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# Moving to a new paradigm:

## submission to the Australian Energy Regulator's NSW electricity distribution network price determination

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# The Public Interest Advocacy Centre

The Public Interest Advocacy Centre (PIAC) is an independent, non-profit law and policy organisation that works for a fair, just and democratic society, empowering citizens, consumers and communities by taking strategic action on public interest issues.

PIAC identifies public interest issues and, where possible and appropriate, works co-operatively with other organisations to advocate for individuals and groups affected. PIAC seeks to:

- expose and redress unjust or unsafe practices, deficient laws or policies;
- promote accountable, transparent and responsive government;
- encourage, influence and inform public debate on issues affecting legal and democratic rights;
- promote the development of law that reflects the public interest;
- develop and assist community organisations with a public interest focus to pursue the interests of the communities they represent;
- develop models to respond to unmet legal need; and
- maintain an effective and sustainable organisation.

Established in July 1982 as an initiative of the (then) Law Foundation of New South Wales, with support from the NSW Legal Aid Commission, PIAC was the first, and remains the only broadly based public interest legal centre in Australia. Financial support for PIAC comes primarily from the NSW Public Purpose Fund and the Commonwealth and State Community Legal Services Program. PIAC also receives funding from Trade and Investment, Regional Infrastructure and Services NSW for its work on energy and water, and from Allens for its Indigenous Justice Program. PIAC also generates income from project and case grants, seminars, consultancy fees, donations and recovery of costs in legal actions.

## Energy + Water Consumers' Advocacy Program

This program was established at PIAC as the Utilities Consumers' Advocacy Program in 1998 with NSW Government funding. The aim of the program is to develop policy and advocate in the interests of low-income and other residential consumers in the NSW energy and water markets. PIAC receives policy input to the program from a community-based reference group whose members include:

- Council of Social Service of NSW (NCOSS);
- Combined Pensioners and Superannuants Association of NSW;
- Park and Village Service;
- Ethnic Communities Council NSW;
- Rural and remote consumers;
- Retirement Villages Residents Association;
- Physical Disability Council NSW; and
- Affiliated Residential Park Residents Association.

# 1. Introduction

The Public Interest Advocacy Centre Ltd (PIAC) thanks the Australian Energy Regulator (AER) for the opportunity to respond to the regulatory reset proposals submitted in May 2014 by the three NSW electricity distribution network service providers (DNSPs): Ausgrid, Endeavour Energy and Essential Energy.

## 1.1 The context for the NSW distribution regulatory reset for 2014/15 – 2018/19 (2015-19)

Any response to the DNSPs' proposals for the distribution reset must be prefaced by consideration of the very negative experience of consumers over the last five years. After a long period of relatively stable electricity prices, the current regulatory period (2009/10 – 2013/14) has seen an extraordinary and unprecedented escalation in NSW electricity prices in general, and network prices in particular. It is estimated that network prices alone have lead to an increase in average household prices of some $500 - $600 per year each year since 2007/08.[1] This has amounted to a doubling over five years. An average small business customer would have seen increases in costs in the thousands of dollars.

This has had a severe negative impact on NSW households and businesses while the profits of the NSW DNSPs have swelled, despite declining electricity consumption by consumers. Such an outcome over five years is only possible for a monopoly business operating within a regulatory environment that has limited the capacity of the AER to act in the long-term interests of consumers, rather than network owners.

It is fortunate for the NSW community, therefore, that the issues with network regulation and pricing have now been recognised. Various reforms have been introduced which, taken together, should address the more egregious outcomes observed in the 2009-14 regulatory period. Key developments for NSW electricity consumers since 2012 include:

- A series of investigations by the Productivity Commission, the Australian Senate Committee of Inquiry, the Australian Energy Market Commission (AEMC), the Grattan Institute and others into the reasons for the surge in network charges (2012-2014);
- Reform of the National Electricity Rules (NER) and National Gas Rules (NGR) (2012), and the development of the AER's Guidelines under the Better Regulation program (2013);
- Reforms to the operation of the Australian Competition Tribunal (2012-2013);
- Modification of the reliability standards set out in the DNSPs' distribution licences (et al) (effective 1 July 2014); and
- The NSW Government's Network Reform Program (NRP) (2012) and its progressive implementation under the auspices of Network NSW (NNSW).

PIAC is cognisant of the challenges that consumers have faced with energy price rises. In this respect, the reforms listed above are welcome, as is the additional assistance provided by the NSW Government to low income households and ordinary families to assist with these rising

[1] Independent Pricing and Regulatory Tribunal, 2013, *Final Report – Review of regulated retail prices for*

costs.[2] Nevertheless, PIAC firmly believes that network charges continue to be a major issue for households and businesses and that strong action needs to be taken to address the impact on households and reinforce the competitiveness of the NSW economy.

The current regulatory proposals provide the first opportunity to significantly reverse the trend of annual price rises above the consumer price index (CPI). The NSW Government has also directed the networks to limit price increases to CPI or less until 2016/17 and to achieve this by enhancing the efficiency of their operations and capital management while keeping their networks safe and reliable.

## 1.2 How have the networks responded to this context?

Since the introduction of the NRP and NNSW, the DNSPs have responded by reducing both their capital investment and operating expenses. It is estimated that overall, the DNSPs have achieved total projected savings of $4.3 billion over the five year reform program (is this 2012-2017?).[3]

This in turn has resulted in a both a reduction in capital borrowing requirements to fund investment and a significant increase in the profits of the businesses. .

While some of the benefits of these reductions in expenditure have been shared with consumers in the form of increased rebates to low and middle income families, much of it has been returned to the NSW Government (as the owner) in the form of increased dividends and state equivalent taxes.

PIAC notes that the networks' reductions in expenditure, although significant, have not resulted in any price relief for consumers, as the revenue/average price path for 2009-14 was set by the AER in 2009. Price relief for consumers can only be achieved through the current regulatory reset process – and through reductions in total revenue.

On first appearances, these proposals appear to comply with the NSW Government's requirements to limit price increases to CPI or less across all consumers. For residential and small business customers, Ausgrid is proposing an average increase in nominal prices of 2.21 per cent and 2.10 per cent respectively, just under the forecast CPI of 2.5 per cent. Endeavour Energy and Essential Energy are proposing the same average increases for both residential and small business customers of 1.22 per cent and 2.30 per cent respectively.

PIAC has significant concerns with this outcome at a number of levels. PIAC believes that consumers should receive a much greater benefit from the significant decreases in the cost of capital since the Global Financial Crisis (GFC) and the much slower rate of cost increases (including wages) across the economy. PIAC believes these economic fundamentals are applicable to the NSW DNSPs.

In addition, following the efficiency gains to date, over the coming five-year period, PIAC would expect much greater improvements in efficiency for NSW DNSPs. The NSW DNSPs have, historically, demonstrated relatively low efficiencies and have much greater scope for productivity

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2 The NSW Government has provided additional rebates on electricity bills to over 1 million NSW consumers through increases in the Low Income Household Rebate and the introduction of a Family Energy Rebate in 2012. These additional rebates have been funded from some of the savings in costs due to the NRP.

3 See for example, NSW Government, *Electricity bill relief for NSW households*, media release, 3 February, 2014, citing statements from the then treasurer, Mike Baird and Minister for Resources and Energy, Anthony Roberts.

growth both from operating efficiency and capital utilisation. It seems to PIAC that the CPI constraint has become more of a target rather than a driver. That is, if the constraint is met, then there is no reason for a DNSP to explore the possibility of further savings to drive *real reductions in consumer prices.* This should not be the case; the driver of the proposals should be to achieve the lowest possible price consistent with the maintenance of safety and reliability, consistent with the National Electricity Objective (NEO) and the National Electricity Rules (NER).

Moreover, average price constraint of CPI is only meaningful if the energy and demand forecasts by the DNSPs are accurate. This is because under a revenue cap regulatory framework, the actual average price will depend not only on the cost inputs but also on the forecasts of energy use and demand. In simple terms, consumers are taking the risk of error in the forecast of energy use and demand. If the DNSPs have overstated these forecasts, then consumer prices must rise more than CPI. This submission looks in detail at the proposed demand forecasts and suggests they require closer examination. Under the NER, if the AER is not satisfied that the demand forecast and cost inputs required to achieve the capital expenditure objectives are realistic, then the AER must not accept the forecast of required capital expenditure of a DNSP.[4]

Overall, it is useful to examine the total revenue proposed by the DNSPs. In summary, the NSW DNSPs are proposing that total revenue - the costs of building and maintaining poles and wires (including financing) and the rate of return to the owners for the 2014-2019 regulatory period are two (Endeavor) or almost three times (Ausgrid, Essential) that in 2004-2009. This means for Ausgrid, for example, average revenue of $2.2b annually for current period compared less than $1b in 2004-2009.

## 1.3 PIAC's overall response to the DNSP's proposals

### 1.3.1 Concern with total revenue sought

A decade ago, network prices were less than half what they are now. The increase in network prices has been the primary driver of increased electricity prices. In turn, this has had major consequences for low income and vulnerable households as low-income households spend around 8% of their disposable income on energy. While electricity prices are not a major cause of financial stress for most NSW households, high prices significantly affect of low-income households and increases the likelihood that they will be disconnected. PIAC recognises that DNSPs do need to provide a return to their owners. It submits, however, that regardless of whether or not the rapid increase in network revenue over the last reset period was justified, the fact of that increase, does not mean that it follows that revenue needs to stay at current levels.

Continued high levels of revenue mean continued proportionally high prices for consumers and the on-going financial burden, especially for low-income consumers. PIAC is not convinced that network revenue needs to continue be two or three times what was a decade ago.

A comparison with the gas network is instructive here. Jemena is currently proposing to decrease network prices, including as a means of responding to the current context of rising wholesale gas prices.

[4] NER, cl 6.5.7(d).

### 1.3.2 Concern in regard to demand forecasts

As discussed above, the accuracy of forecasts at an aggregate and at a local ('spatial') level is critical to the DNSPs' forecasts of capital investment, funding costs, operating costs and revenue and price outcomes. However, forecasting energy use has become very problematic, and even experts such as the Australian Energy Market Operator (AEMO) have continually had to reduce their energy forecasts, and are now providing six monthly updates.

PIAC's examination of the DNSPs' energy forecasts suggests that forecast error is a real risk, especially for Ausgrid's capital investment and average price outcome. Ausgrid forecasts the highest growth rates (particularly for peak demand) despite seeing steep declines in actual energy use outcomes. Ausgrid forecasts a summer and winter peak demand growth (of 1.18 and 1.24 per cent per annum) more than twice Ausgrid's reported actual growth in peak demand for the period 2009-14 (of 0.54 per cent per annum on average). As Ausgrid's average price path is very close to CPI, PIAC thinks it is unlikely that actual price outcomes will be constrained to that level. The consequences of overestimation of energy usage in the forecasts, is that, particularly with the revenue cap control mechanism, average prices will quickly rise above CPI.

More generally, PIAC believes that not enough heed has been paid by the DNSPs for the long run impacts on consumer behaviour of the price rises that have occurred over the last five years. Some changes, such as the uptake of solar energy (rooftop photovoltaic systems), efficiency and reduced energy intensity are now features of the NSW economy. The DNSPs, however, appear at many levels to ignore these features of the current energy system.

PIAC's submission provides further detail on our concerns with the DNPSs' proposals. First, as a general comment, PIAC notes its great disappointment that the DNSPs have chosen not to follow the AER's Guidelines in a number of important areas.

### 1.3.3 Concern about non-compliance with AER Guidelines

The Guidelines were developed by the AER in 2013 following an extensive rule change process conducted by the AEMC in 2012. The Guidelines were designed to give practical effect to the AEMC's changes to the NER and were developed from a thorough consultation process (the 'Better Regulation' program) with all stakeholders over the course of 2013.

PIAC and other consumer representatives committed a considerable amount of time and resources to the Better Regulation program in the expectation that this would deliver a more cooperative, efficient and cost effective regulatory process in the long-term interests of consumers. However, given the proposals by the NSW DNSPs, PIAC must ask the question; are the DNPS holding on to the 'old regulatory world' of challenge and expensive disputation, or are they willing to work within the Guideline framework and with consumers, enabling a focus on real business improvement to underpin sustainable return on their investments.

Certainly, as a result of the DNSPs submitting proposals outside the Guidelines in key areas, PIAC has prepared a much more extensive submission than would otherwise be the case.

### 1.3.4 Concern about the failure to embrace transformation

It is widely acknowledged that the energy market is undergoing a significant transformation, akin to the impact of the development of mobile phones and internet technology on fixed telephone services. This transformation is discussed in more detail in the Demand Management section of

this submission. PIAC's analysis of the networks' proposals shows that, in general, they maintain a one-way, supply focused business model, which raises many concerns. In particular, there is the risk of further over-investment in the networks and resultant stranded assets. In addition, efforts to thwart change or being slow to develop new product offerings place networks at significant risk of being left with declining customer satisfaction and engagement and those customers choosing other service providers, as they have done with the adoption of rooftop solar photovoltaic (PV) systems.

### 1.3.5 The scope of PIAC's submission

PIAC's submission focuses on five areas:

- *Customer engagement*: How effectively have the DNSPs engaged with their customers to identify priority issues and assess the costs and benefits to consumers of different expenditure proposals?

- *Capital Expenditure (capex*): Are the DNSPs' capex proposals efficient and prudent as required by the National Electricity Rules (NER); are there further savings that could be made?

- *Operating Cost Expenditure (opex)*: Are the DNP's opex proposals efficient and prudent as required by the NER; are there more opportunities to achieve benchmark efficient levels of opex?

- *Rate of Return on Capital (RoR)*: Is the RoR proposed by the DNSPs consistent with the NER's requirement of the efficient financing of a benchmark efficient firm of the same level of risk; why has the proposed RoR come down so little (circa 1 per cent) despite the very large drop in the costs of funds generally, and the outlook for stable low interest rates?

- *Demand Management*: To what extent do the DNPS proposals demonstrate adequate effort to identify and implement effective demand management and other non-network alternatives to reduce their future costs?

In assessing of the capex and opex proposals, PIAC has focussed on the proposals by Ausgrid for the following reasons:

- The DNSPs, particularly Ausgrid, have provided many thousands of pages of supporting information, including many papers that re-litigate issues that should have been settled in the Guidelines (such as the assessment of the RoR).

- As a result, it is not feasible for consumer advocates to review these documents across all three DNSPs.

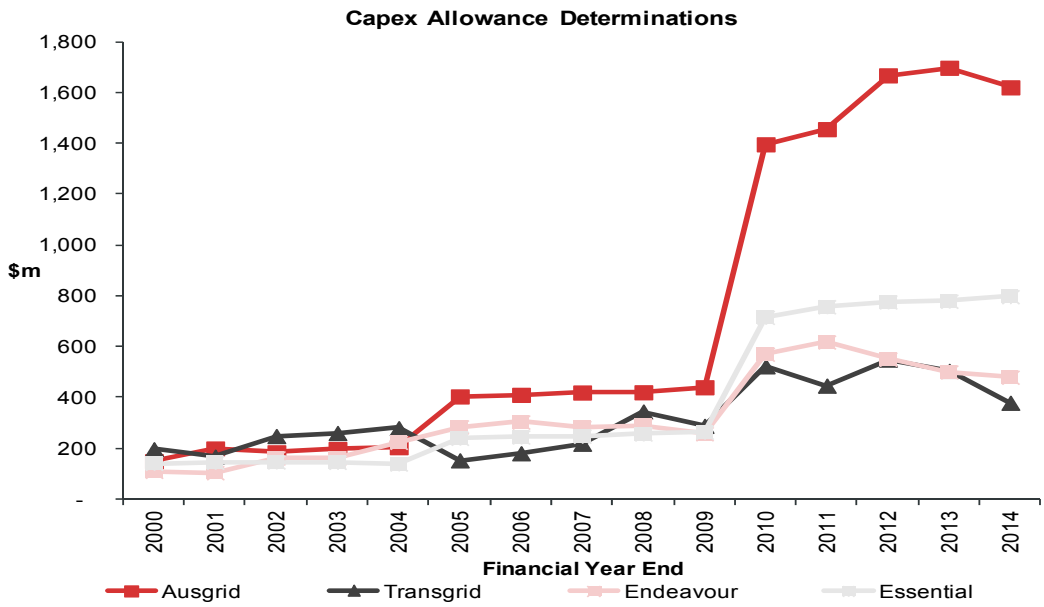
- During the 2009-14 regulatory period, Ausgrid had high levels of forecast error, the highest proposals for increases in capital and operating expenses and the highest price increases. For example, Figures 1 and 2 illustrate the NSW Auditor-General's summary of the capex allowances for each of the regulated NSW networks. Ausgrid is clearly leading the other DNSPs in the both the rate and level of increase in its capex and opex (to a somewhat lesser

extent). As a consequence, Ausgrid also has the highest growth in the regulated asset base, which then drives up the depreciation and cost of capital allowances.

- In this 2015-19 reset, Ausgrid again has the highest revenue increase, demand forecast, average price increase and cost of capital increase of all the DNSPs.

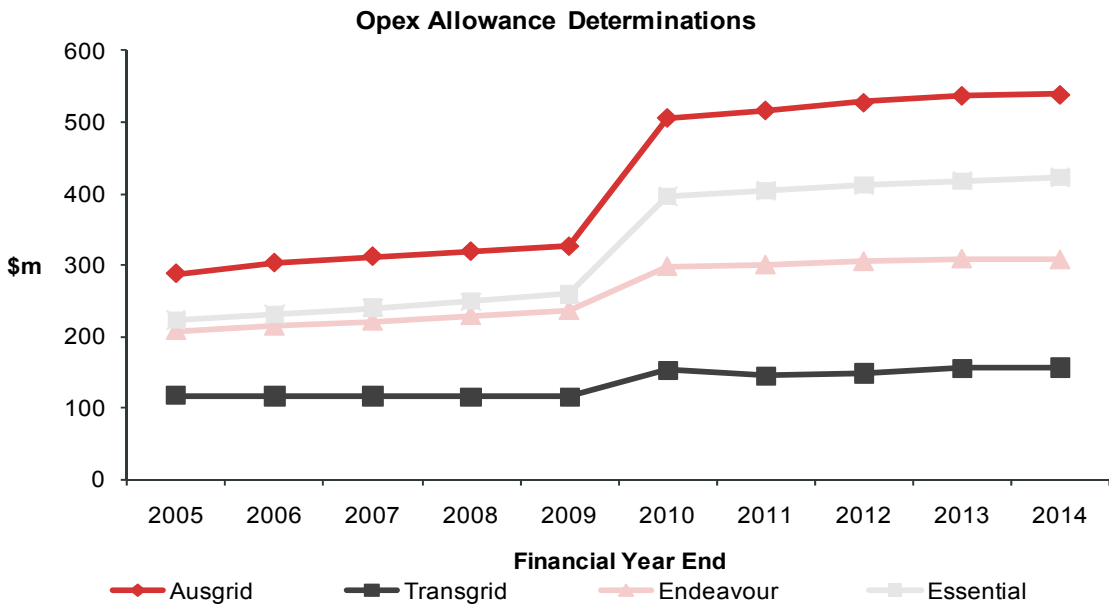
It is hoped, however, that PIAC's commentary on Ausgrid's capex and opex will be of relevance to the other two DNSPs. In particular, PIAC's important issues with the RoR assessment apply to all three DNSPs.

**Figure 1: Capex allowance determination 2009-14**[5]




5 NSW Auditor-General, 2012, *Report to Parliament, Electricity Industry Overview*, vol 4, 9. The chart is expressed in nominal dollar terms.

**Figure 2: Opex allowance determinations 2009-14**[6]




[6] Ibid, 10.

# 2. Summary and recommendations

## 2.1 Non-compliance with the AER's Guidelines

Overall, PIAC considers that the DNSPs have followed the directive of the NSW Government to keep price increases below CPI. However, the independent regulator, the AER, makes the final determination on the revenue allowances. The AER must make its decision in accordance with the requirements under the NEL and NER and in the long-term interests of consumers.

That is, the AER's determination of the revenue for each DNSP should be based on, and only on, its view of the efficient costs of an efficient benchmark firm of similar degree of risk. This may or may not accord with the CPI price constraint outcomes proposed by the Government. It is open to the AER to, for instance, determine a real reduction in the NSW DNSPs revenue allowance.

Moreover, PIAC is concerned that the Government's direction on price constraint has become the 'target' of the networks' proposals, rather than an outcome that has resulted from the assessment of efficient and prudent costs (especially after large revenue increases in the previous period). PIAC concludes from its examination of DNSPs' proposals that there is some opportunity to reduce network prices in nominal terms without threatening the safety and reliability of the network system.

Such a reduction should result from the application of the AER's Guidelines, as well as the DNSPs own initiatives for further savings. The Rate of Return Guideline for instance, would suggest there should be significant savings in the cost of capital for an efficiently financed benchmark firm. Similarly, given the significant increases in expenditure in the current regulatory period, and the decline in demand there must be scope (necessity?) for substantial cut backs in both capex and opex. It is only by such decisive action that NSW DNSPs can hope to achieve competitive levels of efficiency and productivity to support the growth of the NSW economy.

PIAC's views on each of these matters are summarised below and set out in some detail in subsequent sections of this submission. However, as a general comment, PIAC is most disappointed that the DNSPs have not adopted the AER's Guidelines in key areas. The Guidelines were developed after an extensive consultation process with all stakeholders, including consumers. They provide transparency and consistency to industry and consumers while still providing flexibility for the AER to exercise its discretion in the long-term interests of consumers.

The DNSPs appear to have, instead, set their own course and in many instances re-litigated issues that were already addressed in the Better Regulation process. They have varied from the Guidelines with little or no consultation with consumers and without demonstrating that these variations are made in the long-term interests of consumers or represent the efficient costs of an efficient benchmark firm.[7] In doing so, they have greatly added to the costs for consumers.[8]

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[7] The Guidelines are not binding on the NSP or the AER (except for the Confidentiality Guideline which is binding). However, the NER requires any party varying from the Guideline to explain the reasons for that variation. It is the AER's role to use its discretion to accept or reject an NSPs reason based on the NEO, NEL and NER requirements, in particular, the long-term interests of consumers.

[8] The costs of the development of the regulatory proposals, is ultimately passed through to consumers. In the past, the costs of a merits appeal to the Tribunal were also passed on to consumers indirectly as they were able to be recovered through network prices. However, the December 2013 amendments to the NEL have largely

PIAC is unconvinced variation from the AER Guidelines is necessary and was not consulted on the rationale for the variations. PIAC suggests that DNSPs may also find it is in their long-term interests to work within the Guideline framework and thereby concentrate their attentions on delivering competitively priced reliable and efficient services to the benefit of NSW. In this way, the DNSPs may also promote consumer confidence in their services, perhaps arresting the 'death spiral' of higher prices and declining demand. It is concerning indeed, that the DNSPs do not seem to recognise the need for urgent redress of the excesses of the past, in their own interests as well as those of consumers.

***Recommendation 1***

*PIAC recommends that the AER investigate whether the DNSPs have sufficiently and appropriately consulted with consumers and other stakeholders over their proposal to vary from the Guidelines.*

***Recommendation 2***

*PIAC recommends that the AER apply its Guidelines to the determination of the DNSPs' capex, opex and rate of return (including imputation credits) cost allowances. The AER should not agree to a proposal that varies from the Guidelines unless it can be clearly demonstrated that the under the Guidelines services cannot be provided reliably and safely in the long-term interests of consumers and that consumers have been appropriately consulted on this variation.*

## 2.2 Consumer engagement

PIAC takes the view that the consumer engagement activities undertaken by the NSW networks have not effectively addressed consumers concerns, especially concerns about higher prices. PIAC, as an advocate for residential consumers, was not engaged with about the prospect of DNSP proposals deviating from the Rate of Return Guideline. PIAC was also not given options for network management and investment that included details about savings or service standards (although the general trade-off between the two was raised).

PIAC acknowledges that consumer engagement is, broadly speaking, a new activity for many networks. PIAC believes that information provision to consumers can be improved, including through the production of a two-page summary of network proposals.

PIAC also considers that sheer size of DNSPs' proposals is a barrier to consumers' participation in the regulatory process. PIAC, therefore, submits that the AER should investigate placing a limit on the amount of information networks submit as part of their proposals. Much of the additional material is devoted to justifying variations from the Guidelines, and may not be necessary if DNSPs adopted a more constructive and strategic approach to their proposals.

PIAC is also concerned that documents produced by DNSPs as an intended tool for consumer engagement, such as summaries of regulatory proposals, contain too much spin. PIAC takes the view that where this is the case, such documents cannot be used in effective consumer engagement. Accordingly, PIAC recommends that the AER evaluate whether such documents present a balanced picture of network plans and consider this when assessing the effectiveness of consumer engagement activities.

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closed off that option as the NEL now explicitly prohibits recovery of appeal costs through revenue claims or other pass through arrangements. See NEL cl 71YA. .

***Recommendation 3***

*PIAC recommends that network businesses produce a one to two page summary of their pricing proposals, appropriate for use by consumers with little or no prior knowledge of network regulation. Where the DNSP proposes to vary from the Guidelines (that were developed with extensive consumer consultation), the justification for this variation should be included in the summaries for consumers to evaluate.*

***Recommendation 4***

*PIAC recommends that the AER examine options for placing a statutory limit on the amount of information submitted by networks as part of their regulatory proposals.*

***Recommendation 5***

*PIAC recommends that the AER assess whether documents produced by the NSW DNSPs to help consumer engagement present a balanced picture of network operations and plans or are dominated by spin. Where documents are dominated by spin, PIAC recommends that the AER not consider them to be a valid tool for effective consumer engagement.*

## 2.3 Forecasting and capex allowance

PIAC has focused its analysis on Ausgrid's proposal, although many of the issues raised will be relevant to the other two NSW DNSPs. PIAC has identified a number of common features and areas for concern.

First, each of the DNSPs have significantly reduced their overall forecast of capex compared to both the total capex allowed and the total actual capex in the current regulatory period. However, this has not been sufficient to halt the increase in the RAB at a rate of around 5 per cent, twice the forecast CPI. This will continue to put pressure on prices. Ausgrid, in particular, is forecast to spend 65 per cent of total expenditure on the return on and return of capital, restricting their capacity for more productive expenditures or real price reductions.

This fundamental issue does not appear to be recognised in the DNSPs' proposals. PIAC considers that it is essential for the long-term sustainability of the DNSPs that further reductions in capex are made to limit average RAB growth to around CPI, either through more prudent selection of projects and/or more efficient delivery of these projects.

Important in achieving this outcome is the accuracy of the DNSPs' forecasts of energy usage and maximum demand (the former for pricing, the latter for planning). The DNSPs need to forecast both aggregate and local (spatial) demand in order to efficiently and prudently plan their networks. PIAC's brief examination of their forecast accuracy to date, however, suggests that all the DNSPs have difficulty with accurate spatial forecasting,[9] although all DNSPs now claim this is the main basis for their augmentation capex proposals.

Ausgrid is also forecasting significant growth in peak demand, of an average of 1.8 per cent per annum. This is more than twice the forecast provided by AEMO for NSW as a whole, yet Ausgrid does not adequately justify why growth in peak demand should be so much higher in its region.

[9] Compiled by PIAC using data from the respective RIN notices of the DNSPs.

PIAC is also concerned that the AER assess whether all the forecast capex (whether replacement or augmentation) is relevant to the supply of the regulated services. Examination of Ausgrid's Area Plans for instance, suggests that some very large capex projects (including one that is some $115M overall) may be in large part for the benefit of large customers or developers. It is not clear what amount these customers or developers contribute, or should contribute to the costs of the expansion. PIAC provides a number of examples where this may be an issue.

Another general area of concern to PIAC is the risk of 'double counting'. While this issue is relevant to all the DNSPs, it is most relevant to Ausgrid because of its very large capex plan that was proposed for 2009-14. Ausgrid now recognises the difficulty and costs associated with implementing such a rapid expansion of capex investment and has postponed a considerable portion of its replacement program into the forecast regulatory period. In other words, consumers have paid for a certain replacement plan (for example) in their current network prices, but are now being asked to pay for it again in the forecast period. Such claims must be examined with considerable vigour by the AER. PIAC accepts that postponing capex can be prudent, for instance, it is a reasonable response to the unanticipated decline in demand, and consumers ultimately benefit from this postponement. However, when the postponement is due to management issues, such as failure to plan effectively to meet their capex forecasts, then consumers should not have to fund the project again.

PIAC also notes that, while the DNSPs have reduced their augmentation investment in response to the dramatic reduction in the rate of demand growth, Ausgrid, in particular, is growing its replacement capex. Much of this growth is based on Ausgrid's 'condition based' assessment, rather than expected life of the asset or breakdown. However, there is little transparency about this condition based assessment process and there is a real risk that it will result in replacement capex when other solutions (including Demand Management) are available.

More than the other DNSPs, Ausgrid has spent a substantial amount of capex and opex on non-system information technology. For example, across the 10-year period of 2009-19, Ausgrid will have spent more than $600M on its non-system IT. PIAC recognises the importance of efficient support systems. However, it is essential that there is some transparency around the *costs and benefits to consumers* of these investments and the timing of those benefits. Consumers need also to know that the investment is focussed on delivering lower costs and/or better service, and not on non-core activities such as marketing, conducting trials and so on.

Finally, PIAC is concerned to note that Ausgrid has 'rejected' the use of benchmarking when assessing the efficiency and prudency of its capex program, instead suggesting the AER should focus on trends in the DNSP's own expenditure. PIAC does not accept this statement. Benchmarking is an important tool, and one that the AEMC and others have confirmed is a legitimate tool for the AER to apply. The AER is not obliged to reward (and consumers pay) for additional investment, the network should be funded only for efficient and prudent investment

Without benchmarking, is not only to ask consumers to fund on going (albeit improving) inefficiency; it is also to undermine the integrity of the regulatory incentive schemes.

***Recommendation 6***

*PIAC recommends that the AER use benchmarking and its capex and opex models to very critically examine the capex proposals, and in particular, the need for the extensive replacement program that is proposed by Ausgrid.*

***Recommendation 7***

*PIAC recommends that the AER initiate a review of the forecasts of energy usage and maximum demand by each of the DNSPs, taking into account the structural changes in the NSW economy, the decline in energy intensity and the growth in efficiency, solar generation and embedded generation. Ausgrid's maximum demand forecast in particular, should be closely scrutinised.*

***Recommendation 8***

*PIAC recommends that the AER review the historical accuracy of the DNSPs' spatial forecasting to assess whether these forecasts are a sound basis for the augmentation capex forecasts.*

***Recommendation 9***

*PIAC recommends that the AER investigate capex proposals in the current forecasts that arise because of the postponement of capex in the current regulatory period. Where the AER identifies that the postponement is due to controllable issues, such as less efficient planning of resources to meet the capex, then consumers should not be asked to bear the costs a second time around.*

***Recommendation 10***

*PIAC recommends that the AER investigate Ausgrid's 'condition based assessment process' and ensure that it is not driving premature replacement of Ausgrid's distribution assets.*

***Recommendation 11***

*PIAC recommends that AER require the DNSPs to be more transparent about their investment on non-system assets, particularly IT. Clarity is required regarding the costs and benefits to consumers in terms of price and service.*

***Recommendation 12***

*PIAC recommends that the AER should use its benchmarking tool to the maximum extent possible, while exercising its discretion in interpreting the implications of the benchmark results for the capex and opex allowances.*

## 2.4 Opex allowance

Unlike capex, the DNSPs are proposing to generally increase their opex from the current levels of opex, and to maintain that in real terms across the regulatory period.

Effectively, the DNSPs have identified a number of 'step changes' in their opex requirements along with certain adjustments to the base year 2012/13 to increase the level of the 'adjusted base year expenditure' (at least in the case of Ausgrid).

This represents a 'double whammy' for consumers. The adjustment of the base year is (on equivalent nominal dollar terms) equivalent to about $41M. However, all other things being equal in a base, step, trend model, this adjustment persists through each year of the regulatory period, amounting to a total of some $200M.

So a crucial question is whether the opex in the base year represents the opex of an efficient and prudent efficient opex? In Ausgrid's case, it argues that the 2012/13 adjusted opex does represent efficient costs. PIAC considers this is unlikely to be the case given there have been several important studies of the efficiencies of the various DNSPs in Australia, and the evidence points to all the NSW DNSPs being less efficient on average than other comparable Australian DNSPs. Moreover, the introduction of the NRP itself is evidence that the owners of the businesses did not regard them as operating efficiently. Although some improvements have been made, the actual opex in 2012/13 is unlikely to reflect all the efficiency gains DNSPs could have made.

In addition to the claim that the 2012/13 opex represented efficient opex (which PIAC disputes), the DNSPs claim that there are 'step changes' in costs. For Ausgrid, the step change seems to represent an increase in opex in the first year (2014/15) some 15%, once all adjustments are taken into account (see section 6.2).

PIAC does not consider this step increase realistic. With all the efficiency improvements to date the step change should be down, not up. Section 7 provides a more detailed examination of areas of Ausgrid's opex that PIAC believes should be more closely investigated, and which PIAC believes may have some relevance to the other DNSPs. PIAC notes, for instance, the expansion of inspection services, changes in property management and forecasts of labour cost growth are above CPI (up to 2 per cent above CPI per annum). These all warrant further investigation. Supporting this claim by reference to, for example, an Enterprise Bargaining Agreement (EBA), misses the point that the AER's criteria is efficient costs. EBA's that have locked in above normal wage increases are issues for management, not consumers.

Particularly egregious are three further components of Ausgrid's opex. They are:

- *the loss of synergy costs*: these are costs arising from the restructure of the NSW energy market and the subsequent sale of the retail arms of the networks. The loss of synergy costs are the costs of the sale of the retail business and restructure of the DNSP. These costs should be borne by the owners (and net beneficiaries) of the sale, as would occur in a private business selling or restructuring some part of its business. These are not costs that could be passed on to customers in a competitive market; they should not be passed on in this situation either. In addition, it will set a very unfortunate precedent if restructuring costs are allocated to and become funded by consumers.

- *efficiency plans and productivity gains:* the DNSPs all claim to have efficiency plans in place and intend to offset the loss of synergy costs to some degree by improvements in efficiency, although also claiming a substantial allowance for the costs of implementing these efficiency plans. PIAC is concerned with this approach. In particular, PIAC is seeking to understand where the DNSPs are capturing the productivity growth factor that was identified by the AER in the Expenditure Guideline. This should be explicit and not included as some sort of off-set of another cost.

