Victorian Energy Consumer and User Alliance (VECUA)

Submission to the AER

Victorian Distribution Networks' 2016-20 Revenue Proposals

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1 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. ATA has over 6,000 residential members, and is supported by Energy Consumers Australia (ECA) to advocate for affordable and sustainable energy for Australian households
- 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

2 Summary Of Key Points

2.1 Price Impacts

There are a number of drivers that should result in significant reductions to the Victorian distributors' prices. Those drivers have not been appropriately reflected in the Victorian distributors' revenue proposals, which would result in their prices being retained at excessive levels.

It is clear that the Victorian distributors have developed their revenue proposals based on the assumption that consumers will be content with annual network price increases of around CPI over the next five years. As outlined throughout this submission, that is a deeply flawed assumption. Consumers expect the AER's revenue determinations to reflect the price reduction drivers outlined within this submission.

2.2 Return On Capital (Rate of Return)

The distributors are proposing overall Weighted Average Cost of Capital (WACC) allowances of 7.18 - 7.38%, compared to the AER's recent WACC determination of 5.45% for SA Power Networks (SAPN).

The distributors' WACC proposals are excessive and are based on major unjustified departures from the AER's *Rate of Return Guideline* - a guideline that 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 have not been submitted to any rigorous analysis or stakeholder consultation. Most of the information used by the Victorian distributors to support their departures was already considered by the AER during the development of the rate of return guideline.

The distributors have not demonstrated how their proposed departures and the resulting record-high equity risk premiums would better achieve the rate of return objective.

This submission outlines evidence that demonstrates that significantly lower cost of capital allowances would best meet the National Electricity Objective, whilst still delivering very generous returns to the Victorian distributors.

2.3 The Distributors' Demand and Energy Forecasts

The distributors' demand forecasts are not credible and are much higher than AEMO's most recent forecasts. VECUA expects the AER to substitute the forecasts with credible independent forecasts.

VECUA acknowledges that AEMO's latest demand forecasts do not provide localised demand forecasts at the level of detail required to enable a proper critique the distributors' "pockets of demand growth" claims. VECUA therefore expects the AER to develop or obtain localised forecasts for that purpose.

Failure to do so will run the high risk of the Victorian distributors being rewarded for their forecasting errors as occurred during the previous regulatory periods.

2.4 Capital Expenditure

The Victorian distributors are proposing record-high capex levels. This submission outlines a number of deficiencies in the distributors' capex forecasting methodologies, together with a detailed critique of deficiencies in the capex assessment approach that the AER applied in its recent determinations.

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

- 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
- 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

2.5 Operating Expenditure

The Victorian distributors are proposing to increase their opex by 41% over the previous period and are claiming that their proposed opex levels are efficient.

The Victorian distributors experienced the steepest declines in opex productivity over the previous regulatory period, resulting in their opex productivity levels now being close to the average Australian distributor's productivity level - i.e. the previous efficiency gap has closed significantly.

VECUA expects the AER to ascertain the reasons for the distributors' dramatic productivity declines, and to incorporate the findings into its determination of efficient opex allowances for the Victorian distributors.

VECUA has outlined a number of deficiencies with the distributors' proposed *step changes*, and considers that the majority of the step changes do not satisfy the NER requirements.

This submission outlines a number of deficiencies in the distributors' and the AER's approaches to determining labour price changes. VECUA expects the AER to determine efficient labour price changes taking into account that the electricity network sector is in contraction, together with a greater consideration of the interaction between labour price changes and productivity. VECUA considers that the distributors' labour prices should be reducing rather than increasing.

2.6 Productivity

Despite proposing real labour price increases, four of the Victorian distributors are forecasting zero productivity improvements, with only Jemena proposing minor productivity improvements.

The distributors' proposals will result in further declines in their productivity levels over the next regulatory period.

This submission demonstrates why the distribution sector should be delivering positive productivity improvements over the next regulatory period.

VECUA expects the AER to determine positive productivity change rates for the Victorian distributors, to bring their productivity 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.

2.7 The Distributors' Consumer Engagement Programs and Claims

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

This submission includes a detailed critique of the distributors' consumer engagement programs and their associated claims. In summary, VECUA expects the AER to:

- 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 modelling

3 Revenue and Price Impacts

3.1 Revenue Reduction Drivers

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

- **Significantly lower cost of capital requirements** - the current costs of finance are significantly lower than the record high cost of capital allowances that the AER set for the distributors for the 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
- **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
- **Excess system capacity** - over-investment in the networks over recent regulatory periods has resulted in increasing levels of excess capacity and declining network utilisation

The above drivers should result in the Victorian distributors' prices reverting to the price levels (in real terms) that applied around the end of the 2006-10 regulatory period.

3.2 Proposed Revenues

Disappointingly, the above drivers have not been appropriately reflected in the Victorian distributors' revenue proposals.

As outlined in the Table 1 below, the Victorian distributors are proposing total combined revenues of $11.9 billion over the next 5 years – a 45% increase in real terms compared to their total revenue allowances for the previous 5 years.

Table 1 - Proposed Revenues Compared to Previous Regulatory Period

Distributor	2011-15 Revenue Allowance ($2015)	Proposed 2016–20 Revenue ($2015)	Percentage Increase
AusNet Services	$ 2,208 M	$3,308 M	50 %
CitiPower	$ 1180 M	$ 1,589 M	35%
Jemena	$939 M	$ 1,465 M	56%
Powercor	$2,394 M	$3,388 M	41.5 %
United Energy	$ 1,487M	$ 2,148 M	45 %
Total	**$ 8,209 M**	**$11,899 M**	**45 %**

3.3 The Victorian Distributors' Estimated Price Impacts

It is clear that the Victorian distributors have developed their revenue proposals based on the assumption that consumers will be content with annual network price increases of around CPI over the next five years.

As outlined throughout this submission, that is a flawed assumption. Consumers are expecting significant price reductions and expect the distributors' revenue proposals and the AER's revenue determinations to reflect the price reduction drivers outlined above.

In addition, 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 'cost reflective tariff structures' currently under development. This does not appear to have been appropriately reflected in the distributors' energy forecasts.

VECUA's concerns with the distributors' energy forecasts are outlined in Section 5 of this submission.

4 Return on Capital (Rate of Return)

'Return on Capital' is the largest component of the distributors' proposed revenue allowances - amounting to around half of their total proposed revenues.

'Return on Capital' is directly proportional to the valuation of the networks' Regulatory Asset Bases (RABs). The Victorian distributors are proposing significant ongoing growth in their RABs (in excess of 40%) that will result in increasing returns over the next regulatory period. The unsustainability of the distributors' proposed RAB growth levels is demonstrated in Section 6.6 of this submission.

4.1 Weighted Average Cost of Capital (WACC)

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

As outlined in Table 2 below, the distributors are proposing overall WACC allowances of 7.18 - 7.38%, compared to an overall WACC of 5.45% for the AER's recent preliminary decision for SAPN.

Table 2 - Victorian Electricity Distributors' Proposed WACC Allowances (per cent)

	AusNet Services	CitiPower	Jemena	Powercor	United Energy	AER Recent SAPN Decision
Overall WACC	**7.19**	**7.20**	**7.18**	**7.20**	**7.38**	**5.45**
Return on equity	9.90	9.90	9.87	9.90	9.95	7.1
Return on debt	5.39	5.39	5.39	5.39	5.67	4.35

4.2 Weighted Average Cost of Capital (WACC) Components

Table 3 below provides a breakdown of the Victorian distributors' WACC proposals into the key WACC components, compared to the AER's recent WACC determination for SAPN.

Table 3 – WACC Components

	Victorian Distributors' Proposals	AER Recent SAPN Decision
Nominal risk free rate	2.64 %	2.55 %
Equity risk premium	7.23 - 7.31 %	4.55%
Market Risk Premium (MRP)	8.17 %	6.5%
Equity beta	0.82	0.7
Nominal post–tax return on equity	9.87 - 9.95 %	7.1%
Nominal pre–tax return on debt	5.39 - 5.67 %	4.35 %
Nominal vanilla WACC	**7.18 - 7.38 %**	**5.45 %**

4.3 The AER's Recent WACC Decisions

It is anticipated that the AER will adopt the same approach to determining the WACC allowances for the Victorian distributors as it applied to its recent determinations for the interstate networks.

Over the past year, a broad range of stakeholders have provided extensive evidence that demonstrates that: [1]

- Australia's electricity networks are much 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 150% of RAB
- Lenders are lending to the regulated business at significantly lower rates than the 'cost of debt' allowances provided by the AER
- The AER is inappropriately applying its discretion 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

VECUA concurs with the above conclusions and provides further supporting evidence below.

4.4 Return on Equity

The Victorian distributors have proposed Return on Equity (ROE) allowances of 9.87 - 9.95% - i.e. almost 3% higher than the AER's most recent ROE allowance of 7.1%.

The distributors have determined those estimates based on some major departures from the AER's *Rate of Return Guideline.*

Table 4 overleaf highlights the main differences between the Victorian distributors' and the AER's ROE estimation methodologies.

In essence, the key differences are related to the extent to which different ROE estimation models are used.

The AER's guideline uses the 'foundation model' approach - 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 have rejected the AER's foundation model approach, arguing instead for approaches that estimate the ROE using all four ROE models separately, with the results combined in a weighted average.

[1] Smelling the roses and escaping the rabbit holes: the value of looking at actual outcomes in deciding WACC, July 2014
AGL Submissions to the AER on the NSW Electricity Distribution Networks 2014-19 Revenue Proposals, 8 August 2014
PIAC submission to the Australian Energy Regulator's NSW electricity distribution network price determination, 8 August 2014

Table 4 - Comparison of Victorian Distributors' and AER's ROE Estimation Methodologies [2]

Issue	AER guideline	Recent AER decisions	Distributor proposals
Models to be used in estimating return on equity	Primary weight given to SL-CAPM, informed by results of Black CAPM and Dividend Growth Model. Fama French model not used	Followed the principles set out in the guidelines	The Fama French model provides valuable insights and corrects for well-documented biases, and therefore should be used
Regard to financial models	SL-CAPM is used as the primary or foundation model, with other models yielding insight and information in a secondary role	Followed the principles set out in the guidelines	All four models should be used, with the return on equity a weighted average of the estimates arising from each model
SL-CAPM: Risk-free rate	Risk-free rate should be yield on government bonds with a 10-year term, averaged over a 20-business-day-period	Followed the principles set out in the guidelines	Agree
SL-CAPM: Equity beta	Estimated using a set of energy firms comparable to the benchmark efficient entity resulting in beta of 0.7	Followed the principles set out in the guidelines. Beta of 0.7	Beta should be at least 0.82 using a broader sample of domestic and international firms
SL-CAPM: Market Risk Premium	AER will estimate a range for the MRP and then select a point within that range taking into account different sources of evidence	MRP of 6.5 per cent	MRP of 8.17 per cent, derived by synthesising a number of differently sourced estimates (i.e., taking a weighted average).[3]

VECUA makes the following observations regarding the Victorian distributors' proposed departures to the AER *Rate of Return Guideline*:

- The AER *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 have not been submitted to any rigorous analysis or stakeholder consultation
- Most of the information used by the Victorian distributors to support their departures was already considered by the AER during the development of the Rate of Return Guideline

[2] AER Issues Paper – Victorian electricity distribution pricing review, 2016 to 2020, June 2015

[3] See, for example, AusNet Services, Regulatory proposal 2016–20, p. 329.

