorian Distributors' Opex Proposals

The Victorian distributors proposed a total of $4.39 billion of operating expenditure over the next 5 years – an increase of 41% (in real terms) over their actual opex spend during the previous regulatory period.

Operational Expenditure Comparisons ($ 2015)

	2011-15 Actual Opex	2016-20 Proposed Opex	Percentage Change
AusNet Services	$920 M	$1,256 M	35 % increase
CitiPower	$285 M	$501 M	76 % increase
Jemena	$380 M	$499 M	32 % increase
Powercor	$900 M	$1,331 M	48 % increase
United Energy	$630 M	$800.4 M	27 % increase
Total	**$ 3,115 million**	**$4,387 million**	**41 % increase**

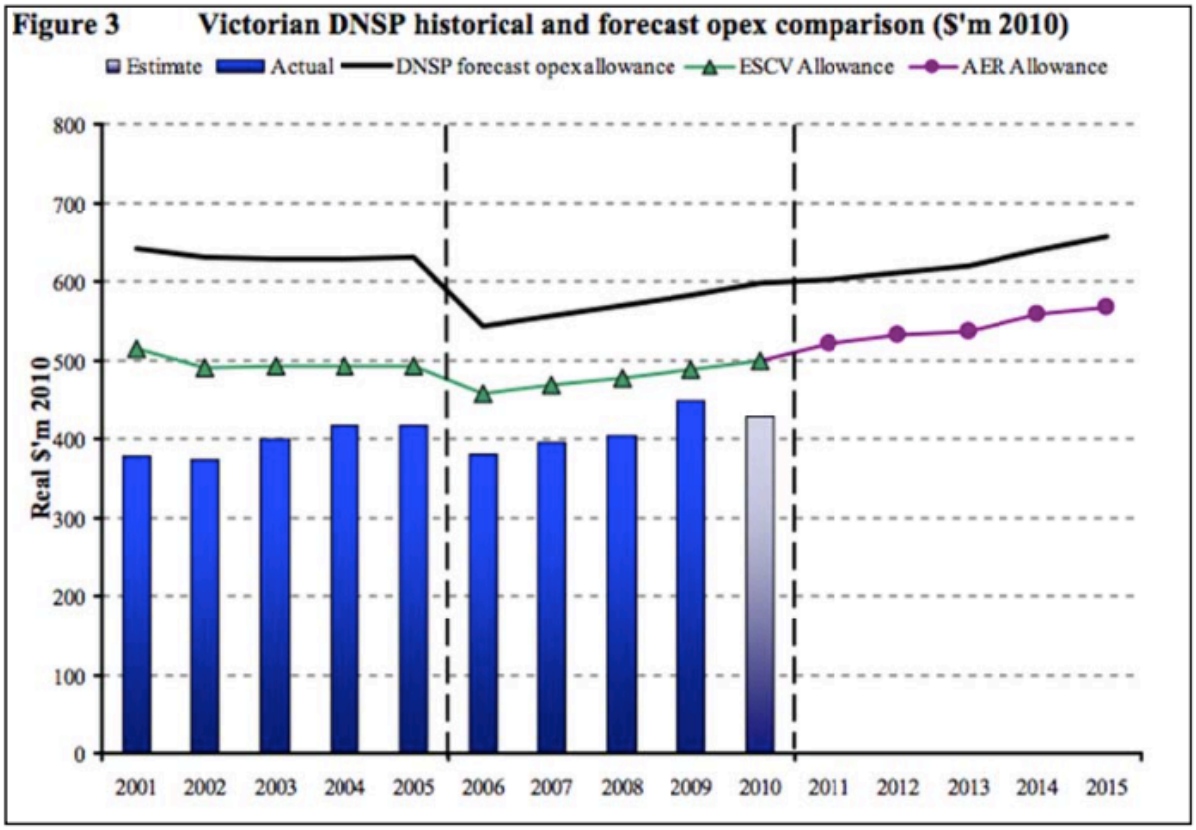
7.2 The Victorian Distributors' Historical Opex Trends

The Victorian distributors' opex proposals need to be considered in the context of their previous opex proposals and their actual opex spend during the previous regulatory periods.

The diagram overleaf highlights the AER Consumer Challenge Panel's (CCP3) analysis of the Victorian distributors' opex trends over the previous three regulatory periods.