- *Efficiency Benefit Sharing Scheme (EBSS)*: while not strictly an opex costs, the EBSS provides rewards for reducing actual opex below the allowed opex. However, the scheme only has value for driving true efficiency, and for consumers' long-term interests, if the allowed opex was set at an efficient and prudent level. This was not the case for Ausgrid in

2009. To now ask Ausgrid's customers to fund an additional $455M in the current regulatory period to reward them for improving on an inflated forecast is to show great insensitivity to the harm that was caused to these consumers from the price rises that occurred as a result. A similar question arises concerning Endeavour Energy's claim for some $200M in EBSS payments.

PIAC is aware that the AER does not necessarily have the regulatory power to reject Ausgrid's and Endeavour Energy's EBSS claims (which is well above the other two DNSPs). However, we urge the Board of Ausgrid and/or the Government to recognise that in this particular instance, asking consumers to pay higher prices to fund this EBSS payment is neither reasonable nor fair to their customers.

The AER should also be cognisant of the implications of this EBSS payment for its approach to setting the efficient and prudent opex. If the opex allowance is not set at a realistic but challenging target, the EBSS just becomes another source of revenue to the DNSPs and a significant 'double cost'[10] to consumers. A vey similar issue will apply to the new capital expenditure incentive sharing scheme (CESS).

***Recommendation 13***

*PIAC recommends that the AER not accept the opex proposals of the businesses, and instead applies its benchmarking and other tools to determine both an efficient base cost (for 2012/13) and proposed step and trend changes to this base cost. PIAC does not accept that the 2012/13 actuals meet the requirement to be efficient and prudent costs without further testing.*

***Recommendation 14***

*PIAC recommends that the AER seek clarification of the proposal by Ausgrid to adopt an accrual approach to accounting for provisions such as long service leave. The accrual approach has allowed Ausgrid to bring forward these costs into the base year, and thereby set a higher base for the future opex forecasts.*

***Recommendation 15***

*PIAC recommends that the AER to publish their benchmarking material so that consumers can form a view on whether the NSW networks are operating at a 'best practice level', and if not, how far from the efficiency frontier are they (following the NRP reforms).*

***Recommendation 16***

*PIAC recommends that the AER set a productivity quotient for each DNSP to ensure that efficiency improvements are continuous and cumulative; a CPI growth in opex is not consistent with this objective.*

***Recommendation 17***

*PIAC recommends that the AER investigate whether the DNSPs proposed step changes are step changes, or whether these costs (such as inspection services) is already embedded in the 2012/13 base year opex.*

[10] That is, consumers pay the higher network prices during a regulatory period, and then the EBSS in the next regulatory period.

***Recommendation 18***

*PIAC recommends that the AER investigate the net benefit consumers have received under the current demand management allowances, and how these benefits and those in the forecast period are flowing through to lower consumer prices or better services.*

***Recommendation 19***

*PIAC recommends that the AER further examine the proposed increase in costs for the next two to three years for the sale and leaseback of Ausgrid's corporate building in Sydney.*

***Recommendation 20***

*PIAC recommends that the AER further investigate the claim by DNSPs regarding continued growth in wage costs above CPI across the price determination period to assess if it is consistent with current trends in wages and with the expectation for improvements in labour productivity.*

***Recommendation 21***

*PIAC recommends that the AER reject the 'loss of synergy costs', including in order to avoid setting a precedent for restructuring cost claims in the future.*

***Recommendation 22***

*PIAC recommends that the AER check Ausgrid's EBSS calculations, and consider what this means for setting the opex in the next regulatory period.*

## 2.5 Rate of return and weighted average cost of capital (WACC) allowance

The proposed cost of capital of 8.83 per cent is significantly higher than one that would be derived by applying the Guideline (approximately 7.7 per cent). In fact, it is only marginally (118 basis points) below the cost of capital that the DNSPs were awarded (after appeal) in 2009 of 10.02 per cent, at the height of the Global Financial Crisis (GFC). The WACC of 10.03 per cent has in turn enabled the DNSPs to achieve record returns on debt and equity over the regulatory period, as real interest rates tumbled.

As such, the rate of return assessment is perhaps the most contentious aspect of the DNSPs' proposals, and certainly one that will have a significant and on-going impact on consumer prices, particularly given the growth in the RAB discussed previously.

It is an area of great concern to PIAC, particularly when the DNSPs' proposals come so soon after the extensive period of consultation on this matter, both during the 2012 Rule change process and subsequently during the development of the Rate of Return Guideline as part of the AER's Better Regulation program.

It appears to PIAC as if the DNSPs have submitted their WACC proposals as if the whole consultation process and Rate of Return Guideline development process had not occurred. Whether it is in the calculation of the cost of debt, the cost of equity or the dividend imputation credit (gamma), the three DNSPs have adopted approaches that are not aligned with the Guideline.

In this submission, PIAC has again challenged the DNSPs assumptions and modelling approach. PIAC does not accept that the DNSPs have established a case (in theory or practice) that justifies them varying from the Rate of Return Guideline. Nor have the DNSPs, to PIAC's knowledge, engaged with their customers to explain their intention or rationale to vary from the Guideline and to extract a higher cost of capital. While the DNSPs have 'threatened' that they would not/could not invest sufficient capital if their proposal for a high WACC is not accepted, they have not identified specifically which projects would not proceed and why they would void their licence obligations to maintain a safe and secure electricity system.

Specific areas where PIAC believes the DNSPs have erred include:

- the calculation of the cost of equity using a multi-model approach, but with no explanation of why they have chosen a point estimate from the various model outputs;
- the inclusion of the Farma-Fench 3 factor model in their assessment of equity costs, despite the fact that it has not been tested in regulatory processes and it gives conflicting results when applied to Australia;
- the adoption of an equity beta of 0.82 (the AER Guideline states 0.7), based largely (it seems) on a study that was dominated by US utilities with only a small sample of Australian utilities, and weighted in a manner that has no theoretical basis;
- to have rejected the AER's proposed transition approach to assessing the cost of debt, replacing it with an approach that resulted in a high cost of debt and the capture of the extreme debt costs that occurred during the GFC (which consumers have already paid for in the current regulatory period); and
- the adoption of a value for gamma that was not consistent with the AER's Guidelines, and suggesting that this value was endorsed by the Tribunal (which it was, but only because no better study was then available; the AER has now conducted such a study).

***Recommendations 23***

*PIAC recommends that the AER continue to apply the approach and parameter values set out in its Rate of Return Guideline, and allow the three DNSPs a rate of return in accordance with the Guideline.*

***Recommendation 24***

*PIAC recommends that the AER carefully consider the STPIS (Service Target Performance Incentive Scheme) targets and closely monitor the performance of the DNSPs, given their claims that their investment in the network will be compromised if the AER determines a lower WACC, in line with the Guidelines.*

## 2.6 Demand management and energy efficiency

From PIAC's analysis of the DNSP's 2014-19 revenue proposals, we conclude that they are based on out-dated supply-side thinking.

The National Electricity Objective (NEO) should be reflected in the AER's decision to not accept proposals that are based on unrealistic assessments of the current context in which they are operating, especially falling overall demand and plateauing peak demand. The current context dictates the need for more frequent reviews of network plans; PIAC suggests a more intensive scrutiny on an annual basis of performance against plans.

Demand Management (DM) and energy efficiency (EE) currently appear to be token components in the DNSPs' proposals and not central to their business plans. PIAC considers that DM should be central, in order to lower future capex and opex requirements, to make efficient operation the priority and to reduce the risk of investment in what may become stranded assets. This requires greater commitment and innovation by DNSPs, alongside supportive regulatory changes.

PIAC is highly supportive of the development of broad-based DM by Ausgrid and Endeavour, in particular, and recommends a further increase on what is proposed. PIAC's view is that any project or program with a cost-benefit analysis >1 (over 15 to 20 years) should be undertaken, as by definition, this is of net economic benefit for consumers. At the same time, there must be transparency in the process and in the pre and post assessment of the outcomes. Sometimes DM activities, claimed to be of net benefit to consumers in the long-run during one regulatory period, have benefits which 'disappear' in future capex and opex proposals.

PIAC welcomes Ausgrid's initiative to develop a Benefit Sharing Scheme for DM and recommends the AER's pending development of a new Demand Management Incentive Scheme (DMIS) be untaken in such a way that DM becomes central (rather than an add-on) to DNSPs activities, undertaken wherever it will reduce long term costs for consumers. It is likely that such a scheme will need targets and possibly, penalties for non-compliance. PIAC also recommends DNSPs should be required to report annually to the AER on their demand management and energy efficiency activities and delivered outcomes in terms of impacts on demand profiles and consumption, and that the scope of this report be developed in consultation with the DM industry and consumers.

In addition, the AER should require all networks to provide detailed information on how they are adapting to climate change both now and expected future factors in both their strategy and operations.

***Recommendation 25***

*PIAC recommends that the AER works with DNSPs to create an environment that assists the industry to embrace transformation.*

***Recommendation 26***

*Given the rapidly changing energy market, PIAC recommends that the AER gives intensive scrutiny to annual reviews and pricing updates, along with DNSPs performance, and consider if shorter reset periods may be appropriate.*

***Recommendation 27***

*PIAC recommends that the AER request that each NSW DNSP submit practical proposals for DM actions that could be implemented as contingency measures if demand or consumption increases above levels used by AER in the determinations.*

***Recommendation 28***

*The AER should require all networks to provide detailed information on how they are adapting to climate change in both their strategy and operations.*

***Recommendation 29***

*PIAC recommends that the AER encourage the DNSPs work to empower customers to reduce and optimise their energy usage and electricity bills, and to stimulate innovation and new products that will further enhance customer opportunities.*

***Recommendation 30***

*PIAC recommends the AER should require the NSW DNSPs to undertake a significant increase in broad based DM. Projects with a cost/benefit analysis >1 (over at least 15 years) should be undertaken as by definition, this is of net economic benefit to consumers.*

***Recommendation 31***

*PIAC recommends that the AER develop a new Demand Management Incentive Scheme should be undertaken in such a way that DM becomes central to DNSPs' activities and is undertaken wherever it will reduce long term costs for consumers.*

***Recommendation 32***

*PIAC recommends DNSPs should be required to report annually to the AER on their demand management and energy efficiency activities and that the scope of this report be developed in consultation with the DM industry and consumers.*

***Recommendation 33***

*PIAC recommends meter exit fees should be set at the remaining cost on the basis of the capital cost of the meter amortised over ten years.*

# 3. The NSW DNSPs' regulatory proposals

## 3.1 The regulatory context

The current regulatory proposals for 2015-2019 were preceded by a transitional determination to apply to the DNSPs for 2014/15. This unusual step was necessitated by the extent of the changes to the NER in 2012, and the subsequent development by the AER of the Better Regulation Guidelines in 2013. The AER's transitional determination focussed on the regulatory rate of return, and applied a rate of return that was consistent with the Rate of Return Guideline issued in December 2013.[11] The AER did not review the DNSPs' other expenditure proposals. However, it did advise stakeholders that the transitional determination for 2014/15 would be reviewed again as part of the full five-year regulatory reset process.

PIAC responded in March 2014 to the transitional proposals from these networks and to the AER's draft determinations.[12] In that response, PIAC noted the purpose of the rule changes as set out by the rule maker, the AEMC. The AEMC stated: [13]

> These changes to the National Electricity Rules and the National Gas Rules improve the **strength and capacity of the regulator** to determine network price increases **so that consumers don't pay any more than necessary** for the reliable supply of electricity and gas**.** [PIAC's emphasis]

The rule changes therefore were intended to provide greater scope for the AER to exercise its discretion in determining the revenues allowed to the DNSPs that were consistent with the long term interests of consumers with respect to both price and service quality as required by the National Electricity Objective (NEO).

The AER's suite of six regulatory Guidelines was, therefore, designed to ensure network revenue allowances only reflected the efficient costs of the efficient network service provider. The Guidelines also provided stakeholders with greater certainty and transparency about the AER's decision-making processes and criteria for determining the benchmark efficient network costs.

As the guidelines were also documents that incorporated input from all stakeholders, it was a reasonable to expect that the NSW DNSPs would follow the Guidelines in their transitional proposals and would concentrate their efforts on delivering a reliable, safe and affordable service to consumers.

Regrettably, the NSW networks chose not to adopt this approach in their transitional proposals, particularly with respect to the rate of return guideline and the forecasts of operating costs. Notwithstanding this, the AER applied the Rate of Return Guideline when determining the regulatory weighted average cost of capital (WACC) and imputation credits.

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11 AER, 2013, *Better Regulation, Rate of Return Guideline*, 4.

12 PIAC, 2014, *The opening act: Response to the Transitional Regulatory Proposal by the network service providers in NSW*, 2014. Available at: http://www.piac.asn.au/publication/2014/03/opening-act.

13 Compiled from the AEMC's summary statements of benefits/impacts of the relevant rule changes, related to economic regulation of network service providers. Statements available at: http://www.aemc.gov.au/electricity/rule-changes/completed/economic-regulation-of-network-service-providers-.html, as at 30 July 2014.

The NSW DNSPs subsequently submitted their full regulatory proposals for 2015-19 in late May 2014. Again the DNSPs have again chosen to put aside the AER's Guidelines in key areas and to do so with little regard to the extensive consumer consultation processes that underpinned the Guidelines. Nor have the DNSPs conducted further consultation with consumers on their reasons for varying from the Guidelines[14] and in each instance this variation has resulted in upward pressure on the proposed network prices.

As an overall comment, therefore, PIAC believes it is essential that the AER stands by the principles and approaches it set out in the Guidelines unless there is a clear demonstration that in doing so, there would be harm to the long-term interests of consumers.

PIAC strongly suggests the DNSPs do likewise. DNSPs should be conscious of the very heavy burden they have placed on consumers over the last five years and the negative effect this has had on economic growth and productivity in NSW. In some ways, the steep price rises have been an 'own goal' as energy demand continues to decline.

DNSPs would a be wise to significantly moderate their expectations in the current regulatory period rather than continue the costly debate on issues such as the rate of return assessment that have been already identified and addressed by the Guidelines. Consistency with the Guidelines will provide a way forward for all parties,[15] and bring closer the day when the energy industry can move towards a more mature and consultative approach to regulation.

## 3.2 PIAC's understanding of the directives of the NSW government.

### 3.2.1 The impact of Networks NSW (NNSW) reforms on prices

PIAC's understanding is that the NSW Government, as owner of the three DNSPs and the transmission network, Transend, has established NNSW to promote better capital expenditure management and operational efficiency and thereby ensure future network prices do not rise beyond CPI at least until 2016/17.

The NSW Government states that the network reform program (NRP) had three objectives:[16]

- continuously improve safety performance for employees, contractors and the public;
- maintain the reliability and sustainability of the electricity distribution networks; and
- strive to contain average increases in our share of customers' electricity bills at or below CPI.

It is also apparent that the NRP has driven considerable savings in the DNSPs costs to date. However, PIAC would note that the savings are against a back drop of very substantial increases in the past.

Moreover, these cost savings have not been translated directly into the prices charged to consumers during the current regulatory period. Figure 3 below, for instance, illustrates that average prices have continue to climb (steeply for Ausgrid and Essential Energy) up to 2013/14

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14 That is, consultation that was directed at explaining to consumers what the guidelines were, how they were developed in consultation with industry and consumer representatives, and how it was (in the view of the network) in the interests of consumers to not apply the regulator's guidelines.

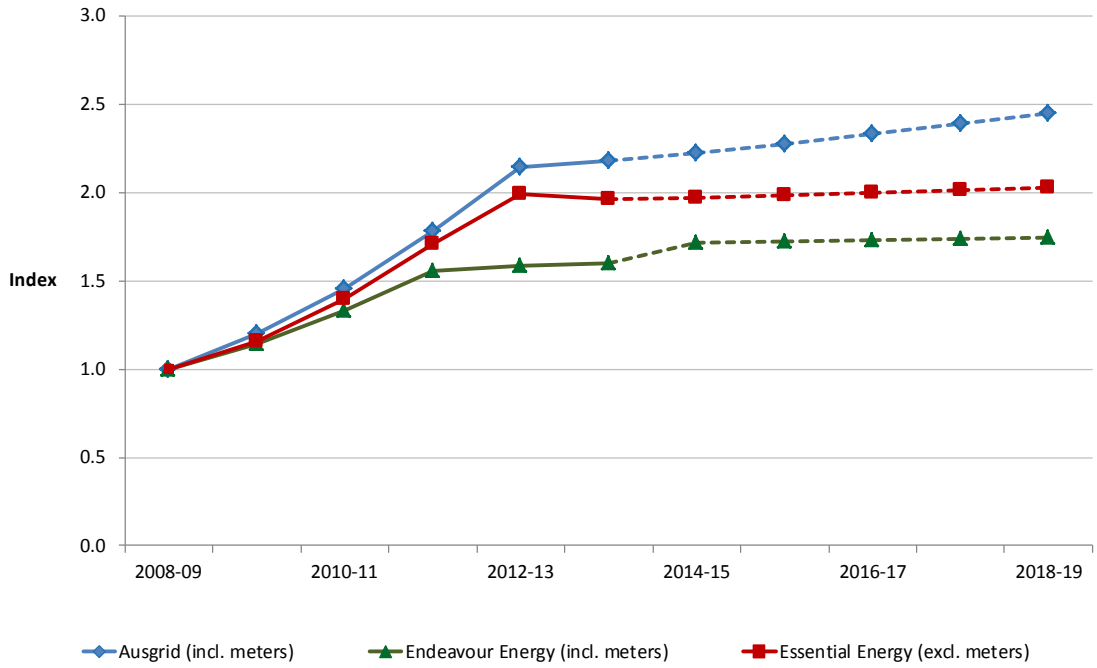
15 PIAC notes that the Rate of Return Guidelines will be subject to review in less than 3 years time, and perhaps arguments or updates and testing of models can well be deferred to that review.

16 Summarised from Ausgrid, 2014, *Transitional Regulatory Proposal for 1 July 2014 to 30 June 2014*, [Ausgrid, *Transitional Proposal*], 3.

despite the reform process. Rather, the cost reductions have enhanced the profits to the NSW networks which in turn are largely returned to the owner (the NSW Government) in the form of increased tax receipts and dividends.

Given the structure of the regulatory arrangements, the first real opportunity for consumers to see price benefits from the reforms is in the regulatory re-set for 2015-19. However, as illustrated in Figure 3,[17] the NSW Government's CPI constraint appears to be a 'target', rather than a driver for extracting maximum cost savings. That is, all the DNSPs are proposing average price increases of just below CPI, but all represent a nominal increase in price in the order of 10 per cent. PIAC strongly challenges whether this is sufficient reform after five years of such extraordinary price increases.

**Figure 3: NSW Distributors' proposed price paths ($nominal)**[18]




Ausgrid in particular appears to be pushing the boundaries of the CPI 'constraint'. If there is an overestimation of energy usage in the forecasts, particularly with the revenue cap control mechanism, average prices will quickly rise above CPI.[19]

As illustrated in Figures 4 and 5, Ausgrid has forecast that energy use will start to rise by the end of the five-year period. Ausgrid also forecasts peak demand to increase by over 1.8 per cent per annum. Both these forecasts run against the current trends in energy usage and demand and the projections by the other two DNSPs, suggesting that for Ausgrid at least there is a significant risk of real price increases above CPI due to over-forecasting demand.

17 AER, 2014, *Issues Paper NSW electricity distribution regulatory proposals 2014-19*, [AER, *Issues Paper,* 2014].
18 Ibid, Figure 1, 7.
19 That is, average prices are derived from dividing total revenue by the expected volume of demand. If demand falls, then the average price must increase to obtain the same revenue.

**Figure 4: Ausgrid – proposed electricity volumes**[20]

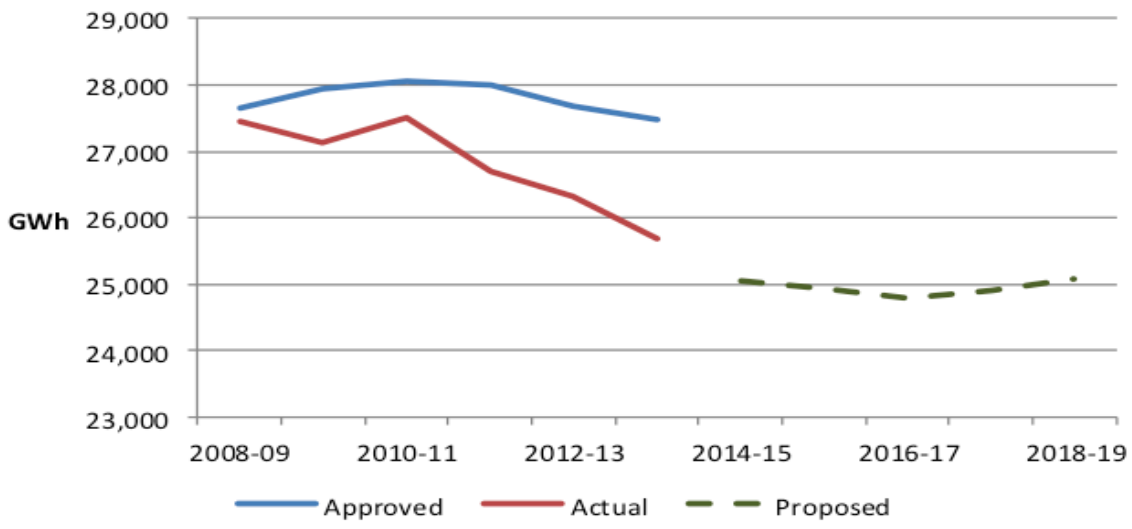
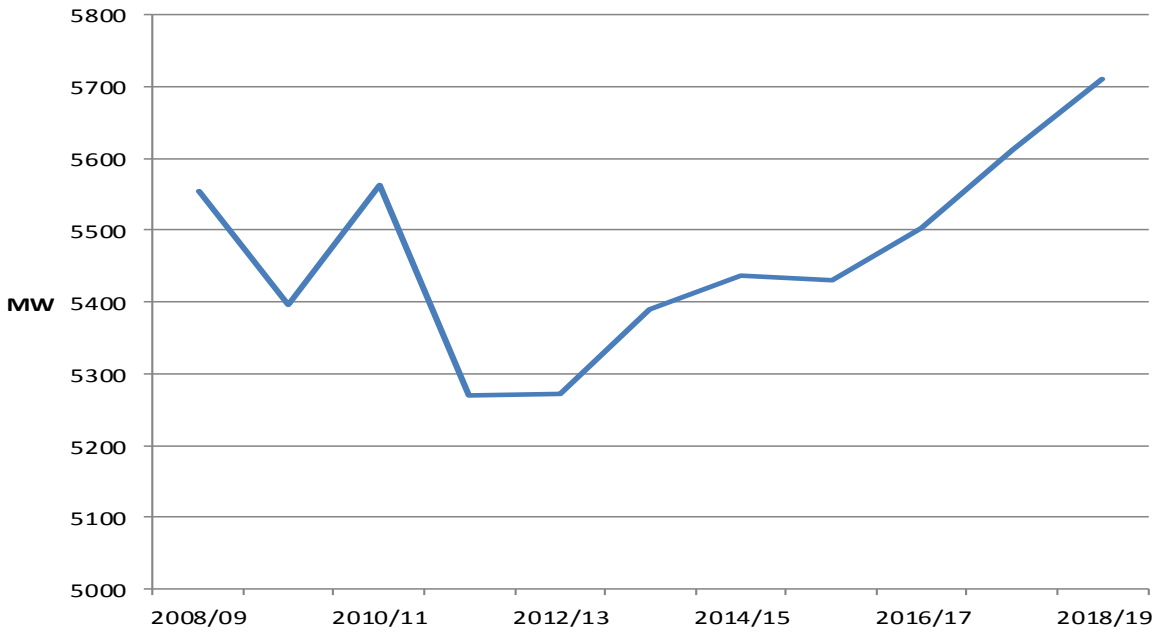



**Figure 5: Ausgrid – proposed summer maximum peak demand (50% POE)**[21]




### 3.2.2 Achieving real reductions in prices

As stated above, PIAC believes there are opportunities to reduce network prices in nominal terms, while still delivering a safe and reliable network service. In saying this, PIAC recognises the difficulties, but these are largely created by the actions of the past in doubling network charges.[22] In a competitive market, the DNSPs could not have priced their services in this way; in a monopoly market, the regulator must impose the discipline of the market through the regulatory reset process.

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20 AER, 2014, *Issues Paper*,12.

21 Ibid, 33.

22 See for example, Productivity Commission, *Electricity Network Regulation*, 2013, 4. The Productivity Commission estimated that network prices for NSW households increased from $505 to $1,159 (130%) between 2007-08 and 2012-13.

The pace of reform will, therefore, need to continue and even accelerate. However, given the reported low levels of relative efficiency in the NSW networks identified by the Productivity Commission review[23] and others, and the extent of the DNSPs' price increases in the last five year, PIAC considers there are real opportunities for, and a real necessity to, significantly reduce nominal prices.

In this submission, PIAC will suggest ways in which this might be achieved through savings in capex and opex and by setting a rate of return that reflects market conditions for low risk businesses and in accordance with the AER's Rate of Return Guideline. In making these recommendations PIAC has only considered a relatively small portion of the overall proposals and has concentrated on the Ausgrid proposal.

However, it is expected that PIAC's comments on Ausgrid's regulatory proposal will have some relevance to the AER's review of the proposals from the other two DNSPs.

## 3.3 PIAC's overview of the DNSPs' proposals

As a general comment, PIAC's view is that the NSW DNSPs have failed to grasp the need to fundamentally alter the way they do business. Their regulatory proposals discuss how they engaged with consumers and heard the very real concerns of both large and small consumers about the rapid rise in the cost of electricity. They have also seen the impact on energy use and how this impacts on pricing.

However, the DNSPs' proposals still include nominal price increases and growth in the regulated asset base (RAB) that will drive cost increases into the next regulatory period. Moreover, the DNSPs' apparent inability to work with the AER's Guidelines suggests they are holding on to the confrontational approaches of the past. Surely it is time to move to a new paradigm of constructive and more cooperative regulation in the interests of all stakeholders.

Section 4 of PIAC's submission includes a further discussion on consumer engagement. The purpose of consumer engagement was for DNSPs to better ensure their plans were aligned with consumer interests as perceived by the consumer. There are two key aspects of PIAC's evaluation of this:

- Did the DNSPs ensure that consumers understand the potential trade-offs between services and prices?;
- Did the DNSPs explain to consumers why they chose to submit a proposal to the AER that differed from the Guidelines that consumers had contributed to, and did they demonstrate effectively why this was in the consumers' long-term interests?

Table 1 below provides a very high level overview of PIAC's response to the economic building block components of the overall revenue proposals by the DNSPs. Each of these main issues will be discussed in further detail Section 5 to 7.

Section 8 provides an analysis of the demand management proposals by the DNSPs. PIAC considers that the DNSPs' responses are further indication that they do not grasp the need to

[23] Ibid, 24-25.

modernise their business models. That is, they see demand management as a side-line, where a progressive and proactive network would see it as integral to their future.

**Table 1: Commentary on the network regulatory building block proposals**

| Building block components for revenue forecast | Requirements | Components | PIAC's position |
|---|---|---|---|
| Return on capital | Regulatory Asset Base (RAB) | (1) Opening RAB<br>(2) Capital expenditure | PIAC has no comment on the opening RAB.<br>PIAC requests more investigation of the capex proposals particularly renewal capex and Area Plans |
| | Rate of return | (1) Return on equity (including equity beta)<br>(2) Return on debt | PIAC disputes both the return on equity and return on debt proposals |
| Return of capital | RAB Depreciation schedule | AER preferred approach, straight-line depreciation based on forecast expenditure. | PIAC has no comment on the DNSPs approach to depreciation costs |
| Operating expenditure | Opex forecast | (1) Base year opex<br>(2) Step & trend | PIAC considers that the base year opex is not efficient. PIAC requests more investigation of this, and of the proposed step change increases in operating costs and CPI increases across the remaining years of the regulatory period. PIAC does not see sufficient emphasis on productivity improvements. |
| Taxation allowance | Adjusted income tax forecast | (1) Tax rate<br>(2) Imputation Credits | PIAC disputes the value of imputation credits (gamma) proposed by the DNSPs |
| Other allowances | Carry over allowances | (1) EBSS carry over<br>(2) DMIA carry over | PIAC is very concerned with the EBSS allowance proposed by Ausgrid, particularly given that the previous regulatory decisions do not appear to reflect efficient costs. |

# 4. Consumer Engagement

On the whole, PIAC does not consider that the consumer engagement undertaken by the three NSW networks has been sufficiently extensive or effective. Based on PIAC's own experience of the consumer engagement activities, PIAC does not believe that the three NSW DNSPs have consulted with consumers about their decision to propose a WACC that is inconsistent with the AER's Rate of Return Guideline.

However, PIAC accepts that the requirement in the NER for networks to consult with consumers about their spending plans is relatively new. Accordingly, PIAC accepts that it is unlikely for NSW networks to undertake best-practice consumer engagement at the first attempt.

PIAC considers that Endeavour Energy is genuine in its intent to engage consumers. PIAC makes this statement based on its membership of the Endeavour Energy customer council. (PIAC has only had contact with staff of Ausgrid and Essential Energy as part of a Networks NSW event, and is therefore not able to comment on those networks consumer engagement activities). During the period covered by the current price determination, it will be important that the consumer engagement activities of NSW networks are progressively ramped up.

PIAC also notes that consumers and consumer advocates have faced a steep learning curve in their efforts to engage with the three NSW networks. A key component of effective consumer engagement is equipping consumers and their advocates to engage on highly complex issues of network regulation. Creating a sufficiently knowledgeable consumer cohort that is able to make a useful contribution to network planning and management remains a significant challenge. PIAC stands ready to rise to this challenge and to assist other consumer groups, networks and regulators in doing so.

It should be the aim of all parties to see that network submissions to the AER in 2018 are much more informed by consumer preferences. This may require the investment of greater resources on the part of networks and consumer representatives in the task of engaging with each other. However, PIAC is confident that any such investment will return a far greater benefit in the form of a fairer, more accessible and sustainable distribution network for the NSW community.

The following points respond to specific issues raised in the AER's Issues Paper.

## 4.1 Accessibility of information

### 4.1.1 Information for consumers

The key consideration in evaluating the accessibility of information provided by networks is the intended audience for a given piece of material. Given the complexity of economic regulation, a trade off necessarily exists between the level of detail provided in a document and the fact that most consumers become less likely to read something the longer it is. If a document is designed to provide an introduction to network issues for consumers with little or no background knowledge, it would need to be in plain English in order to remain accessible to the majority of its target audience.

The regulatory proposals submitted by the three NSW networks are between 109 and 159 pages (excluding attachments, which are discussed further below). PIAC takes the view that very few

residential consumers would read these documents, based on their size and the complexity of the issues. PIAC, therefore, welcomes the attempt by networks to produce an 'easy-to-read summary'[24] of their proposal.

However, PIAC argues that at around ten pages each, these documents are still too long (and contain too much text) to be accessible to many consumers. PIAC would, therefore, like to see networks produce a one to two page summary of their network proposals to provide consumers with a very high-level summary of network spending. This very short document would 'sit in front of' the 10 page summary documents that the networks have produced, as a 'first taste' of the issues. Those who are interested in more detail could then refer to the ten page summary document, and in turn to the full proposal.

***Recommendation 3***

*PIAC recommends that network businesses produce a one to two page summary of their pricing proposals, appropriate for use by consumers with little or no prior knowledge of network regulation. Where the DNSP proposes to vary from the Guidelines (that were developed with extensive consumer consultation), the justification for this variation should be included in the summaries for consumers to evaluate.*

PIAC also notes that Networks NSW established the 'Your Power, Your Say' Facebook page as part of its engagement activities. PIAC believes that social media offers significant opportunities for consumer engagement, especially as an easy method of gathering input from users. However, the existence of a Facebook page does not inherently constitute effective engagement. While PIAC has not followed the page closely over an extended period, it does not appear to cover issues related to network management or price determinations in any detail. While PIAC welcomes this attempt by Networks NSW to engage with consumers through Facebook, social media is only one part of a broader consumer engagement puzzle.

### 4.1.2 Information for consumer advocates

Consumer advocates generally have higher levels of understanding of matters related to electricity network regulation and are keen to contribute to network price determinations. As a result, consumer advocates are potentially interested in network proposals in their entirety – seeking to find any area in which spending proposals may be excessive. As a consumer advocate with reasonable prior knowledge of the issues, PIAC found the three regulatory proposal documents to be largely accessible.

However, PIAC has considerable concern about the sheer volume of information provided by networks to the AER. PIAC notes from the confidentiality claims by the NSW networks that the three businesses submitted 44,389 pages of information. Of this Ausgrid submitted around half (22,600 pages), Endeavour Energy around 15% (6,580 pages) and Essential Energy around 34% (15,209 pages).[25] Most representatives of residential consumers come from the community welfare sector, and work alone or in small teams. Even with funding from the Consumer Advocacy Panel (CAP), no representative of residential consumers possesses the resources to

[24] Endeavour Energy, *Regulatory reports* (webpage), www.endeavourenergy.com.au/wps/wcm/connect/ee/nsw/nsw+homepage/ournetworknav/regulatory+reports/regulatory+reports+content, as at 25 July 2014.

[25] AER, 2014, *Confidentiality Claim by NSW distributors (Ausgrid, Endeavour Energy and Essential Energy)*, http://www.aer.gov.au/node/11483, as at 30 July 2014.

review 44,389 pages of material (or the 42,758 pages that are not confidential).[26] In this context, PIAC gratefully acknowledges the AER's decision to extend the due date for submissions by one week, to allow stakeholders more time to review the proposals.

Further, PIAC questions why Ausgrid's proposal needs to be more than three times as long as that from Endeavour Energy. From a benchmark efficiency point of view, PIAC argues that all three networks should be able to provide the necessary information to the AER in a similar number of pages.

Having such vast proposals also compromises the regulatory process, hampering consumers ability to engage and stretches the resources of the AER. For this reason, PIAC recommends that the AER consider whether limits should be placed on the amount of information networks can provide as part of their regulatory proposals.

***Recommendation 4***

*PIAC recommends that the AER examine options for placing a statutory limit on the amount of information submitted by networks as part of their regulatory proposals.*

### 4.1.3 Information or spin?

It is common for businesses throughout the economy (and for other groups, such as politicians or advocates) to engage marketing expertise in an effort to ensure published material presents an issue in a desired light. This is often described as 'spin'.