- The Victorian distributors' proposals result 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 have not demonstrated how their proposed departures and the resulting record-high equity risk premiums would better achieve the rate of return objective

Whilst we have some concerns with the AER's rate of return guideline, VECUA considers that the AER's approach to estimating return on equity is more appropriate than the distributors' proposed approaches.

VECUA provides some further perspectives on the distributors' proposed return on equity parameters below.

4.4.1 Market Risk Premium (MRP)

The Victorian distributors are proposing a Market Risk Premium (MRP) of 8.17%.

The AER's recent decisions have adopted an MRP of 6.5%.

However, as outlined above, the AER has received numerous submissions over the past year providing evidence that the regulatory framework for Australia's monopoly networks provides an extremely low business risk environment, and demonstrating that the market risk premium (MRP) should be set at the bottom of the AER's guideline range (i.e. 5.0%).

VECUA concurs with those conclusions.

4.4.2 Equity Beta

The AER's recent decisions have incorporated an equity beta of 0.7 – i.e. the top end of the AER's Rate of Return Guideline range of 0.4-0.7.

VECUA refers the AER to Professor Olan Henry's April 2014 expert report [4], which produced calculations of empirical estimates of equity beta that are consistent with the AER's Guideline.

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

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

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

4.5 Return on Debt

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

Table 6 below highlights some key differences between the Victorian distributors' and the AER's approaches to estimating the return on debt.

Table 6 - Comparison of Victorian Distributor and AER's Return on Debt Methodologies [5]

Issue	AER guideline	Recent AER decisions	Distributor proposals
Methodology for estimating the return on debt	Use of a simple average of ten years of return on ten-year debt. Return on debt updated each year of the regulatory period	Followed the principles set out in the guidelines	Agree
Benchmark credit rating	Estimated using a credit rating of BBB+ or equivalent or the closest approximation	Followed the principles set out in the guidelines	Estimated using a credit rating of BBB
Data source	Published yields from independent third-party service provider	Average of RBA BBB-rated ten-year curve and Bloomberg BBB-rated 10-year BVAL curve	Use of "best fit" curve in the first year, and the average approach in subsequent years unless there is a material difference, in which case use "best fit" approach
Averaging period	The averaging period for each year of the regulatory period should be nominated in advance by each distributor, as close as practical to the commencement of each regulatory year	Followed the principles set out in the guidelines	Averaging periods should be nominated in advance but only the first averaging period should be nominated before for regulatory period
Timing of debt updates	Averaging period should be as close as practical to the commencement of each regulatory year, but process not specified	Averaging period must end at least 25 businesses days before distributors must submit pricing proposals	Introduce a one-year lag between estimating return on debt and impact on tariffs, to allow time for consultation

[5] AER Issues Paper – Victorian electricity distribution pricing review, 2016 to 2020, June 2015

VECUA makes the following observations regarding the Victorian distributors proposed departures to the AER's guideline:

- The distributors' departures from the AER's approach for estimating return on debt were already considered by the AER during the development of the ROR guideline
- The distributors proposals result in debt risk premiums (nominal debt less the nominal risk free rate) of around 3%, which is:
  - 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 ESC for the 2006-10 regulatory period
  - Around 5 times the debt margin currently being provided by Ofgem for the UK networks
- The distributors have not demonstrated how their proposed departures and the resulting debt risk premiums would better achieve the rate of return objective

Whilst we have some concerns with the AER's rate of return guideline, VECUA considers that the AER's approach to estimating return on debt is more appropriate than the distributors' proposed approaches. VECUA provides some further perspectives on the distributors' return on debt proposals below.

4.5.1 The Use of BBB+ Ratings

The AER claims that it has used BBB+ ratings in the development of its recent 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 return on debt determinations have predominantly been based on more expensive debt ratings – i.e., the AER has provided significantly higher cost of debt allowances than appropriate.

In addition, it is also well known that the Australian distributors' actual borrowing costs are much lower than the costs implied by their credit ratings. This was demonstrated by the *Energy Users Rule Change Committee (EURCC) in its* 2011 rule change proposal.[6] In that proposal, the EURCC performed an analysis of the differences between the 'return on debt' allowances and the actual debt costs of Australia's electricity networks, demonstrating that:

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

In summary, VECUA asserts that the Victorian distributors' proposed return on debt allowances are well in excess of the actual debt costs that they will incur, and would result in the networks achieving further windfall profits over the next regulatory period. That would clearly not be in consumers' long-term interests.

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

5 Peak Demand and Energy Consumption Forecasts

5.1 Customer Numbers

Table 7 below 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 are broadly in-line with their recent historic growth rates, with the exception of CitiPower and Jemena, who are both forecasting higher growth rates than their historical trends.

Table 7 - 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%

5.2 Peak Demand

The Victorian distributors' peak demand forecasts are much higher than AEMO's forecasts.

AEMO's latest forecast (50 per cent Probability of Exceedance (POE)) is forecasting that Victoria's peak demand will drop to around 20% below the previous 2009 peak over the next 5 years. [7]

Table 8 below compares each of the distributors' peak demand forecasts (10 per cent Probability of Exceedance (POE)) with AEMO's latest specific forecasts for the networks. All of the distributors are forecasting much higher rates of growth than AEMO's projections (e.g. Powercor is forecasting an annual growth rate of 3.54%, compared to AEMO's forecast growth rate of 0.27%).

Table 8 - Forecast Annual Growth in Peak Demand (Summer, POE10) [8]

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%

[7] AEMO National Electricity Forecasting Report 2015

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

5.3 The Victorian Distributors' Demand Forecasting Record

As the AER is aware, 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.

As outlined in Table 9 below (derived from the AER's recently published 2011-13 performance report for electricity distributors) [9], the Victorian distributors have consistently over-estimated their peak demand projections.

Table 9 – 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. [10]

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.

5.4 Energy Distributed

As outlined in the Figure 1 overleaf, 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.[11]

Table 10 overleaf below compares the distributors' forecast growth of energy distributed with their historical trends.

Four of the distributors are forecasting faster rates of growth in the future than has occurred in the past (e.g. CitiPower is forecasting 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 is forecasting lower demand in the future compared to the past.

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

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

[11] AEMO National Electricity Forecasting Report 2015

A preliminary review of the distributors' forecasting methodologies identifies that AusNet Services has used a different forecasting methodology to the other distributors, having incorporated actual interval meter data in its forecasting methodology. VECUA considers that this may be an important factor in explaining the above differences.

Figure 1 - Historic and Forecast Annual Energy Consumption for Victoria [12]

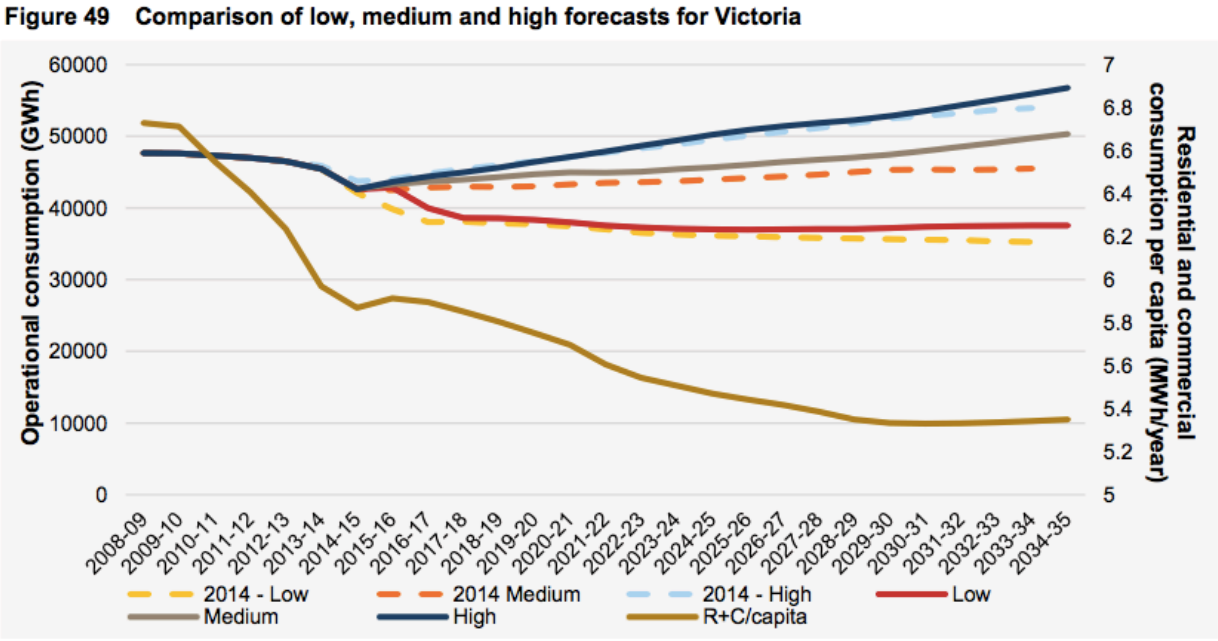


Table 10 - Historic and Forecast Growth Rates of Annual Energy Consumption [13]

Distributor	Historic energy growth 2006-2013	Forecast energy growth 2016-2020
AusNet Services	0.20%	–0.08%
CitiPower	0.02%	2.16%
Jemena	–0.08%	1.20%
PowerCor	0.56%	1.38%
United Energy	–0.11%	0.51%

[12] AEMO National Electricity Forecasting Report 2015, Page 76
[13] AER 2011-13 performance report for electricity distributors

VECUA expects the AER to substitute the networks' demand and energy delivered forecasts with credible independent forecasts.

