



A missed opportunity?

**Submission to the Australian Energy Regulator's
Draft Determination for Ausgrid, Endeavour Energy
and Essential Energy**

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1. Introduction

1.1 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 NSW Trade and Investment 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.

1.2 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;
- St Vincent de Paul (NSW);
- Ethnic Communities Council NSW;
- Tenants' Union of NSW;
- Salvation Army;
- Retirement Villages Residents Association; and
- Physical Disability Council NSW.

Over recent years, PIAC has devoted significant resources to representing the interests of residential consumers of energy in network price regulation matters. Through the development of the Australian Energy Regulator's (AER) *Better Regulation Guidelines* and previous stages of the price determination process for the NSW distribution network service providers (DNSPs), PIAC has demonstrated an expertise in the issues affecting network prices and how the regulation of DNSPs can be made to better work in the long-term interests of consumers.

A list of 36 submissions made by PIAC since December 2011 is provide at Appendix A. The list includes 10 submissions to the AER related to network price regulation, including the development of the Better Regulation Guidelines. The list also includes 13 submissions to AEMC rule changes and market reviews since 2012 and six submissions to IPART on retail price regulation and seven submissions to other energy policy matters.

PIAC observes there is a large gap between the regulator and the DNSPs on the required expenditures, the outcome of which will have a significant impact on future prices for NSW electricity consumers. PIAC has a long history of experience with consumer issues, proactive engagement with the broader community sector and the AER on the issues of NSW electricity pricing.

PIAC would, therefore, welcome the opportunity of constructive engagement with the AER and the industry to discuss the matters outlined in this submission, which are so important to the economic well being of NSW.

2. Summary and recommendations

This submission responds to the Australian Energy Regulator's (AER) Draft Revenue Determinations (the Draft Determinations) for the three NSW distribution network service providers (DNSPs), as well as the Revised Revenue Proposals (RRPs) submitted by the DNSPs. While the submission focuses primarily on Ausgrid, the comments are also applicable to the other two NSW DNSPs (Essential Energy and Endeavour Energy).

The current revenue determinations are the first to implement significant recent changes to the regulatory framework governing the setting of DNSPs' allowed revenue undertaken in 2012-13. All stakeholders were given extensive opportunity to contribute to the development of the new framework, including DNSPs and PIAC. Regrettably, the revenue proposals of the three DNSPs (both initial and revised) have largely ignored the outcomes of these reforms. PIAC argues that this approach is not in the long-term interests of consumers. The overarching recommendation of this submission is, therefore, that the AER should grant the three DNSPs a level of revenue that reflects the efficient cost of providing network services, as determined under the current regulatory framework. This is the approach the AER has taken in its Draft Determinations.

Section five of this submission discusses why the aims of regulatory framework—to try and subject monopoly businesses, such as DNSPs, to the rigours of the competitive market—are best realised by the AER rejecting the revised proposals from the NSW DNSPs in making its Final Determination.

Section six then summarises the constituent decisions that make up the AER's Draft Determinations, of which PIAC is broadly supportive.

This submission addresses the three key drivers of network revenue: capital expenditure (capex), operating expenditure (opex) and the Weighted Average Cost of Capital (WACC). Section seven addresses capex and the claim by the NSW DNSPs that if the AER's Draft Determinations were implemented, there would be significant risks to safety and reliability of the network. PIAC rejects this assertion and notes that the AER's Draft Determinations would only bring the DNSPs back to a level of allowed capex that is broadly efficient, but with relatively young assets that should, therefore, require less replacement in coming years.

Section eight discusses opex and role of benchmarking. As part of the opex assessment, the AER has relied on the use of benchmarking. The NSW DNSPs have expressed significant reservations about the AER's approach to benchmarking and the outcomes of its benchmarking study. PIAC does not share these concerns, and believes the AER's approach to benchmarking will deliver better outcomes for consumers, including more affordable essential services. Further, the DNSPs submitted opex forecasts that were only marginally below the record levels of operating cost seen in the 2009-14 regulatory period. PIAC believes this is a very unsatisfactory response to what had been widely recognised as a significant problem for NSW networks and a drain on consumers who must fund this level of exposure.

Section nine addresses the WACC. This discussion includes PIAC's analysis of the Australian Energy Market Commission (AEMC's) intent in reforming the regulations governing the WACC, as well as how PIAC interprets the relevant Rate of Return Objective, contained in the

regulations. This section also outlines PIAC's concerns with AER's Draft Determinations for the WACC. PIAC supports the AER's proposed method for transitioning from an 'on the day' approach to calculating the return on debt to a 'rolling average' approach but believes the AER must reduce the allowance for aspects of the WACC, in particular the Equity Beta. To accept the NSW DNSPs proposed rate of return would be to accept the proposition that NSW electricity businesses are far less efficiently financed than networks outside NSW. PIAC would strongly oppose the consumers of NSW continuing to pay for inefficiently financed DNSPs.

Section ten discusses the networks proposals for Demand Management (DM). PIAC is a strong supporter of DM and believes it should be an integral part of DNSP planning and management of their networks. Accordingly, PIAC recommends that the AER help facilitate increased DM by networks, in particular through the introduction of an incentive scheme, the outcomes of which are auditable and sustainable generating real savings for consumers in the future.

The aforementioned 2012-13 reforms to network regulation placed a significantly increased emphasis on the role of consumers in the regulatory process. To facilitate this involvement, requirements now exist for DNSPs to consult with their consumers in planning their networks and developing their revenue proposals. Section eleven outlines PIAC's experience in this area with the three NSW DNSPs, including addressing comments from Ausgrid specifically in relation to its engagement with PIAC. PIAC notes that consumer engagement is not an end in itself, but a way in which the users of network services can contribute to better outcomes across the system. PIAC suggests the NSW networks could do more to fully embrace this process as one of ongoing genuine engagement with consumer advocates and community welfare organisations.

Finally, this submission makes a number of observations about continuing issues with the regulatory model that have become apparent as part of this price determination process. While the process of setting DNSP revenue prices is nearly complete, PIAC intends to continue to pursue these reforms.

Recommendation 1

PIAC recommends that the AER does not accept either the original revenue proposals or the revised proposals by the DNSPs with respect to:

- *the proposed total capital costs;*
- *the proposed total operating costs;*
- *the proposed rate of return; and*
- *the total revenue allowance.*

Recommendation 2

PIAC recommends that in making its final determination, the AER consider how equivalent situations would be handled in the competitive market.

Recommendation 3

That the AER determine revenue for the three DNSPs that reflects the efficient cost of delivering network services.

Recommendation 4

PIAC supports reductions in DNSPs capex, especially given market conditions and previous excess expenditures. PIAC therefore recommends the AER continue its examination of proposed capex expenditures and ensure that only prudent and efficient capex is allowed as part of the regulated asset base (RAB).

Recommendation 5

PIAC supports reductions in DNSPs opex, especially given the results of benchmarking studies. PIAC therefore recommends the AER continue its comparative examination of proposed opex expenditures and ensure that only prudent and efficient opex is allowed.

Recommendation 6

PIAC recommends that there should be no transition period towards more efficient opex spend by the NSW networks. The Draft Determinations already allow for a level of inefficiency, including a 10% downward adjustment from the 'efficiency frontier'. Restructures should be funded out of profits as would be the case in a competitive market and consumers should not wear the costs of reforms on the path to efficiency.

Recommendation 7

PIAC recommends that the AER reject the DNSPs revised proposals in relation to the WACC and determine a WACC that meets the rate of return objective in the NER.

Recommendation 8

PIAC recommends that the AER consider whether there is a case for increasing the DMIA above \$1m and whether the criteria for the use of these funds be reviewed (particularly to fund proposed 'pilots and trials').

Recommendation 9

PIAC recommends that the AER accept Ausgrid's DMBSS proposal and also apply it to Endeavour's broad-based DM proposal.

Recommendation 10

PIAC recommends that the AER develop a new Demand Management Incentive Scheme and that this be undertaken a way that is outcomes-focused and seeks to ensure DM becomes central to DNSPs' activities. The process should also ensure it can be implemented in the current regulatory period.

Recommendation 11

PIAC recommends that the AER develop a rule change proposal to improve the governance, scope (including replacement capex) and implementation of the RIT-D.

Recommendation 12

PIAC recommends that the AER consider how all network businesses might be further supported and encouraged to undertake demand management.

3. The current review

The Public Interest Advocacy Centre Ltd (PIAC) welcomes the opportunity to respond to the AER's Draft Determinations¹ on the NSW distribution network services providers (DNSPs) for the period 2015-16 to 2018-19 (2015-2019) (the Draft Determinations).

PIAC previously provided a submission to the AER on the transitional proposal for 2014-15. In August 2014, PIAC also provided an extensive submission to the AER in response to the regulatory proposals submitted by the three NSW DNSPs for the period 2015-2019.² PIAC notes that although the proposals and the AER's Draft Determinations relate to the period 2015-2019, the revenue and cost allowances have been adjusted as a result of applying the new principles to 2014-15 as agreed under the transitional arrangements set out by the Australian Energy Market Commission (AEMC).

PIAC has also briefly reviewed the DNSP's revised regulatory proposals that were submitted to the AER in response to the AER's Draft Determination in late January 2015. Unfortunately, there has not been sufficient time or resources to review these revised regulatory proposals in depth. However, PIAC notes that the revised proposals are little changed from the DNSPs original proposals in terms of the high level categories of expenditure and the weighted average cost of capital (WACC).

PIAC's submission will focus on a limited number of areas of the Draft Determinations. Regarding detailed consideration of the DNSP's revised proposals, including the extensive review of the regulated weighted average capital (WACC), PIAC refers the AER to its original submission.

As in PIAC's response to the DNSPs' proposals, particular emphasis will be on the AER's Draft Determination for Ausgrid and to some extent, Ausgrid's response to that. PIAC believes much of the discussion will be relevant to the other DNSPs, even though Endeavour Energy is coming from a much stronger history of effective investment and service delivery.

As discussed in the final section of this submission, the current regulatory process in which networks submit thousands of pages of material, the AER responds with similar volumes of material (as it is required to do) and the networks respond with further thousands of pages of material, disenfranchises consumers from meaningful participation in the process.

The fact that consumers pay for this process in their network prices simply adds to the frustration of PIAC and other consumer representatives. Our expectation was that the AEMC's Rule changes and the AER's Better Regulation Program and Guidelines would have led to constructive engagement and lower costs. It is disappointing that this has not happened. PIAC will be seeking reform of the process of network regulation.

This submission also outlines PIAC's disappointment with regard to the approach adopted by the network businesses, particularly, Ausgrid, in its Revised Regulatory Proposal. Not only has

¹ AER, *Draft Decision, Ausgrid distribution determination 2014-15 to 2018-19*, November 2014; AER, *Draft Decision, Essential Energy distribution determination 2014-15 to 2018-19*, November 2014; AER *Draft Decision*

² PIAC, *Moving to a new Paradigm: submission to the Australian Energy Regulator's NSW electricity distribution network price determination*, 8 August, 2014. [PIAC, *Submission to AER network price determination*]

Ausgrid's proposal changed very little, it has not accepted the AER's benchmarking or that of any other studies of its relative inefficiency. Ausgrid's apparent continuing expectation is that consumers should fund large capital expenditure (capex) programs and inefficient operating costs. PIAC supports the AER's efforts to required NSW DNSPs to meet a moderately efficient standard.

The public response of Ausgrid and Networks NSW to the AER's Draft Determination is troubling. PIAC believes that debate over the AER's Draft Determination is quite legitimate, but the recent megaphone diplomacy (via statements to the media) is not. Threats to the safety and reliability of electricity supply if the DNPS are not granted their proposed revenue is not conducive to a constructive dialogue between networks, the AER and consumers.

Each DNSP has a moral and legal duty to deliver a safe and reliable supply and comply with the law. This is not unique to DNSPs. Many businesses, including DNSP customers, do this every day. The DNSPs now face the prospect of capital constraint after a period of capital excess. Just like many of their customers, the DNSPs must now select their priorities – that is the key task of management and Boards. As with other businesses, the priorities must be set while maintaining safety, service and compliance with the law.

To that end, PIAC finds one statement in Ausgrid's revised proposal troubling, particularly as it implies Ausgrid is unwilling to assume accountability for its own priorities and decisions. Ausgrid states:³

We are also of the opinion that if the AER is aware of the safety impacts of the proposed operating and capital expenditure allowed for in the draft determination and it makes its final determination allowing for these same levels irrespective of these safety impacts, it will be in breach of its primary duty of care under the Cth WHS Act.

This statement appears to be an attempt to intimidate the regulator and as such is out of sync with an open and cooperative form of network regulation. PIAC seeks public reassurance that this is not Ausgrid's nor Network NSW's intention.