PIAC takes the view that regulatory proposals or summaries of proposals that seek to spin the actions of DNSPs are not a tool for effective consumer engagement. Rather than presenting a polished version of themselves to consumers, DNSPs should be encouraged to present key facts about their plans to consumers in a frank way. For example, when the proposed increases in network prices of around CPI are presented in the context of the increases over the previous determination period, they appear to be a good outcome. However, as argued in this submission, continued nominal price increases may not represent the efficient costs of an efficient benchmark firm.

PIAC, therefore, recommends that the AER assess whether the summaries of regulatory proposals that have been published by the three DNSPs present the networks in a fair way. Where these documents do not present a balanced picture of the DNSPs plans and operations, they should not be considered a tool for effective consumer engagement.

PIAC takes the view that networks should not shy away from constructive criticism of their operations and should produce their documents with this in mind.

***Recommendation 5***

*PIAC recommends that the AER assess whether documents produced by the NSW DNSPs to help consumer engagement present a balanced picture of network operations and plans or are dominated by spin. Where documents are dominated by spin, PIAC recommends that the AER not consider them to be a valid tool for effective consumer engagement.*

[26] Ibid.

## 4.2 Clarity re the role of consumer engagement

PIAC considers that statements from Endeavour Energy and Networks NSW at the Networks NSW forum on 11 March 2014 were expressed in aspirational terms. NSW businesses expressed a hope to use the outcomes of consumer engagement to inform their activities and regulatory proposals, but specific detail about whether this would happen was not provided (and has not been provided subsequently).

Material given to participants at the forum stated that channels such as Facebook allowed Networks NSW to have 'ongoing conversation with our customers'.[27] PIAC believes that such statements do not provide sufficient clarity to consumers about the role of engagement activities in developing network proposals. In PIAC's view, Networks NSW has been keen to tell consumers that their views will be considered, but could have gone further in explaining just how this would occur (and the possible limitations on giving weight to consumer preferences).

## 4.3 Timing of consumer engagement

Given that the forum took place on 11 March 2014, PIAC takes the view that Networks NSW would have had opportunity to incorporate the feedback that was received into the development of the regulatory proposals of the three businesses.

The Endeavour Energy Customer Council met in April 2014, but the forthcoming five-year proposals to the AER were not discussed in any detail. Had that meeting of the Customer Council been used to discuss the five-year proposals, PIAC questions whether sufficient time would have remained to amend the network plans in response to issues raised by consumer representatives.

## 4.4 Opportunities to express preferences as part of consumer engagement

Participants at the Networks NSW forum were polled on three questions related to the network reliability, priorities for households on fixed incomes and the principle of fairer network tariffs. The full questions and participant responses are provided in the report of the *Peak Consumer Group Forum Report,* provided by the AER as attachment 2.08 of the Endeavour Energy proposal.

Beyond these three questions, PIAC has not been asked about preferences for spending versus service levels, or any questions that included figures about the price impact of particular options. As consumer engagement becomes more sophisticated, PIAC is hopeful that NSW network businesses will seek to engage with their customers about the dollar impact of, for example, reducing reliability standards.

## 4.5 Effectiveness of businesses in responding to consumer concerns

PIAC has always found that staff of Endeavour Energy are willing to answer questions from PIAC about the network's activities and to provide further information where required.

However, PIAC's key concern in relation to NSW networks has been (and remains) that prices are too high and that this is impacting negatively on the ability of consumers, especially low-income and vulnerable consumers, to remain connected to essential electricity services. PIAC also notes the very significant impact on small business and the additional challenge to large

[27] Networks NSW, 2014, *Forum on electricity prices and plans*, slide presentation, 21. Available at: www.endeavourenergy.com.au/wps/wcm/connect/ee/nsw/nsw+homepage/ournetworknav/customer+engagement/customer+engagement+content, as at 30 July 2014.

energy users of the DNSPs' prices. As discussed at great length in this submission, Networks NSW has not responded to these concerns in a manner that PIAC considers to be effective or respects the seriousness of the concerns and the very real harm of the recent price rises.

Indeed, to PIAC's great concern, the NSW networks have collectively decided to put aside key aspects of the AER's Guidelines including the assessment of the rate of return and the use of comparative benchmarking to assess the efficiency of NSW DNSPs. Moreover, they have done so without advising their customers in any of the engagement forums of their intentions to do so, or their reasons for not complying with the AER Guidelines. PIAC and other consumer representative groups made a very large commitment to the Better Regulation program and the development of the Guidelines, and PIAC is therefore disappointed in the DNSPs' failure to acknowledge consumers' commitments to the Guidelines and the cooperative approach to regulation.

As a result, PIAC submits that the DNSPs proposals should not be accepted by the AER. PIAC contrasts them to the regulatory proposal by Transend (now TasNetworks), which demonstrated a recognition of the challenges facing the industry and the urgent need to reduce network prices in the face of these challenges and in the long-term interests of all stakeholders.[28] This action is taken without compromising forecast service reliability, although there is a reduction in dividends and taxes to the state government.

[28] Transend/TasNetworks, *Tasmanian Transmission Revenue Proposal, Regulatory control period 1 July 2015 – 30 June 2014*, 2014. Transend reduced prices in the last two years to reflect reduced costs, accepted the AER Rate of Return Guideline approach and reduced both capex and opex for the new regulatory period. As a result, Transend was able to propose a real price reduction of 26.46 per cent in the first year (2014-15) compared to their allowed revenue in 2013-14 and below CPI for the remainder (see Table E.2, 8).

# 5. Forecasts of capital expenditure (capex)

## 5.1 Regulatory requirements

Under the NER, the AER is required to accept a NSP's proposed capex expenditure if it is satisfied that the proposed expenditure reasonably reflects the efficient and prudent costs of providing the services given realistic expectations of the demand forecast and cost inputs required to deliver the services.[29]

If the AER is not satisfied that the capex forecast is efficient and prudent, then the AER must not accept the operating cost proposal.[30] In undertaking this assessment, the AER must have regard to a number of factors, including the AER's most recent annual benchmarking reports and the benchmark capital expenditure that would be incurred by an efficient and prudent DNSP.[31]

The AER's understanding of the requirements under the NER, and under the broader objectives and principles set out in the NEL, are included in the AER's Expenditure Forecast Assessment Guideline (Expenditure Guideline)[32] and the accompanying Explanatory Statement.[33] The Expenditure Guideline was developed after extensive consultation with consumers and other stakeholders and should be the basis for both the NSPs' regulatory proposals and the AER's response to these proposals.

The AER highlights that the Rule changes have provided it with an additional opportunity to apply benchmark techniques to the capital expenditure proposal in addition to its more traditional techniques of assessing the governance framework, capex forecasting methodology and detailed audits of specific costs.[34] Since then, the AER has undertaken extensive investigation into the appropriate techniques for benchmarking the efficiency of capital investment.

Relevantly, the AER states:[35]

> Our approach [to assessing a network's proposed expenditure] is to examine the costs that the objective prudent and efficient operator requires to achieve the expenditure objectives [set out in the NER] (as the capex and opex criteria require). To the extent certain exogenous factors specific to an NSP might impact on the costs of the objective prudent efficient operator, we will need to take those factors into consideration.
>
> This does not mean that the NSPs cannot be benchmarked.

The AER will also be assisted in the benchmarking and regulatory review processes by the additional information it now receives on all aspects of the performance of the NSPs, along with a the development and application of its 'repex' and 'augex' models (replacement and augmentation expenditure models).

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29 NER, Cl 6.5.7(c)
30 NER, Cl 6.5.7(d).
31 NER, Cl 6.5.7(e)(4).
32 AER, *Expenditure Forecast Assessment Guideline*, 2013, 3.
33 AER, *Explanatory Statement, Expenditure Forecast Assessment Guideline*, 2013, 3.
34 Ibid, 9.
35 Ibid, 36.

PIAC believes that consumers will also have the opportunity for more substantive comments on the regulatory proposals once these benchmark reports have been published, and there is increased transparency around the real condition of the networks. Consumers have been told over the course of several regulatory periods about the problems of an aging network, and the need for replacement and/or augmentation of the networks. It is hoped that the new benchmark reports and expanded regulatory information notices (RINs) will provide better information for consumers to assess these claims.

## 5.2 Overview of the capex proposals

PIAC notes the very significant reduction in all the DNSPs' capital expenditure proposals. Compared to the capex allowance of the current regulatory period, the DNSPs' proposed capex is from 33 per cent to 41 per cent lower than their current expenditures. Moreover, in the last two years of the current regulatory period, the DNSPs' actual capex is considerably less than their regulatory allowances.

These reductions in proposed capex are welcome. However, they have come too late to stop the build up in the value of the regulated asset base (RAB), and it is the value of the RAB that drives the cost of capital allowance and the cost of depreciation, which together explain well over half of the total network revenue requirements and prices.

For instance, Ausgrid's proposal suggests that over the five years, *65 per cent of its total cost base* will be driven by the return on and return of capital. [36] Most of this is a result of the very significant capex investment in the current period, albeit investment that was less than allowed. As such, it requires a fairly dramatic reduction in other expenditures in order to manage price reductions to the consumer.[37]

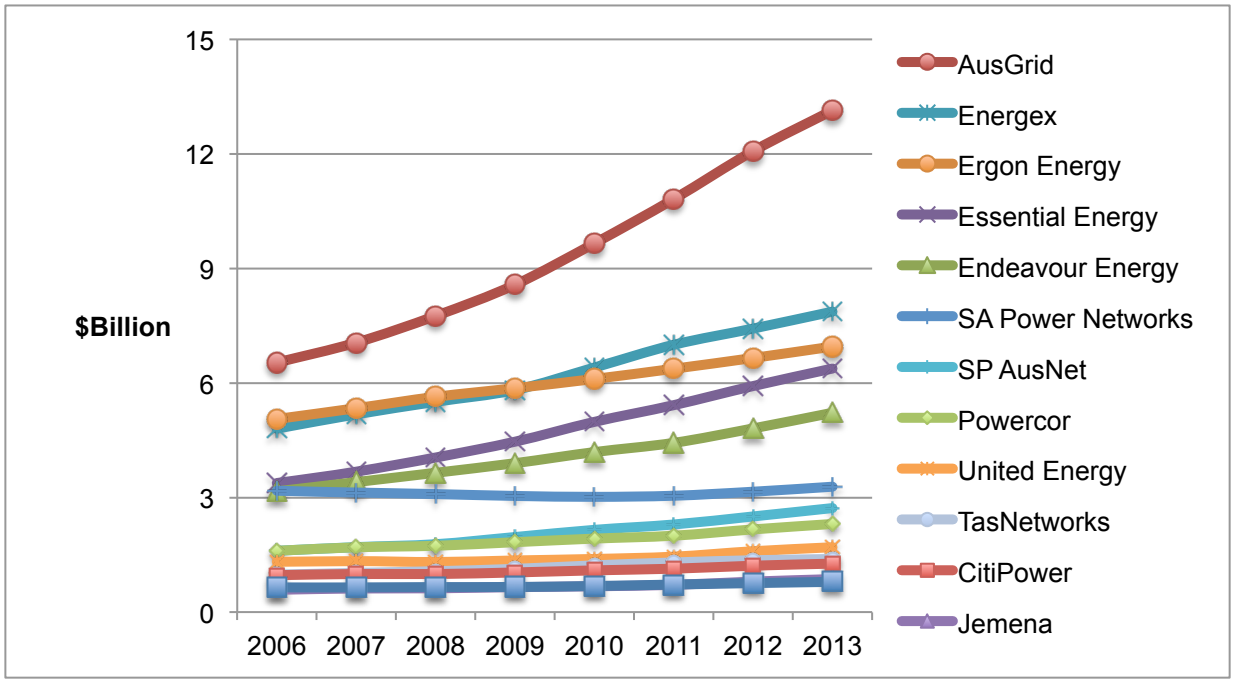
Figure 6 below further illustrates this problem by showing the growth in the value of the assets per customer of the NSW DNSPs and DNSPs in other states. This approach normalises the costs associated with having different customer numbers.

The chart suggests that the NSW DNSPs have all seen significant increases in the RAB per customer, with Ausgrid showing particularly dramatic increases. Ausgrid not only started at a higher value of assets per customer, but has also increased this more rapidly than any other DNSP. Given that 65 per cent of Ausgrid's network revenue (and prices) is set by this semi-fixed component, the extent of the challenge facing Ausgrid is clear.

[36] Ausgrid, *Regulatory Proposal*, Table 8, 22.

[37] Most companies operating in a competitive market and faced with this dilemma would also choose to write down the value of some assets. There is no indication that the DNSPs will take this step, although if demand continues to decline it may be forced upon them.

**Figure 6: Growth in the value of the DNSPs assets per customer**[38]




PIAC's concern with the DNSPs' proposals for capex programmes is heightened by a number of other factors. The following concerns are relevant to all the NSW DNSPs' proposed capex. In addition, PIAC has reviewed Ausgrid's proposal in more detail and the observations on this are set out separately. In terms of the general issues, PIAC notes the following:

- There is a real risk that energy use and peak demand will continue to decline compared to previous growth forecasts. To the extent this reduction in usage is now 'built in' to NSW households and businesses, coupled with the general decline in energy intensive industry, it is most unlikely that there will be recovery in energy demand. Consumers may end up paying higher and higher unit prices to enable DNSPs to recover their allowed revenues.

- Similarly, the surge in capex has resulted in a rapid growth in the value of the RAB that in turn creates ongoing pressure on prices. PIAC estimates that the RAB will continue to grow at about 5% on average across the three DNSPs based on their respective capex proposals. That means the cost of capital component of the building block model will also continue to grow at an average of around 5 per cent per annum over the next regulatory period. This outcome is at around twice the CPI forecasts and, therefore, overall CPI increases can only be achieved at the expense of real ongoing programs that add value to consumers.

  The networks must address this cycle. However, there is no sign in the proposals that the DNSPs recognise the problem that this excess expenditure has for the future of their networks.

- The significant cut back in capex that has occurred in the last few years of the current regulatory regime (compared to the very large forecasts of capex) may, in part at least,

38 Data for the graph is based on the Economic Benchmarking RIN data provided by the NSPs. The NSW networks are represented in light blue.

represent a postponement of capex rather than a cancellation of greater efficiency in delivery of plans. There is a real risk that consumers will pay twice for the same investment, once in the current regulatory period and again in the next regulatory period. While the effect of this may be small, PIAC still urges the AER to monitor this outcome and to ensure consumers are well informed about the efficiency or otherwise of any capex postponement as well as the efficiency of the delivery of the capex programs still undertaken.

- The AER is applying a capex incentive scheme for the first time in this coming regulatory period. Experience with these schemes suggests that they provide an incentive to the NSP to over-forecast its capex, i.e. to set the bar high, so that the NSP receives the reward for underspending.

  Therefore, PIAC urges the AER to ensure that the capex allowance is set at an efficient and prudent level as only in this way will the incentive scheme work to drive greater efficiency. The amendments to the rules should enable the AER to better undertake this challenge, while the DNSPs retain the opportunity to manage risk by proposing contingent projects or by applying for a pass through allowance (for unexpected substantial costs).

- The NSW DNSPs appear to downgrade the importance of benchmarking in setting capital spending targets for their networks. For example, Ausgrid urges the AER to only use benchmarking tools to look at trends over time in a DNSPs performance. Ausgrid clearly does not want the AER to use the benchmarking tools for comparing the performance of networks businesses, and states in its proposal:[39]

  > …we have placed limited weight on benchmarking analysis as a valid test of the efficiency of our [capex] forecast and consider that the AER should do likewise in its assessment.

  PIAC does not support this analysis. The 2012 amendments to the NER clarify the AER's obligation to set an allowance for capex that reflects an efficient and prudent operator and to take into account (inter alia) the results of benchmark studies.[40] Benchmarking the performance across DNSPs is, when judiciously applied, a key element in ensuring efficient outcomes in the long-term interests of consumers.

  More specifically, PIAC's reading of the NER suggests that the AER must focus on relative efficiencies to assess efficient costs, and MUST not accept a capex proposal if it is not satisfied that it is reasonably efficient and prudent in the context of these benchmarks and other data.[41] The Rules do not require the AER to accept a proposal that is 'improving if that improvement is only moving the DNSP somewhat closer to (but not at) the efficient and prudent performance of a benchmark efficient firm.

- The NSW DNSPs make much reference to the change in the licence obligations that was recently introduced by the NSW Government and was to apply from 1 July this year. However, there is little detail on what this practically means for capital investment. PIAC notes, for instance, that the service performance targets and customer service standards that

[39] Source: Ausgrid, *Regulatory Proposal,* 47.
[40] NER, Cl 6.5.7 (c) and (e)(4).
[41] NER, Cl 6.5.7(d).

form part of the licence conditions have not changed since the previous versions of the distribution licence and the *actual* service performance of each of the DNSPs is well in excess of these targets and standards.[42]

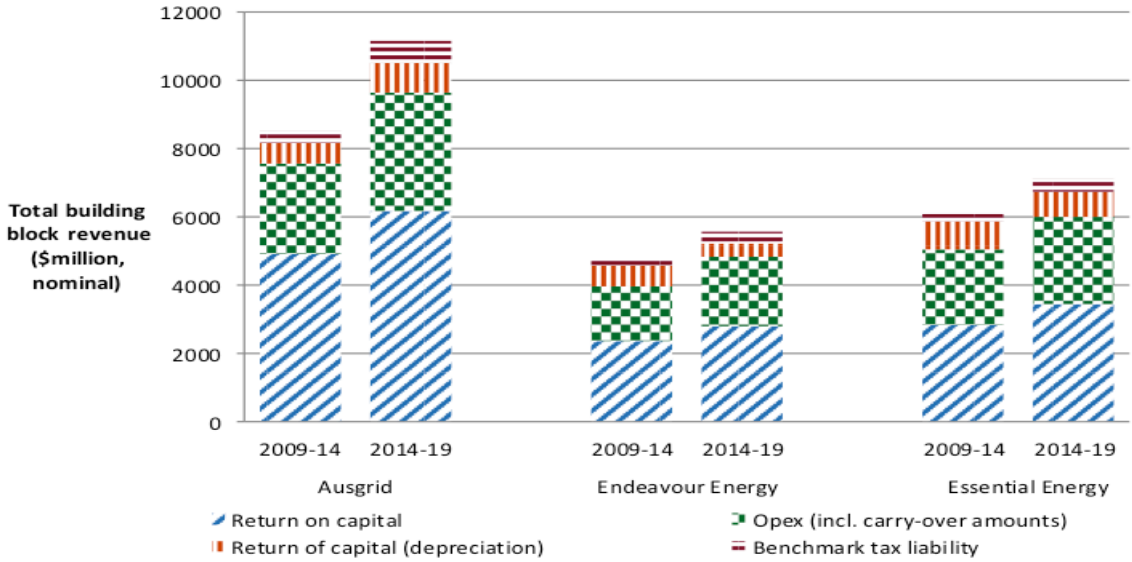
## 5.3 Ausgrid

In the previous section, PIAC raised a number of general issues that are relevant to all the DNSPs' proposals. However, at the level of detail, there are some differences. PIAC, therefore, believes there is value in putting some focus on the regulatory proposal submitted to the AER by Ausgrid.

In the current regulatory period, Ausgrid proposed huge increases in their capex allowance, more so than the other two NSW DNSPs, although in practice Ausgrid has not undertaken that level of capex (for a variety of reasons[43]).

Nevertheless, Ausgrid's current network prices reflect the allowed capex not the actual capex and the RAB has continued to grow rapidly, and well above inflation despite the reduced actual capex. As noted above, some 65 per cent of Ausgrid's costs are related to a return on and return of capital (depreciation). Figure 7, taken from the AER's Issues Paper, confirms this picture and illustrates the extent to which Ausgrid is caught in the 'RAB trap' more than the other two DNSPs.

**Figure 7: Total building block revenue**[44]




Ausgrid claims that it has now addressed a number of its previous forecasting problems, and the 2014-19 forecasts represent a 'reasonable' forecast of capex requirements and should therefore be accepted by the AER, as stated below:[45]

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42 Minister for Resources & Energy, Hon Anthony Roberts MP, 2014, *Reliability and Performance Licence Conditions for Electricity Distributors,* schedules 2-6, 12-17. The commencement date was 1 July 2014.

43 It is suggested that in the first years of the current regulatory period, Ausgrid was unable to resource the very large increases in capex programs and costs were higher than anticipated; in the later years, Ausgrid recognised that demand was falling and some augmentation capex was not required. The NSW Government also imposed constraints as discussed previously.

44 AER, 2014, *Issues Paper*, 17.

45 Ausgrid, 2014, *Regulatory Proposal*, 47.

> We have identified key variations to forecast capex in the 2009-14 period, and consider that these have been taken into account when developing forecasts in the next period. For example, we consider that lower demand forecasts were a key driver of reduced capex, and that our demand forecast process has improved considerably in preparing our 2014-19 forecasts.

Nevertheless, in the current proposal, Ausgrid continues to propose significant increases in some capex categories, albeit from a lower base than the average expenditure over the current period. As a result, as illustrated in Figure 7, the return on capital and return of capital component of Ausgrid's revenue proposal continue to grow significantly and more so than either of the other two NSW DNSPs

The forecast increase in capex also contributes to the fact that Ausgrid is proposing the highest average increase in prices for the 2015-19 period. As such, PIAC believes that Ausgrid faces a real risk of being locked into a self-defeating cycle of expenditure growth and price rises, followed by further declines in energy use.

PIAC, therefore, submits that the AER should not accept Ausgrid's forecasts without a detailed and critical examination.

The discussion below will therefore will consider Ausgrid's proposal with respect to the following subsidiary forecasts:

- energy and demand growth
- renewal/replacement capex;
- growth capex;
- reliability capex; and
- non-system capex.

PIAC notes that Ausgrid's proposal includes significant changes in both the quantum and the mix of these expenditures, most particularly the relative growth in replacement expenditure and the continued proportion of expenditure on 'Area Plans' (albeit declining).

However, PIAC notes that consumers face considerable difficulties in fully examining all the details of Ausgrid's capex proposals (and those of the other networks). In many cases, PIAC will be simply identifying areas of concern that PIAC believes warrant further investigation by the AER, rather than proposing alternative forecasts.

***Recommendation 6***

*PIAC recommends* that *the AER use benchmarking and its capex and opex models to very critically examine the capex proposals, and in particular, the need for such an extensive replacement program as is proposed by Ausgrid.*

### 5.3.1 Ausgrid's energy and demand forecasts

A DNSP's energy forecasts are critical for two main reasons:

- the forecast of peak demand at both a network level and a local level strongly influences the capex forecasts (spatial forecasts);
- the forecast of energy demand underpins the calculation of average prices over the period, particularly under a revenue cap regime.

There are a number of aspects of Ausgrid's forecasts of energy use and demand that are of concern to PIAC. They include:

#### 5.3.1.1 Forecast of consumer number growth

Ausgrid is forecasting a marked increase in the level of new residential connections in their network area, namely an increase from 8,000 – 10,000 per year, to a high of almost 18,000 towards the end of the next period.[46]

PIAC is concerned that this overstates the likely consumer growth, and needs to be further investigated. More particularly, it is important to identify if this growth is concentrated in high-density developments or more urban or rural developments. Electricity supply augmentation for high-density developments, for instance, could involve a considerable level of 'customer contributions', in which case, the capital costs are not relevant to the assessment of standard control services. This particularly applies to situations where the new assets are underground assets. It would be expected that developers would cover all the incremental costs to Ausgrid of such a proposal, not consumers in general.

Similarly, if such developments put pressure on the capacity of local substations, then it is important to understand the extent to which the developers of the new estates would or should make a contribution to that expansion of capacity.

Customer growth also drives growth in energy use. However, if the growth is in high-density buildings then this will not be so significant a factor, even if the overall forecast of consumer numbers is reasonable.

#### 5.3.1.2 Forecast of peak demand

Ausgrid is the only DNSP in NSW forecasting a significant growth in peak demand. Ausgrid forecasts a summer peak demand growth of 1.18 per cent per annum and winter peak demand growth of 1.24 per cent. This is in contrast to Ausgrid's reported actual growth in peak demand for the period 2009-14 of 0.54 per cent per annum on average.[47]

It is also around twice the most recent forecasting report by the Australian Energy Market Operator (AEMO). AEMO's forecasts of electricity peak demand have been reduced each year and AEMO is now forecasting an annual average growth rate in maximum demand of 0.5 per cent across NSW.[48]

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46 Ausgrid, 2014, *Regulatory Proposal*, 38.

47 Ibid, 37.

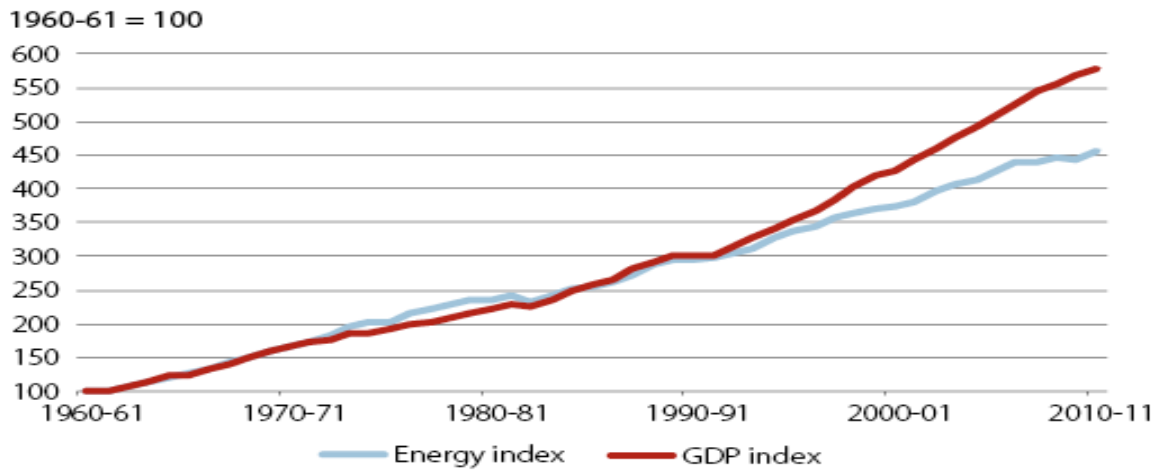
48 AEMO, 2014, *2014 National Electricity Forecasting Report (NEFR) NSW Forecasts Chapter 4*, 4.1. The forecast of 0.5% average annual growth rate is based on the 10% POE MD for the period 2013-14 to 2016-17. The 2014

It is not clear to PIAC, therefore, why Ausgrid is forecasting peak demand growth of 1.18 per cent per year on average. Ausgrid appears to explain this faster growth in peak demand by reference to improved consumer confidence and economic growth and also to higher customer and demand growth in specific areas of the network, rather than in system wide demand.[49]

However, PIAC does not accept at face value that these factors explain an increase that is greater than the state average.

There are a number of reasons for PIAC's concern with this forecast. In the first instance, there has been a clear break, particularly since 2009, between economic growth and energy usage across the whole Australian economy. Gross Domestic Product (GDP) growth is no longer a direct predictor of growth in energy usage. For example, Figure 8 below[50] illustrates the growing disjunction between GDP growth and energy use, indicating a significant decline in energy intensity. This pattern is similar across each of the non-mining states as well as the country as a whole.

**Figure 8: Annual growth in Australia's energy consumption & GDP 1960**[51]




Moreover, the same general factors that have been reducing growth in energy usage can be expected to continue. They include the ongoing impact of high electricity prices (albeit growing at a slower rate), greater efficiency in buildings and appliances, growth in solar installations, installation of efficient lighting and, particularly for Ausgrid, the projected increase in embedded generation and efficiency targets in the Sydney CBD area.[52]

PIAC recommends that Ausgrid engage with the City of Sydney to assist Ausgrid in better forecasting electricity peak load growth in the City area, given the strong support for energy

NEFR is lower than the 2013 NEFR (0.8%), indicating the continued decline in expectations of growth in peak demand.

49 Ausgrid, 2014, *Regulatory Proposal*, Attachment 5.25, 12.

50 Extract from the Bureau of Energy and Resource Economics, 2013, *Energy Australia 2013*, 19.

51 Ibid, 20.

52 See for instance, the City of Sydney, 2011, *Sustainability plan*, http://www.cityofsydney.nsw.gov.au/vision/towards-2030/sustainability, as at 1 August 2014.

efficiency and renewable energy by the Sydney City Council as well as the installation of trigeneration in key buildings, such as the Town Hall.

Ausgrid also refers to their planned initiatives to 'reduce system peak demand more generally across the network area'.[53] This includes the expansion of time of use network tariffs[54] and various 'broad based demand management' activities that Ausgrid states will result in a reduction in summer peak demand in their region of some 84 MVA.[55]

Ausgrid also states that its capital program will be driven by forecast growth rates in specific areas rather than general peak load growth. For instance, Ausgrid suggests that over 40 sub-stations in their network experienced growth rates of more than 2 per cent per annum on average over the last 5 years. This represents some 21 per cent of the total number of sub-stations. [56] However, it is not possible to identify what proportion of the total demand this applies to and what the implications are for network investment.

Ausgrid cites (by way of illustration), a 'proposed new development in West Menai' that will 'almost double the load on our Menai zone substation, i.e. 40 MVA'.[57] However, PIAC also notes that Ausgrid's recent Regulatory Information Notice (RIN) indicates that Ausgrid had already forecast a load of 124 MVA in the two Menai substations for 2012/13 in its previous proposal (for 2009-2014), and experienced an actual demand of some 81.6 MVA, a forecast error of some 34 per cent.[58]

PIAC therefore believes there should be much greater examination of Ausgrid's claim that low level forecasts can provide a sound base for capital investment proposals as discussed below.

***Recommendation 7***

*PIAC recommends that the AER initiate a review of the forecast of energy usage and maximum demand by each of the DNSPs, taking into account the structural changes in the NSW economy, the decline in energy intensity and the growth in efficiency, solar generation and embedded generation. PIAC recommends that Ausgrid's maximum demand forecast in particular must be closely scrutinised.*

#### 5.3.1.3 Reliance on spatial demand forecasts at zone substation

Ausgrid notes that the forecasts of load growth have been based on more accurate 'spatial forecasting' techniques:[59]

> We note that the forecasts of load growth we have relied on are based on our spatial demand forecasts at our zone substations and sub-transmission substations, as this provides a more accurate basis for determining capacity needs on the network.

PIAC considers that this claim warrants further investigation by the AER. PIAC has examined Ausgrid's past forecasts of demand at zone substation level and found many instances where

53 Ausgrid, 2014, *Regulatory Proposal*, 38.
54 See for example, ibid, 98.
55 Ibid, attachment 6.12, 35.
56 Estimated from ibid, figure 16, 37.
57 Ibid.
58 Ausgrid, 2014, *2012-13 – RIN response – Non Financial,* 2.
59 Ausgrid, 2014, *Regulatory Proposal*, 37.

there is a significant disparity between the forecast and the actual demand for 2014[60] of which the Menai zone substations (described above) are examples. PIAC observes discrepancies of up to 100 per cent between forecast and actual demand. Across all the substations, the forecasts of demand were 24 per cent greater than the actual demand.[61]

***Recommendation 8***

*PIAC recommends that The AER review the historical accuracy of the DNSPs' spatial forecasting to assess whether these forecasts are a sound basis for the augmentation capex forecasts.*

## 5.4 Augmentation capex

Augmentation capex refers the augmentation of the network system to match capacity with peak demand and connect new customer accounts. Ausgrid states that augmentation capex accounts for some 16 per cent of the total proposed capex over 2015-2019 period.[62]

Ausgrid is forecasting a reduction in the distribution capacity component of its capex proposal by over 50 per cent in real dollar terms (from $1,394M to $598M).[63] Ausgrid suggests that the distribution capacity forecast is influenced by 4 external factors, namely:[64]

- increased economic confidence;
- areas of high customer and demand growth;
- recent regulatory reform in relation to cost recovery of customer connections, with a lower proportion of connection expenditure being allocated to standard control services; and
- changes in licence conditions that reduce the need to augment the system to the same standard of reliability.

### 5.4.1 Augmentation and demand growth

As noted by Ausgrid above, augmentation capex is very closely related to the forecast of demand growth, including the spatial forecasts and the growth in customer connections. PIAC has already indicated its concerns with Ausgrid's forecasting of overall demand, spatial demand and customer numbers.

PIAC would therefore apply the same caution to the forecast of augmentation capex. PIAC strongly suggests that although the augmentation capex forecast is considerably less than in the current regulatory period, the augmentation cape proposal should be very closely reviewed by the AER noting the difficulties with Ausgrid's forecasts for augmentation capex in the past.

### 5.4.2 Augmentation and expenditure patterns

In addition, PIAC notes that the $598M of augmentation capex is spread fairly evenly across the categories of 11kV capacity investment, low voltage investment and customer connection, and in each category expenditure is significantly lower than in the previous regulatory period. Key points to consider further, however, are:[65]

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60 Ausgrid, 2014, *2012-13 – RIN response – Non Financial,* 2.

61 This figure is only indicative of the level of forecast error and individual variances. There is a wide spread of outcomes, including a few areas where there was no forecast demand but there was actual demand.

62 Ausgrid, 2014, *Regulatory Proposal*, 2014, 42.

63 Ibid.

64 Ibid, attachment 5.25, 12.

65 The data in the following discussion is extracted from Ausgrid, 2014, *Regulatory Proposal*, 2014 16-22.

- Of the $202M capex proposed for 'customer connections', some $114M, is associated with the connection of commercial customers (nearly 3 times the capex expenditure on residential connections). PIAC would have expected these customers to be making a substantial contribution to any augmentation they require, and would appreciate more clarity on what proportion of their total costs for augmenting commercial customers are borne by these customers (and if not, the reason for this).

- Of the total $598M, some $59M (10 per cent) is spent on various 'support costs' such as planning and compliance, GIS data capture and switching and control. This appears to be an excessive level of capex devoted to 'support functions' and may provide opportunities for further savings in Ausgrid's augmentation expenditure.