The CCP's analysis concluded that:

- For the two regulatory periods (2001-2005 and 2006-2010), the Victorian DNSPs' proposed opex allowances were significantly higher than the allowance provided by the regulator (the ESCV)
- During those periods, the distributors' actual opex was well below their opex allowance –20% lower for the 2001-2005 period and 13% lower for the 2006-2010 period
- For the 2011-15 regulatory period, the DNSPs sought a 45 per cent increase compared to their actual opex spend during the 2006-2010 period. The AER allowed a 32 per cent increase
- Between 2001-2010, the Victorian distributors significantly over-forecasted their opex requirements and actually spent considerably less than their proposed opex and less than their regulatory allowances



Overall, the CCP's analysis highlighted that the Victorian distributors' previous opex allowances were too generous and that the provision of excessive allowances has resulted in the AER's opex efficiency scheme (the EBSS) being ineffective in incentivising efficient opex levels.

7.3 The AER's Preliminary Opex Determinations

Despite the above trends, the AER is proposing to provide a total of $3.73 billion in opex allowances over the next 5 years - an overall increase of 20 % (in real terms) over the previous period.

Operational Expenditure Comparisons ($ 2015)

	2011-15 Actual Opex	AER Preliminary Determinations	AER Percentage Change
AusNet Services	$920 M	$1,104.3 M	20 % increase
CitiPower	$285 M	$ 413.3 M	45 % increase
Jemena	$380 M	$ 390.1 M	3 % increase
Powercor	$900 M	$1,164.2 M	30 % increase
United Energy	$630 M	$ 659.5 M	5 % increase
Total	**$3,115 M**	**$3,731 M**	**20 % increase**

7.4 The AER's Opex Determination Approach

The AER applied the *base-step-trend* assessment process to its determination of the Victorian distributors' opex allowances, i.e.:

- **Determination of the efficient base year opex** – using techniques such as benchmarking, trend analysis, category analysis, etc.
- **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
- **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

7.4.1 Determination of Efficient Base Year Opex Levels

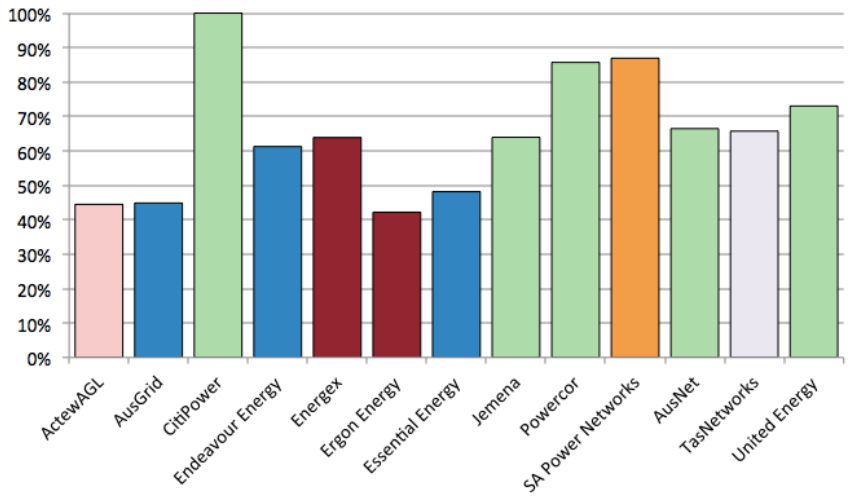
The most critical element of the AER's opex assessment is the determination of efficient base year opex levels for the distributors.

The AER claims to have applied a number of techniques to its assessment of efficient base year opex, including economic benchmarking. However, rather than determining efficient levels of base year opex, the AER's base year opex assessment approach actually focused on seeking evidence that the distributors' base year opex levels were not "materially inefficient".

All five Victorian distributors proposed major increases in their opex, whilst claiming that their proposed opex levels are efficient. Those claims were predominantly based on the AER's benchmarking of the distributors' average opex efficiency scores over the 7 year period 2006-13, outlined in the diagram below.

NEM service provider's average opex efficiency scores 2006 to 2013 [21]

Figure A.2 Opex MPFP performance (average 2006–13)



[21] AER Annual Distribution Benchmarking Report, November 2014

The above diagram highlights that, on average, over the 2006-13 period, Citipower was the most efficient distributor in the NEM.

The table below outlines the 'efficiency gaps' of the other distributors, identifying the implied opex reductions required of each distributor to achieve the average efficiency level of Citipower.