³ Ausgrid, *Revised Regulatory Proposal (amended)*, February 2015, 9.

4. The regulatory framework

The AER's decision on the allowed revenue for the NSW DNSPs is set within a framework of the National Electricity Law (NEL), the National Electricity Rules (NER), the AER's Guidelines (which the AER is obliged to have available at all times), and a variety of state laws and obligations.

PIAC's view of the hierarchy of regulation that the AER must take into account when making decisions on regulatory proposals is:

- The National Electricity Objective in the NEL – the peak obligation on the AER is to make its decisions in the long-term interest of consumers. The recent series of reforms (2012-2013) to the NER and to the NEL (especially regarding the requirements for the Australian Competition Tribunal) have firmly restated this. It is also clear from the literature that ultimately, these reforms and the NEO requires the AER (and the Tribunal) to place a priority on consideration of the reasonableness of the overall regulatory outcomes in terms of the long-term interest of consumers. Each of the AER's constituent decisions must be considered in the light of this.
- The Revenue and Pricing Principles (RPP) in the NEL, which require the AER to make its decisions such that the DNSP is able to at least recover its efficient costs of delivering the network services;
- The specific constituent objectives in the NER (and associated criteria), that include:
 - Rate of return objective
 - Capital expenditure objective
 - Operating expenditure objective
- The guidelines that the AER must have in place and which set out the AER's intentions how it will assess the regulatory proposals to best meet the NEO, the RPP and the constituent objectives.

A consistent theme in the DNSPs' responses to the AER's Draft Determinations is that the Draft Determinations do not comply with the regulatory framework as they will not allow the DNSPs to recover their efficient costs. The claim is then made that the AER's Draft Determinations will not, therefore, serve the long-term interests of consumers.

PIAC's view is that the long-term interests of consumers are best served by the networks delivering services at the efficient cost. Where PIAC departs from the DNSP's proposals and revised proposals is in the assessment of efficient costs referred to in the Revised Revenue Proposal (RRP).

PIAC considers that the evidence from multiple sources (dating back to the Productivity Commission reviews) and including the AER's recent benchmark studies, demonstrates that the NSW DNSPs are not efficient in their operations and have significantly over-invested in their networks. It is important for the DNSPs to accept this criticism, and more particularly, to

understand the harm that has been caused to households and businesses by the excesses of the past.

PIAC also notes that Networks NSW has significant concerns about the AER's benchmarking report and the use of that report in making the Draft Determinations. These concerns were expressed by representatives of Networks NSW at both the public hearing for the AER's Draft Determination on 8 December 2014 and the forum with consumer advocates held on 6 February 2015.

PIAC notes that the AER's benchmarking report was not published by 30 September 2014, as required by the NER, but understands this delay not to have jeopardised the effectiveness or integrity of the consultation process.

As PIAC sees it, the only benefit of this history of excess expenditure is that, however inefficiently it may have been developed, the NSW networks assets are now relatively young, delivering high standards of reliability (greater than requirements) and substantially more spare capacity. A period of only modest investment and consolidation – as implied the AER's Draft Decision – is now what is required.

PIAC therefore considers that the long-term interests of consumers are best served by the AER not accepting either the original revenue proposals or the revised proposals by the DNSPs with respect to:

- the proposed total capital costs;
- the proposed total operating costs;
- the proposed rate of return; and
- the total revenue allowance.

PIAC acknowledges that the adjustments proposed by the AER are significant, and while PIAC applauds the direction of the AER's decision, and much of the evidence put to support that decision, including the benchmarking research, it is clear that there is room for further discussion.

Recommendation 1

PIAC recommends that the AER does not accept either the original revenue proposals or the revised proposals by the DNSPs with respect to:

- *the proposed total capital costs;*
- *the proposed total operating costs;*
- *the proposed rate of return; and*
- *the total revenue allowance.*

4.1 The competitive framework

An important role of the regulator is to ensure that in the absence of market competition, a monopoly business is subject to the equivalent constraints and efficiency drivers.

It is one of the striking features of the NSW DNSPs' proposals that they do not see themselves bound within that framework. In effect, the DNSPs are seeking 'protection' from the regulator as a monopoly, protections that are not available to their customers or other businesses. This is even

more striking, perhaps, given the DNSP's equal insistence that they should receive rates of return similar to those businesses operating in the competitive market.

PIAC has observed a number of instances of this (aside from the cost of capital issue which is discussed in a separate section of this submission), as highlighted in Table 2 below.

In such instances, PIAC submits that the AER should consider how equivalent situations would be handled in the competitive market. Seeking to replicate such approaches would go some way to driving market-led efficiencies in monopoly businesses.

Such an analysis would, for instance, make it clearer whether shareholders or customers of the monopoly should bear the cost and risk of different events. At the end of the day, all businesses have a constraint on capital (including opex) and must make decisions on priorities. Such constraints include the assessment of the proportional share of earnings between the business operations and the return to shareholders, as well as prioritisation of projects.

Table 2: Competitive and monopoly market behaviour

	Competitive market behaviour	DNSP Monopoly market behaviour	PIAC's Assessment
Excess capex investment/ uneconomic assets	Sell Write down Dispose Revalue	Increase prices to recover capital costs	It is in the interests of all parties for the networks to revalue assets. Consumers should not wear all investment and forecast risk
Reduced demand for the product	Reduce prices Improve services Reduce costs	Increase prices	Monopolies benefit from responding proactively
Onerous labour agreements	Renegotiate Pay redundancy & restructuring costs out of profits and dividends	Pass through costs to customers	The agreements reflect management decisions. The cost of these should come out of profits
Restructuring costs/efficiency initiatives	Assess decision on cost benefits basis Fund out of earnings	Pass through costs to customers	Restructuring or efficiency initiatives should be done on a cost benefit basis. The benefits and costs accrue to the owner. Under current arrangements the costs accrue to the customer, the benefits to the owner.
Investment in communications and IT	Assess decision on cost benefits basis Fund out of earnings	Pass through costs to customers	Restructuring or efficiency initiatives should be done on a cost benefit basis.

Other companies in the same business are delivering services at lower cost and/or better quality	Reduce costs Reduce margins Reassess service quality Act quickly to restore competitive position	Ignore the data Suggest that consumers should fund the extended adjustment period.	Unless there is a compelling reason, the owners of the business, not consumers should pay for a transition out of profits and dividends.
Business breaches H&S, or regulatory requirements	Prioritise investment in safety & compliance even at the cost to shareholders Redesign processes	Expect consumers to pay more	Capital is scarce in all businesses and it is the role of the Board and management to set priorities within the capital allowed. Safety & compliance should be one of these priorities.

Recommendation 2

PIAC recommends that in making its final determination, the AER consider how equivalent situations would be handled in the competitive market.

5. An opportunity lost?

5.1 Where is network reform taking NSW electricity consumers?

PIAC provided an extensive submission to the AER in response to the regulatory proposals of the three NSW distribution networks of Ausgrid, Endeavour Energy (Endeavour) and Essential Energy (Essential). PIAC's submission was optimistically titled *Moving to a new paradigm*.

PIAC's optimism was not due to substantial changes in the DNSPs' approach to the regulatory process despite their increased expenditure on "consumer engagement". The DNSP's regulatory proposals for 2014-19 were much as before, perhaps even more so—many millions of dollars spent on expert reports many, many thousands of pages and spread sheets devoted to defending the status quo—all funded by electricity consumers.

Rather, PIAC's optimism arose from the expectation that the 2012 amendments to the National Electricity Rules (NER) would mean that the AER's focus would be unambiguously on using its discretion to make decisions that served the long term interests of consumers. The AER was encouraged to look at the regulatory proposals holistically—did they make sense in the current environment, did they address the historical issues of overinvestment and inefficiency, did they demonstrate a commitment to continuous improvement, did they recognise and respond appropriately to their privileged position as a monopoly service provider?

To its credit, PIAC believes the AER prepared for and took on this challenge, commencing with the development of a suite of regulatory guidelines. The AER's guidelines reflected more than a year of extensive consultation with the industry, consumers, advisors, governments and other regulators. The guidelines sought to provide a balance between predictability and flexibility—predictability so that consumers and Network Service Providers (NSPs) had a sense of the AER's approach and the matters the AER would take into account when making its decisions; flexibility so that the AER was in a position to respond to changing circumstances.

PIAC made a substantial commitment to the Guideline development process to ensure that the voice of its constituents, the residential consumers of NSW, was heard. While PIAC did not agree with all aspects of the Guidelines, PIAC's view was that the rule changes and the guidelines provided an opportunity for a new beginning, for a cooperative, mature and efficient regulatory processes in Australia delivering efficient services and competitive prices to NSW businesses and households.

Disappointingly, the NSW DNSPs have chosen to ignore much of this process and the Guidelines in their regulatory proposals. It is important to remember the prior context for the current proposals, that is that the strong price rises of the 2009-14 regulatory period have made electricity unaffordable to a significant number of residential consumers. The CPI (or near CPI) price increases set out in the DNSP's proposals simply locked in the extraordinary profit gains of the past five years.

In November 2014, the AER released its Draft Determination on the NSW DNSP's regulatory proposals. PIAC does not necessarily agree with all the decisions made. However, the AER's Draft Determination does take a major step towards rebalancing the interests of consumers and the interests of the DNSPs and their shareholder.

The AER's decisions to reject the DNSP's proposal on the weighted average cost of capital, capital expenditure (capex) and operating expenditure (opex) and replace these proposals with their own was a major step in the right direction. The Draft Determination sets out an immediate trajectory of lower prices based on its obligation to approve only efficient and prudent expenditures. In defining what is efficient performance, the AER met the requirement under the rules to employ multiple tools including (but not only) benchmarking of the DNSPs' costs to deliver network services.

Overall, the AER's Draft Determination provides significant and welcome electricity price relief to NSW businesses and households. The Draft Determination was welcomed by representative organisations on behalf of the consumers of NSW, including PIAC. It appeared that the 'new paradigm' had emerged.

5.2 PIAC's submission in response to the Draft Determination

In this submission, PIAC makes the case that the AER's Draft Determinations move in the right direction and is largely consistent with the NEL, NER and the guidelines that were developed by all stakeholders. PIAC considers that the Draft Determinations attempt to address both the existing distortion of prices from efficient levels and the long-term promotion of efficient and sustainable investment by networks in the delivery of network services to the NSW community.

In summary, the AER's Draft Determinations:

- provide some important relief to NSW businesses and consumers following the excessive price rises of the last 5 years;
- set network prices that are moving in the right direction both for this regulatory period (2014 – 2019), and the ones that follow;
- recognise and address at least some of the issues arising out of the excessive expenditures in the last regulatory period, such as accelerated RAB growth;
- provide sufficient funds for the DNSPs to maintain reliability and safety of the network in accordance with the new standards and reflecting existing age, capacity and performance of the network;
- partially reduce the risk of a 'death spiral', in which high electricity prices lead to declining demand below efficient levels to the benefit of current and future consumers;
- provide a strong incentive on NSW DNSPs to lift their performance to at least the standard of efficiency seen in other jurisdictions;
- allow more than sufficient rate of return to enable an efficient DNSP to recover the costs financing its expenditures;
- restore some of the balance between consumers and the DNSPs, while providing sufficient resources for sustainable investment in the future of the network; and

- appropriately approves expenditure at a high level and assigns responsibilities for project decision making and prioritising to where it belongs, the Board and management of the DNSPs.

PIAC, therefore, considers that the AER's Draft Determinations are significantly more preferable to the long-term interest of NSW consumers than the DNSPs' proposal and revised proposal.

This submission will detail the reasons for PIAC's view on this matter and highlights a number of areas where PIAC believes the AER could enhance its Final Decisions.

PIAC opposes the DNSPs' decisions to move outside the framework of the AER's Guidelines. PIAC believes that the NSW electricity consumers deserve better consultation than the public response by the DNSPs, including the manner in which they dismiss the AER's Draft Determination in their revised proposals.