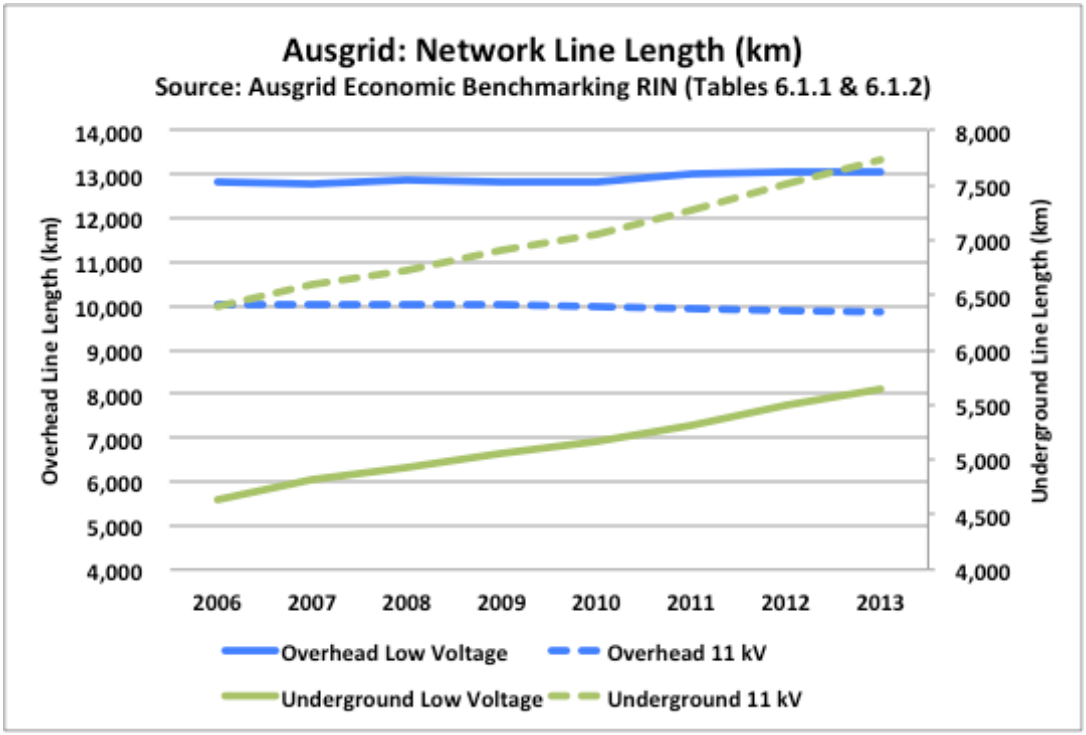
In addition to the $598M augmentation capex cited above (which includes commercial connections), Ausgrid proposes in its Area Plans to spend some $240M on what it labels 'large-scale' augmentations.[66] PIAC seeks further clarity on what these large-scale augmentations are and whether they should be included as part of the costs of standard control services shared by all consumers, or allocated to the customers that use the service.

Another feature of Ausgrid's augmentation capex is the allocation of expenditure between overhead and underground lines. It would appear that Ausgrid has extended its underground cable network while the overhead powerline network remains fairly static, as illustrated in Figure 9 below.

If this trend continues, there should be a more transparent discussion between Ausgrid and its customers on how and who finances these considerably more expensive expansions of the network. Should the additional costs of undergrounding lines be allocated to all Ausgrid's customers or on a user pay basis?

[66] This figure is derived from Ausgrid's proposal on 'area plans' (large scale projects) which suggest that 15% of the total Area Plan capex (of $1,582.8M) is augmentation capex. The remainder of the capex is categorized as replacement. See Ausgrid, 2014, *Regulatory Proposal*, 43.

**Figure 9: Ausgrid's network line length for overhead & underground line[67]**




***Recommendation 9***

*PIAC recommends that the AER investigate capex proposals in the current forecasts that arise because of the postponement of capex in the current regulatory period. Where the AER identifies that the postponement is due to controllable issues, such as less efficient planning of resources to meet the capex, then consumers should not be asked to bear all the costs a second time around.*

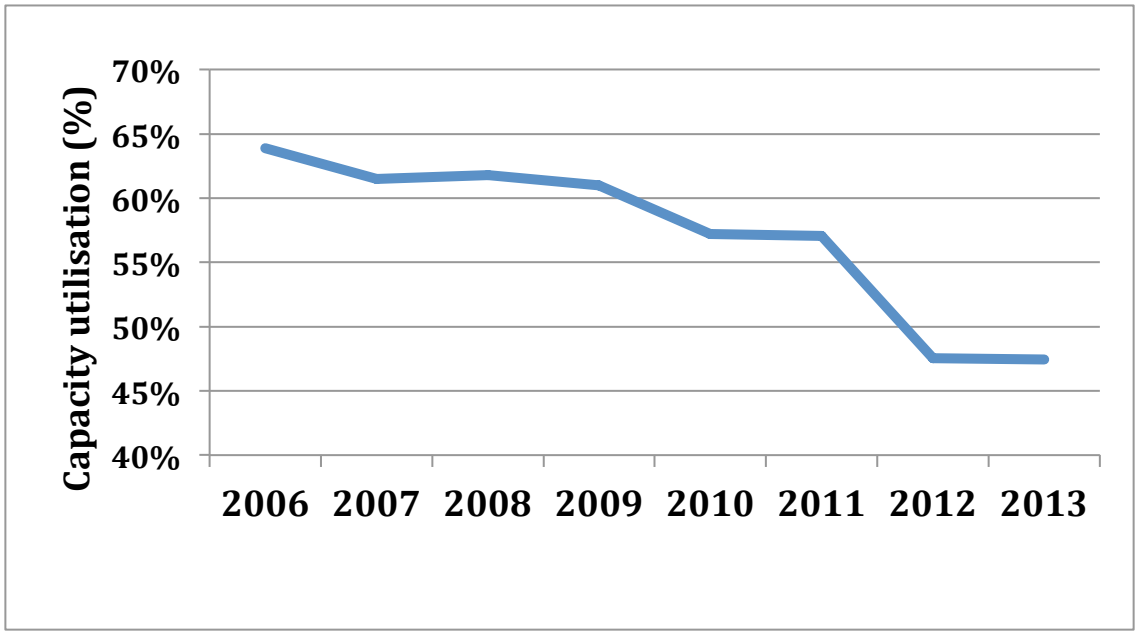
### 5.4.3 Declining utilisation of the network

A further note of caution in assessing Ausgrid's augmentation capex is the very significant reduction in the overall system capacity utilisation reported by Ausgrid.

Figure 10 below illustrates this dramatic reduction in capacity utilisation, a combination of the very large investment in the current regulatory period and the falling away of demand growth. While PIAC recognises that 'overall utilisation' is a crude measure, it nevertheless points to a need for very significant constraint in future investment and detailed examination of the local augmentation proposals (as suggested previously).

[67] The chart is based on data provided in Ausgrid, 2014 *Economic Benchmarking RIN*, Tables 6.1.1 and 6.1.2.

**Figure 10: Ausgrid - Trends in overall system utilisation**[68]




## 5.5 Renewal/replacement capex

Replacement capex is the major component of Ausgrid's proposed capex, accounting for some 70 per cent of the total forecast capex, including 'duty of care' replacement plans. As set out in the AER's Issues Paper,[69] this is a much higher percentage of total capex than the replacement capex for Endeavour Energy or Essential Energy (42 per cent and 33 per cent respectively).

As such, PIAC considers replacement expenditure should be a particular focus of the AER's review of Ausgrid's capex allowance. In particular, with demand growth declining and increasing capacity on the network, it is essential that Ausgrid's approach to replacement capex be carefully examined. With reduced stress on the network (i.e. reduced utilisation), the optimal timing for replacement of at least some assets may change.

In addition, it is difficult for consumers to assess the reasonableness of any of the DNSPs' replacement projects. Even when there are substantial replacement projects in excess of $5M and up to some $150M (per project) in some instances, it appears that the DNSPs are not required to undertake public consultation. Nor does the DNSP have to issue a public report on their plans (unlike the requirements for augmentation capex of similar value).[70]

Thus, even if consumers were in a position to investigate these projects, there does not appear to be a public process to evaluate the merits or otherwise of the replacement projects. For example, Ausgrid states that its proposed replacement capex is 'primarily to replace degraded assets due to condition, risk and compliance related issues'.[71] This claim should be tested, but to test it

68 Ausgrid, 2014, *Economic Benchmarking RIN* (Table 7.4)

69 AER, 2014, *Issues Paper,* table 3, 32. Note, the AER includes the renewal capex component of the large scale Area Plans in this calculation.

70 Ausgrid, 2014, *Regulatory Reporting Statement, 2014-15 to 2018-19*. Sheet 5.1 Material Projects. Ausgrid states for each of its replacement projects identified in this report that it is not obliged to undertake public consultation or produce a report.

71 Ausgrid, 2014, *Regulatory Proposal*, 44.

requires more substantial analysis of data than is available to PIAC. However, it is the major component of Ausgrid's capex and PIAC believes this places an even greater onus on the AER to critically assess the network replacement plans.

Ausgrid's replacement capex includes two high level categories of expenditure, as follows:

- General replacement and duty of care plans, totalling some $1,776M over the regulatory period.[72]

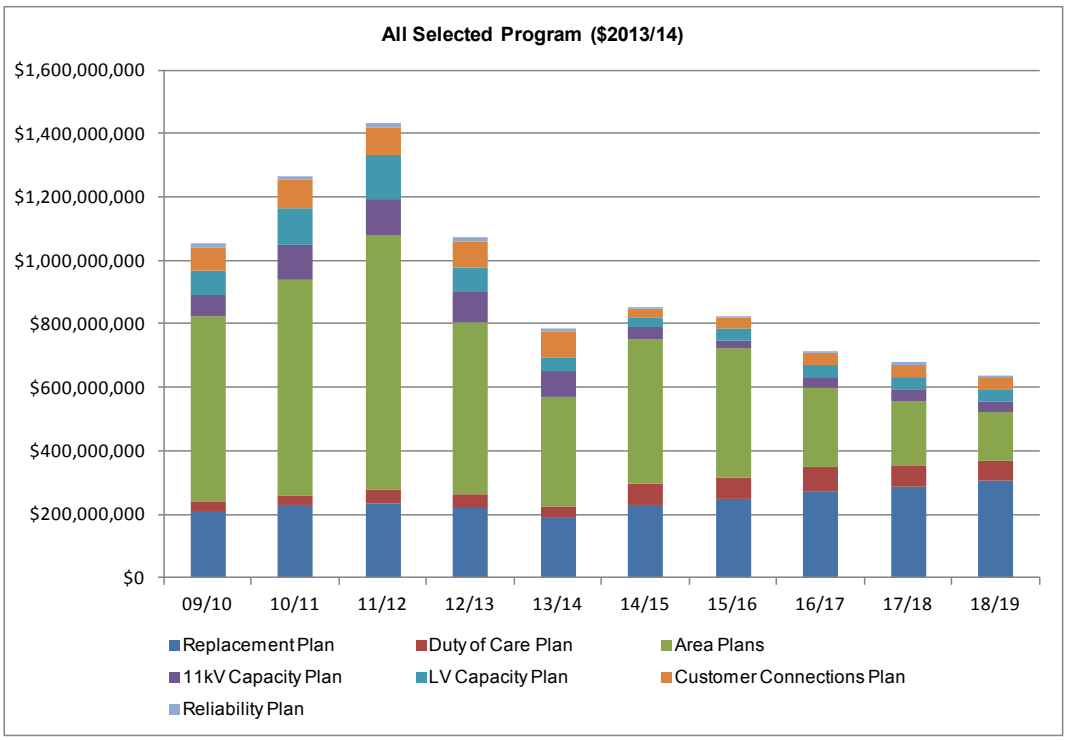
- Area Plans that include large 'strategic' replacements on Ausgrid's sub-transmission networks. The total proposed capex for the Area Plans is $1,583M over the regulatory period, of which 85 per cent ($1,345M) is claimed by Ausgrid to be related to replacement activity.[73]

Ausgrid claims that it has shifted its focus from transmission assets to distribution assets. Nevertheless, there appears to be about an even split between the two categories of general replacement/duty of care and Area Plans/large scale projects.

PIAC considers each of these in the following sections, in some detail. The analysis raises questions about the allocation between capex on general replacement and on Area Plans. It would be concerning if the large portion of capex devoted to Area Plans detracts (again) from addressing the apparent problem of ageing general assets, leaving this latter issue to continue into the next regulatory period. Figure 11 illustrates the growth in general replacement expenditure, but also the proportionally large expenditure of capex on large scale 'Area Plans'.

72 AER, 2014, *Issues Paper,* 44.
73 Ausgrid, 2014, *Regulatory Proposal*, 43.

**Figure 11: Total Core Network Capex ($2013/14)**[74]




The Area Plans also raise questions about projects that were funded in the current regulatory period, yet appear again in this forecast capex. PIAC is also seeking to understand why the costs of some of the large projects appear to be recovered (in whole or part) through the standard control service capex, rather than from the large users who benefit from these. Section 5.5.2 provides examples of this.

### 5.5.1 General replacement and duty of care plans

Ausgrid is proposing to spend some $1,780M on their replacement and duty of care plans in the distribution network. Importantly, *Ausgrid highlights that 'the proposed capex for 2014-19 is about 33 per cent higher than the actual capex during the 2009-14 period'*.[75] Ausgrid suggests there are two primary reasons for this increased capex:[76]

1. A significant portion of forecast capex for replacement and duty of care plans was deferred because of a 'range of delivery issues associated with the total capex program'. Ausgrid chose to concentrate its actual capex on upstream infrastructure such as 'critical sub-transmission assets'.[77]

2. Consequently, Ausgrid states that ' age deterioration of our distribution network rapidly increased during the 2009-14 period'[78] despite investments to remove the most risky assets, increasing risks of failures and other damage.

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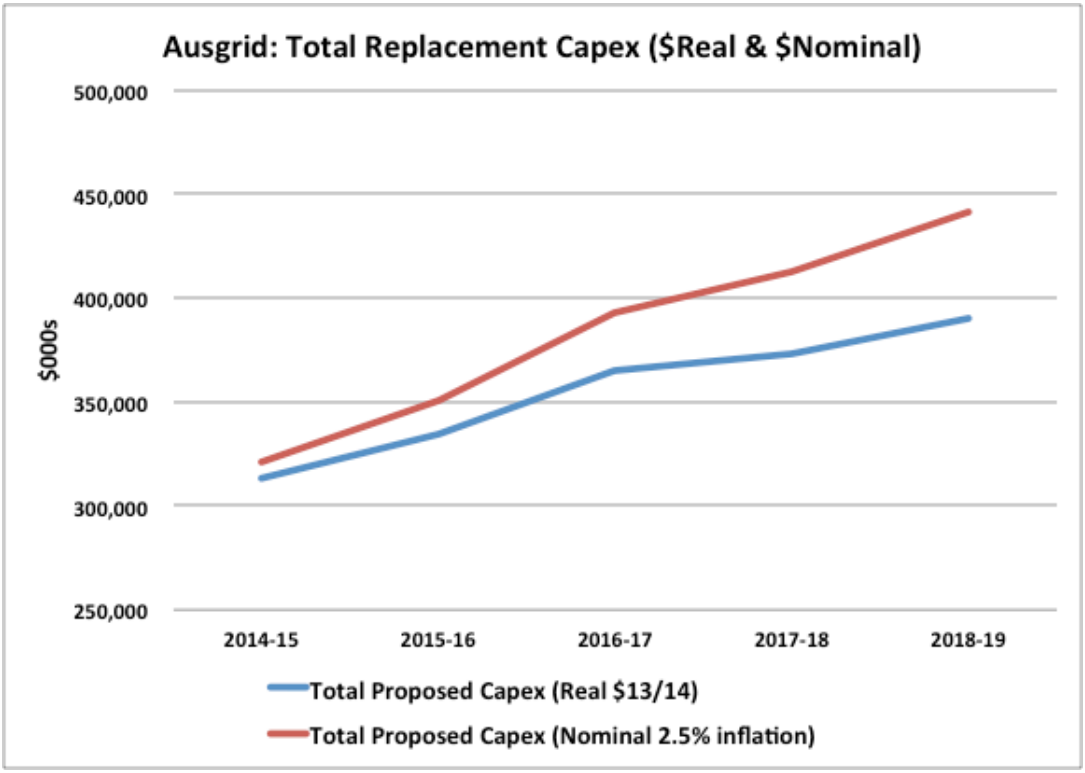
74 Ausgrid, 2014, *Regulatory Proposal*, Attachment 5.24 – Review of Replacement and Duty of Care Plans – 2014, 16. The chart does not include non-system capex.
75 Ibid, *Attachment 5.24 – Review of Replacement and Duty of Care Plans – 2014*, 3.
76 Ibid.
77 Ibid, 18.
78 Ibid.

It is deeply concerning for consumers to read that the services that they have paid for in their current network prices are unable to be delivered. Ausgrid, as one of Australia's leading electricity network service providers, had a responsibility in its last regulatory reset to recognise the difficulties it would have in delivering such a massive increase in capex programs. It should have modified its forecasts and prices at the time of the 2009 reset accordingly.

To add to this concern, having failed to deliver its forecast replacement program in 2009-14 due to problems that should have been foreseen, Ausgrid now seeks additional replacement capex, well above CPI, to replace its aging assets.

In particular, it seems that replacement capex is again on an upward growth path in real dollar terms over the 2015-2019 regulatory period, in order for Ausgrid to undertake the tasks that it has already received at least partial compensation for. This is demonstrated in Figure 12, which illustrates the projected growth in replacement capex in both real ($13/14) and nominal terms.

**Figure 12: Ausgrid replacement capex forecast (real $13/14 and nominal $)[79]**



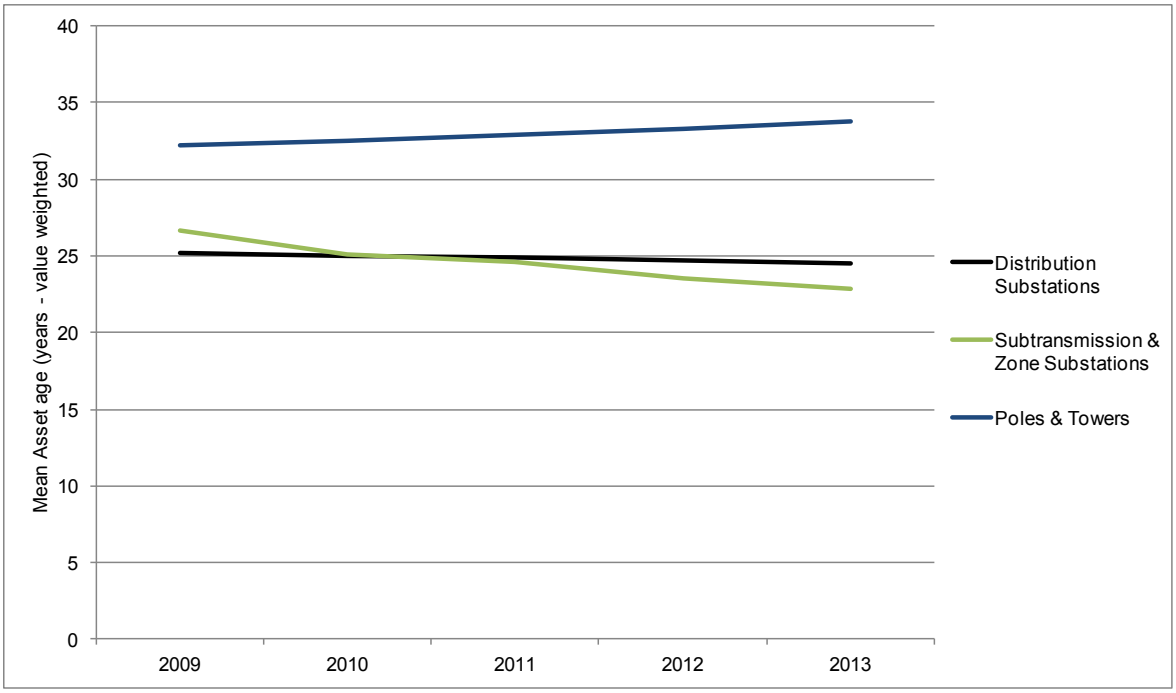

PIAC is not in a position to advise where the replacement capex can be reduced. However, PIAC would ask the AER to review Ausgrid's approach to 'condition assessment' and 'condition based replacement planning', including the balance between the replacement of an asset and extending the life of the asset. There may well be opportunities for further rationalisation of this important area, particularly given the decline in utilisation. An examination of the category level benchmark data might that the AER is developing may assist in this task.

79 Real replacement capex forecast is taken from Ausgrid, 2014, *Regulatory Reporting Statement, 2014-15 to 2018-19*.

In particular, while the average age of part of Ausgrid's distribution system assets (the 'poles and wires') appear to have increased slightly over the last five years (from around 32 years to 34 years), does this necessarily translate into the need for a more aggressive replacement program? At face value, Ausgrid's asset age profile data in Figure 13, does not appear to support Ausgrid's rather strong conclusions that 'the health of the distribution network will rapidly decline in the 2014-19 period in the absence of an increase in capex from current expenditure levels'.[80]

Figure 13 illustrates the changes in the age of Ausgrid's assets across the 2009-14 regulatory period. Moreover, as discussed in Section 5.6 below, and illustrated in Figures 13 and 14, the reliability of Ausgrid's network is relatively high, and above the regulatory standards. This is not suggestive of a portfolio of assets that is reaching the end of its functional or technical life.

**Figure 13: Value Weighted Mean Asset Age by Asset Category[81]**




***Recommendation 10***

*PIAC recommends that the AER investigate Ausgrid's 'condition based assessment process' and ensure that it is not driving early replacement of Ausgrid's distribution assets.*

### 5.5.2 Area plans and material (large scale) projects

A preliminary review by PIAC of the replacement projects for 2014-15 – 2018-19 listed in Ausgrid's Regulatory Reporting Statement [82] suggests that a significant component of Ausgrid's replacement capex is allocated to two general types of projects.

- The replacement of oil-filled 132kV cables in the central Sydney areas, for a total forecast capex of cost of around $100M; and

80 Ausgrid, 2014, *Attachment 5.24 – Review of Replacement and Duty of Care Plans – 2014,* 18.
81 Ibid, Figure 8, 19.
82 Ausgrid, *Regulatory Reporting Statement, 2014-15 to 2018-19*. Sheet 5.1 Material Projects.

- Replacement of 33/11kV zone substations with 132/11kV zone substations (or 132/33kV).

PIAC would seek reassurance from the AER that these substantial 'replacement' projects, are for the benefit of consumers and not adding additional capacity or services that may not be efficient under the current demand forecasts.

In addition to these general observations, the description of the major projects leads PIAC to raise some questions on a number of specific projects. A *sample* of these questions is set out below.

- A new 132/11kV zone substation in the City is classified as replacement capex, costing some $117.9M over the forecast period. This same project (ARA_02.1.0126) was listed for the current regulatory period for a forecast cost of $68.4M, but only $15.5M was reported as spent in this period. Consumers have paid for $68.4M of investment but have only received $15.5M in invested capital. Moreover, consumers will now be asked to fund a further $117.9M capex, making a total capex allowance of $186.5M for the project.

- Ausgrid is proposing the construction of a new zone sub-station at Olympic Park (ARA_04.4.1005), which it categorises as replacement capex for the forecast period. In the current period, Ausgrid forecast expenditure of $38.4M for this project, but spent less than half that, $18.8M. Ausgrid is now proposing a further replacement capex of $19M.

- Ausgrid is proposing to construct a new 132kV busbar at Beaconsfield (ARA_1.1.0031A), the explanation being that the new construction is 'to allow Transgrid to decommission existing 132kV busbar'. In 2009, Ausgrid sought an allowance of $26M for this project, of which they spent some $21M. Ausgrid is now seeking a further $10M. PIAC is not clear whether this project is for the benefit of Transgrid, or Ausgrid's consumers.

- Ausgrid is proposing to construct a new sub transmission station as a result of the planned decommissioning of Delta Energy's Munmorah power station (ARA_01.0013), which provided support to Ausgrid's 33kV system through its auxiliary transformers. In 2009, Ausgrid proposed a capex allowance of $9.9M for this activity, and spent $1.5M. Ausgrid is now seeking a further $32M in replacement capex in the forecast period. Should this be classified as replacement capex? Does this situation change if the station is demolished rather than decommissioned?[83]

- Ausgrid is proposing a number of large replacement projects in the Mascot area. PIAC notes, in particular, that two of the large projects are specifically noted as projects designed to support the Sydney Airport and the Equinix Data Centre[84] (ARA_03.1A.0028A and ARA_03.1B.0029A) at a total forecast replacement capex of $56M. PIAC queries whether extension or expansion of electricity supply to either of these sites should be funded through

[83] See ABC News, *Move to demolish Munmorah power station*, 10 July 2014. http://www.abc.net.au/news/2014-07-10/move-to-demolish-munmorah-power-station/5586274, as at 1 August 2014.

[84] Equinix is an international company specialising in providing large-scale data centres and data centre services. Ausgrid's *Regulatory Reporting Statement (Major Projects)* states that commissioning a new Alexandria subtransmission substation and associated 132kV feeder connections will 'facilitate the replacement of 33kV feeders to Sydney Airport as well as allow for a 33kV connection point for Equinix Data Centre.

standard control services. If either party requires expansion or extension of supply then PIAC expects they should be making a significant contribution to this.

The examples set out above provide just a sample of concerns PIAC has with the overall approach to replacement capex: the lack of transparency for consumers about these projects, the risk of counting the same project twice and the allocation of costs of these projects to standard control services.

## 5.6 Reliability capex

Ausgrid is forecasting an historically small expenditure on reliability capex for 2014-19 of $26.3M. It states that the forecast reliability capex is designed to '…remediate individual feeders and feeder segments *reactively* that we forecast will not meet our performance standards. We have not forecast capex for the *proactive* increase of reliability'.[85] [PIAC's emphasis]

Consumers have consistently indicated that they are satisfied with current standards and not seeking improvements in the current level of reliability, particularly if this will lead to greater electricity prices.

PIAC generally agrees with the approach adopted by Ausgrid to reliability capex. The proposed capex of $26.3M is relatively modest and less than half the capex spent in the current regulatory period. The proposal reflects the reasonable aim of maintaining service levels that were built up in the current regulatory period rather than proactively pursuing higher reliability outcomes.

Ausgrid's focus on allocating reliability capex to specific areas of poor supply is reasonable given that its current performance on the output measures of SAIDI and SAIFI[86] is now on average significantly better than the distribution licence reliability standards, and is forecast to remain so. This outcome reflects the additional augmentation expenditure of the current period.[87]

For example, Figures 14 and 15 set out the Urban SAIDI and SAIFI performance (respectively) against the reliability standards in the distribution licences. Similar findings are seen for the CBD and the Short Rural customer categories.

85 Ausgrid, 2014, *Regulatory Proposal*, 44.

86 SAIDI: System average duration or interruptions to customers in a year: SAIFI: System average frequency of interruptions to customers in a year.

87 Ausgrid notes that augmentation of the 11kV network was the main contributor towards achieving better outcomes as faults in the 11kV network contribute almost 70 per cent of SAIDI and SAIFI. See: Ausgrid, 2014, *Regulatory Proposal*, Attachment 5.26 – Overview of reliability investment plans – 2014, 10.

**Figure 14: Average duration of outage – Urban SAIDI**[88]

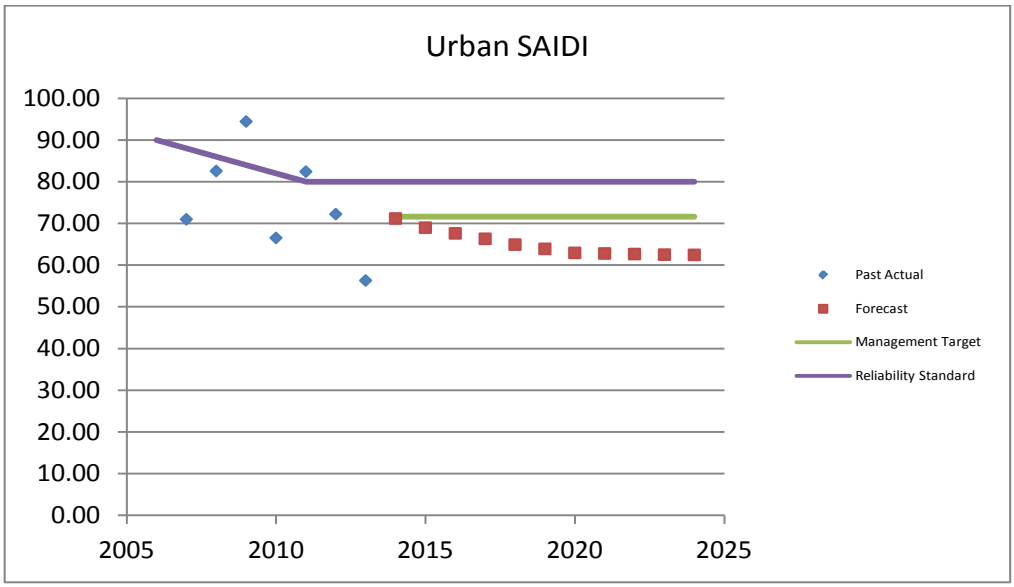
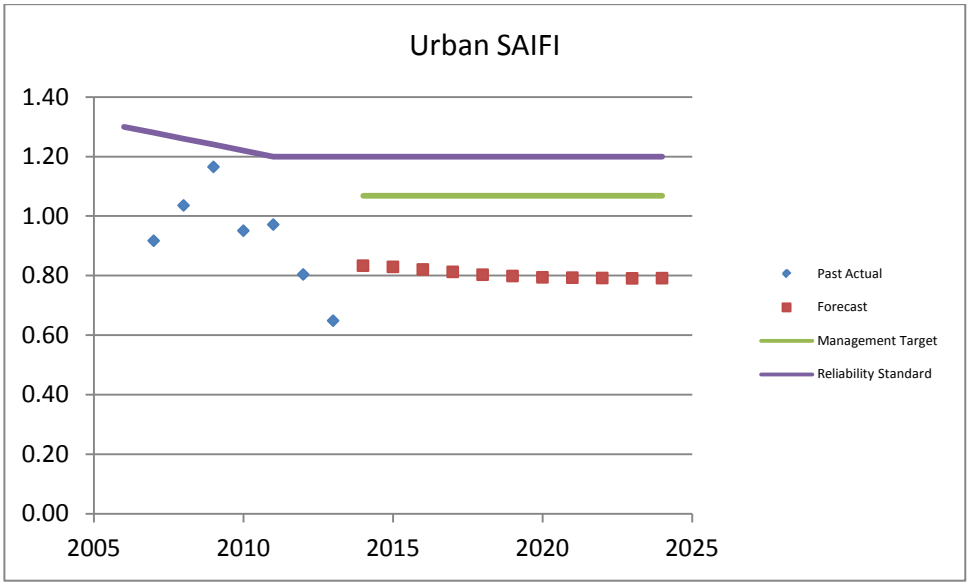



**Figure 15: Average frequency of outage – Urban SAIFI**[89]




## 5.7 Non-system capex

Ausgrid's non-system capex accounts for some $435M ($2013/14), or around 9 per cent of Ausgrid's total capex for the forecast period. This is significantly more than, for example, reliability compliance capex (1 per cent).[90]

The two largest components of this non-system capex are the Technology Plan ($182M) and the Corporate Property Plan ($172M). The Technology Plan in particular is significantly less then the

88 Ibid,12.
89 Ibid,14.
90 Ausgrid, 2014, *Regulatory Proposal*, Figure 17, 42

expenditure in the current regulatory period of around $486M ($13/14).[91] This latter expenditure of $486M is some $73M more than the regulatory allowance for 2009-14.[92]

Ausgrid points to the lack of investment in systems prior to 2009, and therefore the need for rapid upgrading in technology in the current regulatory period. Ausgrid also claims that this investment 'sets the foundation for Ausgrid's technology platform' and that this has enabled the substantial reductions in capex in the forecast period.[93] Ausgrid states that the 'underlying need for new technology assets is not at the same level' and represents a 'return to a more stable rate of network investments focus on 'maintaining core functions'.[94]

PIAC recognises the importance of a business investing in new technology and in maintaining that technology. However, notwithstanding a 'return to a more stable rate of investment', Ausgrid will have spent some $668M in real terms (considerably more in nominal terms) over the 10-year period just to support the provision of the regulated services.

Given this, it is essential that this investment is undertaken in the most efficient way and delivers commensurate benefit to consumers over time in terms of the price and service standard that they receive. PIAC concludes, therefore, that there must be a clear demonstration of the current and future efficiencies that will arise from this very significant investment over the two regulatory periods.

Ausgrid describes a number of qualitative benefits. However, at least with respect to the Technology Plan in its proposal, Ausgrid states that its focus is on maintaining business critical technology and only a limited number of projects have been selected for the implementation of technological change to 'drive productive and dynamic efficiencies'. These latter projects are said to achieve a $45M ($2013/14) business benefit over 2014-19, which in turn will flow through to consumers in the 'long run'.[95]

PIAC is therefore left with three questions with regard to the capex investment in technology:

- What are the quantified benefits consumers will receive in terms of opex or capex reductions, or service improvement during 2014-19 as a result of the very high level of investment in 2009-14?

- What benefit will consumers receive in the regulatory period 2014-19 as a result of the planned investment during this period?

- Ausgrid has usefully identified some of the reasons for its excess expenditure in the current regulatory period. Is there sufficient *practical* evidence that these lessons have been adopted in the current proposal and new investment will be both efficient and prudent?

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91 Ibid. The figures exclude technology investment in non-regulated services.

92 Ausgrid, 2014, *Regulatory Proposal*, Attachment 5.27-AER 1419 Technology Capital Expenditure Plan Overview, 24.

93 Ibid, 9. The $73M is expressed in nominal terms.

94 Ibid, 28.

95 Ibid, 13.

***Recommendation 11***

*PIAC recommends that AER require the DNSPs to be more transparent about their investment on non-system assets particularly IT. The focus should be on the costs and benefits to consumers in terms of price and service.*

***Recommendation 12***

*PIAC recommends that the AER should use its benchmarking tool to the maximum extent possible, while exercising its discretion in interpreting the implications of the benchmark results for the capex and opex allowances.*

# 6. Forecasts of operating expenses (opex)

## 6.1 Background

As is the case with capex, under the NER, the AER is required to accept a DNSP's proposed operating expenditure (opex) if it satisfied that the proposed costs reasonably reflect efficient and prudent costs of providing the services given a realistic expectation of the demand forecast and cost inputs required to deliver the services.[96] If the AER is not satisfied that the operating cost forecast is efficient and prudent, then the AER must not accept the operating cost proposal.[97]

In undertaking this assessment, the AER must have regard to a number of factors, including (inter alia) the most recent annual benchmarking reports and the benchmark operating expenditure that would be incurred by an efficient DNSP.[98]

The AER's understanding of its requirements under the NER, and under the broader objectives and principles set out in the NEL, are included in the AER's Expenditure Forecast Assessment Guideline (Expenditure Guideline) [99] and the accompanying Explanatory Statement.[100] The Expenditure Guideline was developed after extensive consultation with consumers and other stakeholders and should be the basis for both the NSPs' regulatory proposals and the AER's response to these proposals. As noted above, the AER states:[101]

> Our approach [to assessing a network's proposed operating expenditure] is to examine the costs that the objective prudent and efficient operator requires to achieve the expenditure objectives [set out in the NER] (as the capex and opex criteria require). To the extent certain exogenous factors specific to an NSP might impact on the costs of the objective prudent efficient operator, we will need to take those factors into consideration.
>
> This does not mean that the NSPs cannot be benchmarked…

The AER's proposed approach is to use a 'base-step-trend' approach, particularly when an efficiency benefit-sharing scheme (EBSS) is in place, as follows:

- Use the last year of the current regulatory period where validated opex data is available (in this case 2012/13) as the base year, subject to an assessment of the efficiency of the base year opex;
- Identify factors that may lead to a step-change in opex (up or down) to apply for the first year of the forecast opex;
- Include any trends that may impact on opex across the new regulatory period. This includes (inter alia) an assessment of productivity trends.