VECUA anticipates that the AER may choose to utilise AEMO's latest forecasts as the basis of its energy and demand forecasts. VECUA is concerned that AEMO has consistently over-estimated its energy forecasts in recent years and suggests that the AER should consider the extent to which AEMO's latest forecasts have considered:

- The upcoming *National Energy Productivity Plan*, which could reinvigorate demand declines
- The continuation and possible expansion of the VEET scheme (currently under review)
- The implications of the customer demand response rule change
- The planned closures of automotive manufacturing in Victoria, specifically at Geelong and Altona North
- The implications of the distributors' new cost reflective pricing tariff structures
- The rapid development of battery storage technology

6 Capital Expenditure

6.1 Proposed Capex Compared to Historical Trends

As outlined in Section 3 above, there are a number of drivers that are producing significant downward pressure on the distributors' capex requirements for the next regulatory period. However, these drivers are not reflected in the distributors' proposals, with the distributors proposing record-high capex levels compared to their historical averages.

Table 11 below identifies that all five Victorian distributors are proposing higher total capex allowances compared to the previous regulatory period, with increases of 4 - 33 per cent.

Table 11 - Total Capex Proposals Compared to Previous Regulatory Period

Distributor	2011-15 Actual Total Capex ($2015)	Proposed 2016–20 Total Capex ($2015)	Percentage Increase
AusNet Services	$1890 M	$1,964 M	4
CitiPower	720 M	$850 M	18
Jemena	$700 M	$841 M	20
Powercor	$1750 M	$2,331 M	33
United Energy	$1040 M	$1,195 M	15
Total	**$6,100 M**	**$7,163 M**	**17.4**

6.2 Capex Overspend during the Previous Regulatory Period

As outlined in Table 12 overleaf, four of the Victorian distributors over-spent their capex allowances over the previous period, with overspends of 22 - 40%. Only CitiPower under-spent its previous capex allowance.

VECUA acknowledges that the AER does not have the power to disallow the distributors' past over-expenditure and that it will be automatically rolled into their Regulatory Asset Bases (RABs), resulting in their RABs (and associated returns) for the next period being higher than anticipated.

However, the distributors' proposals provide very scant details of the reasons for their previous capex overspend. It appears that some of the over-spend was driven by changes to bushfire safety standards and regulations arising from the Victorian Bushfire Royal Commission inquiry into the safety of electricity networks following the bushfires in 2009.

It will be important for the AER to strongly critique the distributors' capex over-spend during the previous period, as it has implications for the AER's assessment of their capital efficiency and the prudency and efficiency of their capex proposals.

Table 12 - 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**

6.3 The Distributors' Capex Forecasting Methodologies

VECUA has a number of concerns with the distributors' capex forecasting methodologies, including:

An Over-Reliance on 'Bottom Up' Forecasting Methodologies

The distributors' capex forecasts appear to be over-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.

Overly Conservative Risk Management/Risk Assessments

The distributors' capex forecasts appear 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 evaluation information provided by the distributors identifies that their underlying risk assessments are excessively conservative and do not reasonably justify their key assumptions.

In addition, the distributors' risk assessments are predominantly qualitative in nature. For example, the distributors have not quantified or appropriately demonstrated risks associated with network performance in their capex proposals.

Inadequate Project Justifications

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

- Insufficient justifications of the demand drivers for augmentation projects
- Insufficient justifications of asset conditions for replacement capex
- Insufficient justifications of reliability drivers and consumers' willingness to pay for reliability capex
- Insufficient justifications of the prioritisation and timing of projects/programs
- Inadequate provision of cost-benefit analyses

Non-Credible Assumptions

A number of the distributors' proposed capex projects appear to be 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 appear to be strongly biased towards over-estimating their capex requirements.

6.4 The AER's Development of Alternative Capex Forecasts

VECUA expects that the AER's review of the distributors forecasting methodologies will confirm the above deficiencies and the AER will therefore be required to develop alternative capex forecasts.

In developing its alternative forecasts, VECUA expects the AER to:

- Incorporate a more appropriate combination of top down and bottom up modelling, 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
- Incorporate more appropriate risk assessments and cost-benefit analyses
- Incorporate more credible assumptions regarding demand and customer forecast, reliability drivers, escalation rates, etc.

6.5 Load-Driven Capex

As outlined in Section 5, Victoria's maximum demand has been relatively flat over the past 5 years and AEMO's latest forecasts suggest that it will remain flat over the next decade. Despite those projections, all five Victorian distributors are forecasting significant levels of load driven capex over the next 5 years.

6.5.1 Customer Connection Capex

Table 13 overleaf summarise the Victorian distributors' total connections capex forecasts for the next 5 years compared to their capex during the previous 5 years. All five distributors are proposing increased connection expenditure.

The distributors' key justification for their proposed increases include:

- The development of new housing estates in designated growth areas in Victoria
- Increases in construction activity in new developments and redevelopments across Victoria.
- Connecting major new industrial customers and generators

Table 13 - Victorian Distributors' Customer Connections Capex Proposals

Distributor	2011–15 connection capex ($million, 2015)	2016–20 connection capex ($million, 2015)	Percentage Change
AusNet Services	339	368	9
CitiPower	292	332	14
Jemena	155	170	10
Powercor	500	649	30
United Energy	219	249	14
Total	**1505**	**1768**	**17.5**

The distributors' proposals also include some major contingent projects that, if triggered, would account for further substantial increases in their connection capex. For example, Powercor has proposed three contingent projects with a total value of $375 million, relating to prospective regulatory changes for bushfire safety initiatives and to potential changes in Powercor's responsibilities for private overhead electric lines.

6.5.1.1 The AER's Customer Connection Capex Assesment

VECUA is concerned with the lack of scrutiny that the AER applied to its recent assessments of the interstate networks' customer connection capex. For example, the AER recently accepted the Ergon Energy and SAPN customer connection capex proposals in full, despite receiving various submissions that strongly challenged the assumptions underlying the distributors' forecasts.

VECUA appreciates that the AER has limited resources. However, 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 expects the AER to apply a greater degree of scrutiny to the Victorian distributors' connection capex forecasts.

6.5.2 Augmentation Capex

Table 14 below summarises the distributors' proposed total augmentation capex for the next 5 years compared with their actual augmentation capex during the previous 5 years.

Table 14 - Victorian Distributors' Augmentation Capex Proposals

Distributor	2011-2015 augex ($million, 2015)	2016–20 augex ($million, 2015)	Percentage Change
AusNet Services	460	314	- 32
CitiPower	186	203	9
Jemena	115	141	23
Powercor	217	362	70
United Energy	183	167	- 9

VECUA has some concerns with the distributors' augmentation capex proposals, including:

- The distributors' demand forecasts are well in excess of AEMO's most recent forecasts
- The distributors' major investments in the previous regulatory periods have resulted in a large degree of excess system capacity and significant declines in the distributors' asset utilisation levels. This has not been taken into account in the distributors' augex proposals
- The distributors have not provided sufficient evidence of 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

VECUA elaborates further on these issues in the following sections.

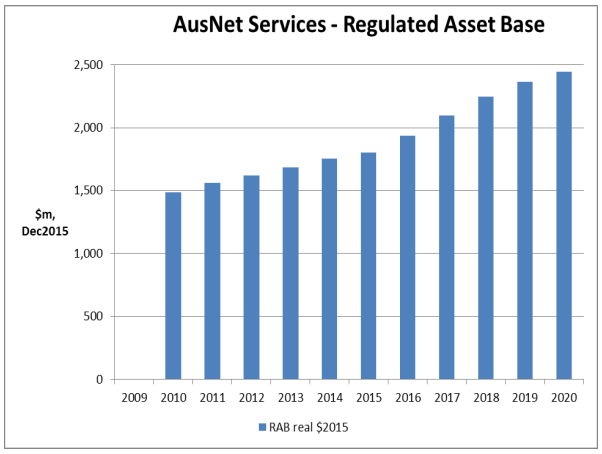
6.5.2.1 Excess Network Capacity

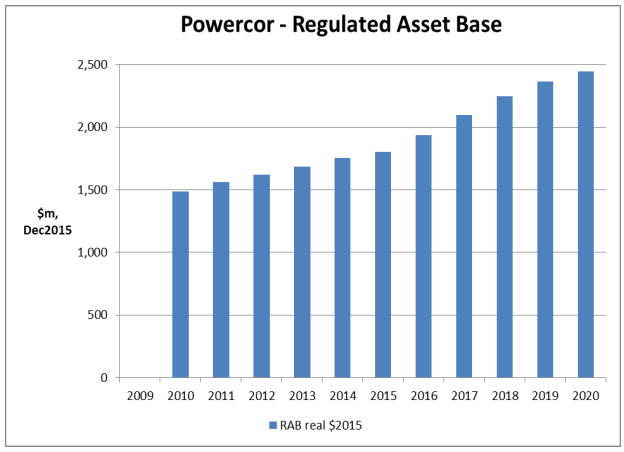
The Victorian Distributors' major capex programs over the previous decade have produced significant levels of excess capacity. VECUA considers that the AER's recent augmentation capex assessments for the interstate networks did not appropriately consider the implications of the network's growing excess capacity levels.

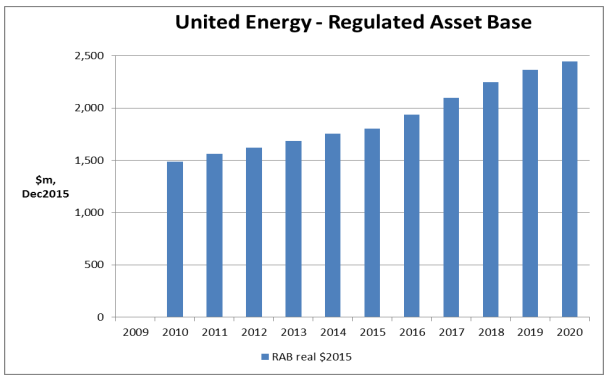
VECUA expects the AER to more fully consider the implications of the Victorian distributors excess capacity in its assessment of their augmentation capex proposals, and to ensure that the distributors' excess capacity is efficiently utilised ahead of any additional augmentation investment.

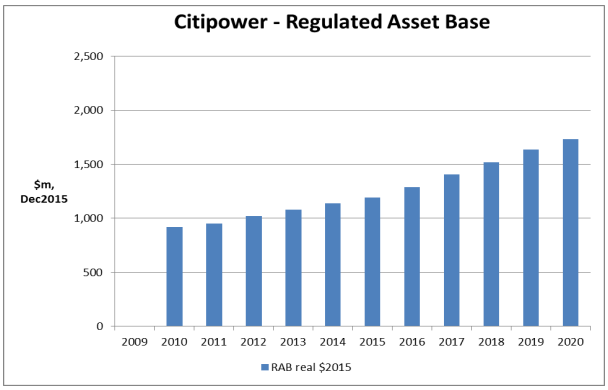
6.5.2.1.1 The Distributors' Unsustainable RAB Growth

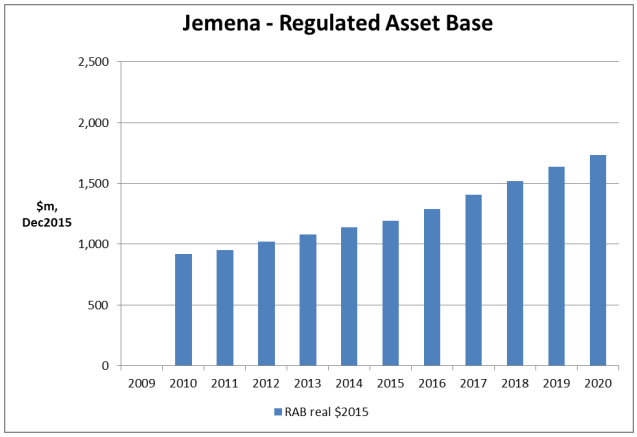
The distributors' revenue proposals are proposing the continuation of these unsustainable trends. As outlined in the charts below, the distributors are forecasting that their RABs will grow by over 40% over the next 5 years, during which their peak demand trends are expected to remain flat.