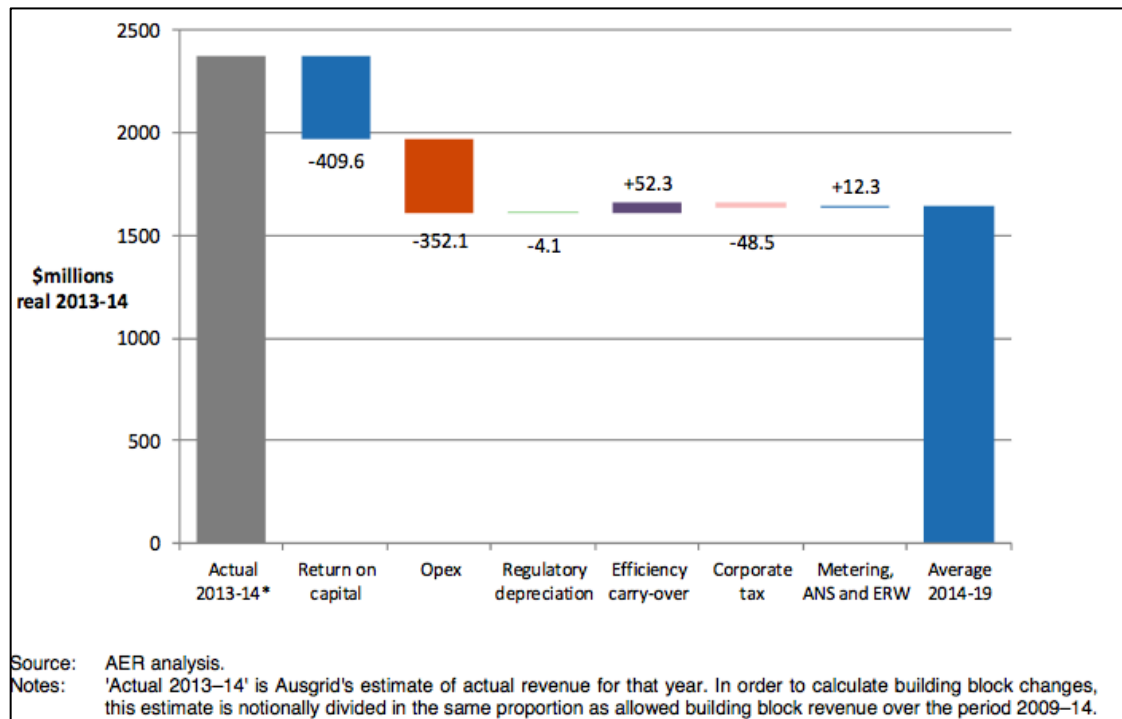
Recommendation 3

That the AER determine allowed revenue for the three NSW DNSPs that reflects the efficient cost of delivering network services.

6. A summary of the AER's constituent decisions

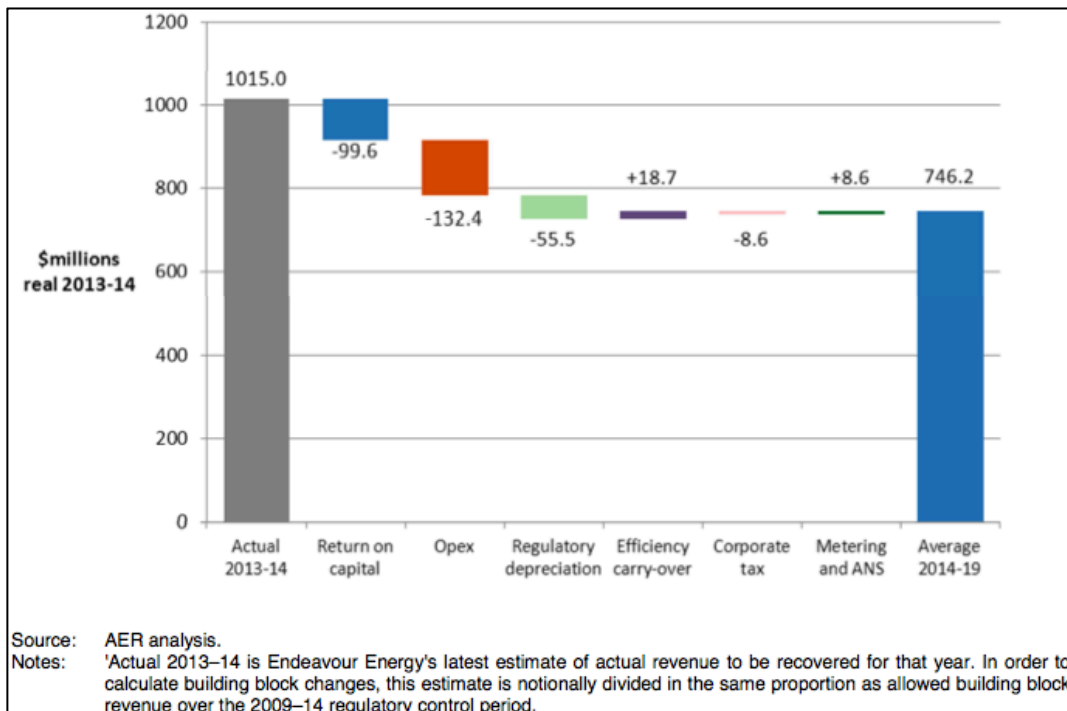
Figure 1 below highlights the significant changes in the AER's allowed revenue for 2014-2019 compared to the actual revenue for each of the DNSPs. It illustrates the importance of the AER's decisions on the return on capital and opex. PIAC believes both these decisions (in large part) are in the long-term interests of consumers.

Figure 1: AER's draft decision on building block costs- Ausgrid (includes Ausgrid's distribution and transmission allowances) (\$ million 2013-14)



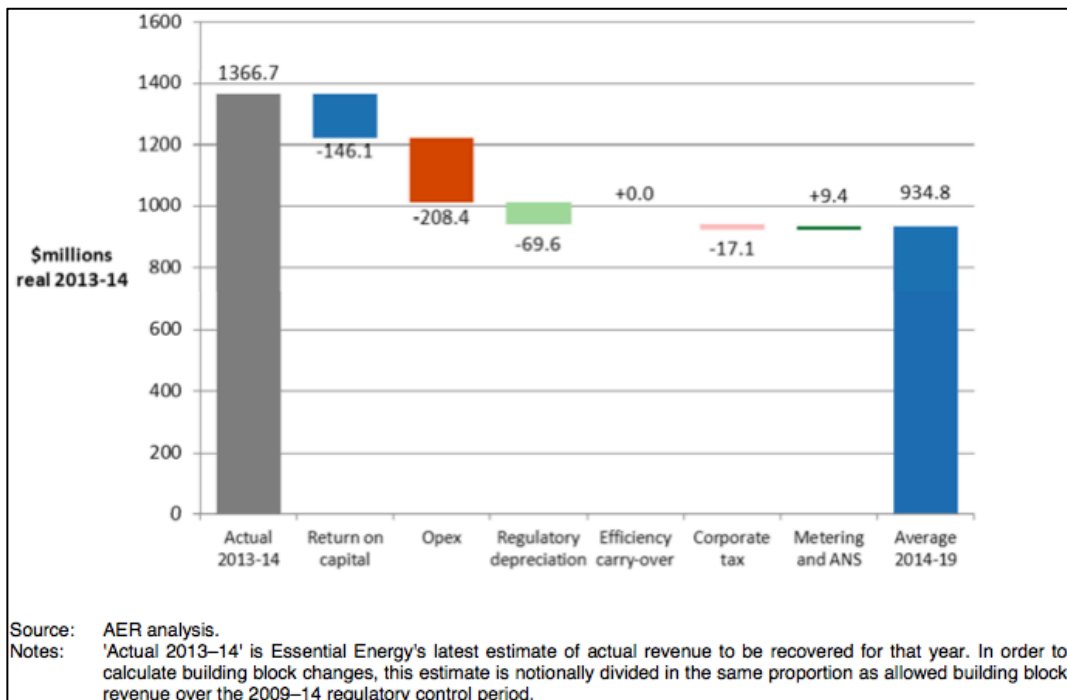
Source: AER, Draft Decision, Ausgrid distribution determination, Overview, Figure 7-2, p 34.

Figure 2: AER’s draft decision on building block costs for Endeavour Energy (\$ million 2013-14)



Source: AER, *Draft Decision, Endeavour Distribution Determination, Overview*, Figure 7-2, 34.

Figure 3: AER’s draft decision on building block costs for Essential Energy (\$ million 2013-14)



Source: AER, *Draft Decision, Essential Energy Distribution Determination, Overview*, Figure 7-2, 34.

As stated above, PIAC's submission generally supports the AER's Draft Determinations as they return the network operations, network profits and prices to consumers to more "normal" levels.

PIAC's central argument is that the NSW DNSPs' proposals for capex, opex and rate of return have all failed to adequately reflect the changing circumstances facing the electricity industry and in the financial markets. Their proposals show minimal reductions in expenditures and the rate of return compared to the very high levels of expenditure in the past period, and therefore, appear to be designed to lock in the excessive cost structures, profit levels and high prices of the past.

For this reason, PIAC finds the AER's decisions on each of these three components are preferable decisions and in the long-term interests of consumers. PIAC considers that the AER has rightly focussed on the "big picture" in terms of the outcomes for consumers, in a way that takes account of the changes in the industry and its environment. In effect, what the AER is doing is returning expenditure levels to the more 'normal' levels of expenditure that prevailed before the recent extreme surge in expenditure by the DNSPs and the consequent explosion of network prices.

This surge in expenditure was justified back in 2009 on the basis of forecasts for high rates of growth in demand, the high cost of complying with new reliability standards and the continuation of an investment climate of high interest rates. The forecast of high demand growth did not eventuate – and spare system capacity grew rapidly. The forecast of continued high interest rates did not eventuate – both government and commercial interest rates are the lowest they have been for many years. The reliability standards have been replaced with standards that better reflect the trade off between infrastructure investment cost, reliability outcomes and the value that consumers place on reliability.

Therefore, PIAC considers the AER is correct to challenge the DNSPs proposals that envisage relatively modest reductions in expenditures from the surge period with resulting CPI (or near CPI) changes in prices. The seeming comfort of a CPI linked price rise is problematic. It simply locks in the expenditures and extra profits of the past, and largely hides under the cost savings arising from the decline in funding costs, declines that have nothing to do with greater efficiency.

If interest rates rise, or demand falls, the CPI 'promise' collapses as it is not underpinned by the very substantive reductions in other expenditures that is warranted by the changed circumstances.⁴

The AER's Draft Decisions, however, provide an opportunity to restore DNSP expenditures to efficient "maintenance" levels and return network prices to more economically efficient levels to the benefit of NSW's industry, commerce and community.

PIAC recognises that the AER's decisions will pose a significant adjustment challenge for the DNSPs. Adjustment to change is, however, a core competency for management and PIAC considers that the DNSPs' management have the skills to meet this challenge. Many industries face such challenges; the best ones embrace the change and adjust their business models and

⁴ This outcome arises because the revised regulatory model includes new protections to the DNSPs such as an annual update of the revenue allowance (and prices) to adjust to changes in interest rates and a revenue cap which means consumers incur the risk of changes in energy use compared to the forecasts.

operational practices accordingly. Many households have faced just such challenges during the periods of explosion in network prices

For these reasons, PIAC is very disappointed in the responses of the NSW DNSPs to the AER's Draft Decision. The DNSPs revised proposals of January 2015 include very few revisions. In fact, the "revised" proposals propose more of the same capex, opex and rate of return.

There is no sense that the DNSPs collectively understand the extent of the changes that are needed in their business practices. Instead, the arguments for more of the same are prosecuted through claims designed to alarm the public, claims such as impending threats to the safety of the workers and the public and declines in reliability of the networks.

PIAC is sceptical, about the basis of these claims, having observed that the network system is in very good health after the expenditure surge and not under pressure from demand growth. Reliability is well above the relevant regulatory standards, there is significantly more spare capacity in the system, the average age of the network has improved, and the cost of raising funds is much lower than it has been for a long time.

If the DNSPs' revised proposals were to prevail, then PIAC considers this will be a unique and fundamental opportunity for real reform of electricity network pricing that goes missing.

In PIAC's view, this is a time for consolidation and a focus on efficiency and cost reduction, and the delivery of more "competitive" prices to customers - just like any other business would do in the face of the challenges. The AER's Draft Decisions take the industry in that direction, while allowing sufficient capex, opex and rate of return to ensure continued "maintenance" levels of expenditure in the networks.

While PIAC disputes the tactics of alarm, PIAC is also cognisant of the adjustments required. PIAC would, therefore, welcome the opportunity of constructive engagement with the AER and the industry to discuss these matters.

PIAC has a long history of experience with consumer issues, proactive engagement with the broader community sector and the AER on the issues of NSW electricity pricing which it could bring to such discussions. The appendix to this submission highlights some of the work PIAC has done in this area.

The focus in this submission is on the "big picture" and PIAC's support of the AER adopting this as its primary perspective on the proposals, albeit supported by detailed examination of the proposed expenditures to assess whether they represent efficient and prudent practices, given the changes in the DNPS' environment.

Table 1, below, summarises AER's Draft Determination and PIAC's response to the AER's decisions. PIAC notes that the DNSPs have rejected most of these outcomes in their revised proposals.