96 NER, Cl 6.5.6(c).
97 NER, Cl 6.5.6(d).
98 NER, Cl 6.5.6(e)(4).
99 AER, 2014, *Expenditure Forecast Assessment Guideline*, 2013, 4.
100 AER, 2013, *Explanatory Statement, Expenditure Forecast Assessment Guideline*, 6.
101 Ibid, 36.

PIAC generally supports the AER's interpretation of the requirements under the NER and NEL as set out in the AER's Expenditure Guideline. PIAC will therefore argue in this section that the AER should not accept Ausgrid's proposed opex. However, PIAC again highlights that consumers are restricted in their capacity to examine all the elements of the DNSPs' proposed opex and PIAC expects the AER to undertake a thorough examination based on the approach set out in the Guideline.

***Recommendation 13***

*PIAC recommends that the AER not accept the opex proposals of the businesses, and instead apply its benchmarking and other tools to determine both an efficient base cost (for 2012/13) and proposed step and trend changes to this base cost. PIAC does not accept that the 2012/13 actual opex meets the requirement to be efficient and prudent costs without further testing.*

PIAC also notes that comparisons are made more difficult due to the transfer of metering services to alternative control services and various cost accounting treatments as discussed below.

Nevertheless, the AER states that 'on a like for like basis each of the distributors has forecast increases in opex compared to its actual spending on standard control services during the 2009-14 period.'[102] PIAC therefore believes that there should be a strong focus on the DNSPs opex proposals, particularly in areas where the DNSPs forecast growth in real terms.

To illustrate this, PIAC examines Ausgrid's opex proposal in some detail below. It is expected that a number of these issues will be relevant to the other NSW DNSPs.

## 6.2 Ausgrid's opex proposal

Ausgrid is proposing a substantial opex allowance of $2,800M ($2013/14) over five years for the provision of standard control services, including Ausgrid's distribution and transmission services.[103] In preparing the opex forecast, Ausgrid states that it has regard to both its current performance and the anticipated circumstances.[104] In particular, its proposal states:[105]

> Whilst our performance during the current period has provided us with a solid platform going forward, there are however necessary increases in our opex requirements for the 2014-19 aperiod. Nevertheless, we expect longer term benefits to result from these costs, in particular reform costs which will enable a lower opex cost requirement as we enter the 2019-2024 period.
>
> We plan to find efficiency savings to offset these necessary opex increases so that we can strive to contain average increases in our share of customers' electricity bills at or below CPI.

Ausgrid's proposed opex is slightly below the actual opex for the current 5-year regulatory period ($2,941M, $2013/14).[106] Across the five-year forecast period, the annual opex remains fairly

102 AER, 2014, *Issues Paper*, 35.
103 See Ausgrid, 2014, *Regulatory Proposal*, 62, Table 39, which provides a breakdown between the opex for distribution and transmission services. However, as most of the information is presented in combined form, PIAC has used numbers based on the aggregate of the two services.
104 Ibid, 49.
105 Ibid, 48.
106 Ibid, 48.

constant in real dollar terms. However, opex costs will still continue to rise each year in nominal terms, putting continued pressure on prices.

Ausgrid also notes that its actual opex is around 1 per cent below its allowed opex.[107] Although this reduction of actual capex against the AER's allowed opex appears quite small to PIAC, Ausgrid highlights the 'significant reductions in opex' that have been 'enabled' by the implementation of the NRP.[108] It is surprising, therefore, that what appear to be significant reforms conducted over the last few years have not resulted in greater opex reductions relative to the allowed opex. Perhaps the answer lies in the fact that prior to the introduction of this reform, Ausgrid had overspent its capex by some 4 per cent.[109]

Ausgrid proposes to use the actual *underlying opex* of the financial year 2012/13 as the efficient starting base for the assessment of its forecast opex. Ausgrid states that it will then apply any significant changes ('step changes') to the first year of the forecast period (2014/15). Beyond the first year, Ausgrid's opex forecast relies on its forecast of trends in input costs such as labour and material. This approach is consistent with the AER's Expenditure Guideline.

However, Ausgrid also makes a number of accounting and other adjustments to the 2012/13 actual opex, that change the outlook somewhat for assessing its opex trends.

For example, Ausgrid states that its base year 2012/13 'efficient underlying' opex is $544.6M.[110] This represents an upward adjustment from its *actual* opex of $520.9M.[111]

This adjustment from the actual opex to the 'underlying' opex (an increase of some $24M, or 4.5 per cent) reflects the removal by Ausgrid of the 'actuarial component of long service leave costs to ensure that opex base amount is reflective of underlying ongoing costs for the next 5 years'.[112]

The accrual adjustment appears to be even more significant if both the actual and adjusted base year amounts are expressed in the same nominal dollars.[113] In this case, the accounting accrual adjustment of the base year amounts to some $41M or 8 per cent above the actual nominal base year expenditure when both are expressed in nominal dollar terms.

Ausgrid identifies the following reasons for making 'significant changes between historical opex and forecast opex',[114] as follows:

- additional costs of inspecting private mains (legal and regulatory obligation);

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107 Ibid.

108 Ibid.

109 Ibid, based on Table 25, 49. In the first three years, Ausgrid's total allowance opex was $1,755M across the three years (2009-2012), while actual capex was $1,828.3, a difference of 4.1%.

110 Ibid, 53, Table 28. This figure includes $34.8M for services such as metering that is now classified as alternative control services. Ausgrid's forecast opex excludes these items.

111 Ibid, 49, Table 25.

112 Ibid, 53.

113 Unfortunately, Ausgrid's proposal provides some figures in nominal terms and some in real dollar terms ($2013/14). The 2012/13 opex actual result of $520.9M is in real 2013/14 dollars, while the $544.6M is in nominal dollars. This greatly complicates the understanding of the movements in Ausgrid's costs. In a separate section (Table 29), Ausgrid states its underlying opex of $503.6M in nominal dollars, which Ausgrid has adjusted to 'reflect actuarial gains and losses in assessments of long service leave obligations' (Ausgrid, 2014, *Regulatory Proposal*, 53). These adjustments increase the nominal opex for 2012/13 to $544.6M, an increase of $41M, or 8 per cent.

114 Ibid, 50-51.

- additional costs for a more comprehensive asbestos audit and inspections (legal and regulatory obligation);
- leaseback costs of corporate building (efficiency investment);
- demand management initiatives (efficiency investment);
- forecast changes in cost inputs (business cost);
- loss of synergy costs from the transitional service agreement (business cost);
- impact of transitioning to a new cost allocation method (regulatory requirement); and
- efficiency initiatives implementation costs (efficiency investment).

If Ausgrid's proposed accrual adjustments to the 2012-13 base year are put aside, then the underlying nominal increase in opex is in the order of 15 per cent to 20 per cent (depending on the treatment of metering costs). Ausgrid's accrual accounting treatment of the base year, reduces this to an increase of 8 per cent. However, the AER has previously rejected the application of this accounting treatment in preference to a cash based approach. PIAC concludes that Ausgrid's increase in nominal opex from base year to 2014-15 is more than six times inflation, and is unacceptable. Moreover, this excessive estimation of the base year, flows through to each year of the forecast period not just the first year, at a total nominal cost around $400M. PIAC therefore strongly urges the AER to reject the proposal

The next section provides more details on PIAC's specific areas of concern with the proposed opex.

## 6.3 PIAC's concerns with Ausgrid's opex proposal

Notwithstanding that Ausgrid's general approach is consistent with the AER's Expenditure Guideline, there are a number of areas that require further clarification and assessment. PIAC believes that a thorough review of these provides an opportunity to deliver real opex reductions over the regulatory period and reduce pressure on consumer prices.

### 6.3.1 The efficiency of Ausgrid's base year (2012/13) opex

The AER's Expenditure Guideline indicates that where an EBSS is in place, the AER will be minded to accept that the actual opex costs observed in the base year will be the relevant starting point to assess a NSP's opex forecasts..

In the case of Ausgrid, however, there are a number of concerns with the simple application of the 2012/13 'underlying opex' as the base year for the forecast opex. A number of these issues were noted above, and are discussed in more detail below.

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#### 6.3.1.1 The accrual accounting issue

As noted in section 6.2, Ausgrid has adjusted its actual opex for 2012/13 to account for the accrual of long-service leave and other obligations in that year.

PIAC does not profess to understand the details of this issue but does note that the AER has moved towards a 'cash accounting' approach in relation to the treatment of provisions such as long service leave. That is, the AER now includes the estimated cash to be paid out rather than the accounting accrual value that sits in the DNSPs books as a provisional liability.

Ausgrid appears to disagree with the AER's recent approach both in terms of accounting principles and practice. In particular, Ausgrid claims that a cash payout approach 'has a real

potential to result in price shock to consumers (particularly when an organisation is undertaking significant reform)'.[115]

However, PIAC is concerned that the accrual approach appears to have such a marked impact ($41M in *nominal terms*, or 8 per cent increase) on the base year costs for 2012/13, and this will flow into the estimate of efficient costs for future years at an estimated total increased cost of some $200M.[116]

This does not seem an acceptable outcome to PIAC. In addition, while PIAC would be concerned about significant year on year volatility in prices, it is not clear how, under the current regulatory model, 'lumpy' factors (such as cash payouts for long service leave) in the actual costs would impact on the allowed revenue and associated prices.

Firstly, the revenue path tends to be smoothed across the five years in the determination, effectively smoothing out any lumps in forecast costs. Secondly, under a revenue cap approach, actual price movements during the regulatory period will reflect actual changes in revenue (compared to the allowance), not movements in underlying costs.

PIAC therefore encourages the AER to clarify this situation and to assist consumers by providing a consistent and transparent approach.

***Recommendation 14***

*PIAC recommends that the AER seeks clarification of the proposal by Ausgrid to adopt an accrual approach to accounting for provisions such as long service leave. The accrual approach has allowed Ausgrid to bring forward these costs into the base year, and thereby set a higher base for the future opex forecasts.*

#### 6.3.1.2 Benchmark efficient opex for the base year (2012/13)

In the AER's Expenditure Guideline, the AER indicates that it will adopt the base year approach if there is an EBSS in place, and subject to assesment of the efficiency of the base year.

PIAC urges the AER to conduct such an assessment of the efficiency of the base year, 2012/13. PIAC is not minded to accept Ausgrid's contention that the base year is efficient because it is lower than the AER's allowance for 2012/13 in the AER's 2009-14 determination,[117] because it is slightly below the average opex for the period (calculated on nominal dollar terms) and because the 2012/13 actual opex 'incorporates efficiencies from business process improvements'.[118]

Evidence has been provided by a number of analysts that the efficiencies of the NSW government owned networks in both capex and opex are significantly below the efficiency of other privately owned distribution networks in providing regulated network services. For example,

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115 Ibid, 53.

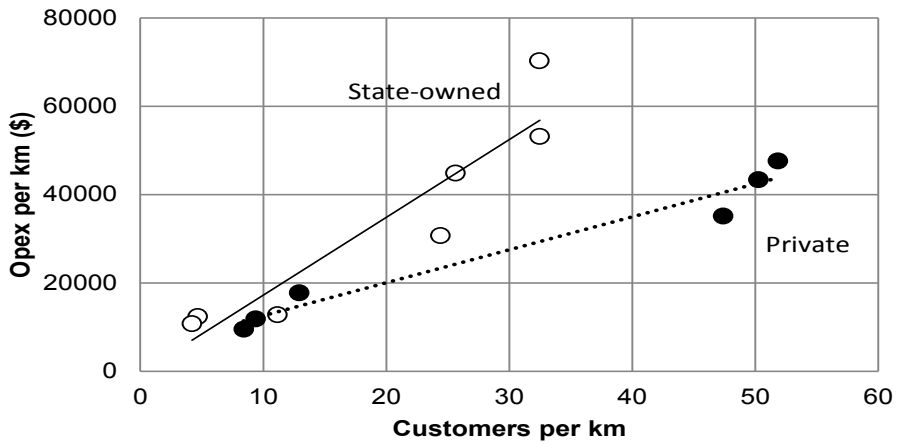
116 That is, assuming the same rate of year on year increase in total opex as set out in Ibid, Table 26. PIAC does not claim this is the exact amount (a better figure would be the net increase compared to the cash payout, but this is not available). However, PIAC does make the point that if the base year is increased by $Y, then all other things being equal, simplistically that increase will perpetuate and accumulate (in the base-step-trend model) across the 5 year period, as $5 x Y.

117 Ausgrid, 2014, *Regulatory Proposal*, 54. Ausgrid claims that it is lower by about $43.7M, but it is not clear whether this is comparing apples with apples, including adjustments for provisions.

118 Ibid, 53.The fact that it is around the average is confusing when calculated in nominal terms, and given the treatment of provisions.

the 2013 report by the Productivity Commission confirmed that government owned utilities performed below the average trend line, taking into account factors such as line length, as shown in Figure 16. Presumably, the AER's benchmarking report will shed further light on this issue, and on any changes in efficiency of opex.

**Figure 16: Operating expenses for state-owned and private businesess ($/km of line)**




While there are always issues with benchmarking, the overall evidence is compelling enough to require the AER to investigate and determine the level of actual opex efficiency, taking into account the various exogenious variables.

PIAC also notes here that the fact that it is a government owned utility is not in itself a justification for a higher opex[119] other than to the extent that the utility has obligations under regulation or law that does not prevail for other utilities (such as the reliability standards). That is, in amending the NER, the AEMC removed the specific requirement for the AER to consider 'individual circumstances' although it stressed that exogenous factors must be considered.[120]

PIAC considers that the NER obligation to assess whether opex in the base year is efficient and prudent is independent of the AER's previous determinations of the efficient level of opex. To claim otherwise, as Ausgrid appears to do, belies the objectives of all the reform of the NER and the Better Regulation program itself.

As a final comment, PIAC would also dispute the claim that the 2012/13 year reflects the business process improvements, and that therefore, it reflects the efficient levels of expenditure. The NRP Network Businssess Reform process is welcomed by NSW consumers, and has resulted in significant savings compared to the original expenditures approved by the AER. However, this does not mean that in 2012/13 (the first year of full implementation of the reform), the actual costs reveal the benchmark efficient levels of opex.

Therefore, PIAC's strong view is that the AER should undertake further investigation of the efficiency of the base year, and set it at a level commensurate with the benchmark efficient firm,

119 This parallels the argument put by the NSW networks that in assessing the rate of return; the AER must consider the efficient financing costs for a benchmark efficient firm, not the actual costs to the owners.

120 As the AEMC noted when it removed the requirement for the AER to consider 'individual circumstances' it still recognised the importance of the AER to take into account factors such as regulated standards, topographies, climate and similar factors. See discussion in AER, 2013, *Expenditure Forecast Explanatory Statemen*t, 36.

not the actual costs claimed by Ausgrid, nor the costs previously approved by the AER. The AER is not bound by its previous determinations, particularly given it has since spent considerable time and resources in developing suitable benchmarks in consultation with stakeholders. It is hoped that these can be brought to bear on the AER's determination of efficient base year opex in the NSW determinations.

***Recommendation 15***

*PIAC recommends that the AER publish its benchmarking material so that consumers can form a view on whether the NSW networks are operating at a 'best practice level', and if not, how far from the efficiency frontier are they (following the NRP reforms).*

***Recommendation 16***

*PIAC recommends that the AER sets a productivity quotient for each DNSP to ensure that efficiency improvements are continuous and cumulative; CPI growth in opex is not consistent with this objective.*

#### 6.3.1.3 Step changes in opex

Ausgrid is suggesting a number of factors to explain a step change (upwards) from the adjusted base year. A number of these are factors are discussed below.

*Inspection services and asbestos audits*:
Ausgrid claims step changes in relation to inspection services and asbestos audits as a result of regulatory obligations. PIAC would ask the AER to investigate whether these are really step changes or costs also embedded in the 2012/13 base year. If the latter, then they do not explain per se, the proposed step change in opex costs.

*Demand Management Initiatives:*
A similar question arises from the claim that demand management initiatives are part of the explanation for 'significant changes between historical opex and forecast opex'.[121] In addition, PIAC would seek clarification about how these costs are included in general opex and separately identified under the specific demand mangement schemes. PIAC seeks reassurance that these costs are not double counted and that consumers can see a clear benefit arising from these demand mangement activities in the forecast regulatory period and beyond. The DNSPs' demand management initiatives are discussed in further detail in section 8, below.

*Leaseback costs of corporate building:*
The city headquarters of Ausgrid have been recently sold for a reported $151M (which is above its depreciated value in the RAB), [122] and it appears Ausgrid is taking out a lease on the buidling for a further 3 years. Ausgrid claims that consumers will benefit because of the reduced RAB and, longer term, efficiencies in opex.[123]

As PIAC understands it, consumers have funded the purchase and upgrade of this buidling through the network tariffs since the rapid expansion of employee numbers in the period 2005 –

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121 Ausgrid, 2014, *Regulatory Proposal*, 50.

122 See for example, NSW Government, *Government News*, 'O'Farrell sale of Ausgrid HQ sale nets $151 mil', March 2014. The Minister for Finance and Services, Andrew Constance, is reported as stating that the $151.8M generated from the sale 'significantly exceeded its retention value' and will be used to fund essential services and more infrastructure across the state.

123 Ibid 50. The transaction occurred in March 2014, but will not be completed until 1 July 2014.

2010. However, based on the publically available information, it does not appear that consumers will receive any direct benefit from the sale as this appears to be claimed by the NSW Government, rather than revenues to Ausgrid's customers. *If* this is the case, it means consumers who have effectively funded the initial purchase, receive only a long-term benefit from the sale (through the reduced RAB and associated lower return of and retun on capital costs) and now must fund the leasing costs.

PIAC would, therefore, request that the AER further analyses this claim by Ausgrid, given that the cost of the building was funded by consumers, but the sale benefits are going to the State.

*Forecast changes in cost inputs:*
Ausgrid states that it anticipates the rate of increase in labour costs and contracted services costs for the next period to be above expected CPI.[124] Ausgrid's forecast opex includes the assumption that labour unit costs will increase by an average of around 2 per cent above CPI, and contracted services at about 1.5 per cent real.[125]

Ausgrid has referred to a number of economic forecasts to support its claim for above CPI increases in labour and contractor costs. However, PIAC considers the claim warrants further examination. The situation for wage growth has changed markedly in the last few years compared to the start of the current regulatory period, with average wage increases at or below CPI. With a relatively soft labour market, this situation can be expected to continue and could be expected to flow through to contractor labour as well. In line with this, productivity per hour is increasing, as illustrated in Figure 17, using RBA data to March 2014.[126]

Both the marked decrease in growth of wages costs and average earnings per hour (below CPI), and the increase in productivity per hour, raise significant questions about Ausgrid's forecast. It is highly questionable if Ausgrid should be allowed to increase its prices above CPI in each of the five forecast years, particularly as the current Enterprise Bargaining Agreement is due to end in December 2014.[127]

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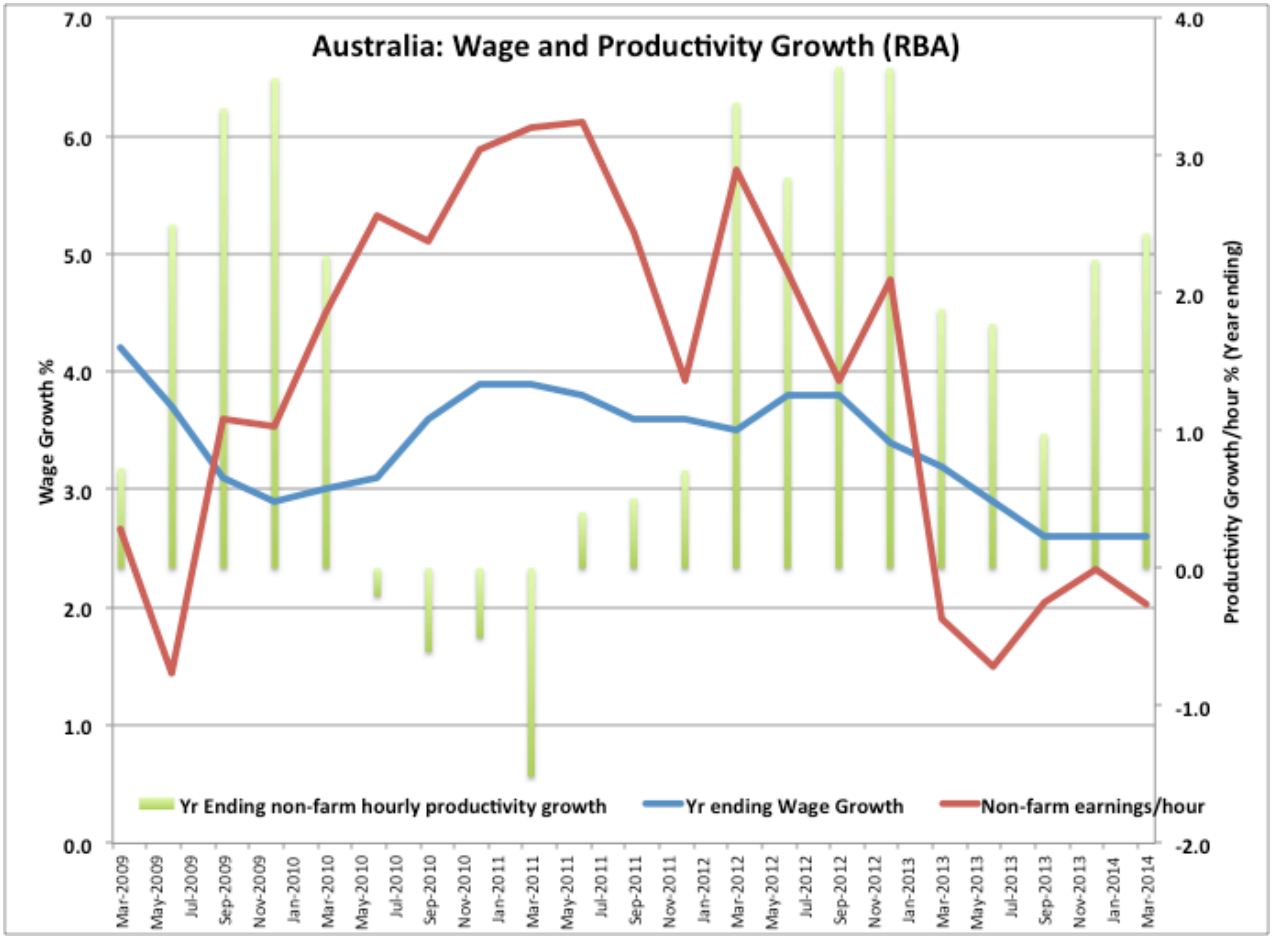
124 Ausgrid, 2014, *Regulatory Proposal*, 50.
125 Ibid, Table 31, 56.
126 Source: RBA, Statistics Report, h04hist-1(Mch 2014). Available at http://www.rba.gov.au/statistics/tables/index.html as at 28 July 2014.
127 Ausgrid, 2014, *Regulatory Proposal*, 55.

**Figure 17: Wage and Productivity Growth**




In addition, even if average wages growth for Ausgrid is higher than CPI, the overall wage bill should be reduced as Ausgrid's claimed improvements in the sizing and management of its workforce comes into play. Consumers, who have funded through the network prices a dramatic expansion of the work force, the extensive use of over-time[128] and wage rises significantly above CPI, should not be faced with a step change for labour costs that is above CPI and continues to grow across the five years.

Ausgrid also forecasts that materials costs will increase at around CPI on average. While this seems reasonable, PIAC expects the AER to undertake further investigation of this aspect of the proposal, along with a vigorous appraisal of total labour costs including both the the number of employees and the rate of change in wages.

*Loss of synergy costs:*

Ausgrid is claiming that the loss of synergy costs arising from the separation of the networks and the retail arms of the company amounts to some $65M. Specifically, the claim relates to the cessation of the transitional service agreement with TRUenergy (now Energy Australia). However, Ausgrid also claims that it 'expects all cost increases due to the loss of synergies to be

128 For example, before the introduction of the NRP, the NSW Auditor-General estimated that Ausgrid had 'booked' a million hours of overtime since 2009. See NSW Auditor-General, 2012*, Report to Parliament, Volume Four Ausgrid,* November, 2012, 26. Available at: http://www.audit.nsw.gov.au/AOReportSearch.aspx?yBase=3&yrf=Year%20-%20From&yrt=Year%20-%20To&ids=0,0&keyw=Ausgrid&pageModule=465&ModuleID=821

fully offset [by 'savings'] in our cost structure by 1 July 2017'[129] with an overall net impact of $26M.[130]

PIAC regards this as an extraordinary claim for a step change in opex, and considers that the AER should reject such a claim, as it should the costs of other reforms, restructures and so on.

It would set an unfortunate precedent. What is to stop other networks who restructure their global organisations from making a similar claim of l'oss of synergies'. In a competitive market, such costs are borne by the business not by its customers, and are taken on in the expectation of a net benefit to the business over time to the business. In addition, in 2012 the NSW Auditor-General reports that Ausgrid 'has developed a plan to manage the financial impact of stranded costs associated with the sale of its retail assets'.[131] The expected costs were reasonably known ($25.1M in $2011/12), and should have been included as an offset to the sale revenue, not a cost to future electricity consumers.

That is, it seems to PIAC that this loss of synergy, if it does exist, is purely a 'cost of sale', that is, it relates to the processes by which the NSW Government disaggregated and sold off its retail assets. It has nothing to do with the provision of the regulated services, and should be funded directly by the Government out of the proceeds of the sale of the retail businesses.

*Efficiency Initiatives:*
Ausgrid is claiming that its efficiency initiatives will drive a total saving of $230.4M ($2012/13) across the regulatory period, for a cost of $105.5M ($2012/13), a net benefit of $115M in real terms or an average of $20-25M per year.[132]

It is not immediately apparent to PIAC if these savings include the savings initiatives to address the claimed impact of the 'loss of synergy' or are additional savings. Either way they are welcome.

However, these efficiency initiatives are clearly not sufficient to drive down the overall opex, which continues to grow at around CPI. Given a history of relatively low productivity across the industry, and lower levels of efficiency on a number of variables for the company, this is simplly not sufficient. The problem is made more even more critical by the risks of falling demand and energy utilisation which potentially put further pressure on average prices.

In a competitive market, such a situation would require management to drive even greater efficiencies, sitting on a CPI increase year on year simply would not suffice. The same market discipline should apply to the monopoly service providers.

PIAC suggests that the AER should commit to assessing all the DNSPs' opex, including Ausgrid's opex against best practice. PIAC also expects the AER to apply its 'productivity factor', to ensure that gains in efficiency are continuous and cumulative across the regulatory period.

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129 Ibid, 57.
130 Ibid.
131 See NSW Auditor-General, 2012*, Report to Parliament, Volume Four Ausgrid,* November, 2012, 27.
132 Ibid, 51, Table 26.

***Recommendation 17***

*PIAC recommends that the AER investigate whether the DNSPs proposed step changes are step changes, or whether these costs (such as inspection services) are already embedded in the 2012/13 base year opex.*

***Recommendation 18***

*PIAC recommends that the AER investigate the net benefit consumers have received under the current demand management allowances, and how these benefits and those in the forecast period are flowing through to lower consumer prices or better services.*

***Recommendation 19***

*PIAC recommends that the AER further examine the proposed increase in costs for the next two to three years for the sale and leaseback of Ausgrid's corporate building in Sydney.*

***Recommendation 20***

*PIAC recommends that the AER further investigate the claim by DNSPs regarding continued growth in wage costs above CPI across the price determination period to assess if it is consistent with current trends in wages and with the expectation for improvements in labour productivity.*

***Recommendation 21***

*PIAC recommends that the AER reject the 'loss of synergy costs', in order to avoid setting a precedent for restructuring cost claims in the future.*

## 6.4 Efficiency Benefit Sharing Scheme (EBSS)

While not stricly part of the opex calculation, it is useful to discuss this EBSS in the context of the previous discussion on the efficiency of the historical and forecast opex. PIAC notes here that the EBSS is designed to incentivise more efficient performance by the NSPs by allowing the long term retention by the DSNP of about 30 per cent of any 'under-spend' of the allowed opex.

Ausgrid is proposing that it should receive an EBSS payment of some $455M based on the scheme set out by the AER in its 2009-14 determination.[133] Endeavour Energy also seeks a large EBSS payment of some $200M.[134]

PIAC relies on the AER to assess whether this figure of $455M is a correct calculation of the agreed EBSS arrangements for Ausgrid, and similarly for Endeavour Energy's claim of $200M. PIAC's concern is more one of principle.

It is a shock to consumers, who have been subject to such extraordinary price rises, to realise that Ausgrid intends to charge its customers an additional $455M for efficiency improvements in the last regulatory period. Even if the NER allows such a cost pass through, as a matter of principle and good business practice this cost could be 'waived' by Ausgrid, or directed to do so by the NSW Government.

133 Ausgrid, 2014, *Regulatory Proposal*, Table 8, 22

134 Endeavour Energy, 2014, *Regulatory Proposal*, Table 4, 32 or Table 9, 36. Table 4 gives a figure of $207M, while Table 9 gives an adjustment for EBSS of $197M.

Ausgrid (and Endeavour Energy) should recognise and accept that its current regulatory opex allowance did not represent the efficient and prudent costs of delivering the standard control services. Many papers have since demonstrated this, and it was a major factor in the amendments to the NER. Moreover, Ausgrid implicitly recognises this fact itself as throughout its proposal it refers to the actions taken or planned to improve its efficiency. In summary:

- Ausgrid's 2009 forecasts of demand were excessive, as were its forecast of capex and opex which were each well above benchmark efficient performance observed in other Australian DNSP;

- As a result, and given the difficulties in the NER (which have now been recognised and addressed to some extent), Ausgrid's capex and opex allowances were excessive;

- Ausgrid managed to beat the allowed targets for opex (and capex), but largely because:
    - Ausgrid was unable to devlop the resources and manpower to implement its ambitious plans; a fact that it acknowledges now and should have been aware of at the time the plans were made; and
    - The NSW Government stepped in to force consolidation and efficiencies on the networks; until the imposed reforms, Ausgrid was spending above its regulatory opex allowance.

- The benefits of these savings in opex in the later years of the current regulatory period have already been returned to the company and its shareholder (the NSW Government) in the form of higher dividends and tax receipts. To charge higher prices in this regulatory period, is a form of double jeopardy for consumers.

In PIAC's view, given these circumstances, a decision should be made by Ausgrid or the Government to waive this particular 'reward' payment for Ausgrid. This action in no way detracts from Ausgrid's ability to receive an EBSS in the future, assuming that the regulatory opex is set at reasonable, benchmark efficient levels. A similar consideration should apply to Endeavour Energy.

***Recommendation 22***

*PIAC recommends that the AER check Ausgrid's EBSS calculations, and consider what this means for setting the opex in the next regulatory period.*

# 7. The regulated rate of return

## 7.1 Overview of the DNSPs' rate of return proposals

The regulated rate of return is the key component of the overall revenue requirement for a DNSP. When applied to the regulated asset base it represents around 50 per cent or more of the total cost base of the networks.

Under the NER, the regulated rate of return is calculated on the basis of the weighted average cost of capital (WACC). In the past, the WACC and its constituent elements have been the major area of contention between the DNSPs and the AER and have been regularly subject to appeal by the DNSPs to the Australian Competition Tribunal (the Tribunal) with varying results.

The reforms to the NER were in part designed to address this issue by providing more flexibility to the AER to exercise its discretion in the long-term interests of consumers when assessing the WACC, subject to satisfying the NEO, the allowed rate of return objective in the NER and the revenue and pricing principles in the National Electricity Law (NEL). Similarly, reforms to the Tribunal's processes were designed in part to reduce the incentives for the DNSPs to undertake expensive litigation over esoteric points as well as to clarify that the Tribunal must take into account the broader impact of its decisions on consumers' long-term interests.[135]

The amended NER now states that the AER must make its rate of return decision to satisfy the *allowed rate of return objective.* This objective is set out in the NER as follows:[136]

> The *allowed rate of return objective* is that rate of return for a [DNSP] is to be commensurate with the **efficient financing costs** of a **benchmark efficient entity** with a **similar degree of risk** as that which applies to the [DNSP] in respect of the provision of *standard control services*. [PIAC's emphasis]

The NSW DNSPs are proposing that a WACC of **8.83% for 2014/15**[137] **represents the efficient financing cost of a benchmark efficient entity of similar degree of risk.**

This is somewhat higher than the DNSP's proposal of a WACC of 8.52% in their January 2014 transitional proposals. The DNSPs have increased their proposals with respect to both the return on debt and the return on equity. The conclusion from this change is that the DNSPs believe their cost of capital has risen since the start of the year. In practice, interest rates have continued to decline, and the change is more a result of some further changes to the methodologies they are using to assess these costs.

Worth noting is that the DNSPs' proposed WACC of 8.83 per cent is now only 119 basis points below the WACC of 10.02 per cent that was allowed (after appeal[138]) to the NSW DNSPs in 2009.

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135 The NEL was amended in December 2013, following an extensive and rather critical review of the operation of the Tribunal, and its decisions which reflected a narrow focus on legal issues rather than the overall NEO.