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" [14] - i.e. as demand continues to decline and the move towards distributed generation increases, the burden of paying for the networks' costs will be placed on a smaller consumer base until those consumers can no longer afford to stay connected to the network.

Again, VECUA considers that the AER's recent determinations for the interstate networks did not appropriately consider the unsustainability of the network's RAB growth levels. In particular, VECUA notes that some networks are now raising the prospect of applying accelerated depreciation to underutilised or stranded assets.

VECUA is strongly of the view that consumers should not be required to fund the networks "asset write-downs" (e.g. through higher depreciation charges). Such write-downs must be borne by the networks who made the inappropriate investment decisions – as happens in every other business.

6.5.2.2 Declining System Utilisation

The AER also needs to take the distributors' system utilisation into account in its determination of their augmentation capex allowances.

VECUA's preliminary review of the system utilisation information provided within the distributors' RINS data has highlighted that the Victorian distributors' system utilisation has declined significantly in recent years.

Again, despite the interstate networks' exhibiting similar declining system utilisation, the AER's recent augmentation capex assessments did not appropriately consider the implications for the networks' augex needs.

This was acknowledged in the AER's recent determination of the NSW distributors' augmentation capex, with the AER stating that:

"Consideration of trends in the networks' asset utilisation - was only used to a limited extent in this assessment" [15]

VECUA considers that this has been a major omission in the AER's recent augmentation capex determinations.

With such major declines in their asset utilisation rates it is expected that the Victorian distributors' augmentation capex requirements should reduce significantly.

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

[15] AER Final Decisions for the NSW Distributors, April 2015

6.5.2.3 Insufficient Justifications of "Pockets of Demand Growth"

As outlined in Section 5 above, the Victorian distributors' peak demand trends are expected to remain flat over the next decade.

However, the distributors are claiming that they need to invest in capacity to meet "pockets of demand growth" in their networks, despite the significant number of substations that expect negative demand growth during the next period.

The distributors' proposals provide very scant justifications or evidence of their localised demand growth claims.

VECUA accepts that a minor level of augmentation capex may be required to alleviate local capacity constraints in the Victorian distribution networks over the next regulatory period. However, the need for such augmentation projects needs to be justified by sound evidence of local demand growth and associated capacity constraints. Such evidence has not been provided within the distributors' proposals.

VECUA's brief analysis of the Victorian distributors' RINS data has highlighted that the vast majority of the distributors' zone substations decreased in utilisation over the previous regulatory period.

The AER needs to determine the distributors' augmentation capex needs utilising credible demand forecasts at the zone substation level and taking into account local system utilisation and excess capacity levels.

That level of analysis was not performed by the AER in its assessment of the interstate networks' augmentation capex proposals.

VECUA acknowledges that AEMO's latest demand forecasts do not provide localised demand forecasts at this level of detail. However, VECUA expects the AER to develop or obtain localised forecasts for that purpose. Failure to do so will run the high risk of the Victorian distributors being rewarded for their forecasting errors as occurred during the previous regulatory periods.

6.5.2.4 Concerns with the Distributors' Key Augmentation Capex Programs

VECUA hereby provides some high-level perspectives on some of the distributors' key augmentation capex programs.

6.5.2.4.1 Bushfire Mitigation Expenditure

A major component of the distributors' capex during the previous regulatory period was responding to the recommendations of the Victorian Bushfire Royal Commission, which examined the safety of electricity networks following the bushfires in 2009.

The distributors are proposing further major bushfire mitigation capex projects for the next regulatory period that they claim will be required to respond to further anticipated bushfire safety recommendations.

VECUA acknowledges and supports the distributors' commitment to safety and to ensuring responsible management of bushfire risks.

However, based on a preliminary review of the distributors' proposed bushfire mitigation capex programs, VECUA has a number of concerns, including:

- **Inadequate Demonstration of Increased Legislative and Compliance Obligations**

The distributors claim that their proposed projects are being driven by "increased legislative and compliance obligations". However, their proposals do not provide sufficient evidence to reasonably demonstrate that their future performance will not comply with their regulatory obligations.

- **Inadequate Demonstration of the Efficiency and Prudency of the Proposed Programs**

The distributors have not provided sufficient evidence of the efficiency and prudency of their proposed projects.

The distributors have not provided appropriate cost-benefit analyses for their bushfire mitigation projects and programs. In general, the limited business case information provided is qualitative in nature and does not properly evaluate the costs versus the benefits of the proposed investments.

For example, some distributors are proposing significant expenditure for undergrounding existing powerlines to mitigate bushfire risks. The risk assessments and business cases for those proposals are insufficient. In addition, there appears to be alternative funding options (e.g. state and local government funding) for the proposed programs.

Furthermore, based on the available information, it appears that the Victorian distributors' actual expenditure on their bushfire mitigation projects significantly exceeded their estimated project costs. VECUA therefore expects the AER to strongly scrutinise the prudency and efficiency of the distributors' proposed projects and programs.

- **Inconsistency in the Proposed Funding Arrangements**

The distributors are proposing different approaches to the funding of the potential new bushfire safety obligations. For example, Powercor has proposed to treat them as contingent projects, whereas AusNet Services is proposing to address the costs as pass through events when the new regulations are introduced.

VECUA considers that where the likelihood or magnitude of an investment (such as bushfire mitigation investments) is uncertain, a pass through event is more appropriate than a contingent project.

Irrespective, VECUA expects the AER to apply consistent funding arrangements across all of the Victorian distributors for their bushfire mitigation programs.

6.5.2.4.2 Inadequate Justifications of "Consumer and Community Support" Claims

The distributors are claiming that a number of their proposed projects have strong consumer and community support.

Those claims are not demonstrated by credible evidence, including 'willingness to pay' evidence. This issue is covered in detail in Section 8 below.

6.5.2.4.3 Capex to Improve Power Quality

The distributors are proposing some significant investments in power quality improvement projects, predominantly aimed at minimising voltage fluctuations and addressing the impacts of anticipated increases in embedded generation (particularly solar PV).

However, VECUA does not consider that the distributors have provided sufficient evidence to demonstrate that they will be unable to maintain their required power quality levels without the proposed additional expenditure.

6.5.2.4.4 Capex to Improve the Distributors' Customer Interaction Capabilities

The distributors are proposing some major capex programs aimed at improving their customer interaction capabilities, e.g.:

- Outage management information and tracking tools
- Consumer 'self service' portals
- Customer relationship management systems
- Systems aimed at improving the distributors' understanding of consumers' preferences

Most of those projects are poorly justified and their justifications are heavily reliant on the distributors' claims regarding consumer support – claims that VECUA considers are, in some cases, not supported with credible evidence.

This issue is covered in some detail in Section 8 below.

6.5.2.5 VECAU'S Expectations of the AER'S Augmentation Capex Review

In light of the above issues, VECAU considers that the Victorian distributors' augmentation capex proposals are materially overstated.

VECUA therefore expects the AER to develop substitute augmentation capex forecasts incorporating VECUA's expectations outlined in Section 6.4, and including:

- Substituting the networks' demand forecasts with credible independent forecasts
- An assessment of the implications of the distributors' declining utilisation and excess network capacity at the local level
- Effective assessments of the distributors' proposed augmentation capex for "pockets of demand growth – informed by credible spatial demand forecasts
- Detailed assessments of the prudency and efficiency of the distributors' key augmentation capex programs

VECUA expects that performing the above assessment will identify the need for significant reductions to the distributors' proposed augmentation capex.

6.5.3 Reliability Capex

In October 2014, AEMO published the results of its national *Value of Customer Reliability (VCR) Review*.[16] The VCR represents, in dollars per kilowatt-hour, the willingness of customers to pay for the reliable supply of electricity.

The results of the AEMO study have identified that current VCRs are significantly lower than previous Australian studies, with some valuations being less than half of the previous VCR estimates.

The Victorian distributors are claiming that their capex proposals have incorporated AEMO's updated VCR estimates.

The distributors' previous capex proposals were predominantly based on maintaining existing levels of reliability. However, AEMO's recent VCR estimates suggest that consumers are willing to accept lower levels of reliability if they are appropriately compensated through reduced network prices.

This does not appear to have been reflected in the distributors' proposals, which again appear to be predominantly based on maintaining existing reliability levels and which contain a number of conflicting messages regarding the use of AEMO's most recent VCR results.

For example, United Energy is claiming that the reduction in the level of the VCR may conflict with their obligation under clause 6.5.7(a) of the Rules to maintain current levels of reliability.

The distributors are also proposing different approaches to the application of AEMO's VCR results. For example, for decisions involving augmentation or replacement of power transformers, United Energy is proposing to use VCR values for hot summer days (the highest VCR values), whilst using the average VCR results for all other assets.

Furthermore, the distributors' proposals contain many claims regarding consumers' preferences, expectations and willingness to pay for reliability performance. As outlined in Section 8 below, VECUA has a number of concerns with the credibility of those claims. In particular, VECUA does not consider that the claims are evidence based or are supported by credible willingness to pay information.

VECUA expects the AER to critically review the distributors' proposed reliability capex to ensure consistency with AEMO's most recent VCR results. Based on the available evidence, VECUA considers that minimal reliability-driven capex will be required for the next regulatory period.

6.5.4 Replacement Capex

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

However, despite having undertaken major repalacement capex programs over the past two regulatory periods, all five Victorian distributors are proposing record-high levels of replacement capex over the next regulatory period.

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

Table 15 below summarises the total replacement expenditure proposed by each distributor for the next regulatory period, compared with their repex spend over the previous period. All 5 distributors are proposing major increases of between 32-70%.

Table 15 - 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 key concerns with the distributors' repex proposals are outlined below.

6.5.4.1 Ageing Assets?

The distributors' proposals do not provide any substantial justifications for their major repex increases, other than some unsubstantiated claims suggesting that their assets are ageing and need replacement.