Table 1: Summary of AER's reasons and PIAC's response

Building Block Component	Requirements	Constituent Decisions	The AER's position	PIAC's comments
Return on Capital	RAB	(1) Opening RAB (2) capex	The AER significantly reduces capex on grounds proposed expenditure neither prudent or efficient	PIAC supports reductions in capex given market conditions & previous excess expenditures
	Rate of Return (RoR) (WACC)	(1) Return on Equity (RoE) (2) Beta (3) Return on Debt (RoD)	The AER does not accept DNSPs' proposal on RoE, beta and RoD	PIAC agrees with the AER. The DNSPs' proposal will lead to excess returns & promote inefficient investment. PIAC considers that the AER's RoR decisions are overly conservative and recommends further downward adjustment of beta given revenue cap & other regulatory changes
Return of capital (depreciation)	RAB depreciation schedule	(1) Method (2) Forecast or actual spend	Straight line depreciation based on forecast expenditure	PIAC has not commented on this issue
Operating Expenditure	Opex forecast	(1) Base Yr (2) Step & trend in prices (3) Productivity trend	The AER has cut back DNSPs' opex significantly based on different a range of efficiency assessments including benchmarking. The AER has set a target opex with reference to the more efficient DNSPs in the NEM (exc NSW), but has then adjusted the target level downwards given uncertainties in benchmarking, providing more scope for the NSW DNSPs to adjust	PIAC agrees that benchmarking studies and other research all suggest that the NSW DNSPs are still very inefficient despite recent cost cuts. PIAC supports the use of benchmarking opex provided it is accompanied by other measures. PIAC supports the AER's findings, but considers that the AER's adjustments to the benchmark efficient targets may leave too much scope for inefficiencies by the NSW DNSPs exposing NSW consumers to higher prices than necessary.
Taxation allowance	Adjusted income tax forecast	(1) Tax rate (2) Imputation credits (gamma)	AER adopts standard tax rate (30%). AER does not accept the DNSPs' gamma proposal of 0.25, but does reduce gamma to 0.4 from allowance in the RoR Guideline (0.5) based on additional information	PIAC supports the AER's rejection of the DNSPs' proposal. PIAC believes the AER has adequately set out the AER's reasons for varying from the relevant guideline

				from 0.5 to 0.4.
Other Allowances	Carry over allowances	(1) EBSS carry over from 2009-14	The AER has chosen not to accept in full the DNSPs' EBSS claims for 2009-14.	PIAC agrees with AER's reduction in the DNSPs' EBSS carry over claims.
Incentive Schemes		(1) EBSS (2) CESS (3) STPIS (4) DMIS	The AER has decided not to apply an EBSS to 2015-19 The AER will apply the CESS as set out in the capex guideline. The AER will apply the STPIS, using targets below average of last 5 years to reflect substantial capex investment . The AER has chosen to apply part A of the DMIA but not Part B or the D factor scheme.	PIAC does not agree with the AER's decision not to apply an EBSS scheme for 2014-19, although it should be modified (IF) the AER's current opex target remains. PIAC agrees that the CESS should apply as proposed in the guideline PIAC agrees with the AER's decision on STPIS. Consumers should see benefits from such large expenditures. PIAC believes the AER should develop a DMIS.
Revenue		Revenue and price path	The AER has significantly reduced the allowed revenue – approves real decreases in average prices	PIAC supports the reductions in revenues that will lead to real dollar reductions in prices for consumers.

7. Capex and the alleged threat to safety and reliability

7.1 Overview of the AER's capex decision

The AER did not approve the DNSPs' capex proposals. The main reason for the AER not agreeing with the DNSPs' capex proposals is the significant proposed increase in replacement capex.

The increase in replacement capex was such that while proposed augmentation capex is much reduced (because of slow demand growth), the total proposed capex for the new regulatory period (2015–2019) is similar in real dollar terms to the very significant surge in capex during 2009–2014. During the last regulatory period there was significant increase in spare capacity in the networks, reducing network average age, and reliability performance well ahead of the reliability standards set by the jurisdictional regulator, IPART.⁵

Given the surge in capex in the 2009-14 regulatory period, and the changing conditions listed above, the AER considered there should not be a need for a significant increase in replacement expenditure; it was sufficient to set capex at a "maintenance" level, not dissimilar to the period prior to 2006.

The DNSPs rejected the AER's reductions in their capex allowances. The DNSPs' revised proposals only indicated minor adjustments in their capex plans (as listed in Table 3 below).

Table 3: Comparison of NSW DNSPs' Capex proposals (original & revised) and AER's Draft Decisions (\$ million 2013-14)

	Ausgrid	Endeavour Energy	Essential Energy
Proposed (May 14)	4,421	1,746	2,574
Approved (Nov 14)	2,546	1,070	1,885
% reduction (AER)	42%	39%	27%
Revised Proposal (Jan 15)	3,756	1,576	2,531
% reduction (DNSPs)	15%	10%	2%

Sources: AER Draft Determinations, DNSP Revised Revenue Proposals.

7.2 The threat to safety and security

In defending their revised regulatory proposal, the DNSPs have been very public in their suggestions that the AER's Draft Decision (if it stands) will be a threat to public and work health safety and to the reliability of electricity supply. As previously stated, PIAC finds it remarkable that the DNSPs have taken such a public stand on the threat to safety and reliability of the public, especially given the legislative obligations for safety and reliability that rest with the networks that

⁵ Note, these jurisdictional reliability standards in NSW are set separately from the targets set by the AER in its Service Target Performance Incentive Scheme (STPIS).

they have been previously able to meet (for example, over the period 2009-2014 with half of the revenue proposed for the current period, or less).

PIAC considers that the AER's draft capex decision has simply taken the DNSPs back to a more "normal" level of capital expenditure, only one that is now based on a much younger and less stressed network system. To suggest that the DNSPs should be allowed to continue capex at much the same rate as they had in 2009-2014 is not credible.

If the AER were to approve the revised plans, PIAC would argue most strongly that they had failed to satisfy the capital expenditure objective or to act in the long term interests of customers as required by the NEO.

In particular, further capex increases the regulatory asset base (RAB) and so creates an on-going obligation on consumers that continues well past the current regulatory period, potentially for decades. The AER has the utmost responsibility to ensure that its decisions on capex will control growth in the RAB. As it specifies in the NER, the only capex that should be included in an adjustment to the RAB is capex that reasonably reflects the capex criteria of efficiency and prudence based on realistic demand forecasts and cost inputs.⁶

The DNSPs revised plans fail to recognise this responsibility to their consumers.

Figure 4 below further illustrates that the AER's Draft Determination for Ausgrid, with an average annual allowed capex of some \$509 million (real, 2014-2019)⁷ simply resets Ausgrid's capex allowance to a more normal "maintenance" level of capital investment. A similar pattern can be seen for both Endeavour and Essential. It is hard to see how this maintenance level of expenditure, which allows a steady rate of replacement, puts the people of NSW at risk in any way.

It should also be highlighted the earlier regulatory periods covered in Figure 4 were characterised by a rapid growth in demand, by increased reliability standards and the urgency to replace a number of major assets in the CBD. The forecast period, in contrast features:

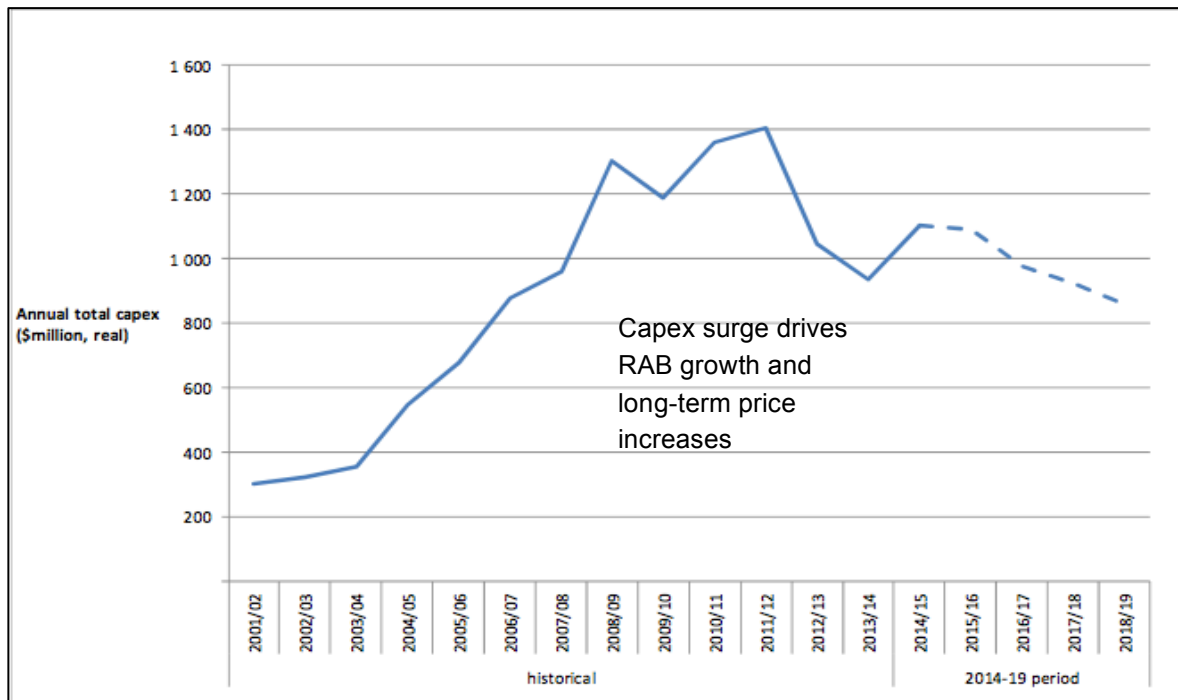
- declining capacity utilisation;
- a much reduced average asset age;
- static or falling demand and energy use; and
- amendments to the excessive reliability standards

PIAC provided a number of examples of these trends in its previous submission based on PIAC's own analysis of the DNSPs' Economic Benchmarking RINS. For example, between 2006 and 2013, Ausgrid's capacity utilisation declined significantly, as did the average age of the assets. PIAC noted similar trends in the other DNSPs.

⁶ NER, clause 6.4A (a). The capex criteria are set out in NER clause 6.5.7 (c).

⁷ See, AER, *Draft Decision, Ausgrid distribution determination – Overview*, Table 8-5, 49. The AER states that Ausgrid's proposed forecast is, on average, higher than its average capex between 2001-02 and 2009-14. (Ibid, 49)

Figure 4: Ausgrid’s past and proposed capex (\$ million, 2013-14)



Source: AER, Draft Decision, Ausgrid distribution determination,- Overview, Figure 8-3, 50.

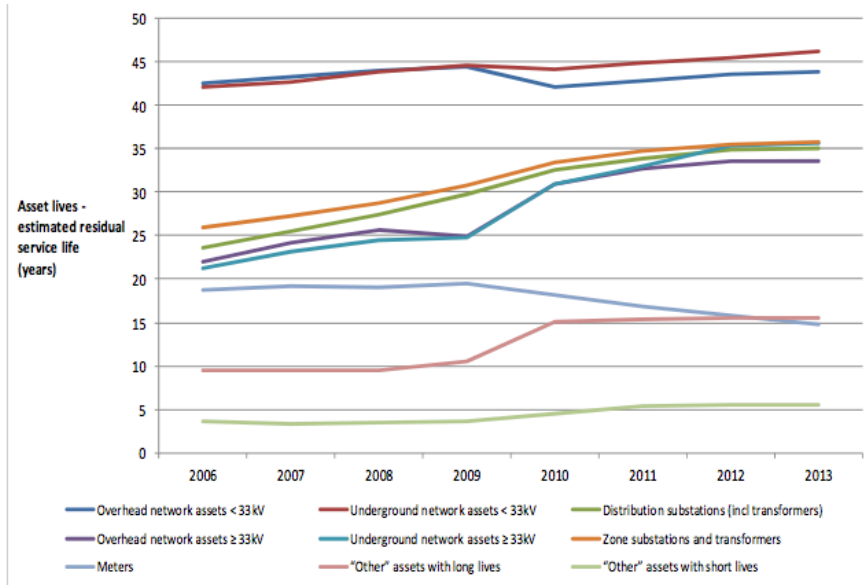
PIAC therefore notes with interest the capex analysis conducted by the AER. In PIAC’s view this analysis supports PIAC’s view that Ausgrid and the other two DNSPs have already undertaken much replacement and augmentation of its assets. As a result, the assets are relatively new. In addition, the rapid growth in investment means that Ausgrid’s performance on partial capital productivity measures is relatively poor.