It identifies that reaching the frontier efficiency level (i.e. the level of Citipower) would involve opex reductions of 14% for Powercor, 27% for United Energy, 34% for AusNet Services and 36% for Jemena - i.e. there is evidence of material inefficiency for some Victorian distributors when compared to the frontier efficiency level.

DNSP opex efficiency scores and implied opex reductions to reach full efficiency (2006-2013) [22]

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%

7.4.2 The Distributors' Declining Efficiency – Merging Towards Mediocrity

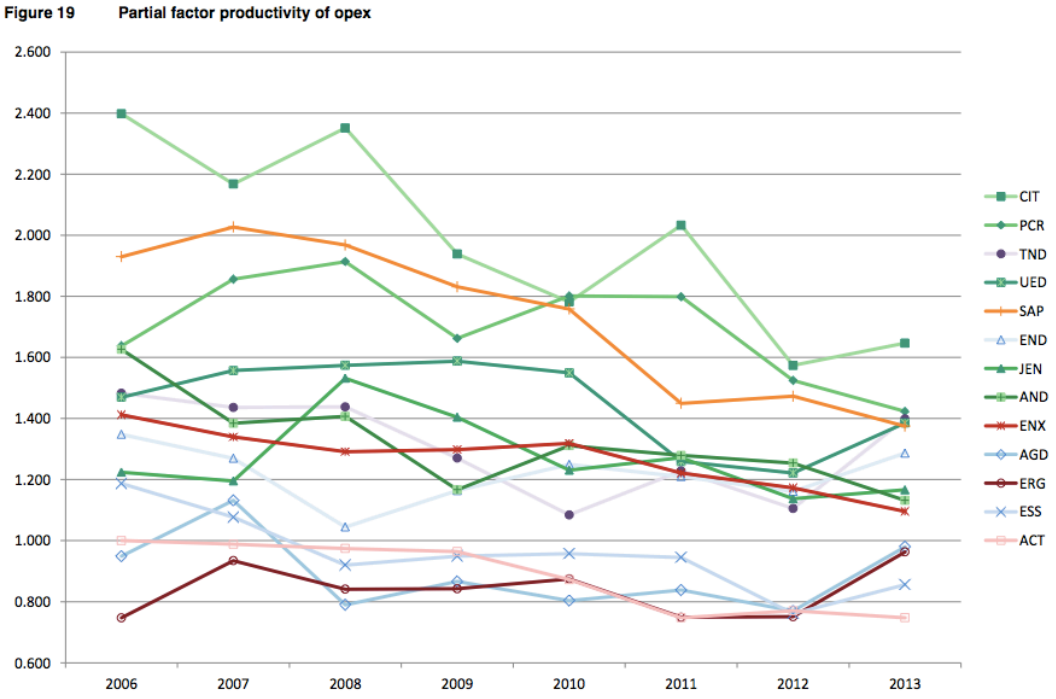
VECUA's previous submission outlined major concerns regarding the Victorian distributors' declining productivity trends.

As outlined in the diagram overleaf, between 2006-2013, the Victorian distributors experienced the steepest declines in opex productivity. For example, Citipower's productivity declined by around 32% over the period.

Importantly, these declines continued over the latter part of the period when the productivity of some interstate distributors improved.

[22] Economic Benchmarking Assessment of Operating Expenditure for NSW and ACT Electricity DNSPs, Economic Insights, 17th November 2014

Figure 7 - Australian Distributor Opex Efficiency Trends



As a result, by 2013, most of the Victorian distributors' opex productivity levels had merged to levels closer to the average levels of all Australian distributors– i.e. the previous efficiency gaps closed significantly.

This means that the Victorian distributors' base year (2013/14) opex efficiency was significantly lower than their average opex efficiency over the previous period.

The Victorian distributors' revenue proposals provided very scant details of the reasons for these dramatic productivity declines. The limited commentary provided within the distributors' proposals (e.g. reduced energy consumption, increased regulatory obligations) fell well short of providing credible explanations of the reasons for such major declines in the distributors' productivity.