However, a brief review of the distributors' RINS data indicates that the average asset ages for most asset categories are infact reducing.

This was reinforced by the chart presented by the Consumer Challenge Panel at the recent AER Public Forum (replicated overleaf), which identifies that the weighted average residual life of Powercor's assets has increased from approximately 18 years to 25 years over the past 7 years.

With the weighted average expected life of Australia's distribution assets being approximately 47.5 years [17], this suggests that Powercor's assets have on average more than half of their expected lives remaining.

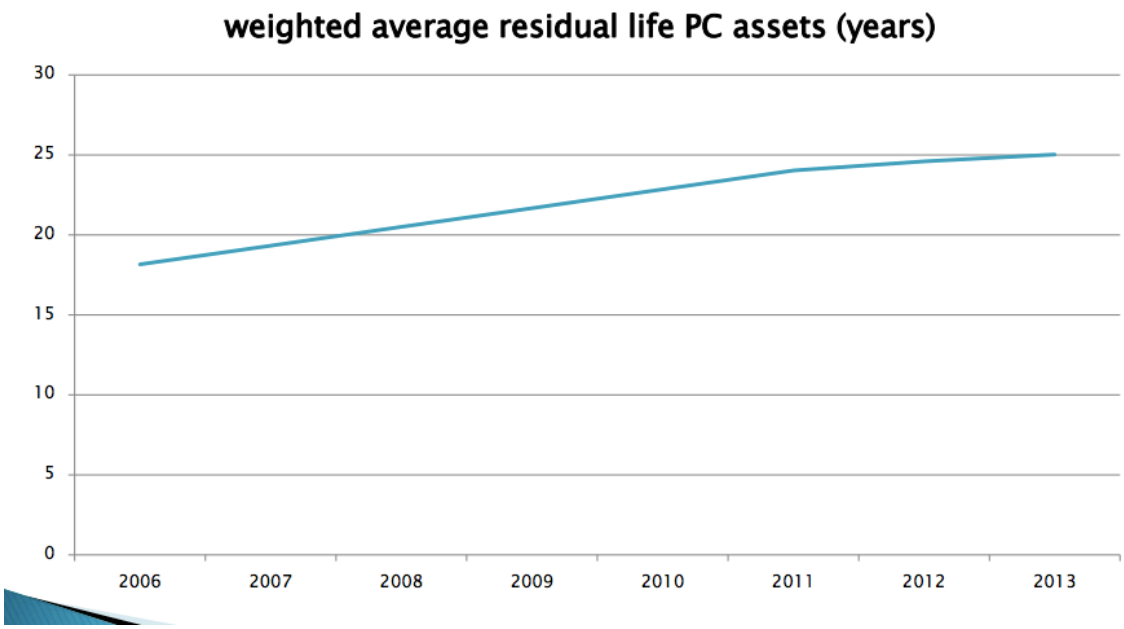
6.5.4.2 Asset Condition

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

Such justifications have not been provided within the Victorian distributors' repex proposals, which provide very scant details of actual asset condition information.

[17] AER Consumer Challenge Panel Presentation to AER Stakeholder Forum, 22 June 2015

Figure 5 – Powercor Weighted Average Residual Life



6.5.4.3 The Distributors' Replacement Spend in Previous Periods

As highlighted in Figure 4 above, the Victorian distributors are proposing record high levels of repex, despite having undertaken major repex programs over the previous regulatory periods.

VECUA asserts that an analysis of the distributors' recent repex spend will identify that some Victorian distributors have effectively 'pre-installed' of a good deal of their replacement capex requirements for the next regulatory period.

6.5.4.4 Standard Asset Lives?

VECUA is concerned with the wide variation in the 'standard asset lives' being used by the Victorian distributors. This has implications for the distributors' repex and their regulatory depreciation costs.

For example, as outlined in the chart presented by the Consumer Challenge Panel at the recent AER Public Forum [18] (replicated overleaf), the distributors' standard asset lives for overhead poles and wires varies from 36 to 62 years. Furthermore, United Energy's estimated asset lives for the 6 main categories of HV assets vary widely from 36-60 years, whereas Citipower and Powercor's asset lives for those assets are consistent at 49 and 51 years respectively.

VECUA considers that the AER needs to ensure greater consistency in the standard asset lives being used by the Victorian distributors.

Furthermore, as outlined in Section 6.5.2.1 above, VECUA is also concerned that some networks are now raising the prospect of applying accelerated depreciation to under-utilised or stranded assets. VECUA is strongly of the view that consumers should not be required to fund the networks "asset write-downs" through higher depreciation charges.

[18] AER Consumer Challenge Panel Presentation to AER Stakeholder Forum, 22 June 2015

Table 4.4.1 Asset Lives – estimated service life of new assets		Ausnet	CP	JEN	PC	UE
Overhead network assets less than 33kV (wires and poles)	years	47	49	62	51	36
Underground network assets less than 33kV (cables)	years	55	49	49	51	36
Distribution substations including transformers	years	62	49	48	51	36
Overhead network assets 33kV and above (wires and towers / poles etc)	years	54	49	64	51	60
Underground network assets 33kV and above(cables, ducts etc)	years	55	49	40	51	60
Zone substations and transformers	years	57	49	46	51	60
Meters	years	0	0		0	5
"Other" assets with long lives	years	0	12	30	15	8
"Other" assets with short lives	years	5	6	7	6	5

6.5.4.5 VECUA's Expectations of the AER's Repex Assessment Methodology

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

VECUA has a number of concerns with the approach that the AER applied to its recent repex assessments for the interstate networks. VECUA considers 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. This is particularly concerning in light of the record-high levels of repex proposed by the Australian networks during this round of revenue resets.

In determining its substitute repex forecasts for the Victorian distributors, VECUA expects the AER to perform a more thorough review of the Victorian distributors' repex needs, including:

- Robust risk assessments based on actual asset condition information
- Ensuring that alternative options to asset replacement (e.g. revised maintenance strategies, asset refurbishments, life extensions, and other risk mitigation options) are appropriately considered
- 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
- Considerations of optimal project timings – including options to defer timings and/or to undertake interim works
- Ensuring that re-use strategies are appropriately considered

VECUA expects that such reviews will identify the need for significant reductions to the Victorian distributors' proposed repex.

6.5.5 Capitalised Overheads

VECUA notes that all five distributors are proposing increases in their capitalised overheads.

VECUA has not yet had the opportunity to review the proposals in detail. However, VECUA is concerned with the assessment approach that the AER recently applied to the interstate networks' capitalised overhead proposals, and the implications of the AER replicating that approach to its assessment of the Victorian distributors' proposed capitalised overheads.

VECUA's key concerns with the AER's capitalised overheads assessment approach include:

- Despite most interstate networks proposing significant unjustified increases in their capitalised overheads, the AER has only applied very minor reductions
- The AER's determinations have predominantly been based on maintaining the networks' historical ratios of capitalised overheads to total overheads
- The AER has predominantly accepted the networks' claims that the majority of their overheads are "fixed"
- The AER's determinations have been overly-reliant on short-term trend analysis (previous 5 years)
- **The AER is required to determine its allowances based on efficient costs - not historical costs**

7 Operating Expenditure

The Victorian distributors are proposing a combined $4.39 billion of operating expenditure over the next 5 years – an increase of 41% (in real terms) over the previous period.

Table 18 - 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**

7.1 The AER's Opex Assessment Approach

The AER has indicated that it intends to apply the *base-step-trend* assessment process in its assessment of the Victorian distributors' opex proposals, i.e.:

- **Determination of the efficient base year opex** – using various techniques including 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

The table below provides a breakdown of the distributors' proposed opex into those key components.

Table 19 – Opex Components

	AusNet Services	CitiPower	Jemena	Powercor	United Energy	Total
Base Year Opex	913	292.4	379.2	907.6	623.9	**3116.1**
Step Changes	4.8	18.3	25.7	16.5	53.8	**142.9**
Rate of Change	89	65.5	34.1	159.6	15.1	**363.3**
Others	250	125.8	60	250.2	107.6	**793.6**
Total	**1,256**	**501**	**499**	**1,331**	**800**	**4,387**

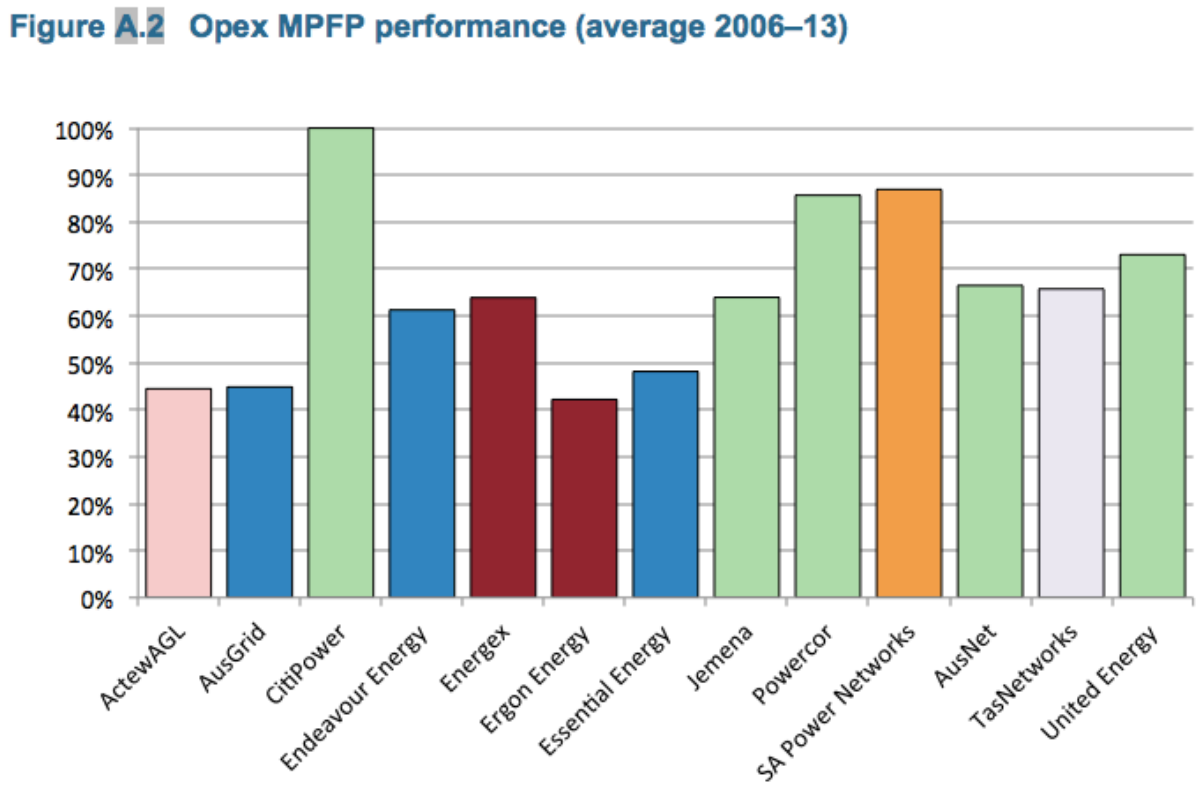
7.2 Determination of Efficient Base Year Opex

A critical element of the AER's opex assessment is the determination of efficient base year opex. The AER applies a number of techniques to assess opex efficiency, including economic benchmarking.