136 NER, Cl 6.5.2 (c)

137 The transitional determination set a WACC for 2014/15 in April 2014 of 8.1%. However, this WACC will be updated to be consistent with the AER's final determination for the full five-year regulatory period, taking also into account that the cost of debt component of the WACC will be updated annually.

In 2009, the world's economic environment was very challenging, consumer and business confidence was very low, commercial bond rates were much higher and more volatile and financial liquidity generally was also very constrained. Conditions five years later are considerably more stable and interest rates across the world have persisted at very low levels.

It is rather surprising, therefore, to see the DNSPs suggest that their financing costs have only reduced by some 1 per cent, many other businesses appear to have been able to take much better advantage in their funding portfolios of much lower and more stable borrowing costs through refinancing and other strategies.

The NSW DNSPs' proposals can also be compared with the AER's transitional WACC determination of 8.1 per cent based on the parameters and models set out in the Rate of Return Guideline.[139] PIAC considered that this figure of 8.1 per cent was at the high end of the range of outcomes that the AER considered was consistent with the Rate of Return Guideline. These outcomes ranged from 7.6 per cent to 8.1 per cent.

PIAC believes, therefore, that the NSW DNSPs' proposed WACC of 8.83 per cent is well in excess of what is required for the efficient financing of an efficient benchmark entity. It will result in prices to consumers that are higher than necessary for an efficiently financed regulated monopoly with very low risk.[140]

PIAC believes, therefore, that the NSW DNSPs' proposed WACC of 8.83 per cent is well in excess of what is required for the efficient financing of an efficient benchmark entity. It will result in prices to consumers that are higher than necessary for an efficiently financed regulated monopoly with very low risk.[141]

PIAC believes that the DNSPs have come to this erroneous outcome by varying the approach to the WACC assessment from that set out in the Rate of Return Guideline.

In PIAC's response to the transitional determination,[142] PIAC considered all the components of the DNSPs' WACC proposal in detail to demonstrate the problems with the DNSPs' proposed approach to vary from the guideline in key areas of the WACC. The current proposals step even further from the Guideline, particularly in the assessment of the cost of equity.

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138 The AER Final Determination for the period of 2009 to 2014 set a WACC of around 8.80%. This was amended to 10.02% following the Tribunal orders to accept the DNSPs' proposed averaging period for the nominal risk free rate, albeit the AER's proposed averaging period was arguably more consistent with the economic CAPM theory. This Tribunal's order resulted in an estimated additional $2 billion dollars in revenue for the NSW networks. See Australian Competition Tribunal, *Application by Energy Australia and ORS* [2009] ACompT8, December 2009. Also see: http://www.aer.gov.au/sites/default/files/AER%20statement%20on%20updates%20for%20NSW%20DNSPs%20distribution%20determination_1.pdf

139 AER, 2014, *Transitional Determination for NSW & ACT Distribution Service Providers*, 6.

140 It should be noted that the business risk is reduced even further by the AER adopting an annual updating of the cost of debt. This replaces the risk inherent in determining a fixed rate of return to apply for the whole of the 5-year determination period.

141 It should be noted that the business risk is reduced even further by the AER adopting an annual updating of the cost of debt. This replaces the risk inherent in determining a fixed rate of return to apply for the whole of the 5-year determination period.

142 PIAC, 2014, *The Opening Act, PIAC response to the Transitional Regulatory Proposals by the electricity distribution network service providers in NSW for 2014-15,* 9. Available At: http://www.piac.asn.au/publication/2014/03/opening-act

In this section of PIAC's submission PIAC will also directly address the more specific claim made by the DNSPs that the AER's approach would lead to an outcome that is below their cost of capital and would, therefore, provide a disincentive for the DNSPs to invest in their networks and meet the service requirements of consumers. For example, Ausgrid states in their proposal:[143]

> Finally, any under-recovery of Ausgrid's efficient costs [of financing] may lead to inefficient under-investment in distribution networks given that under-recovery will be reflected in the revenue that Ausgrid may earn (and the prices that Ausgrid may charge). The potential consequence of under-investment in Ausgrid's distribution network is significant given security of supply risks and the importance of electricity to consumers.

PIAC challenges this assertion that there will be under-recovery of **efficient costs** if the AER's Rate of Return Guideline is followed.

As evidence, PIAC will not only point to the various models and their assessments that have formed part of the development of the Rate of Return Guideline, but also to various data on the actual financial performance of the networks. This includes an assessment of the extraordinary level of profits generated by the networks in the past few years notwithstanding the highest ever level of expenditures in the same period, and the parallel decline in energy usage. Also included in this assessment is an examination of the f*orecasts* for the future financial outcomes of the NSW DNSPs as revealed in (for instance) the NSW Government budget papers.

Notably absent from the DNSPs' proposals are any reference to and quantification of the risk to consumers of **over-recovery** of efficient cost of capital. Consumers have already borne the costs of an excess allowance for capital costs over the last four to five years, and their businesses and households have suffered accordingly. PIAC finds it unacceptable to again transfer risk to consumers for another five years by overestimating reasonable efficient capital costs.

As noted previously, commercial interest rates have declined rapidly in the years after the GFC.. However, electricity users have received no benefit from this in terms of electricity network price reductions; they continue to pay prices as if the GFC was still happening. The higher revenues and 'surplus' profits generated by the decline in actual capital costs have been entirely captured by the networks and their owners.

It is, however, most important to note that PIAC is not proposing that the AER move away from the concept of the efficient financing of the benchmark efficient firm; this concept is fundamental to the rate of return assessment as defined in the NER. Rather, the use of actual network business and financial data is included in this section to challenge the claim made by the DNSPs that applying the AER's Guideline will result in a cost of capital allowance that is below the real costs of their businesses and restricts their future investment.

The following sections discuss aspects of the theoretical approach proposed by the DNSPs that do not align with the guideline and the varied evidence that indicates the networks are not likely to under-recover efficient financing costs. PIAC urges the AER to take both these matters into consideration.

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143 Ausgrid, 2014 *Regulatory Proposal*, 74.

## 7.2 The theoretical considerations

### 7.2.1 Overview

All the DNSPs have adopted the same approach to assessing the regulated rate of return, and refer to the same consultancy reports. Their approach is largely, but not totally, similar to the approach adopted by the DNSP's in their transition proposals and rejected by the AER when it made its transitional determination.

In particular, the DNSPs have extensively relied on the advice of the same consultants and submitted many specialist papers (or updated versions of the papers) that were also considered by the AER and others during the 2013 Better Regulation process. The summary report prepared by Competition Economics Group (CEG)[144] provides the basis for the DNSPs' claims with respect to the rate of return parameters and the value of imputation credits.

From PIAC's perspective, both the AER and consumers have very largely already considered these models and alternative approaches during the Better Regulation process. Following this extensive consultation period, the AER has drawn its conclusions on what the appropriate principles, methodologies and data available and has provided extensive response to each of the issues raised by the DNSPs and consumers in the final Rate of Return Guideline and the accompanying Explanatory Statement. Consumer representatives, including PIAC, were not satisfied with all the AER's decisions but accepted that the final Guideline provided a reasonable, and reasoned, framework for economic regulation of networks for the next three years. To the extent there were disagreements with the AER's approach, these could be brought forward in the mandated review of the Rate of Return Guideline to be conducted in less than three years time.[145]

PIAC recognises that the NER does not provide a legal obligation on the DNSPs to adopt the approach set out in the Rate of Return Guideline. However, in proposing an alternative approach that is not consistent with the Guideline, a DNSP must explain its reasons and should demonstrate to its customers and the AER that the alternative approach to establishing the benchmark efficient rate of return is a better way to achieving the NEO, that is, a better way of meeting the long-term interests of consumers in the supply of electricity.

PIAC does not believe the NSW DNSPs have provided such a reason. The main reasons given by the DNSPs to explain their proposals to vary from the Rate of Return Guideline seem to be:

- The AER is obliged under the rules to consider all these alternative models; and
- The rate of return obtained under the AER's guideline approach will not enable DNSPs to recover their efficient costs to provide the networks services.

However, the rules do not oblige the AER to include in their final Guideline all possible models (and their many variations), data sources and so on. Rather, the AER - having consulted widely - has the discretion to choose those models, data and approaches that it considers best meet the regulatory criteria of recovering the efficient financing costs of an efficient benchmark entity with similar degree of risk.

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144 Ibid, Attachment 7.01, *WACC estimates, a report for NSW DNSPs,* 2014.

145 Under the NER, the AER's Rate of Return Guideline must be reviewed at 'intervals not exceeding three years'. See NER, cl 6.5.2 (p) (1).

Having undertaken such a task, the Rules simply require the AER to set out in a Guideline which 'methodologies'[146] it proposes to use, how these will result in a determination on the rate of return on equity and debt in a way that is 'consistent' with the allowed rate of return objective and what 'estimation methods, financial models, market data and other evidence'[147] the AER will take into account. The AER's final Rate of Return Guideline[148] and associated Explanatory Statement [149]quite clearly achieves this outcome while retaining flexibility to respond to changes in the market, for instance, to update the market risk premium (MRP).

For example, the AER sets out some key elements relevant to any approach to determining the efficient cost of capital, as follows:[150]

- the determination should be based on the efficient financing costs of a benchmark efficient entity of similar risk; it is **not based on the specific financing circumstances of an individual network business.**

- **objective assessment criteria** should be established (ex ante) to guide the selection and use of estimation methods, market data and other evidence. The AER undertook an extensive review of many different models and data source, before formulating its approach in the guideline.

- the approach should be **responsive to changing market conditions and new evidence but at the same time provides sufficient certainty** to all stakeholders. The AER used both historical and current data to develop its approach and apply it to the transition determination.

- **effective consumer engagement** through an accessible consultation process. The development of the rate of return guideline involved an extensive consultation process with consumers through presentations, meetings, workshops and papers.

The NSW DNSPs' proposals for the WACC components, while varying from the AER's Guideline, do not appear to have adequately addressed these key elements.

For instance, in proposing an alternative approach to assessing the cost of debt, the DNSPs make considerable reference to the debt financing strategies of their specific network, and the need to recover at least their 'actual cost of debt'. However, the task of the regulator is to assess the efficient financing costs of a benchmark efficient firm. Each DNSP's own costs are not directly relevant to this conceptual definition of the WACC.

In any case, PIAC is not convinced that adopting the AER's Guideline will in fact mean that the NSW DNSPs cannot recover their actual cost of debt. For instance, under the proposed changes to their actual costs of debt recently announced by the NSW Treasury, Treasury states:[151]

146 NER, cl 6.5.2 (n) (1).
147 NER, cl 6.5.2 (n) (2).
148 AER, 2013, *Better Regulation, Final Rate of Return Guideline*.
149 AER, 2013, *Better Regulation, Explanatory Statement – Rate of Return Guideline*.
150 Ibid, 8. The list is a summary of the AER's criteria, more details are available in the Explanatory Statement.
151 The NSW Treasury, 2014, *Government Guarantee Fee Policy, Treasury Circular,* NSW TC 14/08, 3.

> NSW businesses have the opportunity to manage debt funding risk, base interest risk, credit cost risk and inflation risk completely independently from one another. These flexibilities demonstrate that NSW utilities have **significantly more policy and product flexibility to reduce debt costs and manage risks than private sector borrowers**. [PIAC's emphasis]

Moreover, PIAC also notes the inconsistency in the DNSPs underlying approach. For example, while the DNSPs focus on the need for the regulator to replicate their (claimed) actual debt costs and debt structure, they were comfortable to accept the AER's 'benchmarks' for the assumed credit rating (BBB+) and gearing level (60 per cent).[152] Similarly, the DNSPs are silent on their actual return on equity that is currently considerably higher than the regulatory allowance (See 7.2.4).[153]

In 2009, after a successful appeal by the NSW NSPs, the AER determined a return on equity of around 11.8 per cent.[154] The NSW DNSPs, however, are now reporting a return on equity (net profits after tax) as around 20 per cent.[155] These actual returns do not seem to have been considered as part of the DNSPs' proposal for the return on equity. Instead, the DNSPs proposals are focussed on extensive debates about equity models and determining a benchmark efficient equity.

Finally, PIAC is not aware that the DNSPs have undertaken any significant level of engagement with consumers to explain their proposal and why they have chosen to vary their approach from the AER's Guidelines and how it will be in consumers' long-term interest to increase costs to consumers by some $1 billion dollars.[156]

Nor do the DNPS appear to have explained to consumers why they are proposing a rate of return that is only 119 basis points below the very generous rate of return allowance in 2009-14 when interest rates and commercial bond rates have declined rapidly after the GFC, there is ample liquidity and reasonable stability over the last four years. Figure 18 illustrates how much the financial market has changed since the 2008-09 period. It is puzzling therefore that the DNSPs are proposing such a small reduction in their actual debt costs compared to 2009.

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152 The DNSPs generally have a somewhat higher gearing (65 per cent to 75 per cent) which reduces the WACC as debt costs are lower than equity cost allowances.

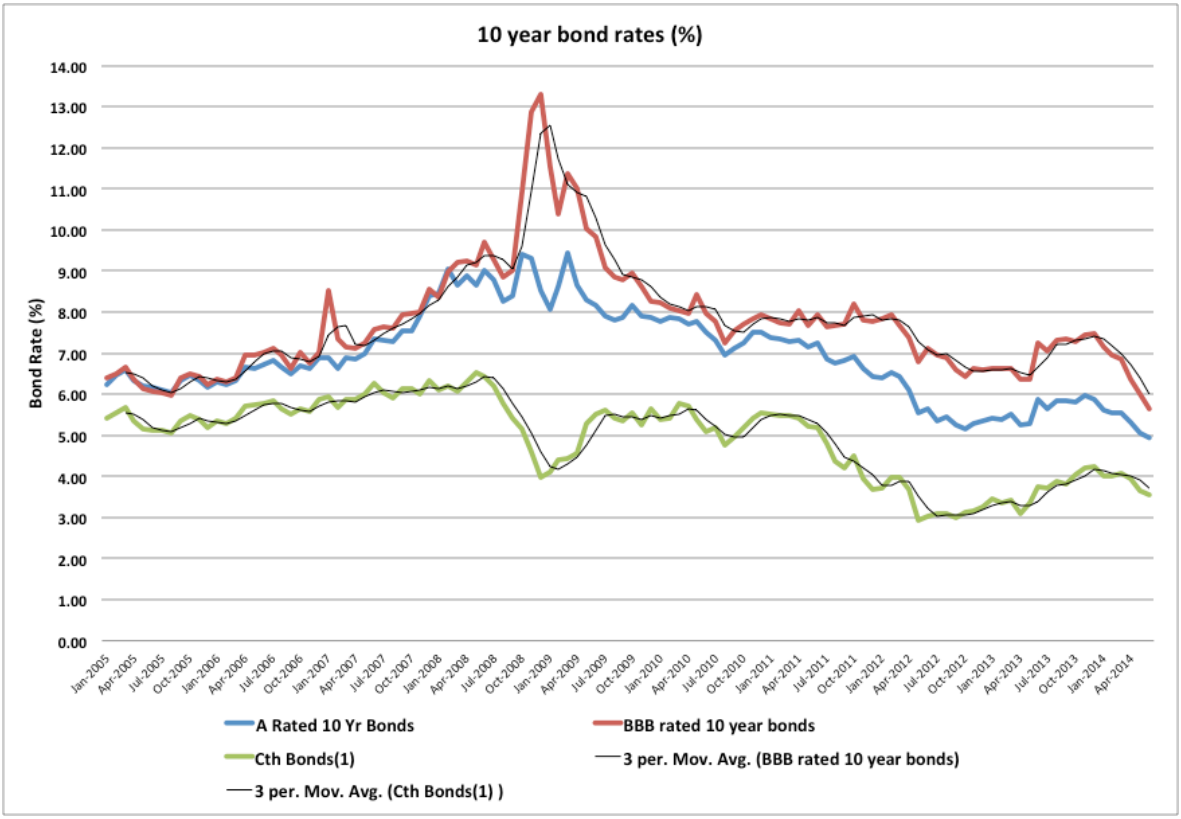
153 That is, while the allowance for the cost of equity in 2009 was 11.8%, an actual return on equity of 20% means that consumers are paying excess prices as a result of an overgenerous allowance from the regulator.

154 After the Tribunal's decision on the NSW networks appeal which reset the averaging period for the risk free cost (Commonwealth Government 10-year bonds).

155 From the 2012/13 Annual Reports of each of the NSW DNSPs. Further details are set out in Section 7.2.4 of this submission.

156 Estimated on the basis of the difference between the proposed WACC of 8.83% and PIAC's estimate of the WACC derived from applying the Guideline of around 7.7%, applied to the asset base of the DNSPs.

**Figure 18: Commonwealth Government and commercial bond rates 2005-2014**[157]




These issues are examined below in the context of each of the primary components of the WACC assessment. Many of PIAC's concerns have been already set out in detail in PIAC's response to the transitional proposals[158] and are restated below.

### 7.2.2 Return on equity

The NER require that the return on equity must be estimated such that it contributes to the *allowed rate of return objective* and that, in estimating the return on equity, regard must be had to the *prevailing conditions in the market for equity funds*.[159]

The emphasis in the return on equity under the rules is, therefore, on establishing a forward-looking estimate of the return on equity. There is general agreement that there is no one model or approach that achieves this outcome with any certainty, and that various sources should be relied on to provide the best estimate of the cost of equity. However, a most important condition is that the models are relied upon in a systematic and transparent way. There should be no opportunity for the DNSPs or the AER to 'cherry pick' the models or mix of models for each determination on the basis of the outcomes they deliver to the proponent.[160]

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157 Reserve Bank of Australia, Reports No F02 and F03hist.

158 See PIAC, 2014, *The Opening Act, PIAC response to the Transitional Regulatory Proposals by the electricity distribution network service providers in NSW for 2014-15,* 17-34. Available At: http://www.piac.asn.au/publication/2014/03/opening-act

159 NER, cl 6.5.2 (f) and (g), respectively.

160 PIAC's concerns with cherry-picking arise in part out of previous disputes between the DNSPs and the AER regarding which source(s) should be used to determination the cost of debt. There was clear evidence of changing approaches by the networks depending on the outcomes of each approach at the time of the determination. For example, in the past, DNSPs and the AER have proposed various sources of data to obtain a 10-year bond rate, such as Bloomberg extrapolated, CB Spectrum, the average of both, a weighted average

The AER undertook extensive investigation of this issue and concluded that the Sharpe-Lintner Capital Asset Pricing Model (S-L CAPM) best met the ex-ante criteria for a regulatory cost of equity model, was transparent, supported by a body of economic theory and well-understood by stakeholders and regulators.

The S-L CAPM was therefore selected as the 'foundation' model' to provide a range of reasonable estimates for the cost of equity. Having established the range of outcomes, the AER could select a point estimate taking into account current market data and other modelling approaches such as the Black CAPM and the Dividend Growth Model (DGM).[161] The overall result could be checked against other market data, valuation reports and the views of various experts such as Professor Wright[162] on the relationships between the risk-free rate and the market risk premium (MRP).[163]

The DNSPs' proposals have adopted the general approach set out in the Guideline of establishing a range of possible outcomes and then selecting a point estimate within the range. However, the DNSPs' approach and the AER Guideline are significantly different in the models used, in the calculations of the input parameters and the final outputs of the approach.

In particular, the DNSPs' approach varies from the relatively straightforward calculation of the forward-looking S-L CAPM and introduces considerable complexity and uncertainty into the calculation of the overall cost of equity range and point estimates. An examination of the detail of the key parameters in the CAPM model illustrates this point.

#### 7.2.2.1 Calculation of the risk free interest rate

The risk-free interest rate is an input into the cost of equity calculation in the CAPM model. Using readily available data and consistent with the assessment of a forward looking estimate of the cost of funds, the AER Guideline proposes to use 10-year Commonwealth government securities based on the 'prevailing' yield averaged over a short period close to the date of the determination.

In contrast, the DNSPs propose to use a long-term average of the risk-free rate, claiming that this best aligns with the long-term assessment of the MRP.[164]

The DNSPs state that it is important to have internal consistency in the model by using the long-term average risk free rate in combination with the long-term average of data on excess returns that is used to estimate the MRP (as both terms sit in the same cost of equity equation).[165]

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of both and so on. Generally, the combination that provides the highest or near highest outcome at that particular time is the one that appears to be pursued most vigorously by the proponents.

161 There are a number of different specifications of the DGM of increasing complexity, such as the two stage and three stage models, which can lead to different results. The variability of the DGM outputs, and their dependence on input assumptions, is one of the major limiting factors in its use as the main model for regulatory purposes. See AER, 2013, *Explanatory Statement, Rate of Return Guideline*, Appendix A, 14-15.

162 The approach proposed by Professor Wright recognises the possibility of a perfectly negative relationship between the risk free rate and the MRP, while also recognising the importance of the equity beta estimate to estimating the overall return on equity. See ibid, Appendix B, 24-.27.

163 AER, 2013, *Explanatory Statement, Rate of Return Guideline*. The outline of the AER's approach is adapted from pages 9 and 10 of the Explanatory Statement.

164 The DNSPs also calculate a short term MRP and short-term risk-free rate, but have generally proposed that the long term risk-free rate and long-term MRP should be used together.

165 See for instance, CEG, 2012, *Internal consistency of risk free rate and MRP in the CAPM*.

However, the AER addressed this very issue in the Explanatory Statement to the Guideline and PIAC supports this analysis.[166]

From PIAC's perspective, the claim also misunderstands the purpose of the long-term average MRP. Unlike the risk-free rate, the MRP is not directly observable, but must be estimated by regression of a series of market data over some historical period (usually more than 50 years). In other words, the use of historical data for the MRP is a reasonable and relatively transparent approach to estimating the forward-looking cost of equity given that the forward cost of equity is not directly observable.

APA GasNet raised this same issue in its appeal to the Tribunal in 2013. APA GasNet contended that the AER had erred because the AER's calculation of the S-L CAPM parameters was inconsistent. The AER used long-term historical data to calculate the MRP in the CAPM equation, but then combined this in the S-L CAPM equation with a risk free interest rate that was calculated over the short term (e.g. over 20 days). In response, the AER explained to the Tribunal that:[167]

> …it [the AER] did not calculate a long term historical average MRP (incorporating a long-term average risk free rate) and that conceptually it estimated a 10 year forward-looking cost of equity by determining an estimate of the 10 year forward-looking risk free rate [on the basis of Commonwealth Bonds] and a 10 year forward-looking risk-free rate and a 10 year forward-looking MRP. This meant that its estimate of the MRP was internally consistent.

Contrary to APA GasNet's appeal claim, the Tribunal found **no inconsistency** in the AER's approach and clearly stated that this was a decision where the AER would 'need to exercise its discretion…[168] and it was not for the Tribunal to overthrow the outcome if the AER had legitimately exercised its discretion.[169] The Tribunal concluded that:[170]

> APA GasNet's complaint in reality concerns the **results of the AER's investigations, and not the process**. In all circumstances of this matter, it was reasonably open to the AER to choose an MRP of 6 per cent. [PIAC's emphasis]

Overall, the Tribunal provided very clear directions that (a) the AER did not err in using historical data to estimate the forward-looking MRP and (b) there was no issue in terms of 'consistency' arising from estimating a forward looking MRP from historical data regressions and calculating a forward looking interest free rate based on the most recent market data.

Given the Tribunal's strong view that there was no inconsistency in the estimation of the CAPM parameters of the risk-free rate and the MRP, PIAC must question why the NSW DNSPs have spent so many additional resources to pursue this line of reasoning yet again.

Perhaps the answer to this question is that the DNSPs' proposal to use a long-term risk free rate (based on historic yields from 1883 to 2011 of 10-year Commonwealth Government bonds)

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166 AER, 2013, *Explanatory Statement, Rate of Return Guideline*, 108-109.

167 Australian Competition Tribunal, *Application by APA GasNet Australia (Operations) Pty Limited* (No 2) {2013] ACompT 8, 18 September 2013, @ 275.

168 Ibid, @ 305.

169 The Tribunal specifically highlighted that their role was not to stand in the shoes of the regulator.

170 Ibid, @ 308.

results in a risk free rate of 4.78 per cent. This is well in excess of a calculation of the 'current' risk free rate, which at this point in time is around 3.46 per cent,[171] a reduction of some 132 basis points to the DNSPs' proposed long-term average rate.

Moreover, interest rates are expected to remain relatively stable at these low levels for some time according to Glenn Stevens, Governor of the Reserve Bank of Australia (RBA). For example, in a recent market update, Glenn Stevens set out his view of market expectations as follows:[172]

> Present market pricing suggests that market participants expect interest rates to remain low for some time yet. If anything, pricing in recent days has suggested that, if a move were to occur over the next several months, markets expect it would be down, not up. Any increase in rates is thought by market participants, on average, to be unlikely for quite some time.

PIAC concludes, therefore, that while the final risk-free rate allowed by the AER will inevitably differ from 3.46 per cent, the approach of using the short-term rate (as set out in the Guideline) will still be relevant and has effectively been accepted by the Tribunal as reasonable and not inconsistent with the estimation of a forward looking MRP using long-term market data..

#### 7.2.2.2 Mixing the models

The DNSPs are particularly critical about the value of the AER's approach of using the S-L CAPM as the foundation model and the AER's approach to using other models to guide it in selecting a point estimate within the S-L CAPM range.[173]

They go on to illustrate how they have assessed a range of data including estimates of the required return on equity/equity related parameters using different financial models, including, the S-L CAPM, the Black CAPM, Fama-French 3 factor model and a DGM.[174]

More significantly, however, the DNSPs are left with the same dilemma. At each step in the modelling processes, for instance, there are a number of more or less transparent calculations and assumptions that must be made, such as the estimate of additional betas (Fama-French) or the estimate of future economic and dividend growth rates (DGM).

Most significantly, given all the outputs, there is still a need to decide on the final point estimate of the return on equity. The DNSPs suggest an overall range of 10.1 -11.5 per cent based on the outputs of their models, then select 10.11 per cent as the final point estimate for the cost of equity in their proposal.[175] How this conclusion is drawn from a range of data and model results is not

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171 This figure is calculated as the average of the 20 business days in July 2014 for yields on 10 year Commonwealth Government Bonds, published by the Reserve Bank of Australia (RBA), Report f02d. Different periods of averaging will give somewhat different results and the number will be updated for the final determination.

172 Glenn Stevens, *Economic Update*, 3 July 2014 (Presentation to the Econometric Society of Australasian Meeting and the Australian Conference of Economics in Hobart), available at http://www.rba.gov.au/speeches/2014/sp-gov-030714.html, as at 1 August 2014.

173 For example, see Ausgrid, 2014, *Regulatory Proposal*, Attachment 7.18 includes a paper by SFG Consulting, 2014, *Equity Beta*, 25–36. The paper is focused on the AER's assessment of the equity beta, but raises more general questions about the AER's approach to selecting a point within the S-L CAPM range.

174 Ausgrid, 2014, *Regulatory Proposal*, 80.

175 In fact in this instance, the DNSPs appear to have selected a cost of equity point estimate using the S-L CAPM framework (having worked through all the other models). However, they have selected different inputs into the

clear, and in the end, for all the complexity that the DNSPs approach has added to the process, the final point estimate is still an exercise of judgement, whether by the DNSPs or by the regulator.

It also strongly suggests to PIAC that, at another time, a different combination of weightings of modelled outcomes might be applied with the aim of achieving on higher cost of equity.

In fact, the Tribunal said as much with respect to an appeal by a NSP, APA GasNet. APA GasNet challenged the AER's decision not to use the results of the DGM in determining the cost of equity/MRP. In rejecting APA GasNet's appeal, the Tribunal noted that the DGM had on occasion produced very low estimates ('just above 2 per cent'),[176] and expressed its doubt whether the networks would be prepared to use the DGM on those occasions, or only when the outcome was a much higher figure and better suited to the networks 'end purpose'.[177]

#### 7.2.2.3 Assessment of the equity beta

The equity beta is another component of the S-L CAPM calculation that was extensively reviewed during the 2013 Better Regulation program. The equity beta for a firm or industry modifies the market risk premium calculated for the market as a whole, based on the relative risk. It is widely acknowledged, even by the DNSPs themselves, that the Australian utilities face a much more stable business environment than the market as a whole, and are seen as a 'safe haven' in periods of economic volatility. Typically, DNSPs present themselves to the investors as (for example):[178]

- Providing stable long-term regulated cash flows; and
- Regulated monopolies with high barriers to entry

The two major conceptual studies undertaken by the AER during this Better Regulation process also suggested that on theoretical grounds, the equity beta that was well below 1 for the Australian regulated networks, reflecting the very low risks of the regulated network businesses compared to the market as a whole.[179]

The introduction of a maximum revenue cap (versus a maximum price cap) to apply for the 2015-19 regulatory period, and the annual updating of the cost of debt allowance, reduces these risks even further than in the past determinations for NSW DNSPs. Energy usage risk is, in effect,

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S-L CAPM than those in the Guideline, such as adopting a different equity beta and using a long-term average of the risk free rate. See Ausgrid, 2014, *Regulatory Proposal*, Table 50, 81.

176 Australian Competition Tribunal, *Application by APA GasNet Australia (operations) Pty Limited (No 2)* [2013] ACompT 8, September 2013, @ 266 – 270. In its decision, the Tribunal emphasized that the AER has the right to exercise its discretion (reasonably) to derive the cost of MRP and cost of equity, and was not bound to take into account the various models put forward by the DNSP and their consultants. However, notwithstanding the clear statements of the Tribunal, the NSW networks continue to make many of the same arguments.

177 There is some recent discussion among financial commentators, that the period of relatively high growth in dividends has come to an end and equity holders should expect little growth in future years. It would be interesting to see how the DNSPs respond to this risk to their model.

178 Extract from SP AusNet, 2014, *Full Year 2014 Results for the financial period ended 31 March 2014*, 5. Similar statements are made to investors by other regulated utilities.

179 See M McKenzie and G Partington, 2013, *Report to the AER: Risk, Asset Pricing Models and WACC*; and, Frontier Economics, 2013, *Assessing risk when determining the appropriate rate of return for regulated energy networks in Australia, a report prepared for the AER*.

passed on to consumers[180] while the allowed cost of capital will be more responsive to significant economic movements.

In addition, the AER had conducted a number of empirical studies, including the extensive 2009 study undertaken by Professor O Henry which included multiple analyses of Australian utility data returns.[181]

The AER concluded from these studies that the range of equity betas derived from the empirical analysis (and consistent with the conceptual analysis) was between 0.4 and 0.7. However the Guideline set the beta at the top of this range, that is, at 0.7. The empirical analysis by Professor Olan suggested to PIAC that the best value for beta was between 0.5 and 0.6 (representing the median of the various analyses). PIAC therefore argued in its submission that a value between 0.5 and 0.6 was the best representation of the empirical studies and was consistent with the theoretical analyses that the risks of the regulated network businesses were significantly less than the risks in the market as a whole.

In contrast, the networks generally have argued for a higher beta in the range of 0.8-1.0, using a variety of statistical analyses. They did not explain how such a figure is compatible with the reality that a benchmark efficient network, protected by its monopoly status and a favourable legal and regulatory regime in Australia, could properly justify a figure close to the market average risk (of equity beta 1). Nor do they explain how this is consistent with the descriptions they provide to potential equity and debt providers (as cited above).

In support of their claim, the networks put forward a 2014 study by SFG Consulting (SFG), which indicated an equity beta of 0.82.[182] However, as PIAC pointed out on several occasions,[183] this figure was derived from a sample that was dominated by 56 US energy firms who operated under very different market, economic and legal conditions. SFG's analysis of the subsample of nine Australian utility firms in the total sample suggested a much lower beta, with an average beta of 0.58.[184]

The difficulty is, that the Australian sample is small with a 'long tail' but that does not mean it is valid to 'boost' the reliability of the Australian data by subsuming the Australian sample into a much larger sample, taken from only one country (the US). In fact, PIAC considers that the data provided by SFG demonstrate this very issue.

Figure 19 is taken from the SFG 2014 report on equity beta. It demonstrates PIAC's observation that the median of the Australian values was below 0.7. It also suggests that SFG is tapping into two very different population distributions. The merger of the two into a single average equity beta is dubious on the basis of the spread of outcomes observed here.

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180 Under a maximum revenue cap (but not under a price cap), the DNSP is 'guaranteed' to receive the total allowed regulated revenue, even if demand declines further than forecast, and/or the mix of consumers changes.

181 O T Henry, 2009, *Estimating Beta*.

182 Ausgrid, 2014, *Regulatory Proposal*, Attachment 7.18, SFG Consulting, *Equity Beta*, 42. The beta of 0.82 is derived from the regression analysis undertaken in 2013.

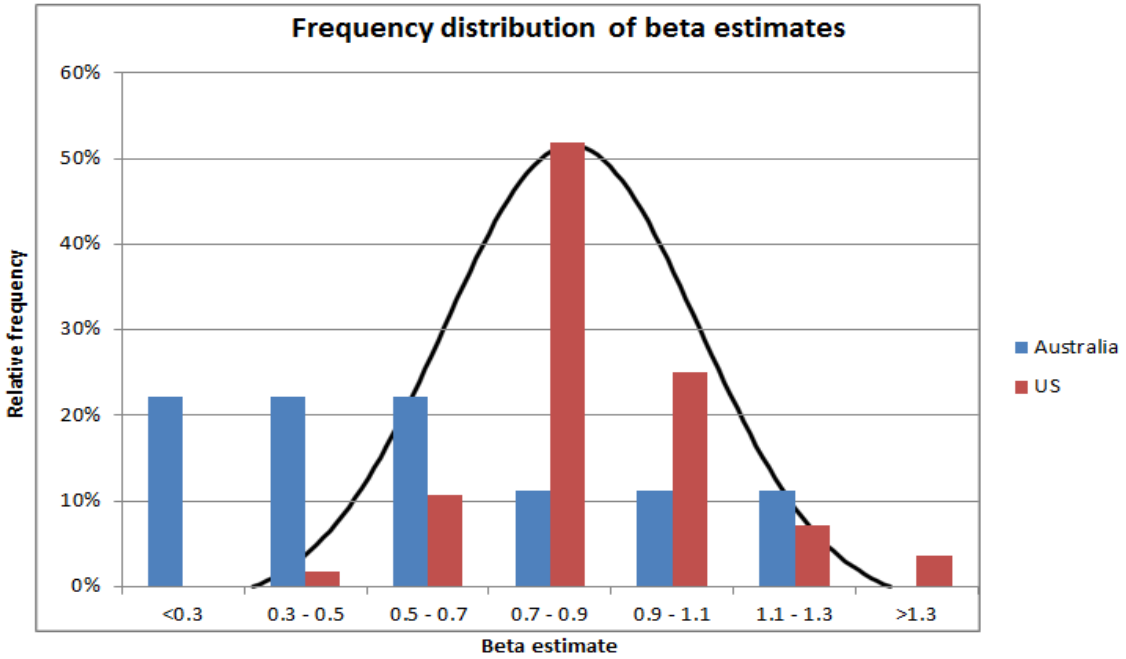
183 For example, PIAC,2013, *Better equity, submission to the AER's equity beta issues paper*, 21-23. Available at: http://www.piac.asn.au/publication/2013/11/better-equity.