VECUA's concerns were reinforced by the submission from the AER Consumer Challenge Panel (CCP3) which included an analysis of the NEM distributors' productivity trends. That analysis identified that:

- The productivity declines of the Victorian distributors were much larger than the average declines across the NEM
- For the NEM distributors, the median decline in opex partial factor productivity was 3.9%/annum
- This average productivity decline for the Victorian distributors was 5.2%/annum
- There were major differences in the productivity declines for the Victorian distributors – varying from an average decline of 11.1%/annum for Citipower, to an average decline of 2%/annum for Jemena
- The wide diversity in the Victorian distributors' productivity decline rates means that their productivity declines cannot be attributed to Victoria specific exogenous factors
- The distributors' proposed base year opex levels do not reflect the efficient opex levels as required by the NER

The AER received various submissions outlining stakeholders' concerns regarding the Victorian distributors' proposed opex levels and their productivity declines in recent years.[23]

VECUA's previous submission urged the AER to perform a detailed analysis to ascertain the reasons for the Victorian distributors' dramatic productivity declines, and to incorporate the findings of that analysis into the AER's determination of efficient base year opex levels for the distributors.

Such analysis was not performed by the AER.

7.4.3 Base Year Expenditure Adjustments

The distributors proposed major adjustments to their base-year expenditure for "service reclassifications" and "changes to overhead capitalisation policies".

VECUA has not performed a detailed analysis of the AER's assessment of the Victorian distributors' base year expenditure adjustments and will leave it to others to perform such critiques.

Rather, VECUA simply reiterates the concerns outlined in its previous submission regarding the high level of inconsistencies in the distributors approaches to service classifications and overhead allocations, which make it very difficult to compare the distributors' operational efficiencies.

VECUA urged the AER to apply a high degree of scrutiny to the distributor's proposed base year opex adjustments and to ensure greater consistency in the distributors' treatment of opex costs, including their service classifications and overhead capitalisation policies.

7.4.4 The AER's Base Year Opex Determinations

Despite extensive evidence of material inefficiencies in some Victorian distributors' base year opex levels, the AER accepted all five Victorian distributors' proposed base year opex levels as being efficient.

VECUA considers that the AER's decision to apply the "revealed cost" method to its determination of base year opex levels for the Victorian distributors is fundamentally flawed, as it does not reflect the material differences in the Victorian distributors' efficiency levels identified by the AER's benchmarking.

VECUA asserts that the distributors' base year opex allowances should be set on the basis of benchmark efficient levels, informed by the AER's opex benchmarking results.

Furthermore, VECUA considers that the AER's proposed base year opex allowances have also had insufficient regard to:

- The Victorian distributors' dramatic productivity declines over the previous regulatory period
- The major increases in the Victorian distributors opex levels over the previous regulatory periods
- The opex reductions that should be realised from the Victorian distributors' major capex expenditure programs over previous regulatory period (AMI roll-out, major ICT upgrades, bushfire management capex, etc.)

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[23] CUAC, *Submission: Victorian electricity distribution pricing review (EDPR) 2016 to 2020*, 13 July 2015, p. 2.
VGA, *Submission: Local Government response to the Victorian electricity distribution price review (EDPR) 2016–20*, July 2015, p. 33
DEDJTR, *Submission to Victorian electricity distribution pricing review – 2016 to 2020*, 13 July 2015, p. 6;
VECUA, *Submission: Victorian distribution networks' 2016–20 revenue proposals*, 13 July 2105, pp. 6 and 18.

7.4.5 Step Changes

The previous VECUA submission provided a detailed critique of the distributors' proposed step changes, demonstrating that the majority of the proposed step changes did not satisfy the NER requirements.

VECUA's key criticisms of the Victorian distributors' proposed step changes included:

- Insufficient evidence of changes in regulations
- The inappropriate incorporation of step changes aimed at delivering efficiency improvements
- Inadequately justified "bushfire mitigation" step changes
- Inadequately justified "consumer-driven" step changes
- The inclusion of step changes that were already included in price changes
- The inappropriate inclusion of step changes to cover the costs of the distributors' consumer engagement programs
- The inappropriate inclusion of step changes for the distributors' revenue reset proposal costs
- The inappropriate inclusion of step changes driven by internal management decisions
- The inappropriate inclusion of step changes to implement new ICT capabilities and to improve ICT security

The AER agreed with most of VECUA's critiques and declined the majority of the distributors' proposed step changes.

Whilst VECUA still has some residual concerns with some of the step changes that the AER has allowed, overall VECUA concurs with the AER's assessments of the Victorian distributors' step changes.

7.5 Rate of Change

The previous VECUA submission provided detailed critiques of the distributors' proposed *rate of change* factors for price, output and productivity changes.