Figure 5 below sets out the “residual age” of Ausgrid’s networks. This is a measure of the expected average remaining useful life of a particular category of capital assets. This demonstrates that the Ausgrid’s asset age profile is relatively young and has been getting younger. For instance, the average remaining life of zone substations has increased from around 25 years to 35 years over a period of just seven years. Zone substations are critical infrastructure and a structural failure in a zone substation has major safety and widespread reliability impacts. Ausgrid has clearly replaced many of these recently and the average age is now well below ‘standards’ seen in other networks operating at high safety levels.

PIAC considers that the AER is correct in its decision to restore levels of investment to more normal levels, consistent with the much improved health of the system and also consistent with the steady state maintenance of the network.

Given these factors, PIAC considers that Ausgrid’s response to the Draft Determination with respect to capex (and the response of other parties) is exaggerated and unnecessary. The need for the extra high levels of investment seen in 2009-14 to continue has not been established, and if the capex proposals are adopted, they will burden NSW consumers for many years.

Figure 5: Ausgrid Asset Lives – estimated residual service life

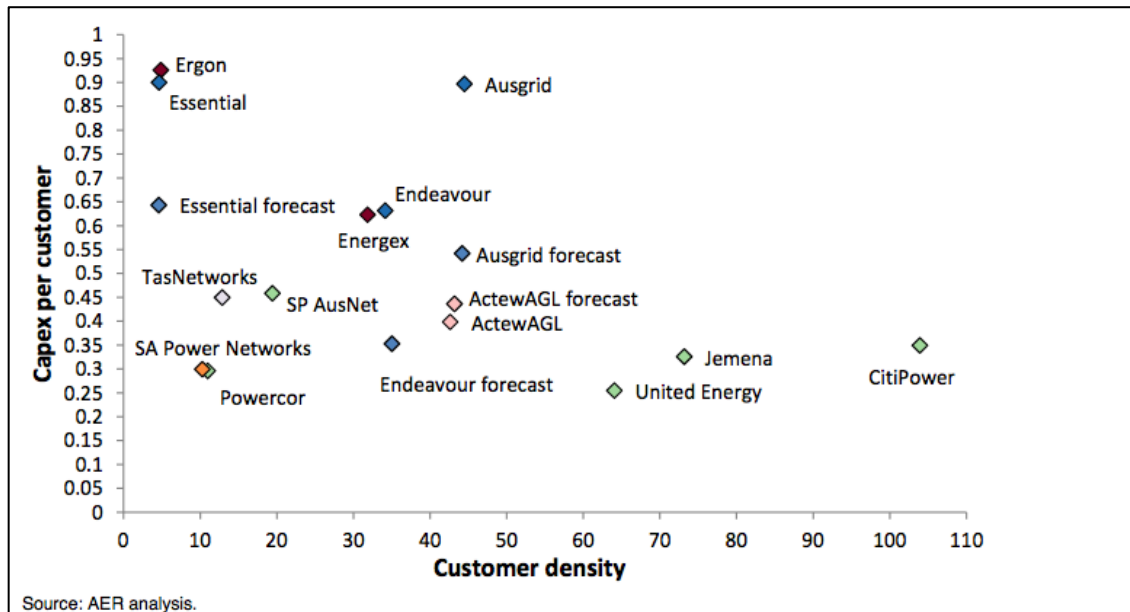


Source: Ausgrid - EBT RIN - 4. Assets (RAB) - Table 4.4.2 Asset Lives – estimated residual service life (Standard control services).

Source: AER, Draft Decision Ausgrid Draft Determination – Att 6, Figure A-10, p 6-56.

Figure 6 provides an illustration of where Ausgrid and the other two NSW DNSPs sit relative to other DNSPs following the very large increases in expenditures. It demonstrates the challenge ahead for the three NSW DNSPs to reach the efficient frontier. The current capex proposals will not assist this process.

Figure 6: Capex per customer (000s, \$2013-14) against customer density:



Source: AER analysis.

Source: AER, Draft Decision Ausgrid Draft Determination – Att 6, Figure 6-4, p 6-26.

Section 7, which considers the opex proposals of the three DNSPs also discusses the recent, and contested economic benchmarking that Economic Insights conducted on behalf of AER. This benchmarking study considers overall productivity of capex and opex using a multilateral total factor productivity index (MTFP).

The MTFP research (whatever caveats might be added to its interpretation) is still sufficiently compelling to indicate that in terms of overall expenditures, the NSW DNSPs are performing at the lower end of the DNSPs in the National Energy Market (NEM). This is not an acceptable position for NSW consumers and we urge the AER to continue its examination of these expenditures and ensure that only prudent and efficient capex is allowed.

Recommendation 4

PIAC supports reductions in DNSPs capex, especially given market conditions and previous excess expenditures. PIAC therefore recommends the AER continue its examination of proposed capex expenditures and ensure that only prudent and efficient capex is allowed.

8. Operating expenditure & the role of benchmarking

8.1 Overview of the AER's draft decision

The AER did not approve the DNSPs proposed opex and replaced each DNSPs opex forecast with its own estimate of the opex required to meet the allowed operating expenditure objective in the NER. The DNSPs have not accepted the AER's Draft Determination and submitted revised proposals in which the forecast operating expenditure is very similar to their original proposals. Table 4 sets out the proposals and the AER's Draft Determination.

Table 4: NSW DNSPs Opex proposals (original & revised) and AER's Draft Decisions
(\$ million 2013-14)

	Ausgrid	Endeavour Energy	Essential Energy
Proposed (May 14)	2,843	1,364	2,334
Approved (Nov 15)	1,722	1,053	1,440
% reduction (AER)	39%	23%	38%
Revised Proposal (Jan 15)	2,679	1,448	1,993
% reduction (DNSPs)	6%	-6%	15%

Source: AER Draft Decision, NSW DNSPs Revised Proposal. There may be some differences in definitions.

As shown in Table 4 above the reductions in opex for each DNSP in the Draft Determinations were substantial; between 23% and 39% of the DNSPs' proposals (\$2013-14).

However, the reductions in opex have followed on from opex allowances and expenditures that were well above historical trends in real dollar terms. In real dollar terms, the approved opex is at levels close to where opex was a decade ago with little real increase over the five years.

PIAC understand that in large part this reduction in expenditure is a result of the AER applying benchmarking techniques to the base year 2012-13.

In the Expenditure Forecast Guideline, the AER set out the following process for assessing opex allowances. It is this process that has provided the insight and opportunity for the AER to make significant adjustments to the proposed opex spend. PIAC understand that this process was consistent with the AER taking a "top down" approach to forecasting opex rather than examining item-by-item expenditure plans.

In brief:

- the AER assesses the efficiency of the DNSP's opex in the "base year"; in this case, the base year is 2012-13. The AER can use a variety of tools to do this, including trend analysis, productivity (economic) benchmarking, various partial benchmarks and category analysis;

- if the base year is deemed to be reasonably efficient, then AER accepts the base year as the starting point for the opex forecast; if the base year is not found to be efficient, then the AER may adjust the base year to an efficient level;
- the AER assesses and approves or rejects the DNSPs' proposals for "step changes" in opex and for trends in expenses (such as labour and material rates).

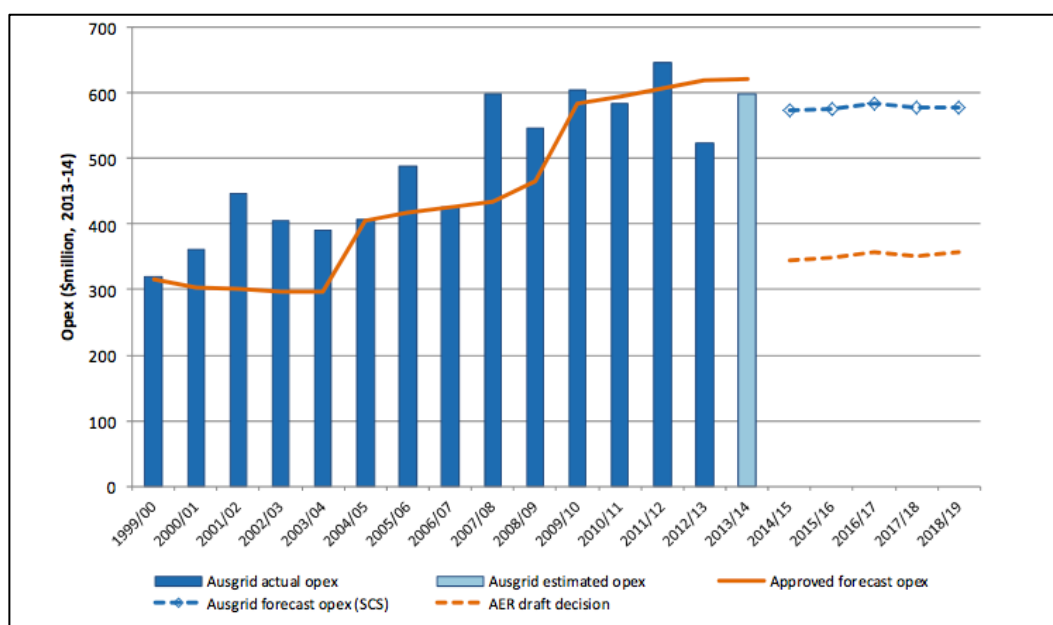
The AER found that the base year for all of the NSW DNSPs was not efficient.

PIAC believes there are many other sources of evidence, including the NSW Government's assessments as part of the planned partial sale/lease of 49% of the network assets (including Transgrid), and various statements from NSW Networks over the last six months.⁸

PIAC also shares the AER's concern that 2012-13 was not an efficient base year and highlighted some of the issues in its response to the initial DNSPs proposals. PIAC is also concerned that despite the DNSPs publicly stating they have had an issue with excessive operating costs, the regulatory proposals did not address the matter at all adequately.

The DNSPs submitted an opex forecast that was only marginally below the record levels of operating cost seen in the 2009-14 regulatory period. PIAC found this a very unsatisfactory response to what had been widely recognised as a significant problem for NSW networks and a drain on consumers who must fund this level of exposure. Figure 7 illustrates this point, using Ausgrid's proposal as an example. However, the findings are similar for the other two NSW networks.

Figure 7: Ausgrid's past and proposed opex and the AER's draft decision (\$ million, 2013-



14)

Source: AER, Draft Decision Ausgrid distribution determination, Overview, November 2014, Figure 8-5, 54.

⁸ For example, Productivity Commission, *Electricity Network Regulatory Frameworks – Inquiry report*, Volume 1 June 2013, 227-260; Grattan Institute, *Putting the customer back in front: How to make electricity prices cheaper*, December 2012 39 – 40.

PIAC believes that at the very least, the large expansion in capex, the relatively rapid decline in the age of key network assets, reductions in demand, energy use and capacity utilisation, high levels of reliability and removal of the more rigid reliability standards, plus the investment in advanced information and communication systems should have resulted in a significant savings in opex (and capex) over the forecast regulatory period.

However, the DNSPs have not proposed such reductions, costs are proposed to be maintained in real dollar terms or slightly increased. The DNSPs have had many months to review their opex programs. Again, however, the revised DNSPs' proposals have come back with substantially the same level of opex.

Given this lack of seemingly intractable position on this issue by the DNSPs, PIAC strongly supports the efforts of the AER to address the chronic lack of productivity in the NSW networks. PIAC also supports the view that the high levels of expenditure in 2009-14 should not be repeated again, and that expenditure needs to return to more normal "stead-state" levels. Under the AER's allowance, each DNSP has between 1 billion and 2 billion dollars of opex that should be sufficient to fulfil their responsibilities for safety and reliability, assuming suitable prioritisation by management.