However, as demonstrated by the AER's recent preliminary decision for SAPN, rather than determining an efficient level of base year opex, the AER's base year opex assessment approach actually focuses on seeking evidence that the networks' base year opex is not "materially inefficient".

All five Victorian distributors are claiming that their base year opex is efficient. These claims are predominantly based on the AER's calculation of the Australian distributors' average opex efficiency scores over the 7 year period 2006-13, outlined in Figure 6 below.

Figure 6 - NEM service provider's average opex efficiency scores 2006 to 2013 [19]



This highlights that over the 2006-13 period, Citipower was the most efficient distributor in the NEM.

Table 20 overleaf outlines the efficiency gaps of the other distributors, identifying the implied opex reductions required of each distributor to achieve the efficiency level of Citipower.

It identifies that reaching the frontier efficiency level 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 (Citipower). The AER needs to take this into account in its determination of efficient base year opex.

[19] AER Annual Distribution Benchmarking Report, November 2014

Table 20 - DNSP opex efficiency scores and implied opex reductions to reach full efficiency (2006-2013) [20]

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%

7.2.1 The Distributors' Declining Efficiency – Merging Towards Mediocrity?

The AER's opex benchmarking has identified a highly concerning declining productivity trend for the Victorian distributors.

As outlined in Figure 7 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.

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

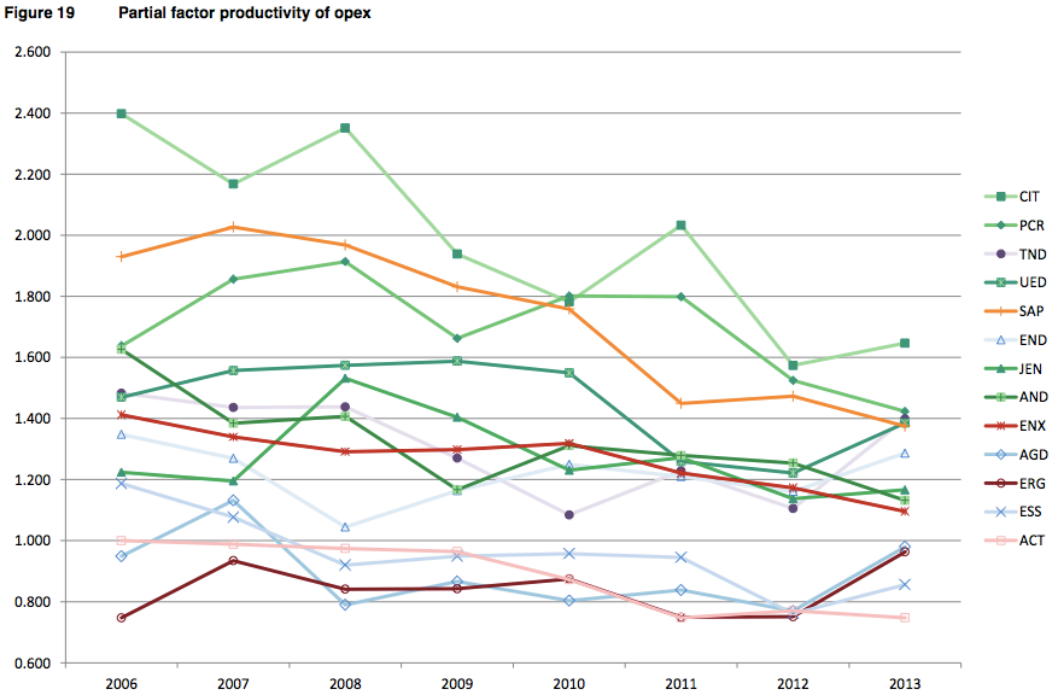
This means that the Victorian distributors' base year (2013/14) opex efficiency is significantly lower than their average opex efficiency over the previous period.

The Victorian distributors' revenue proposals provide 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) fall well short of providing credible explanations of the reasons for such major declines in the distributors' productivity.

VECUA therefore expects 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.

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

Figure 7 - Australian Distributor Opex Efficiency Trends



On the basis of the available evidence, VECUA asserts that the AER's determination of efficient base year opex levels must be below the distributors' proposed levels.

7.2.2 Base Year Expenditure Adjustments

The distributors are proposing major adjustments to their base-year expenditure for "service reclassifications" and "changes to overhead capitalisation policies" that will require a good deal of scrutiny by the AER.

For example, the opex increases arising from these proposed changes equate to 25% of Citipower's base year opex and 18% of Powercor's base year opex.

A brief analysis of the distributors explanations for their proposed changes identifies that there is a high degree of inconsistency in the distributors approaches to service classifications and overhead allocations, making it very difficult to compare the distributors' operational efficiencies.

These issues identify the need for the AER to ensure greater consistency in the distributors' treatment of opex costs, including their service classifications and overhead capitalisation policies.

7.3 Step Changes

As outlined in Table 21 below, the Victorian distributors are proposing a total of $143 million for increased opex that they claim is required to address new obligations.

Table 21 - Victorian Distributors' Proposed Step Changes

	Number of Step Changes	Total Value ($ 2015)	Percentage of Base Year Opex
AusNet Services	9	4.8	**0.53 %**
Citipower	7	18.3	**6.2 %**
Powercor	5	16.5	**18.2%**
United Energy	19	53.8	**8.6%**
Jemena	12	25.7	**6.8%**
Total	**52**	**143**	**4.6%**

VECUA has a number of concerns with the distributors' proposed step changes and anticipates that the AER will conclude that the majority (or all) of the proposed step changes do not satisfy the NER requirements.

Therefore, rather than provide a detailed critique of all 52 proposed step changes, VECUA simply highlights some high level concerns with the distributors' proposed step changes.

Insufficient Evidence of Changes in Regulations

Step changes need to demonstrate that there has been a material change in a regulatory or legal obligation facing the distributors since the base year, and that the new obligation requires increased costs in comparison with the base year costs.

The distributors have quoted a variety of regulations in support of their step change proposals.

However, for most step changes, they have failed to provide sufficient evidence to demonstrate that the regulation will materially change since the base year, or how the changes will materially affect their costs

Step Changes Aimed at Delivering Efficiency Improvements

The distributors are proposing a number of step changes aimed at delivering efficiency improvements (e.g. Citipower and Powercor's proposed increases in the use of mobile devices).

However, the distributors are subject to the Efficiency Benefit Sharing Scheme (EBSS), which provides rewards for such efficiencies. The distributors do not provide any compelling reasons why they should receive receive additional funding from consumers to pursue efficiencies that are already funded through the EBSS.

Bushfire Mitigation Step Changes

The distributors proposals include a number of step changes for bushfire mitigation initiatives.

Whilst VECAU acknowledges the importance of bushfire safety, it is not clear from the distributors' proposals that the proposed opex increases are required to comply with their future obligations related to bushfire risks.

Consumer-Driven Step Changes?

The distributors have labelled a number of their step changes as "customer driven initiatives" or "initiatives driven by changes in community expectations", claiming that there is strong consumer support for the proposed step changes.

VECUA has a number of concerns with these claims, including:

- Some of the distributors' claims of consumer support are not supported by credible evidence
- Most, if not all, of the proposed programs are discretionary. VECUA considers that discretionary programs should be managed within the distributors' existing opex budgets

VECUA's concerns regarding the distributors' claims of consumer support for their expenditure proposals are outlined in detail in Section 8.

Step Changes Already Included in Price Changes

The distributors appear to be proposing step changes for costs that are included within price changes, (e.g. site rent increases, insurance premium increases, etc.).

To compensate the distributors for price increases via step change as well as a through 'rate of change' factors would be double counting.

Consumer Engagement Programs

The distributors are proposing varying amounts to fund their proposed consumer engagement programs.

VECUA acknowledges that the AER's consumer engagement guideline outlines some expectations that consumers will be engaged - just like every business does - as part of their broader stakeholder engagement activities

However, VECUA asserts that the distributors base year opex allowance provides them with sufficient funds to fulfil the expectations of the AER's consumer engagement guideline.

Revenue Reset Step Changes

Some distributors are proposing step changes for the development of their 2016-20 revenue proposals.

The AER's recent decisions have considered this expenditure to represent "business as usual expenses" and not a change in expenditure attributable to a change in businesses' operating environment or in a legislative or regulatory obligation.

Step Changes Driven By Internal Management Decisions

The distributors are proposing a number of step changes that are driven by internal management decisions, e.g.:

- Enhanced inspection programs
- Stakeholder engagement programs
- Increased Vegetation Management Costs
- Customer information system and customer relationship management step changes

These changes are not driven by new external obligation (such as new legislation or regulations), or changes to the distributors' operating environment beyond their control.

Step Changes to Implement New IT Capabilities

The distributors are proposing a number of step changes related to implementing new IT capabilities, e.g.: implementation of new customer information systems and new customer relationship management systems.

VECUA does not consider those proposed step changes to be justified, as most of the IT capex projects were justified on the basis of improving opex efficiencies. VECUA would therefore expect these initiatives would lead to lower, rather than higher, opex.

As outlined above, the distributors are subject to incentive based regulatory framework whereby they are rewarded for investing in initiatives that reduce their costs.

Step Changes to Improve IT Security

Some distributors have proposed step changes to improve their IT security.

VECUA considers that the distributors have not clearly demonstrated why they require an increase in their opex budgets for these changes. In particular, VECUA considers that they have not identified:

- The specific information security risks that the networks face
- Whether those risks have caused incidents for the networks during the previous regulatory control period, and if so, the cost arising from those incidents
- How the distributors' IT security risks are expected to change in the next regulatory control period compared to the previous period

7.4 Rate of Change

The table below outlines the value of the Victorian distributors' proposed opex increases arising from their proposed *rate of change* factors for price, output and productivity changes:

Table 22 - Victorian Distributors' Proposed Rate of Change Costs ($ 2015)

	AusNet Services	CitiPower	Jemena*	Powercor	United Energy
Price Change	49.2	30.2	-	76.7	7.0
Output Change	39.4	35.3	?	82.8	8.1
Productivity	0	0	?	0	0
Total Value	**89**	**65.6**	**34.1**	**159.6**	**15.1**

* Jemena details are not clear in its Revenue Proposal

Table 23 below outlines the distributors' proposed rate of change factors in terms of their average annual percentage escalation factors. It highlights that the distributors are proposing :

- Average annual real price change escalation factors of up to 8 times the average factor that the AER determined in its recent preliminary decision for SAPN
- Average annual output change factors of up to 4 times the average factor that the AER determined in its recent preliminary decision for SAPN
- Total rate of change factors of up to 4.5 times the average total rate of change factor that the AER determined in its recent preliminary decision for SAPN

VECUA's perspectives on these differences are outlined in the following sections.