It also included a critique of the AER's approach to determining its rate of change factors.

As outlined within the following sections, the AER's preliminary determinations have taken VECUA's concerns into account to varying degrees.

The table below outlines the AER's proposed rate of change factors in terms of their average annual percentage escalation factors. It highlights that the AER is proposing to apply:

- Average annual real price change escalation factors of up to 3 times the average factor that the AER determined in its recent preliminary decision for SAPN
- Average annual output change factors of 1.2-2.4 times the average factor that the AER determined in its recent preliminary decision for SAPN
- Total rate of change factors of 1.7-2.5 times the average total rate of change factor that the AER determined in its recent preliminary decision for SAPN

AER Preliminary Determination - Average Annual Escalation Factors (Per Cent, Real)

	AusNet Services	CitiPower	Jemena	Powercor	United Energy	AER SAPN Decision
Price Change	0.66	0.66	0.66	0.66	0.66	0.22
Output Change	1.15	1.16	0.76	1.34	0.7	0.57
Productivity	0	0	0.89	0	0	0
Total Rate of Change	**1.81**	**1.82**	**1.42**	**2.0**	**1.37**	**0.79**

7.5.1 Price Change

The previous VECUA submission provided a detailed critique of the Victorian distributors proposed price change factors together with a critique of the AER's standard approach to determining price changes.

The AER acknowledged VECUA's concerns in its preliminary determinations, but did not change its determination approach which has resulted in the AER proposing to apply total price change factor of 3 times the level that it applied to its recent preliminary determination for SAPN.

This submission reiterates the key criticisms in VECUA's previous submission that VECUA considers the AER has had insufficient regard to.

7.5.1.1 Labour Price Change

The AER's preliminary determinations are proposing to provide real labour price increases for the Victorian distributors.

In determining its labour price change escalation factors, the AER adopted the average of the utilities WPI forecasts of Deloitte Access Economics (DAE) and BIS Shrapnel, resulting in the AER applying an average annual real labour price escalation factor of 0.66% for the next 5 years.

This is around double the average labour price change factor that the AER determined for its recent preliminary decision for SA Power Networks (SAPN).

The AER has not demonstrated why it believes that the Victorian distributors' labour costs will increase at twice the rate of the South Australian distributor.

- **The Interaction Between Labour Prices and Productivity**

Two of the rate of change factors – *labour price change* and *productivity* are inextricably linked.

It is well understood that, over the long term, labour price growth adjusted for labour productivity closely tracks the Consumer Price Index (CPI). For example, Professor Borland demonstrated that, on

average from 1997–98 to 2009–10, CPI plus labour productivity matched the average weekly ordinary time earnings (AWOTE).[24]

In general, employers only allow labour costs to rise above CPI if they are accompanied by offsetting productivity improvements. The AER's labour price forecasts therefore need to be assessed in conjunction with its productivity forecasts.

However, the AER is proposing zero productivity improvements for all five Victorian distributors over the next 5 years.

The provision of real labour price increases without appropriate offsetting productivity improvements will therefore result in further declines in the distributors' productivity levels.

- **The Electricity Network Sector is in Contraction**

The AER's labour forecasting approach does not appropriately consider the specific drivers of the Australian electricity network sector.

The Australian electricity network sector is currently in a major contraction phase due to a number of forces that are driving a declining demand for its services.

Industries in contraction do not face real labour price increasing drivers.

There is currently minimal wage pressure within the Australian economy. The mining boom has passed and skilled labour is readily available.

Deloite Access Economics (DAE) expects utility sector wages growth to fall in the near term. DAE also notes that the skill shortages that underpinned strong wage growth in utilities in the past decade have diminished.[25]

Similarly, the RBA recently produced a report – *"Why is Wage Growth So Low*" [26], which outlines that:

"Wage growth has declined markedly in Australia over the past few years"; and

"At the same time, stronger growth in labour productivity has worked to contain growth in labour costs"

7.5.1.2 The Distributors' Labour Costs

VECUA's previous submission outlined that the distributors' enterprise agreement rates do not represent efficient labour costs.

It highlighted that the Victorian distributors' enterprise agreements are delivering wages well above the efficient level. The AER is required to only allow efficient costs.

In essence, the AER's preliminary determinations would allow the Victorian distributors to continue to treat inefficient EBA outcomes as a "pass through".