8.2 The application of benchmarking to the base year opex

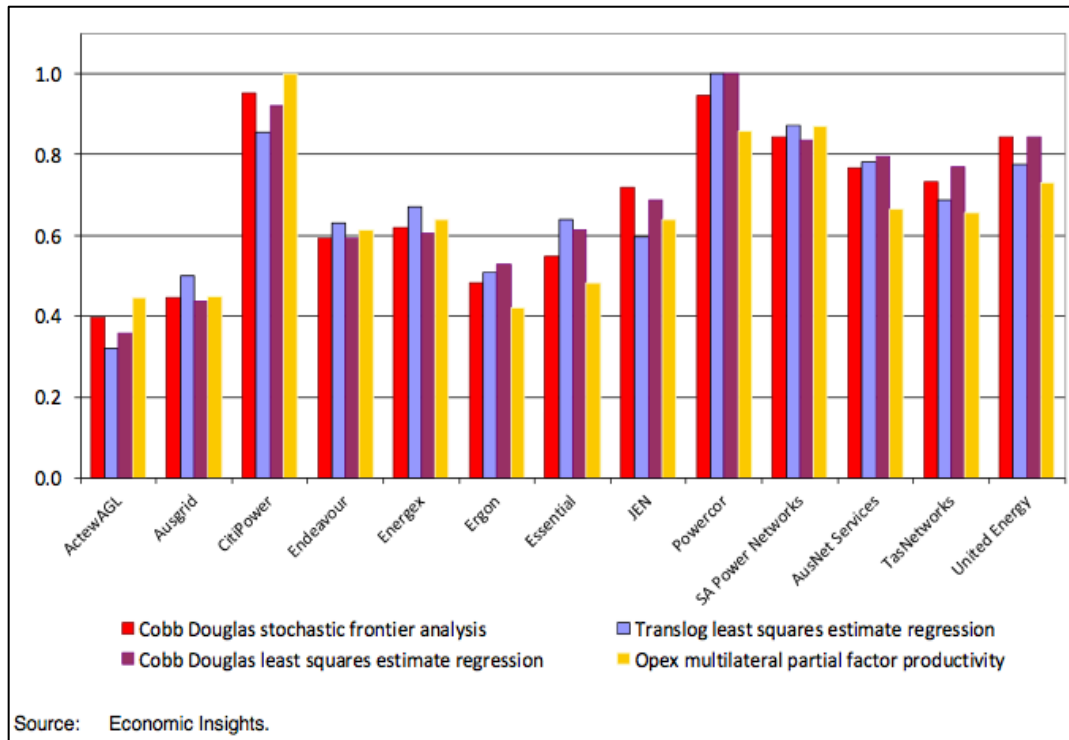
The AER is obliged under the NER to use a number of techniques to assess whether the DNSPs' forecasts of opex reasonably meet the opex criteria of efficiency and prudence given a realistic expectation of demand and cost inputs. In its 2012 amendments to the NER, the AEMC clarified the importance of benchmarking in the AER's opex assessment process. The NER now specifies that in deciding whether it is satisfied with an opex proposal, the AER *must have regard to* (inter alia), the most recent annual benchmarking report and the benchmark operating expenditure that would be incurred by an efficient DNSP over the regulatory period.⁹

PIAC is also aware that the AER, together with their expert advisors, Economic Insights, have been working for over a year, starting at the commencement of the Better Regulation program to develop a benchmarking framework and enhance the quality and quantity of data collection from the networks. The DNSPs' representatives have been very heavily involved throughout the process as were a number of experienced consumer advocates. The AER's intention to use benchmarking and the content of that benchmarking should come as no surprise.

Figure 8 provides an illustration of the outputs of the AER's benchmarking study that was used as the basis for assessing the base year efficiency of the NSW DNSPs based on Economic Insights analysis of multidimensional total factor productivity (MTFP).

Figure 8: Econometric modelling and opex MTFP results

⁹ NER, clause 6.5 6 (e) (4).



Source: AER, Draft Decision Ausgrid distribution determination, Overview, November 2014, Figure 8-6, 55.

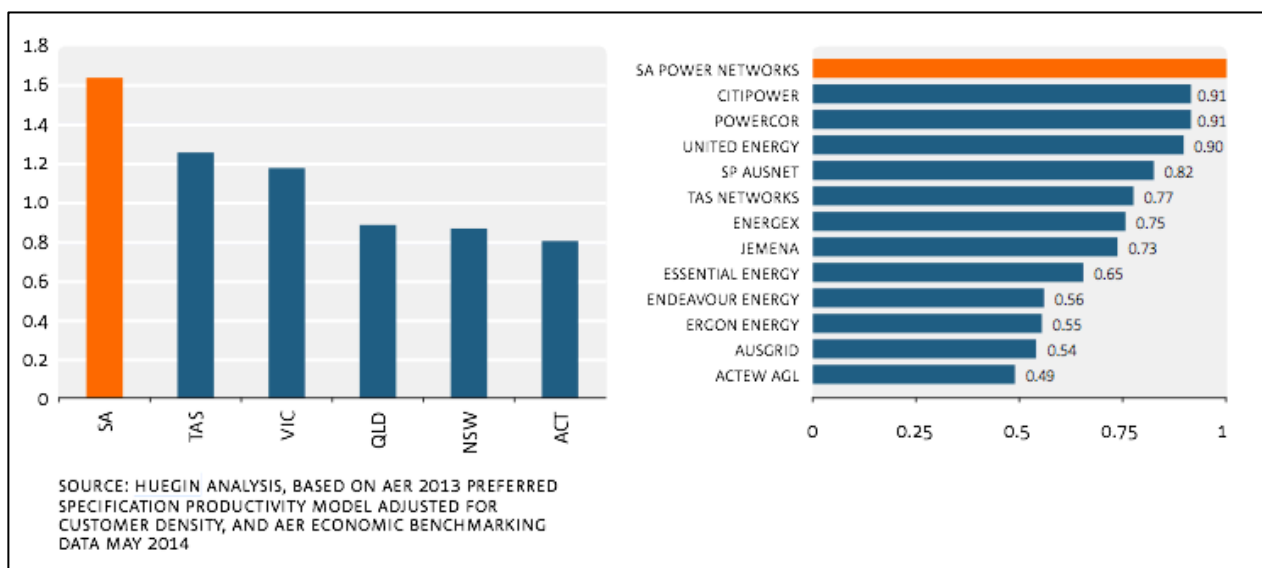
PIAC considers that at the very least, the MPFP and the partial productivity analysis is evidence that the AER could not simply apply its “top down” approach of base, step, trend to assessing the DNSPs’ proposals. If it had, PIAC considers that it would not be acting in accordance with the opex objectives and the NEO and would result in NSW electricity consumers paying (continuing to pay) excess for the network services.

PIAC’s concerns are further heightened by the response of the DNSPs to the AER’s forecast cost. The fact that the DNSP’s submitted revised proposals that made effectively no changes to the original opex proposals indicates to PIAC that their intentions are not aligned with the long term interests of consumers.

In terms of the many caveats that DNSPs have about the AER’s benchmarking study, PIAC’s view is that benchmarking studies will always have their limitations. However, so would a detailed bottom up review of the expenditure plans of the DNSPs, which would require significant resources and be beset by information asymmetry.

In any case, PIAC is aware that other benchmarking studies have yielded similar results. Figure 9, for example illustrates that other analysts have found significant differences in the MPFP scores across different DNSPs. It illustrates that the NSW DNSPs are some distance from the efficient frontier. Partial productivity measures confirm the general order of efficiency, if not the exact rankings that in any case show trends over time.

Figure 9: MTFP 2013 – jurisdictional and DNSP comparisons



Source: SA Power Networks, Regulatory Submission, 2015-2020, Figure 2.7, 16.

8.3 Adjustments to the MTFP

PIAC understands that the AER has used the relative efficiencies of different DNSPs on the MTFP measure to calculate a net reduction to 2013 network services. In fact, a number of “softening factors” have been applied to the outcomes of the MTFP study prior to its use to adjust the base year. Table 5 provides a rather simplified illustration from the Economic Insight benchmarking report.¹⁰

Table 5: NSW DNSPs opex efficiency and opex adjustments to reach target.¹¹

DNSP	Efficiency Score (A)	Efficiency Target (adjusted by 10%) (B)	Implied opex reduction to reach average efficiency target (C)	Reduction to 2013 network services opex (D)
Ausgrid	45%	78%	43%	33%
Endeavour Energy	59%	78%	24%	13%
Essential Energy	55%	78%	40%	35%

Source: Economic Insights, Economic Benchmarking of NSW and ACT DNSP Opex, Table A, vi.

¹⁰ Economic Insights, Economic Benchmarking of NSW and ACT DNSP Opex, November, 2014.
¹¹ Column A represents the raw efficiency score and it is based on the average score across the period for which the AER has collected data, i.e. 2006- 2013. Column B is the target score, and is the average score of the top quartile of DNSPs (out of a total of 13 in the NEM), which was further adjusted by 10%. The original average score of the top quartile was 86% – the average of this top quartile sets the target for the remaining networks, including the three NSW networks. All other things being equal, column C would represent the target required by each of the DNSPs to reach the average efficiency of the top quartile (in Col B). However, the average score across 2006 – 2013 does not carry all the important information, there are trends in the level of relative efficiency. For example, Essential Energy has one of the lower MTFP scores (on this measure), and also an annual decline in MTFP of -3.79%. Ausgrid’s change rate is -0.86% and Endeavour is - 2.03%.¹¹ Column D is adjusted for these trends, for example, Ausgrid’s final efficiency reduction is now less than Essential Energy because of the different rate of change.

While the process is complicated, the bottom line is that there were a series of adjustments that needed to be made. Simplistically, the efficiency target for the DNSPs represented an averaging of the top quartile, then a 10% downward adjustment (from 86% to 78% in Column B), then further adjustments made to account for the rate of change – all three DNSPs saw productivity decline over 2006-13, but at different rates.

The question PIAC would ask therefore was whether the AER is being too accommodating in its Draft Determinations for opex. It is certainly not setting a target at the efficient frontier of performance. PIAC is of the view that the AER is correct in taking a rather cautious approach to setting the target reductions, particularly as this is the first time the MTFP analysis has been applied in the setting of top-down targets (although benchmarking has been common enough).

The change proposed by the AER will be difficult enough but PIAC would understand if other electricity customers consider that the AER is being too lenient. Effectively the AER's approach is an interim determination on the road to opex efficiency; PIAC would expect future determinations would be less accommodating.

Of concern is that the response from the NSW DNSPs has been indignant and loud, with many queries about the methodology, different circumstances, etc. On one hand, such a response could be expected given this is the first time the consequences of inefficiency have been brought so close to home.

On the other hand, PIAC would suggest that the DNSPs consider the modifications that the AER has adopted to limit the impact, as described above. A more mature conversation about the DNSPs performance and the trade-offs would be desirable – and PIAC is a willing participant in such a conversation.

8.4 Transitioning to a new world

The DNSPs have also suggested that the AER should allow a transition period so that the DNSPs have time to adjust to any lower expenditure allowances – although they have not specified what the target should be in this transition.

The DNSPs have also indicated that without such a transition period there would be wide spread disruption and cut backs to services.

The AER has sought comment on this. PIAC's position is clear. There should be no transition period. PIAC draws this conclusion on the following grounds:

- There is no reason why consumer should continue to pay for inefficient services any longer than June 2015. The trend is clear, even if the quantum is in dispute. NSW DNSPs have spent a lot of opex, particularly in the last five years and it has not been spent efficiently. Consumers have paid for this inefficiency, and it is inappropriate to ask them to continue to pay. This applies to management decisions on labour costs such as excessive Enterprise Bargaining Agreements (EBA). Absent this discipline, EBAs become a simple cost pass through – a luxury the DNSPs' customers cannot "enjoy".

- PIAC considers a useful test of this outcome (and the question of restructuring costs and loss of synergies) is the competitive market tests laid out in Section 3, above. In brief, what would happen in a competitive market – would consumers given the inefficient supplier time to improve; they would not. The same discipline should apply to the monopoly distribution provider.
- It is undoubtedly true that reform and restructure will cost the DNSPs a significant amount of opex. However, the profits of the DNSPs, the dividends and retained earnings are sufficient to fund the restructures out of profits - just like any other business operating in the competitive world. The DNSPs are not immune from the costs of reform, even when their revenues are protected.

As a final comment on benchmarking PIAC is hopeful that some of the more realistic concerns of the DNSPs regarding the benchmarking research can be addressed constructively with the AER over the next few months.

PIAC's supports the use of benchmarking to drive improvements in the delivery of network services and the costs of doing so. It is an important tool in the regulatory processes, as well as a key part of moving from DNSPs providing many thousands of pages of detailed analysis to a more mature discussion on how the monopoly businesses can progress efficiency reform. PIAC submits that such progress must begin as part of the current price determination process.

Recommendation 5

PIAC supports reductions in DNSPs opex, especially given the results of benchmarking studies. PIAC therefore recommends the AER continue its comparative examination of proposed opex expenditures and ensure that only prudent and efficient opex is allowed.

Recommendation 6

PIAC recommends that there should be no transition period towards more efficient opex spend by the NSW networks. The Draft Determinations already allow for a level of inefficiency, including a 10% downward adjustment from the 'efficiency frontier'. Restructures should be funded out of profits as would be the case in a competitive market and consumers should not wear the costs of reforms on the path to efficiency.

9. Weighted Average Cost of Capital (WACC)

The WACC is one of the most important elements of the revenue allowance calculation as small differences in the WACC allowance can make the difference of many millions of dollars to the revenues of NSPs and therefore to the prices consumers pay for network services.