184 SFG Consulting, 2013, *Regression based estimates of risk parameters for the benchmark firm*, Table 4, 16.

Equally arbitrary is SFG's decision to weight the Australian sample in their final estimation of the beta parameter.[185] That is, the beta estimate of 0.82 is the result of placing twice as much weight on an Australian listed observation as a US listed observation. As a result, the Australian sample is weighted 24 per cent, and the US sample weighted 76 per cent. This begs the question, why weight the Australian sample by a factor of two, why not three or some other number? The arbitrariness of this weighting further negates the validity of the conclusions for Australian utilities.

This in turn, raises again the issue of consistency. For instance, the DNSPs' proposal for an equity beta of 0.82 places heavy reliance on the results of a sample dominated by US firms in deriving an equity beta (as explained above). However, when assessing the cost of debt interest rates, the DNSPs do not suggest incorporating overseas bond rates even though all the Australian DNSPs draw on overseas funds at cheaper rates as part of their capital management strategies.[186] Figure 20, for instance, demonstrates that if the WACC for Australian utilities could be calculated on the basis of a 74 per cent weighting of US Government bonds, the WACC might be considerably lower.

**Figure 19: Frequency distribution of beta estimates[187]**

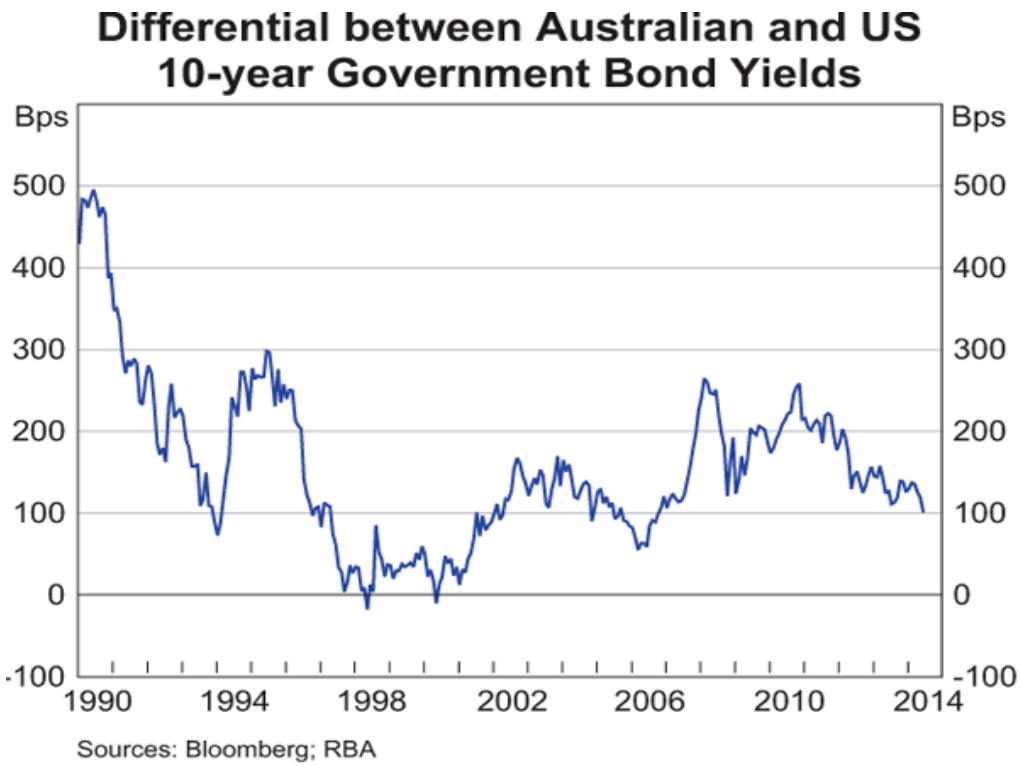



185 Ibid.

186 In the case of NSW DNSPs this relationship is more indirect in that the NSW Treasury sources the funds in the first instance.

187 SFG Consulting, 2014, *Equity Beta,* 33.

**Figure 20: Relative price of Australian and US 10-year Government bonds**




#### 7.2.2.4 Updates to the assessment of the equity beta

Since completing the Better Regulation program the AER has received an updated empirical study by Professor Henry that updates his original 2009 study on the equity beta for Australian energy utilities.[188]

Professor Henry conducted multiple analyses of Australian regulated energy network businesses using different combinations of companies, time periods, regression formulations and 'corrections'. His updated study strongly supports PIAC's previous recommendations and demonstrates a range of outcomes between 0.3 and 0.8 with a median value closer to 0.3 and an average of around 0.5.To quote Professor Henry's 'summary of advice' to the AER:[189]

> In the opinion of the consultant, the majority of the evidence presented in this report, across all estimators, firms and portfolios, and all sample periods considered, suggests that the point estimate of β lies in the range of 0.3 to 0.8. …within the range of 0.3 to 0.8 the average OLS [ordinary least squares) estimates for the individual firms reported in Table 2 is 0.5223 while the median estimate is 0.3285.

The results of Henry's 2014 study are important for another reason. PIAC notes in the DNSPs' proposal the importance given to the Black CAPM model as one of the four models to be considered in the cost of equity assessment. The Black CAPM model in essence suggests that

188 Olan T. Henry, 2014, *Estimating Beta: An Update*.

189 Ibid, 63. It is interesting to see that SFG and CEG consider that the study supports a higher equity beta, See for example, SFG, 2014, *Equity Beta,* 27-28. However, this is not what Professor Henry concludes from his study as cited above.

the S-L CAPM overestimates the equity beta for high beta stocks and underestimates the beta for low beta stocks.

There are many issues with the Black CAPM approach, but PIAC recognises that the AER has provided some credence to the Black CAPM theory when setting the point estimate for the equity beta.[190]

However, PIAC would argue that the AER has already made an implicit adjustment for the Black CAPM by selecting a beta at the highest end of the observed levels from the empirical studies, and well **above the median value for beta of these studies**. Similarly, the AER has selected a value for the MRP of 6.5 per cent in the Guideline, which is one of the higher values observed in its review. Therefore, there is no justification to apply the Black CAPM theory to *further adjust* the equity beta or the overall cost of equity.

As PIAC considers the equity beta of 0.7 is on the high end of empirical observations for Australian energy utilities, PIAC also rejects the DNSPs' proposal of an equity beta of 0.82.

#### 7.2.2.5 Summary of the return on equity

The table below summarises the return on equity. It includes an estimate of the return on equity that might be expected based on the AER's Guideline approach and using updated 10-year CGS bond yields for the risk free rate based on the average of 20 days in July 2014.

These outcomes are compared with the NSW DNSP's transitional proposal and the current 5-year proposals. The differences are significant and highlight the importance to consumers of the AER applying the Rate of Return Guideline to its decision on the efficient cost of ca

**Table 2: Return on equity - summary**

| Return on Equity Parameter | AER RoR Guideline* | NSW DNSPs Transitional Proposals (Jan 14) | NSW DNSPs 5 yr Proposal (May 2014) | Difference, AER Guideline and DNSP Proposal (May, 2014) |
|---|---|---|---|---|
| Risk Free Rate (RFR) | 3.46% | 4.78% | 4.78% | 132 bp |
| Market Risk Premium | 6.5% | 6.5% | 6.5% | |
| Equity Beta | 0.7 | 0.8 | 0.82 | |
| **Overall return on Equity** | **8.01%** | **9.98%** | **10.11%** | **210 bp** |

* The RFR is calculated on the basis of the 20 day average in July of 10 year Commonwealth Government Bonds, from RBA Statistics, f02(d) in accordance with the AER's Guideline.

190 The AER provides an extensive discussion of the strengths and weaknesses of the Black CAPM and concludes that it can be used to 'inform the selection of the equity beta'. AER, 2013, *Explanatory Statement – Appendices-Rate of Return Guideline*, December, A.3.2, 18

### 7.2.3 Return on debt

The AEMC's rule changes have provided more flexibility in the NER for the AER to exercise its discretion on the most appropriate methodology to achieve the rate of return objectives in the NER.[191] The AER's Rate of Return Guideline sets out the AER's view of the most appropriate methodology for calculating the return on debt.

Notably, the AER's Guideline proposes an important change to the calculation of the return on debt, that is, the introduction of a *trailing average approach with annual updating*. This approach had general agreement in principle amongst stakeholders participating in the Guideline development process although there was much debate about the details, such as the tenor of the debt or the credit rating of the efficient benchmark firm.

The AER's Guideline proposes that the cost of debt be calculated on the basis of the 10-year commercial bond yield for a firm with an average credit rating of BBB+. This yield would be averaged across 10 years of historical data and be updated annually, reducing the exposure of both networks and consumers to significant movements in interest rates during the regulatory period and between regulatory periods.

The AER's Guideline proposes an important change to the calculation of the return on debt, that is, the introduction of a trailing average approach with annual updating. This approach had general agreement in principle amongst stakeholders although there was much debate about the details, such as the tenor of the debt or the credit rating of the efficient benchmark firm.

The AER rate of return guideline proposes that the cost of debt be calculated on the basis of the 10-year commercial bond yield for a firm with an average credit rating of BBB+. This yield would be averaged across 10 years of historical data and be updated annually, reducing the exposure of both networks and consumers to significant movements in interest rates during the regulatory period.

While annual updating would create somewhat more movement in the rate of return allowance within the regulatory period, the views of most industry and consumer representatives was that the use of historical averages would (on balance) result in greater stability in the WACC outcomes. It was generally agreed that greater stability in regulatory outcomes would be beneficial to the network businesses, consumers and investors.

However, PIAC considers that while consumers may have a preference for more stable pricing, this should **not be at the expense of fair and efficient regulatory allowances and network prices.** As noted previously, consumers continue to bear the brunt of a higher than necessary WACC allowance right through to June 2014, including the high regulatory allowance for the cost of debt.

The AER Guideline therefore sets out a transition period of 10 years to move completely from the current 'on the day' approach to a 10-year averaging approach (matching the 10-year bond rate used to calculate the risk-free rate and the tenor of the commercial bonds). This transition

[191] See NER, cl 6.5.2 (j) for the 3 different approaches allowed under the Rules. The rate of return on debt objective requires the AER to decide on a return on debt that is consistent with the overall allowed rate of return objective (see NER cl 6.5.2 (n) (1).

mechanism would mean that the first year of the cost of debt assessment would look much like the current on the day approach.

The expectation was that this approach would maximise regulatory certainty and, overall, minimise financing risks to the networks. As the transition approach was only settled in late 2013, regulated businesses would have already operated portfolios of debt instruments and hedges based around the continuation of the 'on the day' approach

For example, Queensland Treasury (QTC) outlined a suitable transition approach to minimise risk to companies during a transition.[192] SFG Consulting also advised the AEMC during the rule change process to mitigate the impact of changing the approach: [193]

> Service providers are likely to have **entered into financial arrangements to mitigate their risk given the current approach to estimating the return on debt**. Therefore, any change in approach could lead to some service providers gaining extra revenue or losing revenue as a result of unwinding those financial arrangements. Gains or losses of revenue of this type from changes in regulatory arrangements could be perceived by investors as increasing regulatory risk, and thereby lead investors to seek a higher rate of return. **SFG therefore recommend that consideration be given to transitional arrangements when changing the approach to estimating the return on debt**. [PIAC emphasis]

Based on this transition process, the cost of debt allowance in the first year of the regulatory determination, 2014/15 would be around 7 per cent[194] and would progressively move towards a 10-year average as it was updated each year.[195] PIAC did not necessarily support the transition proposal in the Better Regulation discussions, although in part this was associated with a preference for using a 5-year term for the debt to match the regulatory period, in which case, the risks of no transition would not be such an important issue.

However, PIAC also considers that once the decision is made and set out in the Guideline, it is appropriate for it to be applied to all networks unless there is a compelling demonstration that the networks financial position would be significantly harmed (applying, for instance, objective financeability tests[196]). Without this commitment to the Guideline transition approach, there is a very real risk of DNSPs 'cherry picking' the approach that provided the highest return on debt at a particular point in time, rather than an approach that represents the most efficient outcome over time and a reasonable sharing of risk with consumers (who have taken all the risks to date).

The NSW DNSPs are, however, seeking a variation from the Guideline, namely an immediate changeover to the rolling 10-year average approach *without a transition period*. The NSW DNSPs

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192 QTC, 2012, *Moving average approach – detailed design issues: Supplementary submission on economic regulation of network service providers rule change process*.

193 AEMC, 2012, *Economic Regulation of Network Service Providers and Price and Revenue Regulation of Gas Services, Final Position Paper*, 76.

194 This estimate by PIAC is based on the RBA data for yields 10-year commercial bonds for BBB rated company, assessed by averaging the end of month rates for 12 months to June 2014 (Reserve Bank statistics f03, BBB 10 year non-financial Australian corporate bonds). The yield curve is currently trending down. As at June, the monthly bond rate was 5.64 per cent.

195 For instance, by 2024/25, the bond rate would be calculated as the average over the period from 2015/16 to start of 2024/25.

196 The financability tests have been used in other jurisdictions, for instance, the UK, to test whether a regulators decision for the efficient benchmark entity is viable given the financial status of the individual company.

claim, in support of this approach, that their actual debt profile is based on a portfolio approach with long-term loans. Therefore, they claim, an immediate switch to the trailing average would result in a cost of debt that better reflects their actual cost of debt.

The DNSPs claim that under the Guideline's proposed transitional approach, the DNSPs also would be at risk of under-recovering their debt costs in the next regulatory period. For example, Ausgrid states in its proposal:[197]

> Under the AER's transition approach, the return on debt allowance would not match the efficient cost of debt until 2024/25 – three regulatory periods. This is clearly inappropriate for a business that already issues debt on a staggered portfolio basis. An immediate application of the trailing average approach should be preferred because it provides longer term stability.

However, it is also clear that this approach would come at a considerable cost to consumers as this proposed 10-year averaging period would include the high cost of debt observed during the peak of the GFC.[198] As a result, the cost of debt in the DNSPs' proposals is 7.98 per cent; higher than the DNSP's transitional proposal of 7.55 per cent despite the continued decline in bond rates – see Figure 18). Importantly, the DNSPs approach would deliver an outcome that is significantly higher than the one calculated by applying the AER's Guideline approach. The Guideline approach would, on current bond rates, result in a in a cost of debt of around 7 per cent (depending on the averaging period).

It is most doubtful if an efficiently financed business would, in practice, adopt such a rigid approach to raising debt. Debt portfolios are actively managed and financial managers have a variety of tools to manage risk and take advantage of movements in interest rates; far more so than their customers.

Certainly most private sector utilities report they have significantly reduced their costs of debt in the last few years through refinancing and restructuring their debt and by better management of their debt portfolio.[199] Moreover, the amendments to the Debt Guarantee Fee Policy in NSW will provide much greater flexibility to NSW DNSPs to undertake such management task in response to the regulatory determinations, for instance to alter the tenor of their debt, refinance and modify existing loans at switching costs reported to be 'very low'.[200]

The DNSPs also suggest that consumers will benefit because of greater 'longer term stability' if their approach is adopted. PIAC has already noted that consumers value stability, but not if that is at the expense of higher than reasonable costs.

However, it seems to PIAC that the DNSPs' idea of stability is one where there will be only a small reduction in their allowed cost of debt from the current regulatory period allowance (around 1 per cent), despite the large changes in market conditions. In marked contrast, under the AER's

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197 Ausgrid, 2014, *Regulatory Proposal,* 77.

198 During the 12-month period September 2008 to August 2009, the RBA report (f03) indicates that the average monthly bond rate for 10-year BBB bonds was around 10.68%. Bond rates declined quite quickly after that period.

199 For example, SP AusNet recently successfully issued 15-year bonds on the Norwegian market. SP AusNet states, 'The issue was competitively priced and will add to our funding diversity both in terms of maturity and sources of debt'. SP AusNet, ASX & SGX-ST Media Release,16 June 2014.

200 The NSW Treasury, 2014, *Government Guarantee Fee Policy, Treasury Circular,* NSW TC 14/08, 1-3.

Guidelines, consumers will see a real reduction in the network prices as the lower debt costs based on current markets flow through (appropriately) to a lower cost of debt allowance.

After this first year, there may be marginally less 'stability' in the outcomes of the AER's approach, but the difference is likely to be small[201] and more than offset by the very significant difference in the 'starting point' cost of debt between the DNSPs' approach and the AER guideline.

Finally, given the concerns by DNSPs that they may not be able to recover their costs if the AER's Guideline applies, it is instructive to consider some other data that indicates the current financial status of the businesses and how vulnerable they are to a market-based reduction in their allowance for debt costs. The next section will look at a number of these measures.

### 7.2.4 What's happening out there?

There are a number of sources of data that provide an indication of how much the NSW DNSPs are paying for debt, and whether the AER's methodology as set out in the Guideline would prove as challenging as is claimed.

Each of these sources of data provides only a partial picture, and PIAC is aware that reliance on public data may lead to oversimplified conclusions. Moreover, the situation is complicated in NSW because of the financial arrangements between the DNSPs and their owner, the NSW Government. These include dividends paid to the NSW Government, state taxes, and Government guarantee fees. In addition, there are a number of policy guidelines set by the Government that control and limit the freedom of the networks to manage their debt portfolio.

Nevertheless, PIAC presents this data to the AER in the expectation that it will provide some insights and point to areas of further investigation.

[201] In the second year, the AER approach will average Year 1 and Year 2 and in the third year it will be the average of Year 1, 2 and 3 (and so on), while the DNSP approach will continue to average 10 years of history. It will be 5 years before the impact of the GFC will be washed out of the cost of debt under the DNSP methodology.

**Table 3: Average cost of debt and average interest cost for NSW DNSPs (2012/13)**

| DNSP | Weighted average cost of debt 12/13 (as reported in the 12/13 Annual RIN for each DNSP)[1] | Weighted average interest cost (as reported in the Annual Reports for 2012/13)[2] | TCorp loans to the DNSP (AUD fixed[202]) as reported in the Annual Reports for 2012/13)[3] |
|---|---|---|---|
| Ausgrid | 7.59% | 7.5% | 5.8% |
| Endeavour Energy | 6.82% | 7.10% | 5.73% |
| Essential Energy | 7.95% | 7.75% | 5.85% |
| **Average (unweighted)** | **7.45%** | **7.45%** | **5.79%** |

1 Distribution Network Service Provider, Annual reporting template, Table 6.1.
2 DNSPs' Annual Reports, Notes to the financial statements, (1) Significant accounting policies, (y) Finance Costs.
3 DNSPs Annual Reports, Notes to the financial statements (13) Borrowings.

Based on Table 3, the cost of interest is lower than the DNSPs' proposals of 7.98 per cent. Importantly, the cost of debt in 2012/13 is considerably reduced from the cost of debt in 2011/12. For example, the average interest cost across the three DNSPs reported for 2011/12 was 8.79 per cent,[203] which by 2012/13 had dropped to 7.45 per cent as set out in Table 3 above. It is reasonable to assume that this decline in average interest rates will continue, given the downward slopping yield curve for commercial bonds and NSW Government bonds.

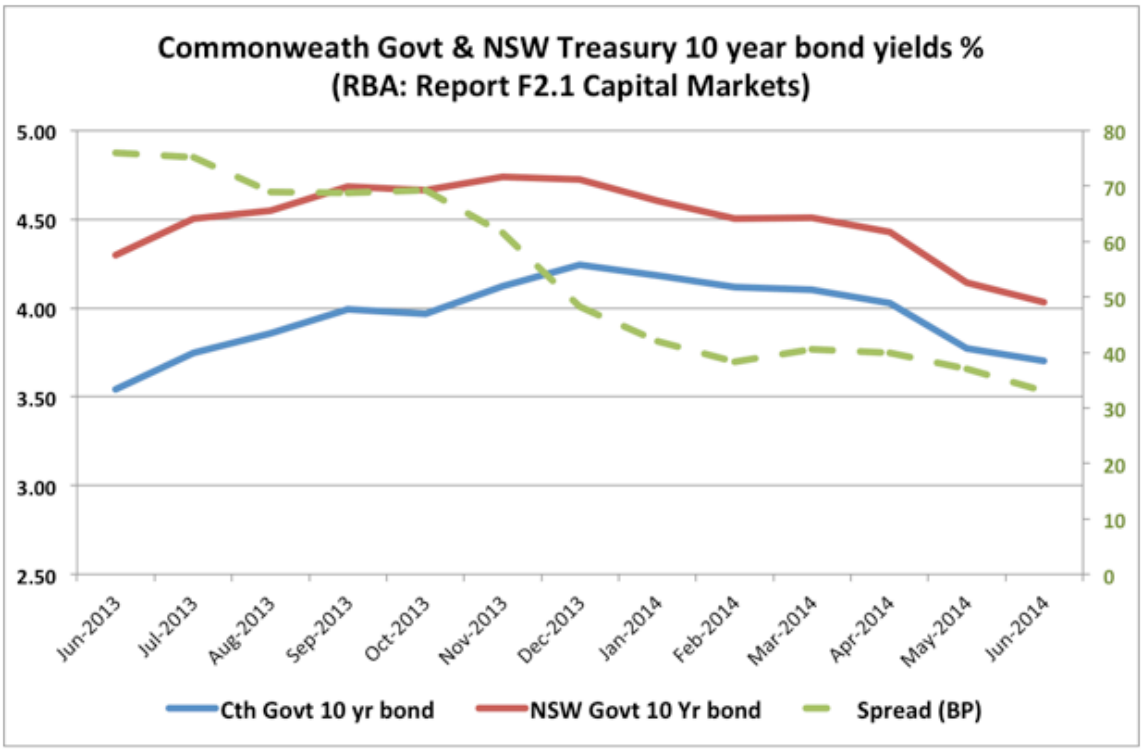
In other words, commercial interest rates are declining and low interest rates should continue into 2014/15. Given the average interest cost in 2012/13 was 7.45 per cent, it is more than reasonable to expect the average cost of debt of the three DNSPs by the start of 2014/15 will be closer to the 7 per cent mark. That is, the DNSPs' actual cost of debt will be very similar or better than the return on debt calculated under the by the Rate of Return Guideline approach, assuming efficient management of the debt portfolio by the DNSPs.

There is certainly no evidence that the DNSPs will in practice be paying a cost of debt closer to 8 per cent as their current regulatory proposals seem to suggest. What the figures do indicate is that there will be much less of a chance of excessive margin on debt costs as currently exists.

The cost of loans from TCorp (the source of the DNSPs' loan funding) is also declining and moving closer to the Commonwealth risk free rate as illustrated in Figure 21 below. However, while the NSW DNSPs can borrow at this lower rate, they must also pay a Debt Guarantee Fee to TCorp that is designed to align the cost of capital with a commercial cost of capital.

202 TCorp long-term loans are provided in both fixed interest and CPI indexed form. The relevant notes in the Annual Reports state that the majority of TCorp debt to the DNSPs is 'fixed rate loans'.
203 As reported in the 2012/13 Annual Reports. See note 2 to the Table 3.

**Figure 21: Trends in interest rates for the Commonwealth and NSW Governments[204]**




Interestingly, the NSW Treasury has recently amended their approach to the Government Guarantee Fee (GGF) and the provision of debt to government business enterprises including the NSW electricity networks. This submission has referred to some aspects of the new policy above. These amendments would also appear to provide the NSW DNSPs with additional 'protections', or as stated in the Treasury circular of May 2014:[205]

> NSW utilities have extensive flexibility to beat their debt allowance benchmark. Indeed, many of the flexibilities available to NSW businesses are not available for private sector borrowers.

Some of the examples provided in the Treasury circular, include:[206]

- The data source used to calculate the GGF will be the same Reserve bank reports as the AER proposes to use;
- The GGF rate tenor for regulated utilities will be aligned with the tenor used by the relevant regulator in setting the cost-of-debt allowance;
- Matching the tenor will allow the NSW regulated businesses to match debt cost risk to debt allowance risk if they choose, by hedging to the regulatory debt allowance for the first time.
- Utilities can draw down debt at the time of their own choosing; utilities have access to very short lead times to arrange new debt or refinance existing debt through TCorp.

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204 RBA, *Statistics, Capital Markets*, Report f2.1.
205 NSW Government, 2014, *Treasury Circular*, *Government Guarantee Fee Policy*, NS TC 14/08, 3.
206 Ibid, 1-3.

- Utilities have the flexibility to modify existing loans, for instance to switch existing loans between fixed and floating and YOY loans to cheapen interest costs and manage risks.

As noted previously, PIAC is not proposing that the model of using the benchmark efficient entity should be discarded in favour of using actual data on the businesses. However, the data above does provide an important perspective on the special pleadings of network businesses, particularly when these pleadings, if adopted, would lead to significantly higher network prices than reasonably required in the current circumstances of very low bond rates.

### 7.2.5 NSW 2014/15 budget projections

The NSW budget for 2014/15 provides further information on the NSW Government's expectations for the return to the government (as the owner) from the network businesses. The budget was put together **after** the AER made its transitional determination (April 2014) for the NSW NSPs based on the AER's Rate of Return Guideline approach.

The NSW 2014/15 budget appears, therefore, to take into account the impact of a WACC assessed under the AER's Guideline approach, and one that is significantly less than the previous regulatory WACC. As stated in the budget paper:[207]

> EBITDA from the network businesses is estimated to fall by 15 per cent in 2014-15 to $3.5 billion (from $4.1 billion in 2013-14) reflecting the interim regulatory decision. …Underlying dividends from these businesses are forecast to decline by 14 per cent per annum on average over the four years to 2017-18.

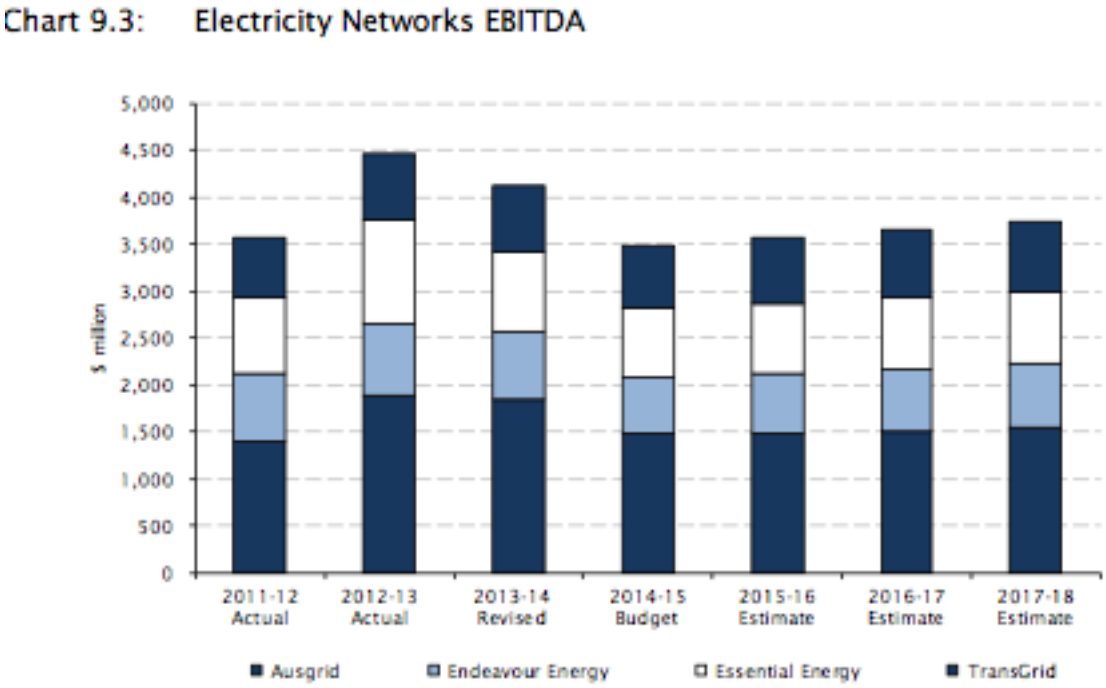
Figure 22, from the budget paper also demonstrates these outcomes. There is clearly a decline in the expected EBITDA for each of the networks, most particularly Ausgrid in 2014/15. However, the position for all three DNSPs stabilises through the remaining budget years.

PIAC considers that a decline in profits and dividends is warranted, given the extraordinary returns on equity the DNSPs have achieved in the last years, much as a result of consumers paying more than they need to. The decline in profits simply reflects the DNSPs returning to more normal conditions.

Overall, despite the significant reductions in EBITDA and dividends to the NSW government, the budget papers provide no indication that the government expects a crisis in funding for these businesses either in their financing position or their ability to deliver services and sustain the reliability of the network.

[207] NSW Government, 2014, *Budget Statement 2014-15, Budget paper No. 2,* 9-11.

**Figure 22: NSW Budget estimates for the NSW electricity networks**[208]




PIAC acknowledges, as stated above, that the data provided here are only snapshots of the DNSPs' financial positions. Nevertheless, they challenge the DNSPs' claims that if they are allowed only a WACC based on the Guideline approach, then their ability to provide efficient and reliable network services to consumers may be compromised. PIAC suggests that if this is the position adopted by the DNSPs, then it is essential that there is a strong service target incentive performance scheme (STPIS) in place to align incentives appropriately.

On the other hand, PIAC believes that a WACC that is efficient, and in line with the outcomes of the AER's Guidelines, will provide continued incentives for better capital management and more focus on investing in the right things at the right times; a discipline already facing many of their consumers operating in the competitive market and forced to pay the much higher electricity prices that now prevail.

A summary of the proposed WACC and PIAC's estimate of the appropriate level of WACC that would currently be indicated is set out in the table below. The results suggest to PIAC that any WACC above around 7.7 per cent would be excessive.

[208] Ibid, 9.

**Table 4: Summary of WACC parameters in the DNSPs' regulatory proposals for 2014/15-2018/19.**

| Component | Proposal by DNSPs for WACC components (debt cost updated annually) | PIAC's estimate (for illustration only) of AER's RoR Guideline outputs |
|---|---|---|
| **Cost of Equity:** | | |
| Risk Free Rate | 4.78% | 3.46% |
| Market Risk Premium | 6.5% | 6.5% |
| Equity beta | 0.82 | 0.7 |
| Total Cost of Equity | 10.11% | 8.01% |
| **Cost of Debt:** | | |
| 10 Year bond rate BBB | 7.98% | 7.0% |
| **TOTAL WACC (60% gearing)** | **8.83%** | **7.4%** |
| Note: PIAC's estimate relies on data provided by the RBA on 10-year Commonwealth Government Securities (Statistics Report f02), averaged over 20 days; and 10-year Commercial Bond rates for BBB rated organisations (Statistics Report f03). Commercial Bond rates are based on averaging the most recent 12-month data reported by the RBA as the f03 report only provides end of month results. The regulatory WACC is based on **the nominal post-tax return** on capital. The risk free rate and 10-year bond rate will be updated at the time of the AER's determination. | | |

The discussion above demonstrates that there is no justification for the DNSPs to depart from the AER's Rate of Return Guideline. In an era of relative economic stability and low interest rates, consumers have the right to expect networks to manage their portfolio of debt at benchmark efficient levels. Consumers also expect the AER to define that allowance by effectively applying its Guideline and appropriately exercising its discretion in the long-term interests of consumers.

## 7.3 Imputation credits ('gamma').

Imputation credits in the Australian taxation system are the credits domestic (Australian residents) investors receive for tax paid at the company level and that offset part or all of their personal income tax liabilities. In theory, where a company provides franking credits, then the investors required rate of return will be somewhat lower, that is, eligible investors will be willing to invest at a somewhat lower rate of return because of the taxation benefits of imputation. Therefore, the DNSPs costs should be adjusted downward in proportion to the implied impact on domestic investors' expectations for the rate of return.

Under the NER, the value of imputation credits is not part of the nominal vanilla WACC calculation. Rather, it is included as an adjustment to the regulatory allowance for taxation costs.

The value of the imputation credits (gamma) in the regulatory process sits between 0 and 1. A low gamma value means that the DNSP will receive a relatively higher regulatory allowance for tax costs and, therefore, a higher revenue allowance to pay for these costs. It is not surprising,

therefore, that there has been a long and arcane debate over the value of gamma with NSPs seeking a low value and the AER setting a higher value.

It should be noted here that gamma is the product of two other variables and it is in the determination of these values that the real dispute between networks and the regulators sit. The two variables in question are (a) the imputation credit payout ratio (F) and (b) the utilisation rate (theta).

At this stage, the networks and the AER have accepted the value of the payout ratio of 0.7. The dispute centres on the value of the utilisation rate (theta), with the AER guideline setting a value for theta of 0.7 while the networks propose a theta value of 0.35. When combined with the AER's payout ratio, the AER guideline has a gamma value of 0.5 (0.7 * 0.7) while the DNSPs propose a gamma value of 0.25 (0.7 * 0.35). The final adjustment to the allowed taxation cost is set out in the summary table below.

**Table 5: Imputation credits and taxation cost allowance**

| | A | B | C | D |
|---|---|---|---|---|
| | Payout ratio (F) | Utilisation rate (theta) | Imputation credit (gamma = A* B) | Allowed % for tax costs (= corporate tax rate of 30% * (1-C)) |
| AER Guideline | 0.7 | 0.7 | 0.5 | 15% |
| DNSP Proposal | 0.7 | 0.35 | 0.25 | 22.5% |

Some years ago, the Queensland networks launched an appeal to the Tribunal over the AER's assessment of gamma. The appeal was successful and the Tribunal ordered the AER to accept the networks' proposal for a low gamma of 0.25 (and, therefore, a higher tax cost allowance).[209]

The AER has applied a gamma value of 0.25 for most of the regulatory decisions following this order from the Tribunal. The DNSPs have generally placed much store in the 'decision' by the Tribunal to allow a theta value of 0.25.

However, PIAC considers that the Tribunal's decision was much more nuanced than claimed by the DNSPs. The Tribunal considered that 0.25 was the preferable figure at the time, based on the evidence in front of it. However, the Tribunal also urged the AER to undertake a more thorough examination of the possible approaches to the assessment of theta. PIAC argues that this suggests the Tribunal was by no means indicating that its directions were 'permanent'.