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[24] Labour Cost Escalation: Choosing between AWOTE and LPI, Professor Jeff Borland, March 2012

[25] Deloitte Access Economics, *Forecast growth in labour costs in NEM regions of Australia*, 23 February 2015, p. 44.

[26] Jacobs, David, and Alexandra Rush. "Why Is Wage Growth So Low?" *RBA Bulletin, June* (2015): 9-18.

7.5.1.3 Non Labour Price Change

In determining its non-labour price change factors in its recent decisions, the AER has adopted CPI.

The AER's rationale for applying CPI was predominantly based on regulatory simplicity – i.e. avoiding the difficulty of attempting to predict movements in commodity prices and exchange rates.

Whilst VECUA understand these difficulties, VECUA is concerned that the prices of a number of the distributors' non-labour inputs are trending downwards and consequently the application of CPI is likely to over-estimate their costs.

VECUA's previous submission outlined recent trends of commodities prices (including copper, aluminium and steel) demonstrating that they have fallen considerably – e.g. the RBA Commodities Price Index has dropped by around 20% over the previous 12 months.

VECUA outlined its expectation that the AER needs to demonstrate that the benefits of regulatory simplicity outweigh the risks of excessive non-labour price changes.

That has not been demonstrated in the AER's preliminary determinations.

7.5.1.4 Output Change

The table below outlines the AER's proposed average annual output escalation factors in comparison with the AER's recent output factor determination for SAPN.

Average Annual Output Change Escalation Factors

	AusNet Services	CitiPower	Jemena	Powercor	United Energy	AER SAPN Decision
AER Determinations	1.15 %	1.16 %	0.76 %	1.34 %	0.7 %	**0.57%**

VECUA's previous submission outlined a number of concerns with the distributors' and the AER's approaches to estimating the output growth factors.

While VECUA has some issues with the AER's approach, overall VECUA considers that the AER's methodology is more reflective of the change in outputs required.

7.5.1.5 Productivity Change

The productivity factor is intended to ensure that the networks' productivity levels improve in future years. It is intended to act as a complementary measure to the AER's Efficiency Benefit Sharing Scheme (EBSS).

However, the AER's preliminary determinations have assumed zero productivity improvements for the Victorian distributors over the next 5 years.

▪ Productivity Declines Should Be Temporary

As outlined above, from 2006 to 2013, the distribution industry experienced negative productivity growth. However, as outlined by the AER and its consultants in its recent decisions, these productivity declines are not considered to be reflective of future trends:

"While data from 2006–13 period indicates negative productivity for distribution network service providers on the efficient frontier, we do not consider this is representative of the underlying productivity trend and our expectations of forecast productivity in the medium term. The increase in the service provider's inputs, which is a significant factor contributing to negative productivity, is unlikely to continue for the forecast period" [27]

It is important to note that the electricity transmission and gas distribution industries experienced positive opex productivity growth during the 2006–13 period. For example, the electricity transmission sector's productivity improved by an average of 0.85% over the 2006–13 period and is forecast to improve further in the next regulatory period.[28]

As outlined in the AER's recent determinations, the AER's expectation is that the electricity distribution sector should deliver positive productivity improvements in the next regulatory period.

"Cyclical factors and regulatory obligations for the distribution sector may be the reason for the lower measured productivity in the distribution industry compared to the transmission and gas distribution industries. Over the medium to long term, however, we expect the distribution network service providers to have underlying productivity growth rates comparable to the electricity transmission and gas distribution industries. This is because the specific factors that have resulted in declining productivity for the distribution industry are unlikely to apply over the medium to long term and the distribution industry should be broadly similar to other energy networks" [29]

The AER's decision to apply zero productivity growth over the next 5 years conflict with the above statements, which outline that the AER expects the distribution sectors to deliver positive productivity improvements over the next regulatory period.

As outlined within VECUA's previous submission, VECUA asserts that a key reason for the distributors' productivity declines during the previous regulatory period was the AER's provision of excessive opex allowances, which VECUA considers have been a strong driver of the networks' inefficient labour practices.

Such factors must not be used to justify poor productivity outcomes in future years.

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

VECUA concurs with the CCP's conclusion that the productivity factor is becoming effectively redundant in the AER's revenue determination process and that the regulatory incentives are failing to drive the necessary improvements required of Australia's energy networks to ensure the industry's long-term survival.