Table 23 - Average Annual Escalation Factors (Per Cent, Real)

	AusNet Services	CitiPower	Jemena	Powercor	United Energy	AER SAPN Decision
Price Change	1.72	1.72	0.98	1.72	1.6	0.22
Output Change	1.38	1.76	2.24	1.85	1.3	0.57
Productivity	0	0	0.89	0	0	0
Total Rate of Change	**3.1**	**3.46**	**2.33**	**3.57**	**2.9**	**0.79**

7.5 Price Change

Table 24 below provides a breakdown of the distributors' proposed price change factors.

Table 24 – Price Change Components ($ 2015)

	AusNet Services	CitiPower	Jemena*	Powercor	United Energy
Labour	49.2	16.3	?	39.5	7
Non Labour	0	14.1	?	37.2	0
Total	**49.2**	**30.2**	**?**	**76.7**	7

* Jemena details not clear in its Revenue Proposal

7.5.1 Price Change Weightings

The AER's approach to determining overall price change is to weight the forecast price growth to account for the proportion of labour and non-labour. The AER adopts a 62 per cent weighting for labour costs and a 38 per cent weighting for non-labour costs.

Some of the Victorian distributors have proposed significantly different weightings to the AER's. For example, Citipower is claiming that 97% of its opex costs are labour related.

The distributors' application of different weightings result in some material differences between the AER and the distributor's overall price growth factors - as the distributors' forecasts include a much higher proportion of labour costs (forecast to grow above CPI) and a lower proportion of non-labour costs (forecast to grow at around CPI).

7.5.2 Labour Price Change

In determining its labour price change escalation factors for its recent preliminary decision for SA Power Networks (SAPN), the AER utilised forecasts from Deloitte Access Economics' forecast for the Electricity, Gas, Water and Waste Services (EGWWS) industry, resulting in the AER applying an average annual real labour price escalation factor of 0.36% for the next 5 years.

The Victorian distributors have used various methodologies to determine their proposed labour price escalation factors. For example, Powercor has used the historic average of the change in EBA rate to forecast internal labour prices, and the forecast change in the wage price index for the Victorian construction sector for contractor labour costs.

The different forecasting methodologies result in some significant differences between the distributors' and the AER's labour price growth factors. As outlined in the table overleaf, the distributors are proposing average real labour price increases of between 1.6-2.1%, compared to the AER's most recent decision of 0.36%/annum for SAPN.

Table 25 - Average Annual Real Labour Price Change Escalation Factors (Per Cent)

	AusNet Services	CitiPower	Jemena	Powercor	United Energy	AER Recent SAPN Decision
Internal Labour	1.8%	1.72	1.6	1.72	1.6	**0.36**
External Labour	2.1%	1.72	1.6	1.72	1.6	**N/A**

7.5.2.1 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).[21]

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

The distributors are forecasting that their labour rates will increases to by between 1.6-2.1% per annum above CPI over the next regulatory period. For such levels of real price growth the distributors would be expected to propose offsetting productivity improvements.

However, four of the Victorian distributors are forecasting zero productivity improvements, with only Jemena proposing productivity improvements (of 0.89%/annum).

Proposing such levels of labour price increases without appropriate offsetting productivity improvements will result in further declines in the distributors' productivity levels.

7.5.2.2 The Electricity Network Sector is in Contraction

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.

Neither the distributors', nor the AER's labour forecasting approaches appropriately consider the specific drivers of the Australian electricity network sector.

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

Delloite 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.[22]

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

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

7.5.2.3 The Distributors' Inclusion of External Labour Costs

The Victorian distributors are proposing to apply labour growth factors for their internal labour and for the labour in their contracted services. This differs from the AER's approach, which includes contracted services in its non-labour price growth (which the AER assumes will move in line with the CPI).

7.5.2.4 The Distributors' Use of Enterprise Agreement Costs

The Victorian distributors have incorporated their current and anticipated enterprise agreement rates in the forecasting of their proposed labour price growth factors.

VECUA does not accept that the distributors' enterprise agreement rates represent efficient labour costs, as they are typically 1.5-2% higher than the EGWWS WPI rates.

Furthermore, the distributors' enterprise agreement rates are not fully representative of their total workforce labour rates. A recent AER analysis of privately owned distributors' enterprise agreements identified that less than half of the staff of CitiPower, Powercor and AusNet Services are employed under their enterprise agreements.[23] That analysis also identified that privately owned distributors outsource a large proportion of their opex. The distributors' enterprise agreements therefore only represent a subset of their total labour price and overall labour costs.

There is extensive evidence that the Victorian distributors' enterprise agreements are delivering wages well above the efficient level. The AER is required to only allow efficient costs. The AER must ensure that Australia's distribution networks are not allowed to continue with their previous approach of effectively treating inefficient EBA outcomes as a "pass through".

7.5.2.5 VECUA'S Expectation's of the AER's Labour Price Change Determination

For the reasons outlined above, VECUA considers that the Victorian distributors' proposed labour escalation rates are materially overstated. VECUA expects the AER to determine efficient labour price changes for the distributors, taking into account:

- The electricity network sector is in contraction
- The Victorian distributors' historical and proposed enterprise agreement labour rates are inefficient
- The interaction between labour price change and productivity change – i.e. real labour price increases need to be compensated by offsetting productivity improvements

VECUA asserts that an appropriate consideration of the above issues will conclude that the distributors' labour prices should be reducing rather than increasing.

7.5.3 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 is predominantly based on regulatory simplicity – i.e. avoiding the difficulty of attempting to predict movements in commodity prices and exchange rates.

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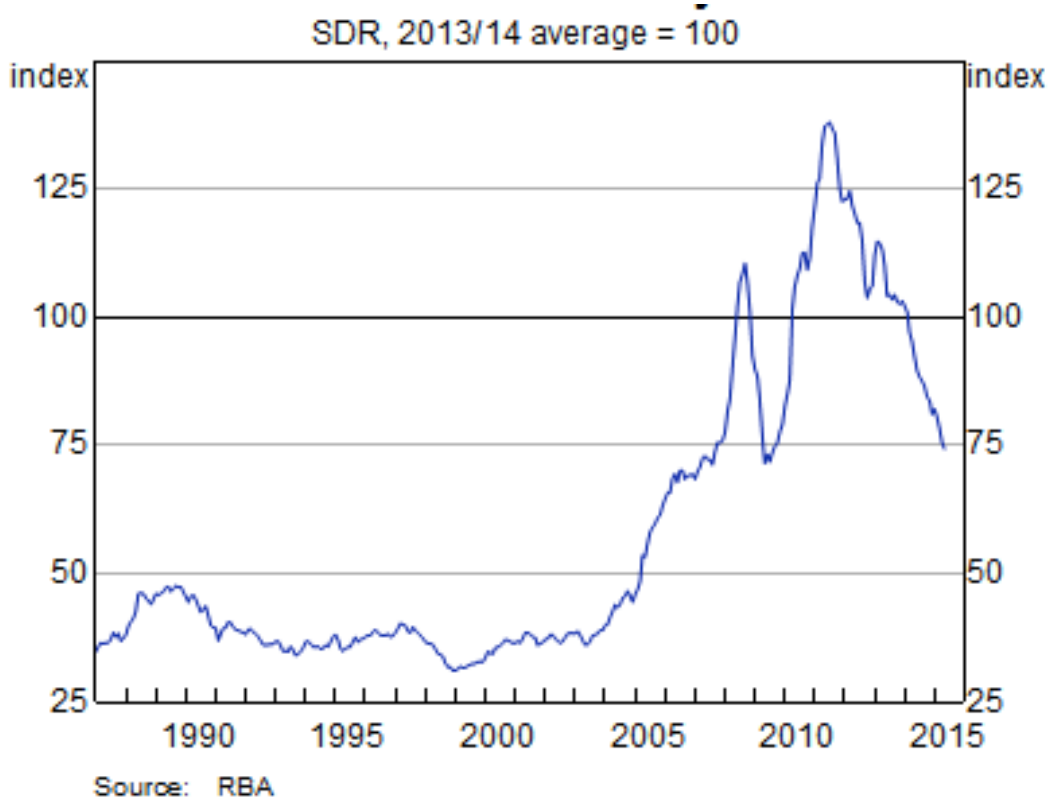
23 Deloitte Access Economics, *NSW distribution network service providers labour analysis – final draft addendum to 2014 report,* 9 April 2015. p. 29

Whilst we 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.

As outlined in the chart below, over the past six months the prices for commodities (including copper, aluminium and steel) have fallen considerably. For example, the RBA Commodities Price Index has dropped by around 20% in the past year.

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

Figure 8 - RBA Index of Commodities Prices (AUD)



7.6 Output Change

Table 26 below outlines the Victorian distributors' average annual output escalation factors in comparison with the AER's recent output factor determination for SAPN.

Table 26 – Average Annual Output Change Escalation Factors

	AusNet Services	CitiPower	Jemena	Powercor	United Energy	AER SAPN Decision
Output Growth	1.4%	1.84%	2.24%	1.8%	1.62%	**0.57%**

The AER's methodology for determining output change factors is based on applying the weighted average increase in:

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

Some Victorian distributors have proposed different approaches to determining output factors, e.g.:

- CitiPower and Powercor's forecasts are based on the use of four factors, including a 'substation transformer capacity' factor
- Jemena's forecasts are based on its forecast growth in 'system physical capacity' and number of customers

VECUA has a number of concerns with the distributors' proposed output factors.

For example, the use of the installed capacity factors proposed by Citipower, Powercor and Jemena would result in the provision of increased opex for newer assets, rather than the reduced opex required due to their lower maintenance costs.

VECUA considers that the AER's 'ratcheted maximum demand' factor is a more appropriate measure of the distributors' output than installed capacity factors. This is particularly important given the distributors' growing levels of excess network capacity. Contrary to the distributors' proposed factors, ratcheted maximum demand takes into account the actual network capacity used.

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.

Irrespective, VECUA expects the AER to determine output change factors on a consistent basis across all distributors.

7.6.1 Productivity Change

With the exception of Jemena, the Victorian distributors are proposing zero productivity improvements over the next 5 years. Jemena is proposing productivity improvements of 0.89%/annum.