The AER has stated that it is not satisfied with the rate of return (WACC) proposed by the DNSPs' for the 2015-19 regulatory period. The AER has substituted the DNSPs' proposals with a preferable proposal that better achieves the rate of return objectives in the NER.

PIAC agrees with the AER that the rate of return proposals by the DNSPs are not satisfactory and do not achieve the rate of return objective. PIAC considers that the AER's more preferable decision better achieves the objectives and therefore better serves the NEO.

However, PIAC considers that the AER has still over-compensated the DNSPs relative to the very low risks they will face in the regulatory period, the current low level of interest rates (which are predicted to continue well into the future), and the protections afforded by regulatory framework.

Further, PIAC is most concerned that overcompensating networks in the rate of return will provide incentives for over investment in the network and will fail to provide the necessary drivers for efficient financing and operations. There must be serious questions asked of the DNSPs financial capabilities (both now and in the past), if they are unable to finance their operations at a cost similar to the financing costs of other utilities.

The following sections explain PIAC's position in more detail. However, PIAC also refers the AER to the substantial submission it has already made on the assessment of the rate of return in its response to the DNSPs' initial proposals.¹² As the DNSPs have chosen not to amend their initial proposals, PIAC submits that the detailed assessments in its earlier submission to the AER still stand and should be considered as part of PIAC's response to the AER's Draft Determination and the DNSPs' revised regulatory proposals.

9.1 Background to the Rate of Return Assessment Process

9.1.1 The AEMC's Considerations

In 2012, and following many concerns raised by consumers and others with the AER's decisions on the rate of return allowances under the NER, the AEMC conducted a substantial review of the network regulation rules.¹³ The AEMC concluded the review by making substantial changes to the NER, stating that these changes to the NER "will or are likely to contribute to the national electricity objective..." and, more specifically:¹⁴

The amendments will provide the Australian Energy Regulator (AER) for gas and electricity and the Economic Regulation Authority (ERA), for gas, with additional strength and flexibility in

¹² PIAC, *Moving to a new paradigm, submission to the Australian Energy Regulator's NSW electricity distribution network price determination*, August 2014, 67 - 90.

¹³ See AEMC, *Economic Regulation of Network Service Providers*, Reference ERC0134, at <http://www.aemc.gov.au/Rule-Changes/Economic-Regulation-of-Network-Service-Providers>

¹⁴ AEMC 2012, *Economic Regulation of Network Service Providers, and Price and Revenue Regulation of Gas Services, Final Position Paper*, 29 November 2012, Sydney, i. [AEMC 2012, *Final Position Paper*].

setting revenues and prices for electricity and gas network service providers... The most significant changes are the way the regulator determines the rate of return that service providers can earn on their assets.

The AEMC's approach was to provide a balance between flexibility and certainty in the AER's decision on the rate of return, stating that the Commission has¹⁵:

...provided high-level principles to guide the estimation, and left the judgement as to the best approach to the regulator to make, consistent with achieving the overall allowed rate of return objective. This involves the regulator making judgements about methodologies, analytical techniques and evidence to use to make the estimate of the rate of return.

To facilitate greater certainty for investors, the NSP and consumer confidence, the AEMC also required the AER to develop a rate of return guideline that would set out the approach the AER intended to take in estimating the allowed rate of return:¹⁶

While providing for flexibility, the Commission recognises that it is important for investor, service provide and consumer confidence in the framework that the regulator is transparent about its approach, and consults extensively, when determining the allowed rate of return.

To supplement the considerations at each regulatory determination, the new framework requires the regulator to develop rate of return guidelines setting out the approach it intends to take in estimating the allowed rate of return. This must be undertaken no less than every three years and involves consultation with stakeholders. Consultation on the guidelines will give all stakeholders an opportunity to contribute to discussions about how the regulator should approach the overall rate of return estimate.

9.1.2 The Rate of Return Objective

The AEMC's amendments to the rules followed on from the principles it set out above. In brief, the NEL states that the allowed rate of return is to be determined such that it "achieves the allowed rate of return objective".¹⁷ The rate of return objective is as follows:¹⁸

The allowed rate of return objective is that the rate of return for a Distribution Network Service Provider 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 Distribution Network Service Provider in respect of the provision of standard control services (the allowed rate of return objective).

The NEL also states (inter alia) that each of the two components of the overall rate of return - the return on equity and the return on debt – "must be estimated such that it contributes to the achievement of the *allowed rate of return objective*".¹⁹

PIAC considers that the AEMC expects the AER to assess the reasonableness of the overall rate of return, and whether it is commensurate with the efficient financing costs of a network business

¹⁵ Ibid, iv.

¹⁶ AEMC 2012, *Final Position Paper*, iii - iv. [AEMC 2012, *Final Position Paper*].

¹⁷ NEL, clause 6.5.2 (b).

¹⁸ NEL, clause 6.5.2 (c).

¹⁹ NEL, clause 6.5.2 (f) and (h).

with the same level of risk. The estimation of the component elements, that is, the cost of equity and the cost of debt are subsidiary decisions, albeit decisions that must be consistent with the overall task of determining the efficient rate of return. For example, the AEMC states (when discussing the possible reforms to the Australian Competition Tribunal) that:²⁰

The recommendations in the final state two report [on the operation of the Tribunal] that seek to encourage a greater focus [by the Tribunal] **on objectives and overall outcomes** are consistent with the final position of this rule change [the 2012 amendments to the NER] and are supported by the Commission [the AEMC]. Where possible, the final position rule seeks to **allow and encourage the regulator to approach decision-making more holistically** to meet overall objectives consistent with the NEO, NGO and RPPs. [PIAC's emphasis]

PIAC considers that a simple “sense check” of the overall rate of return proposed by the DNSPs, will indicate that their proposed overall rate of return does not meet the standard that an efficiently financed benchmark firm would require to provide the standard network services. This is true even if some features of the financing practices of the networks are ‘efficient’ as claimed by the DNSPs (although PIAC will dispute that claim too).

To accept the NSW DNSPs proposed rate of return would be to accept the proposition that NSW electricity businesses are far less efficiently financed than networks outside NSW. PIAC would strongly oppose the consumers of NSW continuing to pay for inefficiently financed DNSPs.

9.2 PIAC's interpretation of the AEMC's requirements and their implementation

Having carefully considered the AEMC's intentions set out above, the resulting rule changes, and the overall emphasis on the AER adopting a holistic approach; PIAC draws the following conclusions regarding the AEMC's intentions:

- the AEMC intended for the regulator to have greater strength and flexibility in setting revenues for NSPs;
- the AER is required to exercise its judgement on the best approach, techniques and other evidence to achieve the rate of return objective;
- the AER's rate of return guideline should demonstrate how the AER intends to estimate the rate of return; and
- the AER must consult extensively with stakeholders in the development of the Guidelines.

In accordance with the AEMC's expectations, and the amended NER, the AER established the Better Regulation program; a 12 month program involving extensive consultation with the networks, other regulators, governments, various experts, and representatives of large and small businesses and a number of community representatives.

²⁰ AEMC 2012, *Final Position Paper*, xi.

PIAC, and other business and community representatives took a very active part in the process²¹ through public forums, submissions, workshops and meetings with the AER staff. At the end of this process, the AER published six guidelines, including the Rate of Return Guideline and the associated Explanatory Statement.²²

PIAC recognises the AER's process for developing the Rate of Return Guideline as being one of the more open and transparent regulatory process, and one that has genuinely sought contributions from a wider range of stakeholders. The development of the Guideline set a high standard for regulatory consultation processes. It represented a major change compared with previous determinations that limited the contribution of non-network stakeholders to the regulatory process. PIAC, therefore, considers that the AER fulfilled the requirements for consultation on the Rate of Return Guidelines that was specified by the AEMC

PIAC also commends the process by which the various methodologies, techniques and evidence that might be used to assess the rate of return were systematically evaluated by the AER against a set of agreed objective criteria. The findings of the evaluation process provided the foundations of the AER's proposed approach to assessing the rate of return.

For example, the AER consulted on and reviewed a variety of economic and financial models, and combinations of models for assessing the cost of equity, a notoriously difficult element to measure, against the agreed objective criteria.²³ In line with the AEMC's expectation (as cited above), and having consulted extensively, the AER exercised its judgement to select a particular approach that it regarded as best able to meet the rate of return objective. It is this approach that is set out in the Guideline.

It has to be said that PIAC was not comfortable with all the components of the AER's rate of return approach in the Guideline. For instance, PIAC previously advised the AER that the equity beta set out in the Guideline (0.7) was overly conservative and did not recognise the extent to which the economic risks sat with consumers rather than the networks. The adoption of a revenue cap control mechanism, the annual updating of the cost of debt and the introduction of "contingency projects" further reduced network risks and (particularly the revenue control mechanism) transferred risk to consumers.

PIAC also considered that the AER did not take sufficient note of the extraordinary profits that the regulated businesses were making under the regulatory arrangements; a fact that PIAC believes indicated gaps in the NER that may not be adequately addressed even under the new rules.²⁴

PIAC, therefore, supports the submission by the Consumer Challenge Panel (CCP)²⁵ on the need for the AER to benchmark its decisions on the rate of return, by making more use of actual financial information taken from the DNSPs annual audited reports and other sources. PIAC will refer to a number of these matters in the discussion below.

²¹ For a list of PIAC's submissions to the Better Regulation program, including submissions discussing specific rate of return parameters, please see Appendix A.

²² AER, *Explanatory Statement, Rate of Return Guideline*, December 2013.

²³ See *Ibid*, which includes a very extensive review of various approaches to the rate of return assessment and the submissions by the ENA, NSPs and consumer representatives on these options.

²⁴ Further discussion on these and other gaps is included in Section 12.

²⁵ CCP, *Smelling the roses and escaping the rabbit holes, the value of looking at actual outcomes in deciding WACC*, July 2014.

9.3 The DNSPs' rate of return proposals and revised proposals

PIAC accepts that the developments described above are evolutionary and need to be the subject of a much broader discussion and debate, although PIAC would suggest that they have some immediate value.

What is considerably less acceptable to the DNSPs' consumers is the approach to the assessment of the rate of return as set out in the DNSPs' proposals. The DNSPs have varied from the approach set out in the Rate of Return Guideline in a number of key areas, thus deriving a return on equity, return on debt and overall rate of return significantly in excess of the AER's modelling. The differences are summarised in Table 6, below.

Table 6: NSW DNSPs' Proposal & AER Draft Decision

	2009-14 AER Decision	2015-19 NSW DNSPs' Proposal	2015-19 AER Draft Decision	Comment
Risk Free Rate	5.82%	4.78%	3.55%	Difference in timing & approach
Equity Risk Premium	6.0%	5.33%%	4.55%	MRP * B
Market Risk Premium (MRP)	6.0%	6.5% (6.56%)	6.5%	Guideline has 6.5%
Equity Beta (B)	1	0.82	0.7	Difference in approach
Gearing ratio	60%	60%	60%	Guideline has 60%
CPI Forecast	2.47%	2.5%	2.5%	
Nominal post-tax return on equity	11.82%	10.11% (10.15%)	8.1%	Difference in Approach
Nominal pre-tax return on debt	8.82%	7.98%	6.51%	Difference in approach
Nominal vanilla WACC	10.02%	8.83% (8.85%)	7.15%	

Source: AER Draft Decision, Endeavour Energy, 2015-19, Overview, Table 8-3, 40.

Note: Number is brackets are the updated figures in the DNSPs revised proposal. For example, see Ausgrid, Revised Regulatory Proposal (amended), February 2015.

The main areas of difference between the AER's approach as set out in the Guideline and the approach adopted by the NSW DNSPs are summarised as follows:²⁶

- *Risk free rate*: The DNSPs have applied a long term average of Commonwealth Government Securities yield for 10 year bonds (averaged over period 1983-2013);

²⁶ Note, the DNSPs claim to have assessed a number of different approaches to assessing the return on equity, and state the equity return of 10.15% is at the lower end of the range of different methodologies. See for example, Ausgrid, Revised Regulatory Proposal (amended), February 2015, 191 – 198.

- *Market risk premium:* The MRP has been updated in the revised proposal;
- *Equity beta:* The DNSPs use different data, including a sample that is dominated by US utility firms
- *Return on debt:* Calculated using the RBA BBB yield series (BBB+, BBB, BBB-) for commercial 10 year Australian bonds.

The explanations given for the approach are much the same as those set out in the original proposals.

Many of the NSW DNSPs arguments were also prosecuted during the development of the AER's Rate of Return Guideline although the emphasis in the rationale for the return on equity appears to have changed from the "multi-model" approach to an approach that relies on the Sharpe-Lintner Capital Asset Pricing Model (S-L CAPM) formula. However, the DNSPs' proposal using the S-L CAPM differs from the AER's Guideline in terms of the key inputs, such as the approach to the risk free rate, the equity beta and the return on debt.