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[27] AER Preliminary Decision - SA Power Networks determination 2015−16 to 2019−20

[28] *AER,* TransGrid transmission determination – draft decision*,* Attachment 7, Appendix A, November 2014; *AER,* JGN gas distribution determination – draft decision*,* Attachment 7, Appendix A, November 2014.

[29] AER Preliminary Decision - SA Power Networks determination 2015−16 to 2019−20

VECUA therefore urges the AER to determine positive productivity change rates for the Victorian distributors aimed at bringing their productivity levels back into line with their previous productivity levels, and into line with the levels being achieved by the electricity transmission sector and other asset intensive industry sectors.

7.6 VECUA'S Key Concerns with the AER's Opex Determinations

In summary, VECUA considers that the AER's proposed opex allowances for the Victorian distributors are well above the efficient levels.

The key deficiencies in the AER's opex assessments include:

The AER's Base Year Opex Determinations

VECUA considers that the AER's decision to apply the "revealed cost" method to its determination of base year opex levels for the Victorian distributors is fundamentally flawed, as it does not reflect the material differences in the Victorian distributors' efficiency levels identified by the AER's benchmarking.

VECUA believes that the distributors' base year opex allowances should be set on the basis of benchmark efficient levels, informed by the AER's opex benchmarking results.

Furthermore, VECUA considers that the AER's proposed base year opex allowances have also had insufficient regard to:

- The Victorian distributors' dramatic productivity declines over the previous regulatory period
- The major increases in the Victorian distributors opex levels over the previous regulatory periods
- The opex reductions that should be realised from the Victorian distributors' major capex expenditure programs over previous regulatory period (AMI roll-out, major ICT upgrades, bushfire management capex, etc.)

Labour Price Change

- The AER's labour price change determinations have not considered the specific drivers of labour prices in the Australian electricity network sector.
- The AER needs to determine efficient labour price change factors for the Victorian distributors, taking into account:
  - The electricity network sector is currently in a major contraction phase - industries in contraction do not face real labour price increasing drivers
  - The evidence that demonstrates that the Victorian distributors' current labour costs are excessive
  - The interaction between labour price change and productivity change – i.e. real labour price increases need to be compensated by offsetting productivity improvements

An appropriate consideration of the above issues will confirm that the Victorian distributors' labour prices should be reducing rather than increasing.

Productivity

The AER's decision to apply zero productivity improvements to the Victorian distributors over the next 5 years is illogical and is not supported by the evidence.

It conflicts with:

- The AER's expectation that the distribution sector will deliver positive productivity improvements over the next regulatory period
- The Victorian distributors' proposals – with Jemena proposing positive productivity growth factors
- The AER's intention to apply real labour price increases over the next 5 years – the provision of real labour price increases without offsetting productivity improvements will result in further ongoing declines in the distributors' productivity levels

The AER needs to determine positive productivity change factors for the Victorian distributors, aimed at bringing their productivity back into line with their previous productivity levels and into line with the levels being achieved by the electricity transmission, gas distribution and other asset intensive industry sectors.

8 The Distributors' Consumer Engagement Programs and Claims

Recent changes to the National Electricity Rules (NER) require the networks to identify how they have engaged with consumers and to demonstrate how consumers' concerns have informed and been reflected in their revenue proposals and ongoing business activities.

The Victorian distributors' proposals included a number of claims regarding feedback they have received from consumers, together with claims regarding consumer support for their proposed expenditure.

VECUA's previous submission provided a detailed critique of those claims and provided detailed recommendations regarding how the AER should consider the claims when determining the 2016-20 revenues for the Victorian distributors, including recommendation that the AER should:

- Encourage the distributors to work towards engaging consumers at the "Involve" and "Collaborate" levels
- Play a much more proactive role in improving consumers' capacity to engage, rather than leaving consumer education and capacity building to the networks
- Be diligent when assessing claims that are based on inappropriate questions or on a false premise
- Strongly scrutinise whether the distributors have clearly communicated the cost and price implications of the preferences that they claim consumers have expressed
- Strongly scrutinise whether the distributors have provided clear evidence of all of their claims regarding consumer preferences
- Differentiate consumers' responses to ensure the appropriate consideration of feedback from consumers who are most impacted by the proposed projects or programs
- Only consider 'willingness to pay' (WTP) information that has been developed through well-designed choice modeling

Overall, VECUA considers that the AER has appropriately considered the reflected the above recommendations in its preliminary determinations.