7.6.1.1 Productivity Declines Should Be Temporary

As outlined in Section 7.2.1 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" [24]

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.[25]

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" [26]

7.6.1.2 VECUA's Expectation's of the AER's Productivity Determination

In its recent determinations for the interstate distributors, the AER applied zero per cent productivity change factors.

These decisions conflict with the above statements by the AER, which outline that the AER expects the distribution sectors to deliver positive productivity improvements over the next regulatory period.

VECUA considers 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

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

[25] *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.

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

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 therefore expects the AER to determine positive productivity change rates 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 sector and other asset intensive industry sectors.

8 The Distributors' Consumer Engagement Programs and Claims

8.1 The Distributors' Key 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 include a number of claims regarding feedback they have received from consumers, together with claims regarding consumer support for their proposed expenditure.

Some of the distributors' key claims regarding consumers' support for their proposals include:

CitiPower and Powercor

- Claims that consumers support additional investment in activities that reduce the risks of fire danger
- Claims that consumers support investment in smart grid programs to enable consumer choice and flexibility and to provide greater access to readily understandable information about their electricity usage
- Claims that consumers support capex to underground powerlines in high-risk fire areas, as well as investing in other bushfire mitigation activities
- Claims that consumers support investing in technology to connect more embedded generation, and working with local government to introduce new types of energy efficient street lighting
- Claims regarding large customers' views on the importance of continuous, uninterrupted reliable supply of electricity

AusNet Services

- Various claims regarding consumers' support for improving safety levels
- Claims that its regional customers believe that urban customers should contribute to the costs of bushfire mitigation works because they benefit from regional products and services such as agricultural output and tourism
- Claims regarding consumers' support for investment in demand management
- Claims regarding consumer support for the application of accelerated depreciation of the remaining asset value
- Claims that consumers accept that its expenditure proposal will result in slightly lower level of reliability
- Claims that consumers support expenditure that aims to reduce the risk of bushfires and electric shocks
- Claims that consumers support an expanded allowance for investment in longer term research

United Energy

- Claims that customers will not accept lower reliability in exchange for lower prices
- Claims that consumers support investment in ICT solutions to provide better outage information, online customer claims and tracking tools and a self-service portal for new connections to streamline the process for customers, electricians and developers
- Claims that consumers support further investment in its customer portal to give customers ready access to the information they need to make informed energy choices
- Claims that consumers support further investment in ICT systems to improve the quality and reliability of market transactions and to take advantage of the remote capabilities of AMI meters for transfer and re-energisation / de-energisation reads
- Claims that consumers support $3 million in expenditure for a three-year trial of dedicated vegetation management crews to work with local councils

Jemena

- Claims that consumers support maintaining current service levels
- Claims that large commercial and industrial customers are seeking "specific service differentiation"

8.2 VECUA's Perspectives On The Distributors' Claims

8.2.1 The Distributors' Consumer Engagement Is In Its Infancy

VECUA acknowledges that the distributors' consumer engagement is in its infancy and that the distributors are currently on a very steep learning curve regarding how to reflect consumers' preferences in their revenue proposals.

This is a new space for the distributors and is not a core competency. It is therefore not surprising that there is significant room for improvement with many aspects of the distributors' consumer engagement programs, and the claims that they are making from the programs.

VECUA therefore does not wish to be overly critical of the distributors or to single out any particular distributor for criticism. Rather, VECUA provides some perspectives to assist the AER in its assessment of the distributors claims and to assist the distributors to improve the effectiveness of their ongoing consumer engagement efforts.

8.2.2 The Level of Consumer Participation

The AER's *Consumer Engagement Guideline* [27] was deliberately designed as a set of 'best practice principles' rather than a prescriptive standard. In essence, the AER's guideline places the onus on the networks to develop consumer engagement strategies and activities that they consider best suit their

[27] AER's Consumer Engagement Guideline for Network Service Providers, November 2013

businesses. The AER guideline acknowledges that for most networks, genuine consumer engagement may require a significant cultural shift.

The principles outlined in the *AER's Consumer Engagement Guideline* were partially drawn from the *International Association of Public Participation's Spectrum,* which assists with the selection of the desired level of stakeholder participation in engagement programs.

The Spectrum illustrates that differing levels of participation are legitimate depending on the goals, timeframes, resources and levels of concern in the decisions to be made.

Importantly, the Spectrum sets out the extent of promises being made to stakeholders at each of the 5 participation levels, as outlined in Figure 10 below.

Figure 10 International Association of Public Participation (IAP2) Spectrum

INCREASING IMPACT ON THE DECISION

	INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
PUBLIC PARTICIPATION GOAL	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.
PROMISE TO THE PUBLIC	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision. We will seek your feedback on drafts and proposals.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will work together with you to formulate solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.

The IAP2 Spectrum highlights that effective consumer engagement must be a two way process, with consumers playing a significant role in the distributors' decision making at the higher levels of participation.

As outlined by the AER in its recent determinations for the interstate networks, the majority of consultations performed by the Australian networks to date have been at the "Inform" level - i.e. the focus of the programs is predominantly about information provision rather than collaboration.

Consequently, the AER reached the conclusion that it can only place minimal reliance on the claims being made by the networks.

VECUA acknowledges that some distributors have a genuine commitment to working towards more in-depth two-way discussions with consumers. In particular, VECUA considers that Jemena and United Energy have made positive and genuine efforts to extensively engage with residential consumer advocates.

However, overall, VECUA considers that, similar to the interstate networks, the Victorian distributors' consumer engagement programs have also been predominantly focused at the "Inform" level.

VECUA encourages the distributors to work towards engaging consumers at the "Involve" and "Collaborate" levels. That will require the distributors to have consumers more involved in their decision-making regarding options and preferred solutions, to provide consumers with more detailed information, and to better enable consumers to challenge the distributors through their participation.

Ultimately, a deeper level of consumer participation will result in revenue proposals that better reflect consumers' long-term interests.

8.2.3 Consumers' Knowledge and Capacity to Engage

To date, most consumers have had very limited involvement in the networks' development of their revenue proposals. Consequently most consumers have limited knowledge of the networks' businesses and the revenue determination process. It is therefore not surprising that, at this stage, consumer participation in the networks' decision-making is highly challenging for both the consumers and the networks.

Some consumers and consumer advocacy groups are more knowledgeable and could potentially participate effectively in collaborative decision-making. However, due to systemic information and resource asymmetries, even the most knowledgeable consumers have limited capacity to do so.

VECUA therefore considers that further consumer education and capacity building will be critical for improving consumers' ability to contribute meaningfully to the distributors' revenue proposals.

8.2.4 Improving Consumers' Knowledge and Capacity to Engage

The need to improve consumers' capacity to engage has led to the networks' consumer engagement programs including some elements of education.

However, VECUA considers that rather than leaving such education to the networks, the AER should be playing a much more proactive role in improving consumers' capacity to engage.

This is particularly important as, under the current regulatory framework, the networks' and their consumers' interests are not truly aligned. Therefore, VECUA considers that addressing consumers' education needs should be led by a more independent body, such as the AER.

8.2.5 Inappropriate Questions/Push Polling

VECUA considers that a number of the distributors' surveys and questionnaires have been based on inappropriate or flawed underlying assumptions.

For example, an underlying premise in most of the distributors' communications is that the distributors' current prices reflect an appropriate baseline against which consumers' preferences should be based.

That premise is fundamentally flawed. It does not reflect the major price reduction drivers outlined in Section 3, which should result in the distributors' prices being significantly lower during the 2016-20 regulatory period.

This issue permeates most of the distributors' communications with their consumers and consequently the majority of the distributors' questions and resulting claims are invalid as they are based on a false premise.

8.2.6 Insufficient Information Provision

In order for consumers to provide informed feedback on specific expenditure items, they need to be fully informed about the cost and price implications (including trade-offs) of any preferences they are asked to provide feedback on.

VECUA is concerned that the distributors have frequently failed to provide sufficient information when seeking consumers' views on their proposed expenditure. In particular, VECUA is concerned that in many of the distributors' surveys, polls, questionnaires and discussions, the distributors did not adequately or clearly communicate the cost and price implications of the alternative choices that they were asking consumers to make.

Consequently, rather than being based on informed choices, in many cases consumers ' responses have simply been based on a best guess or emotional basis.

8.2.7 Programs Driven by the Networks' Priorities - Not Consumers' Priorities

VECUA is concerned that, contrary to the expectations of the AER Consumer Engagement Guideline, the focus of the distributors' consumer engagement programs has been driven by the networks' priorities rather than their consumers' priorities.

For example, consumers have consistently identified that price is their number one concern. Consumers overwhelmingly believe that the distributors' current prices are excessive and are calling for significant price reductions during the next regulatory period.

However, that priority has not been appropriately reflected in the distributors' consumer engagement programs, which have a strong focus on justifying ongoing price increases and on issues that rated low on their consumers' priority lists – i.e. there is a major disconnect between the focus of the distributors' consumer engagement programs and the issues which consumers are most interested in engaging on.

8.2.8 Insufficient Differentiation of Responses

VECUA is concerned that the distributors' claims do not appropriately differentiate their consumers' responses. As the AER is aware, some expenditure programs can have very different impacts on different consumers (e.g. regional and urban consumers, large and small consumers, etc.)

In many cases, the distributors are inappropriately attempting to justify expenditure by using feedback from consumers who are least impacted by the proposed project or program.

8.2.9 Insufficient Evidence of Claims

The networks need to provide clear evidence of all of their claims regarding any consumer preferences being claimed.

In many cases, such evidence has not been provided.

This is particularly the case for the distributors' claims regarding consumers' willingness to pay for reliability performance, most of which are not supported by credible evidence.

8.2.10 Non-Credible Willingness to Pay (WTP) Claims

VECUA is concerned with the distributors' use of non-credible 'willingness to pay' (WTP) surveys and methodologies.

VECUA concurs with the views of the AER Consumer Challenge Panel (CCP) [28] that credible WTP surveys can provide some useful insights on consumer preferences regarding competing priorities. However, such information, in and of itself, is insufficient to support particular expenditure programs. Simply providing information on the WTP or potential benefits is only part of the information that is needed to assess the distributors proposed expenditure.

Furthermore, VECUA concurs with the CCP's recommendation that only WTP information provided through well-designed choice modelling should be considered by the AER as possible support for a program or activity.

As the use of willingness-to-pay research is still in its infancy, VECUA also considers that the AER needs to be very cautious about its use in supporting the networks' investment decisions.

8.2.11 VECUA's Expectations of the AER's Assessment of the Distributors' Consumer Engagement Claims

In light of the above, VECUA expects the AER to:

- 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 modelling

[28] Consumer Challenge Panel – Advice to the AER on consumer engagement, 28th Nov 2013 and 16th July 2014