In response to the Tribunal's requirements, the AER has recently 're-evaluated the conceptual task of estimating the value of imputation credits' and based on this, undertaken further empirical analysis using taxation statistics and other measures. The results of this reassessment have been included in the rate of return guideline. The regulatory gamma is now deemed to be 0.5 (as opposed to 0.25). In explaining its decision, the AER concluded as follows: [210]

[209] Australian Competition Tribunal, *Application be Energex Limited (Gamma)(No 5) [2011]* ACompT 9 (12 May 2011).

[210] See AER, 2013, *Explanatory Statement, Rate of Return Guideline*, 161.

> From this re-evaluation [of the approach to theta] we have determined that the regulatory debate on the value of imputation credits did not fully address this conceptual task. [the role of gamma in the regulatory context]. Instead, the previous regulatory debate has included an economic and econometric debate over certain **arcane** details. The debate has also solely relied as evidence on a particular class of evidence that has a **number of significant limitations**. We consider this outcome is not in the long-term interests of energy consumers. We consider a wider appraisal of the available evidence is better regulatory practice. [PIAC's emphasis]

However, the NSW DNSPs have rejected the AER's approach and continue to apply a gamma value of 0.25, based on a payout ratio of 70 per cent and a theta value of 35 per cent as set out in Table 4 above. The argument presented by the DNSPs relies to a large extent on the assessment of theta by a number of consultants including SFG Consulting who updated their paper as part of the DNSPs proposals. SFG in particular claimed that 'theta represents the **value** of distributed imputation credits – the extent to which a distributed credit is capitalised into the stock price'.[211] Theta should, therefore, be calculated on the basis of estimating this value, and not by reference to taxation statistics, the path that the AER had most recently taken.

In response, PIAC notes that the AER has investigated various approaches to estimating the value of theta and have provided an extensive assessment of the various approaches in the Explanatory Statement to the Rate of Return Guideline.

PIAC believes that in doing so, the AER has addressed much of the criticism raised by the Tribunal in 2011 of the studies that had at that time been undertaken by the AER to evaluate the value of gamma and, in particular, the value of theta within the regulatory context. PIAC believes that the 2013 research undertaken by the AER addresses the primary concern of the Tribunal when it 'found some deficiencies in its understanding of the foundations of the task facing it, and the AER, in determining the appropriate value of gamma'.[212]

PIAC also considers that even though the Tribunal required the AER to adopt a gamma value of 0.25 (based on a theta of 0.35) the Tribunal's decision was by no means determinative. The Tribunal's statements were heavily qualified throughout its analysis of the value of gamma by its concern about the lack of a sound conceptual base for the assessment of gamma and its constituent components in the regulatory context, as indicated in the quote above.

In particular, the Tribunal directly encouraged the AER to investigate a wider range of approaches and, importantly, to better establish the conceptual framework in which the regulatory value of gamma is determined.

The question now arises as to whether the AER's conceptual framework that is set out in the guideline is a reasonable approach to estimating the value of gamma. This is a difficult issue, as the Tribunal recognised in 2011, as there is no generally agreed methodology to assess theta. Again, it is a case of the AER exercising its discretion in a way that it considers will best achieves the NEO and the long-term interests of consumers.

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211 SFG Consulting, 2014, *An appropriate regulatory estimate of gamma*, 17.

212 Australian Competition Tribunal, *Application by Energex Limited (No 2*) ACompT October 2010, @ 149-150.

***Recommendations 23***

*PIAC recommends that the AER continue to apply the approach and parameter values set out in the Guideline, and award the three DNSPs a rate of return consistent with the Guideline.*

***Recommendation 24***

*PIAC recommends that the AER carefully consider the STPIS targets and closely monitor the performance of the DNSPs, given their claims that their investment in the network will be compromised if the AER determines a lower WACC, in line with the Guidelines.*

# 8. Demand management and energy efficiency in the NSW DNSPs submissions

## 8.1 The regulatory framework and demand management

In response to a question at the AER's forum with the NSW DNSPs in Sydney on 10 August 2014 on 'What would have to happen for Demand Management (DM) to be a key component of network businesses' business models?', the response was that, other than under the Demand Management Incentive Scheme (DMIS), DM is 'not allowed for under the AER model'.

PIAC strongly contests this assumption. To quote the NER,

> In deciding whether or not the AER is satisfied as referred to in paragraph (c), the AER must have regard to the following … (10) the extent the Distribution Network Service Provider has considered, and made provision for, efficient and prudent non-network alternatives'.[213]

DM is clearly consistent with delivering outcomes consistent with the long-term benefit to consumers, as stated in the NEO and emphasised as a key element of the NEO by the Productivity Commission.[214] In fact, Ausgrid's Demand Management operating expenditure plan states:

> Delivering appropriate levels of demand management is recognized as a key strategic objective of the NEM and part of the efficient operation of the electricity market in line with National Electricity Law objectives.

and clearly outlines:

> More consistent use of DM to defer network investment would provide certainty to the market and both discover new opportunities and improve confidence in the reliability of DM.[215]

Indeed, Ausgrid makes the valuable point that:

> DM opportunities can exist even when system wide demand growth is flat or even falling, because within the overall trends there is a mix of growth and reductions at the spatial level.[216]

Further, it is normal business practice to depreciate the value of assets over time, and this mechanism allows networks to cope with some degree of declining demand without having to pass additional costs on to consumers.

While there are clearly barriers to greater use of DM such as the relatively low level of experience of network businesses, the relatively immature market of DM service providers and the rapidly

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213 NER, cl 6.5.7(e).
214 Productivity Commission, 2013, Electricity Network Regulatory Frameworks, Report No. 62, Canberra
215 Ausgrid (2014) Ausgrid's Demand Management operating expenditure plan (Attachment 6.12).
216 Ibid.

changing costs and nature of new technologies (such as electric vehicles and 'smart' devices), the current arrangements do not preclude network businesses from embracing demand management. Specialist businesses in Australia and many businesses overseas have expertise in this area, and can be called upon by DNSPs for advice and assistance (as is highlighted in Essential Energy's Demand Management Strategy).

However, PIAC does acknowledge that the current network regulation is not as supportive of Demand Management (and new models of network service provision) as it could be. Accordingly, PIAC would welcome the opportunity to work with the AER and DNSPs on rule changes, Guidelines and other initiatives that would facilitate the innovation in DNSPs' business models needed to adapt to the rapidly changing nature of the energy sector in New South Wales.

## 8.2 The NSW network proposals seem based on out-dated models

Experts agree that Australia's stationary energy market is in the midst of a major transformation. The deployment of new technologies, such as solar PV and rapid energy efficiency improvements (eg LED lighting) is having a massive impact. The sector also faces market distortions and failures due to slow response to past changes, such as the rapid adoption of air conditioners and inefficient lighting. There is a need to develop new responses to address both existing and emerging factors impacting on energy infrastructure costs and revenues and the ways consumers can manage those costs. Moreover, the challenge of adapting to the climate change already underway and that projected, in both the short and medium term, is a massive one for the sector. Indeed, AER Chair, Andrew Reeves, gave a speech at the Energy Networks Association (ENA) Forum in Brisbane on 6 August 2014 where he spoke on this overarching issue of transformation and the need to rethink network services so they deliver maximum benefit to consumers. He suggested that the networks needed to redefine their product to become a platform to support generation, storage and demand management. In other words, two-way trading, instead of the historic one-way supply from centralised generation model.

The proposals of the NSW distribution businesses, however, seem to be grounded not in the world of transformation and a pro-active response to developing business plans suited to the times, but still in a supply-focused transport of electrons mentality. The DNSP focus is on calling for protection from emerging competitors instead of responding to competitive forces, as required by National Competition Policy.

PIAC has formed this view by investigating how the network proposals deal with the following areas:

- distributed/embedded generation
- electric vehicles
- storage
- demand management
- climate change

and by comparison with network businesses internationally.

Searches of the terms above in the main proposal documents of each of the NSW DNSPs yielded the following results:

| Term | Quantity and quality of reference in the DNSPs proposals |
|---|---|
| distributed generation/ embedded generation | No mentions of distributed generation.<br>Embedded generation - 1 mention in Endeavour proposal – with regard to DM pilots and trials |
| electric vehicles | 1 mention in Ausgrid proposal – as grounds for increasing demand:<br>The projected stable electricity price path and expected moderate uptake of electric vehicle usage add positive stimulus to growth trends compared with that experienced in recent years. |
| storage | 1 mention in Endeavour proposal – with regard to DM pilots and trials |
| energy efficiency | Mentioned in regard to customers desires, government policies and falling demand:<br>For example, in the Endeavour proposal:<br>Demand management and energy efficiency: … Customers expected a substantial incentive to participate in Endeavour Energy initiated energy efficiency programs. Others encouraged us to pursue renewable energy initiatives given the rapid uptake of solar. |
| falling demand | No mentions |
| emissions | No mentions |
| climate change | Only mentioned in regard to the NSW Government's Climate Change Fund |
| extreme weather | 1 mention in Endeavour proposal:<br>We also sought to maintain the reliability and quality of our supply by replacing ageing assets and increasing network capacity for new customers. The program has significantly improved the resilience of our network to extreme weather, natural disasters, and peak demand conditions. |

While content analysis alone is insufficient grounds to judge the DNSPs' business model, the lack of reference to the changing context for energy utilities in the proposals is quite startling. One would not know by reading the DNSP's proposals that there has been 'a significant downturn in electricity consumption and slowing growth in peak demand'[217]. Indeed, the AER's Issues Paper shows how all three DNSPs have forecast an uptick in peak demand through the five year period. Active intervention using cost-effective proven methods could ensure such an increase does not occur.

Another example of the DNSPs' failure to adapt to the changing nature of the energy sector is the description of DM projects undertaken in the previous regulatory period. Ausgrid's Demand Management operating expenditure plan[218] outlines a description of targeted DM (D-Factor) projects in the 2009-14 period, the majority of which consisted of temporary diesel generator installations – clearly old emissions-intensive technology, not consistent with best practice in demand management or energy efficiency (EE).

217 AER, 2014, *Issues Paper: NSW electricity distribution regulatory proposals 2014-15 to 2018-19.*
218 Ausgrid, 2014, *Ausgrid's Demand Management operating expenditure plan* (Attachment 6.12).

To be fair, all DNSPs are proposing a reduction in capex (in comparison with the last regulatory period), but the proposals emphasise this is a response to and as a result of the significant capex investment over the last regulatory period, rather than a response to any reduction in demand.

There is a notable exception to this critique and that is the approach outlined in Essential's Demand Management Strategy. PIAC commends Essential Energy for their commitment to:

> …reducing the summer and winter peak demand, increasing customer end use energy efficiency and awareness, encouraging customers to modify their usage patterns, and the development of new and innovative energy saving technology and education in the future[219]

PIAC supports all of Essential's DM objectives:

> Enhancement of the business case to further enable demand management and non-network alternatives as a primary element of the planning process and as a broad-based strategy.
> Efficient development and refinement of demand management and non-network alternatives based technical skills, experience and solutions.
> Enable and encourage external stakeholder involvement.
> Reduction of peak demand through the implementation of prudent demand management and non-network alternatives initiatives.
> Optimise demand management and non-network alternatives application value now and in the future.

In particular, PIAC is pleased to see that the vision is for decreased network expenditure and customer costs to be achieved through the efficient implementation of DM and non-network alternatives; that Essential aims to partner with customers and communities to unlock DM value and that DM is to be used as the first option to planning to meet peak capacity requirements. Essential's DM strategy is also very honest in acknowledging that the business is a long way from achieving this vision and that change management, technical skills and experience, workforce engagement, business process reengineering, education and training, cultural change and stakeholder engagement are all needed.

There are also worthy elements in Ausgrid's DM Strategy. However, it does not appear to address the overarching business model and cultural change in the way Essential does.

PIAC recognises it is a substantial task for DNSPs and TNSPs to develop and implement new business models. At the ENA Forum mentioned above Mr Reeves noted, 'we (the AER) can't regulate innovation (but we can) create environment in which it can flourish'. PIAC would like to see the AER help create that environment utilising good practice in change management.

***Recommendation 25***

*PIAC recommends that the AER works with DNSPs to create an environment that assists the industry to embrace transformation.*

[219] Essential Energy, 2014, *Demand Management Strategy.*

### 8.2.1 The NSW network proposals and demand forecasts

PIAC set out its views on the accuracy or otherwise of the DNSPs' forecasts (particularly Ausgrid) in Section 5 of this submission. It is essential to raise this issue again in the context of this discussion on DM and EE.

PIAC appreciates that the DNSPs demand forecasts are essentially 18 months out of date due to the timeframes required to prepare their proposals; and that AEMO's forecasts have been dramatically inaccurate (but consistently over-estimating demand) for the last five years.[220] However, as noted in section 1.3.2 above, PIAC's view is that the proposals have significantly over-estimated the investment that is required, given that overall demand is falling sharply and peak demand is steady, if not decreasing. The end result of these demand forecasts is that NSW consumers will pay excessive costs for investment that is not required. This issue of investment beyond the level required for the manifest demand has widely been acknowledged (including by the AER) as a massive failing of the last regulatory period. PIAC would argue strongly that this mistake should not be repeated for the current period. In PIAC's view, without the AER's intervention, NSW consumers face significant risk of this recurring.

As such, PIAC recommends the AER assess the DNSPs' proposals based on realistic assessment of the current context in which they are operating, especially falling overall demand and plateauing peak demand. If this assessment supports PIAC's views that the DNSPs have still overestimated electricity demand, then the AER should replace the DNSPs forecasts and significantly reduce both the capex and opex granted to the NSW networks in line with more up-to-date and realistic projections of falling demand.

Given how rapidly the energy sector is changing, PIAC also recommends that intensive scrutiny be given to annual reviews and pricing updates. These reviews should closely monitor the forecasts and achievements of plans that consumers have paid for. As outlined in section 7, PIAC also urges, the AER to closely monitor the service performance, given the comments made by the DNSPs regarding their rate of return requirements.

***Recommendation 26***

*Given the rapidly changing energy market, PIAC recommends that the AER gives intensive scrutiny to annual reviews and pricing updates, along with DNSPs performance and consider if shorter reset periods may be appropriate.*

***Recommendation 27***

*PIAC recommends that the AER request that each NSW DNSP develop practical proposals for DM actions that could be implemented as contingency measures if demand or consumption increases above levels used by AER in the determinations.*

### 8.2.2 DNSPs proposals are inconsistent with NSW Government policy

Despite all three DNSPs currently being fully owned by the NSW Government, there is a surprising lack of consistency with NSW Government policy, in particular the Renewable Energy Action Plan and Energy Efficiency Action Plan. While responsibility for NSW Renewable Energy Action Plan rests primarily with NSW Trade & Investment – Division of Resources and Energy, one might expect that the overall objective:

[220] M Sandiford, 2014, *When will electricity utilities admit the game is up?, available at:* http://theconversation.com/another-summer-on-the-nem-24451, as at 4 August 2014.

> This NSW Renewable Energy Action Plan supports the achievement of the national target of 20% renewable energy by 2020. The Plan positions NSW to increase the use of energy from renewable sources at least cost to the energy customer and with maximum benefits to NSW

and in particular Action 1:

> Improve the process of network connection by:
> - Facilitating timely network connections
> - Assisting to resolve issues when they arise
> - Improving access to resource mapping in NSW so energy resources are linked spatially to demand and network capabilities, enabling easy identification of opportunities and constraints
> - Developing and publishing clear guidance outlining the steps for grid connection for commercial-scale PV, providing greater certainty of process and timeframes and identifying opportunities for cutting red tape and costs[221]

would be referred to in the DNSPs' proposals – and in fact, that the proposals might outline how these government-owned businesses are working to implement NSW Government policy.

Similarly, the NSW Energy Efficiency Action Plan:

> will ensure the NSW Government can meet Goal 5 of *NSW 2021* to place downward pressure on the cost of living and make NSW number one. This goal includes targets to:
> - realise annual energy savings of 16,000 gigawatt-hours by 2020

and is the primary responsibility of the Office of Environment and Heritage. However, Action 3 to:

> Investigate policy options to deliver cost-effective energy savings at the times and locations of peak demand and to better coordinate energy efficiency programs and demand-side participation.[222]

is an area where DNSPs should be able to contribute but it is not clear from the proposals if they are contributing in any way. While the DNSPs are corporatised bodies governed by the NER, they should be assisting the NSW Government to achieve policy outcomes and not apparently be ignoring Action Plans in relevant areas. In any case, failure to address these government policies place DNSPs at risk of incurring costs as a result of government actions to implement its policies, unless they develop compatible strategies.

### 8.2.3 NSW consumers want DNSPs to provide demand management and energy efficiency

It appears the networks' own research shows customers want DNSPs to provide demand management and energy efficiency services, although they want to be paid to participate in such programs. For example:

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221 NSW Government, 2013, *NSW Renewable Energy Action Plan*.
222 Ibid.

> Most believed that Ausgrid should be working with customers to ensure they understood the impacts of changes in electricity usage.
>
> …
>
> While customers indicated interest in the overall idea of new technology, such as smart meters and the opportunity to obtain further information on how they might better manage their electricity usage, few were interested in paying more for technology. [223]

### 8.2.4 DNSPs proposals are inconsistent with international best practice

Clearly, a better regulatory framework is needed for DM. Ausgrid's DM Plan states (and PIAC would agree) that:

> It is widely recognized by regulators and stakeholders that a less than economically efficient level of DM has been conducted in the NEM to date. This has led to several recent enquiries, regulatory reviews and rule changes. Notable examples include the "Power of Choice" review (AEMC), the Productivity Commission enquiry into "Electricity Network Regulatory Frameworks" and the Distribution Network Planning and Expansion Framework Rule Change driven by the MCE. Further to this, The AER has stated in its Strategic Priorities and Work Program 2013-14 the intent to establish stronger incentives for distribution businesses to undertake demand management.

PIAC would argue that NSW DNSPs need not wait for regulatory change and that they have the ability and resources to look to best practice internationally for ideas and lessons for their businesses. Indeed, early action is likely to reduce future compliance costs and risks. In California, for example:

> The California Public Utilities Commission (CPUC) has recently mandated the purchase of 1325MW of energy storage by 2020; California's Investor Owned Utilities (IOUs) have installed over 14 million smart meters, Pacific Gas & Electric (one of California's largest IOUs) currently has 12 different demand response products; California has almost 50,000 plug-in electric vehicles (PEVs) on the road, and it recently generated a record 26%(1) of its electricity from renewable sources, with a target of 33% by 2020.[224]

While much of this innovation has been driven by regulation and also is facilitated by the integration of distribution and retail businesses in California, Ryan Wavish highlights that:

> Meaningful collaboration between retailers and distributors to develop an aligned approach for pricing and selling DM products that recognise the needs of both the energy market and energy networks can result in a vibrant demand management market.[225]

Innovation is not limited to California:

> British Gas, for example, is transforming its retail business by offering a range of new services and products such as gas boiler repair and insurance, solar PV, insulation and

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223 Ausgrid, 2014, *Regulatory Proposal.*

224 Wavish, R, 2014, *Lessons from the Californian Electricity Market*, Marchment Hill Consulting, available at http://www.marchmenthill.com/qsi-online/2014-04-10/lessons-from-the-californian-electricity-market as at 8 August 2014.

225 Ibid.

> smart energy management. Last year, almost 30 per cent of its retail profits came from these non-traditional areas.[226]
>
> Duke Energy achieved peak savings of between 5 per cent and 15 per cent in its first year of operating a demonstration virtual power plant in North Carolina, involving 213 solar panels, a 500 kilowatt battery and residential customers with home energy management systems.[227]

The New York State Public Service Commission's stated objective is to:

> make energy efficiency and other distributed resources a primary tool in the planning and operation of an interconnected modernized power grid. Under the customer-oriented regulatory reform envisioned here, utilities will actively manage and coordinate a wide range of distributed resources to accomplish the policy objectives described by the Commission. Markets and tariffs will empower customers to reduce and optimize their energy usage and electric bills, and will stimulate innovation and new products that will further enhance customer opportunities.[228]

The traditional (supply-oriented, capex-focused) model of networks is out-dated, as was acknowledged by the CEO of the Energy Networks Association at Clean Energy Week in Sydney on 23 July 2014.

The question is, when will the NSW DNSPs undertake necessary innovation in their business model? Innovation need not come by requirement from regulation. Regulated monopolies can show leadership and look to establish a business model more appropriate for the rapidly transforming energy market, as others overseas are doing and as it appears Essential Energy is planning to do. Moreover, unless they do so, the NSW DNSPs are at risk of excessive investment in infrastructure that will become stranded assets well before the end of their economic life.

### 8.2.5 The NSW network proposals do not acknowledge or apparently incorporate climate change risks

As noted above in the content analysis, climate change is not discussed as a risk in the DNSPs' proposals. However, the Garnaut Review conservatively estimated climate costs to Australian infrastructure alone would be worth $9 billion annually by 2020[229] and the Climate Institute's 2012 report, *Coming ready or not: Managing climate risks to Australia's infrastructure*[230] found that overall, the electricity sector was underprepared. The Climate Institute report noted that Ergon

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226 E Micklem, 2014, *Orthodoxy is out in the power sector,* Xynteo, available at http://www.xynteo.com/articles/orthodoxy-is-out-in-the-power-sector as at 8 August 2014.

227 Gandhi, Preeti; Pradhan, Anindya; Leordeanu, Cristian; Zaitsev, Danny & Jan van der Zanden, Geert, 2012, *Empowered consumers The next wave of electric utility services,* Tata Consultancy Services/Xyntéo available at http://www.tcs.com/SiteCollectionDocuments/White%20Papers/ESU_Whitepaper_Electric_Utility_Services_1212-1.pdf as at 8 August 2014.

228 NYS Department Of Public Service, 2014, *Reforming The Energy Vision: NYS Department Of Public Service Staff Report And Proposal*, available at: http://www3.dps.ny.gov/W/PSCWeb.nsf/96f0fec0b45a3c6485257688006a701a/26be8a93967e604785257cc40066b91a/$FILE/ATTK0J3L.pdf/Reforming%20The%20Energy%20Vision%20(REV)%20REPORT%204.25.%2014.pdf as at 8 August 2014.

229 Garnaut, R, 2011, *The Garnaut Review 2011: Australia in the Global Response to Climate Change*, available at http://www.garnautreview.org.au as at 8 August 2014.

230 Climate Institute, 2012, *Coming ready or not: managing climate risks to Australia's infrastructure, available at:* http://issuu.com/theclimateinstitute/docs/tci_comingreadyornot_climateriskstoinfrastructure_?e=0/7755954, as at 8 August 2014.

and Energex developed a combined Network Adaptation Plan in 2011, but there is no reference to any comparable plan in any of the NSW DNSPs' proposals.

Climate impacts should be being routinely incorporated into strategy, design, construction, and maintenance standards, but it is unclear if or how this is being done by NSW networks.

***Recommendation 28***

*The AER should require all networks to provide detailed information on how they are adapting to climate change in both their strategy and operations.*

### 8.2.6 A step-change in NSW networks' strategy is required

In summarising the analysis in the sections above, in PIAC's view, a major flaw in the NSW DNSPs proposals is their failure to acknowledge or respond to the transformation currently underway in the energy system. This includes the falling costs of distributed generation and distributed storage, and the potential of new technologies to benefit networks if they embrace them as central to their strategy and operations. The rules do not prevent demand management and energy efficiency from being central to DNSP's business strategies, but from an anthropological perspective, it appears the culture does. As Melbourne University academic Mike Sandiford put it recently:[231]

> As an essential service, a death-spiral seems implausible. However, there is clearly a need to move on from the old game of simply selling more electrons. There is now a need to focus on delivery of quality energy services with less capital expenditure. This necessarily means accommodating the new technologies of distributed generation and demand management, with a sharp focus on mitigating peak demand growth.

***Recommendation 29***

*PIAC recommends that the AER encourage the DNSPs work to empower customers to reduce and optimise their energy usage and electricity bills, and to stimulate innovation and new products that will further enhance customer opportunities.*

## 8.3 Analysis of DNSPs' proposed expenditure on DM

### 8.3.1 Quantum of proposed expenditure

The table below highlights the low level of proposed expenditure on DM compared with overall revenues, a mere 0.3% in Ausgrid and Endeavour's case, less in Essential's:

[231] Sandiford, M, 2014, *When will electricity utilities admit the game is up?* Available at: http://theconversation.com/another-summer-on-the-nem-24451, as at 8 August 2014.

| | Ausgrid | Endeavour | Essential |
|---|---|---|---|
| **Number of customers** | 1,600,000 | 908,000 | 815,000 |
| | ($millions 2014-15 to 2019-20) | | |
| **DMIA** | $5.3 | $3.0 | $3.0 |
| **Broad-based programs** | $21.1 | $6.2 | $13.7 |
| **Targeted programs** | $2.0 | $3.8 | - |
| **Pilots and trials** | $8.2 | $3.0 | - |
| **Total DM spend** | $37.3 | $16.0 | $16.7 |
| | | | |
| **Total capex** | $4,900 | $1,900 | $2,800 |
| **Total opex** | $3,300 | $1,800 | $2,800 |
| **Total revenue** | $12,200 | $5,300 | $7,100 |
| | | | |
| **DM compared with revenue** | 0.3% | 0.3% | 0.2% |
| **DM compared with total opex** | 1% | 1% | 0.6% |
| | | | |
| **DM spend per customer** (actual $) | $23.3 | $17.6 | $20.5 |

Such expenditure ratios suggest the DNSPs do not value DM or recognise the potential for DM and EE to provide them with strategic advantages into the future. There is a case for independent evaluation of the cost-effectiveness of DM options relative to the costs and benefits of the DNSPs' proposed approaches, given these small allocations to DM action.

### 8.3.2 Scope of proposed expenditure

PIAC commends Ausgrid and Endeavour for developing Broad Based Demand Management programs and acknowledges in Ausgrid's case this is 'a step change increase in opex for demand management activities compared to the previous regulatory period'[232]. However, PIAC also notes in Ausgrid's case:

> Other program options that were considered include:
> 1. Building automation controls
> 2. Residential appliance efficiency / rebates
> 3. Residential small appliance load control
> 4. Motor energy efficiency and variable speed drives
> 5. Refrigeration equipment efficiency
> 6. Compressor efficiency
> 7. Ice storage
> 8. Rural irrigation pumping
> 9. Standby generator upgrades
> 10. Greenfield development efficiency incentives
> 11. Cogeneration support
> 12. Subsidies/rebates for energy efficient equipment/fuel switching

[232] Ausgrid, 2014, *Ausgrid's Demand Management operating expenditure plan,* (Attachment 6.12).

13. Residential appliance round-ups
14. Additional tariff options (e.g.residential capacity charging)
15. Battery storage and distributed generation

and is surprised none of these made the cut for the program, especially given that distributed storage and electric vehicle support were included in the $100m recently completed Ausgrid-led Smart Grid, Smart City project. PIAC was surprised to see Ausgrid propose instead innovation projects of a grid battery trial from 2016/17 for only $500,000 over three years and an Electric vehicles - Controlled Load Trial from 2016/17 for only $500,000 over two years. Grid batteries are economic at fringe of grid now and PIAC would have expected that Ausgrid could have been much more ambitious in a Broad Based Demand Management program given the learnings from the Smart Grid, Smart City project.

Ausgrid's DM operating expenditure plan says that the program will have a minimum benefit cost ratio of 2.0 when using the whole and it expects the benefit:cost ratio will range from 3 to 5. This suggests that Ausgrid is only proposing to tackle the very lowest-hanging fruit and there must be a great deal more it could do (with a benefit:cost ratio above 1) that would bring net benefits to consumers.

***Recommendation 30***

*PIAC recommends the AER should require the NSW DNSPs to undertake a significant increase in broad based DM. Projects with a cost/benefit analysis >1 (over at least 15 years) should be undertaken as by definition, this is of net economic benefit to consumers.*

### 8.3.3 Ausgrid's demand management benefit sharing scheme

PIAC commends Ausgrid for proposing a demand management benefit sharing scheme (DMBSS) and supports it as an interim measure before the reformed DMIS is introduced. The new DMIS (with targets and maybe even penalties) should be consistent with international best practice and apply as soon as it is available. This should be developed as a matter of urgency and applied within the current determination.

***Recommendation 31***

*PIAC recommends that the AER develop a new Demand Management Incentive Scheme should be undertaken in such a way that DM becomes central to DNSPs' activities and is undertaken wherever it will reduce long term costs for consumers.*

In addition, the AER should require DNSPs to report on their demand management and energy efficiency activities in order to improve information available to consumers and DM businesses and support growth of the DM industry. Essential's DM Strategy incorporates bi-annual monitoring and reporting, but given the need for consumer transparency about these activities, PIAC recommends annual reporting.

***Recommendation 32***

*PIAC recommends DNSPs should be required to report annually to the AER on their demand management and energy efficiency activities and that the scope of this report be developed in consultation with the DM industry and consumers.*

## 8.4 Meter fees

Smart meters are essential to smart grids and the implementation of cost-reflective pricing. As such, in PIAC's view, networks should support the adoption of smart meters by both households and business customers. It is disappointing to see Ausgrid's decision to revert back to installing $12 accumulation meters given the potential of smart meters to facilitate better outcomes for consumers.

In addition, the proposed exit fees (see table) are excessive and serve as a major barrier to the wider adoption of smart meters, once the metering sector becomes contestable for all meter types:

| | Ausgrid | Endeavour | Essential |
|---|---|---|---|
| Standard meter charge | $35 | $27 | $51 |
| Interval meter | $57 | $12 | |
| Average exit fee | $195 | | $117 |

***Recommendation 33***

*PIAC recommends meter exit fees should be set at the remaining cost on the basis of the capital cost of the meter amortised over ten years.*

# 9. Response to questions in the AER's issue paper

## 9.1 AER questions: the capital expenditure proposals

| | |
|---|---|
| AER Q: Do you think that the distributors' capital expenditure proposals are appropriate? | A: No, there needs to be further review of these expenditures.<br><br>It is commendable that the proposed capex has been much reduced from the previous record levels of expenditure. However, under the networks' proposals, the regulated asset base still continues to grow at a rate above CPI despite declining demand. This situation is not sustainable, but can only be addressed through significant reductions in capex beyond those proposed.<br><br>It is up to the businesses to prioritise their capex accordingly, bearing in mind consumers' preferences. However, key points are:<br>(a) reliability capex: The average reliability across the networks is above the standards now required. Therefore, reliability capex should be minimal, and specifically targeted at identified areas of poor performance.<br><br>(b) growth capex: The distributors, particularly Ausgrid, are proposing continued high levels of growth capex despite the decline in demand, and expansion of capacity in the current regulatory period. PIAC believes these claims should be vigorously examined, including the assumption by Ausgrid and Endeavour that peak demand will recover and grow over the period.<br><br>This is against current trends in demand. Also, the over-forecast of demand growth in the past has resulted in unnecessary capex at the expense of consumers. In addition, PIAC considers much of Ausgrid's growth will come from urban growth, the costs of which are largely recovered from the developers, while Ausgrid benefits from greater utilisation of its assets such as transformers and sub-transmission (many of which have been replaced and upgraded over the last 5 years or in the near future).<br><br>(c) asset renewal capex: PIAC also urges the AER to undertake a critical examination of the proposals for renewal/replacement capex.<br><br>It seems most surprising that despite the level of investment in the current regulatory period, the networks, particularly Ausgrid, are claiming further renewal expenditure is needed to 'maintain' the average age of the network.<br><br>In other jurisdictions, such as Qld where there has also been significant capex investment, the average age of the network has reduced as would be expected. |

## 9.2 AER questions: operating expenditure.

| | |
|---|---|
| Q: Are the distributors' operating expenditure proposals appropriate? | A: No. there needs to be further review of these proposals, particularly the proposal by Ausgrid.<br><br>Ausgrid has the highest price increases, and builds up on a very high RAB value (return on capital and return of capital explains 65 per cent of Ausgrids cost base, much reducing flexibility for other investments in consumer services or price reductions.<br><br>PIAC has identified a number of particular areas that should be further assessed. They include:<br><br>(a) Base Year Forecast: Adjustments have been made to the 2012/13 base year which increase the amount of opex claimed. The adjustments are made on the basis of accounting issues, not cash. Any upward increases on the base year costs will tend to flow through across all years. PIAC estimates a net effect of some $200M across the five years.<br><br>(b) Step changes: There appear to be some significant step changes as the opex in first year of the new period is about 14 per cent higher than the 12/13 year. The overall increase should therefore be examined in more detail.<br><br>(c) Trends: The forecasts for materials seems reasonable, but the labour forecast is well above CPI, and such costs are not sustainable.<br><br>(d) EBSS: While an EBSS has been in place, PIAC believes it is not credible for the businesses, particularly Ausgrid, to pass the EBSS rewards through the network prices. PIAC's view is based on the perception that the current regulatory period financial opex allowances were not set at efficient levels. It would be most concerning to PIAC, and bewildering to Ausgrid's customers to know that they must pay this cost as well as the very high prices. |

## 9.3 AER questions: rate of return

| | |
|---|---|
| AER Q: Do you consider that any departures from our rate of return guideline are justified? | A: No. PIAC does not consider current circumstances warrant a departure from the rate of return guideline.<br>The guidelines were developed after a long, extensive and transparent consultation with the DNSPs, consumers and various experts.<br><br>Economic conditions, including low interest rates continue to be stable and are expected to remain so for some time. The regulatory environment (including the revenue cap and the annual updating of the cost of debt) will provide considerable additional financial protections to the businesses<br><br>The guideline will go some way to ensuring that consumers share in the benefit of the improved economic conditions while reflecting the urgent need to drive greater productivity in the network businesses and more efficient investment of capital. |
| AER Q: In particular, do you have any comments on the departures proposed by the businesses? | A: Yes. In each instance of variation from the guideline the aim of the DNSPs is to achieve a higher rate of return above their efficient costs.<br><br>The DNPSs' proposed changes all concern areas of cost that were well canvassed during the development of the guideline. Their arguments are inconsistent, based on the one hand (in the cost of debt) on their claim of their actual costs of debt and on the other hand, based on regurgitation of arguments about modelling approaches but without linking these to the long-term interests of consumers.<br><br>There is no evidence from either the actual outcomes of the current regulatory determination or future forecasts that the DNSPs will be in financial difficulties and unable to meet their obligations under the NEO if the rate of return is based on the Guidelines. |