In the following section, PIAC will look at some of the more specific issues that have been discussed during the development of the Rate of Return Guideline and in its subsequent application by the AER to the DNSPs' proposals. In this section, however, it is appropriate to raise three high-level, but very important matters. They are:

- As noted, the Guidelines were developed after extensive consultation with all stakeholders. As such, they should be considered with respect and in PIAC's view, accepted by all parties for the purposes of this 5 year period unless major error is found. This is not the approach the NSW DNSPs have taken. The NSW DNSPs' proposals are at their root merely alternative ways of assessing the WACC components. However, the amended rules, and the more recent judgements by the Australian Competition Tribunal,²⁷ have clarified that the AER is entitled to use its judgement on the appropriate methodology; it is not an "error" for the AER to propose one way when the DNSPs want another. Of course, the AER would be open to criticism if it just "lobbed" in with its rate of return assessment approach. However, the AER consulted extensively.
- PIAC is not aware if the DNSPs have undertaken any significant level of consultation with consumers in terms of their decision to vary from the Rate of Return Guidelines. While the AER undertook extensive consultation (see above), the DNSPs have provided an alternative approach, which varies from the Guideline, without reference to the views of other affected stakeholders. This is a failure of process and another missed opportunity. Consumers, for instance, would like the DNSPs to explain why it is in consumers long term interests to be (effectively) paying such high WACC rates when they bear much of the risk; DNSP profits and returns to shareholders are at record levels and interest rates have dropped markedly since the last regulatory reset.

²⁷ See for example, Australian Competition Tribunal, *Application by APA GasNet Australia (Operations) Pty Limited (No 2)* [2013] ACompT 8, 18 September 2013 @ 308. The Tribunal specifically highlighted that the AER was not in error and it was not for the Tribunal to stand in the shoes of the regulator even if they disagreed with the regulator's conclusion (which they did not).

An additional “quirk” of the NSW DNSPs’ approach is the adoption of the long-term risk free interest rate; this was quite unheralded and never subject to consultation during the Guideline development process at least as far as PIAC is aware. PIAC notes that no other DNSP has adopted this methodology.

- The AEMC has also clarified that the amendments to the NER are directed at considering the overall rate of return and whether or not the rate of return satisfied the rate of return objective (see above). PIAC therefore believes it is appropriate to take a sense check of the overall rate of return proposed by the DNSPs.

The first and most obvious point is that it is quite remarkable that the NSW DNSPs would propose an overall rate of return of 8.85%, and claim that this rate of return is required for the DNSPs to encourage investment and recover their financing costs. For instance, Endeavour states that 8.85% overall rate of return.²⁸

Is commensurate with the minimum efficient financing costs for a DNSP with a similar degree of risk as that which applies to Endeavour Energy over the 2014-19 period.

PIAC considers the claim that 8.85% is the minimum financing costs for a DNSP is unfounded. A number of DNSPs, whose risks would be very similar, have been allowed a lower return and are still in good financial health, forecasting profit growth.

The three DNSPs that have recently submitted their proposals to the AER (SA Power Networks and Ergon and Energex in Queensland) have all submitted lower WACC proposals, albeit only TasNetworks proposals align with the AER’s Guideline. Table 7 above illustrates this point.

TasNetworks agreed to the AER’s Draft Decision in the interests of their customers, the only network agreeing to prioritise that outcome. PIAC commends TasNetworks on their approach, noting that like PIAC TasNetworks had some residual reservations about the AER’s Rate of Return Guideline and its assessment of some costs.

Moreover, the NSW DNSPs are putting to NSW electricity consumers the following propositions (albeit implied propositions) in regard to their financing proposal:

- NSW DNSP Proposition: that the risk free rate is 4.78% when the CGS risk-free 10 year bond rates have been below 4.78% for every month since the July 2011 and has continued to decline²⁹;
- NSW DNSP Proposition: While DNSPs in other states are able to raise funds at lower levels (see Table RRR below), the state owned DNSPs in NSW funded through NSW Treasury have the highest cost of funds; and
- NSW DNSPs’ Proposition: The NSW DNSPs have only been able to reduce their cost of funds since the start of the Global Financial Crisis (GFC) of 2008-2009 by 107 basis point,

²⁸ Endeavour Energy, *Revised regulatory proposal, 1 July 2014 to 30 June 2013*, January 2015, 196.

²⁹ See for instance, Reserve Bank of Australia, *Aggregate Measure of Australian Corporate Bond Spreads and Yields: Non-Financial (NFC) Bonds*.

although most other utilities and businesses have been able to negotiate substantial refinancing arrangements since that time.³⁰

Table 7: Comparison of allowed and proposed WACC outcomes in last 2 years (2013 & 2014)

NSP	Total WACC %	Cost of Equity %	Cost of Debt %	Status
NSW (Distribution)	8.85	10.15	8.1	Revised Proposal 2014 -2019
ElectraNet (Transmission)	7.50	8.71	6.69	Complete 2013-18
SP Ausnet (Transmission)	7.87	9.51	6.79	Complete 2014-2017
Energex (Distribution)	7.75	10.53	5.91	Proposal 2015-20
Ergon (Distribution)	8.02	10.53	6.36	Proposal 2015-20
SA Power Networks (Distribution)	7.62	10.45	6.36	Proposal 2015-20
TasNetworks (Transmission)	7.15	8.10	6.51	Proposal 2015 -20

Source: The AER's final determinations for Electranet and SP Ausnet, the revised proposals for 2015-19 for the NSW DNSPs and TasnNetworks, and the regulatory proposals for 2015-20 for Energex, Ergon and SA Power Networks.

These propositions, which point to either an inefficient financing strategy or the construction of a theoretical benchmark that has little to do with reality, are made even more surprising when considering that the NSW DNSPs raise almost all the funds through NSW Treasury.

If the later (the theoretical benchmark) applies, then this is an argument about models and interpretation of general market data. PIAC considers the AER is correct in using its judgement to come to an alternative view particularly as it is the AER, not the DNSPs who have undertaken extensive consultation with all stakeholders.

On the other hand, if the claim is about the actual harm the AER is causing to their business, then this bears consideration of the actual financial outcomes for those businesses. We strongly urge the AER to investigate such a claim. Research by Mr Bruce Mountain³¹ suggests that under the old regime the DNSPs were making extraordinary profits—return on equity in the order of more than 20%. This excludes capital growth from the indexation of the assets (automatic growth at

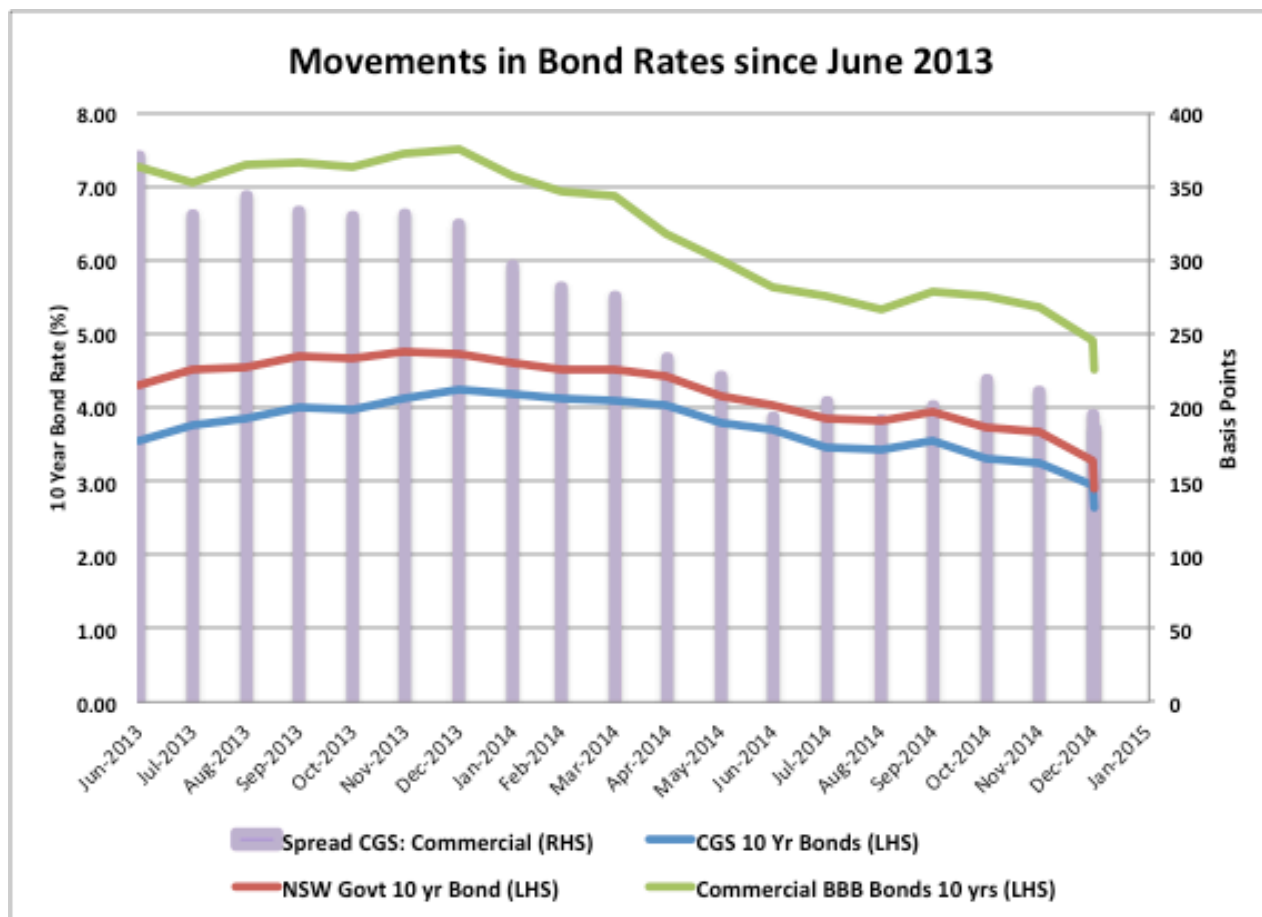
³⁰ PIAC provided an example in its initial August 2014 response, of SP Ausnet's fund raising of 15-year bonds at competitive rates to improve the cost and balance of their borrowings. See PIAC: *Moving to a New Paradigm*, August 2015, footnote 199, p 84.

³¹ This research will be provided to the AER in the Consumer Challenge Panel's submission.

CPI plus new capital spend) and the impact on equity returns of the revaluations that occurred in a number of years.³²

Figure 10, below, demonstrates the current 10-year Treasury bond rates, which are clearly moving closer to CGS rates, reflecting greater confidence in the states AAA credit rating.

Figure 10: Movements in Bond Rates since June 2013, 10 Year CGS, NSW Government & Commercial Bonds.



Source: RBA, Statistics, F2 and F3 historical monthly yield data

PIAC recognises that the NSW DNSPs are charged a “Government Guarantee Fee (GGF)” which is designed to “ensure competitive neutrality between Government businesses and their private sector counterparts with respect to the cost of debt.”³³ The GGF will be such that the cost of debt to the businesses is consistent with their debt levels and independent credit ratings. Some of the important features of the GGF relevant to the DNSP’s proposal include:³⁴

³² See for example, Ausgrid, *Annual Report 2012/13*. The Annual Report states: “Shareholders’ equity increased during 2012/13 to \$4.2 billion reflecting a \$2.9 billion increase in the revaluation of system assets. Ausgrid achieved a 23.2 percent return on equity which was lower than the Statement of Corporate Intent target of 31.3 percent. This was also affected by the revaluation of system assets.” (Annual Report 2012/13, 28).

³³ NSW Government, The Treasury, Treasury Circular, *Government Guarantee Policy*. NSW TC 14/08, 20 May 2014. PIAC provided a more extensive review of the impact of this policy for NSW Government businesses in its submission on the DNSP’s regulatory proposals. See PIAC, Submission on regulatory proposal, August 2014, 84-85.

³⁴ See *Ibid*, 3.

- utilities can draw down debt at any time of their choosing – they have access to “very short” lead times to arrange new debt or refinance existing debt with Treasury Corporation (TCorp).
- The NSW GGF tenor management provides utilities with: “unlimited and free access to credit tenor management” (i.e. as an alternative to accessing the Credit Default Swap Market). “Utilities have used the mechanism to significantly reduce credit costs over recent years”.³⁵
- Utilities can use the different debt types that are available to: “significantly reduce their debt costs and outperform the Regulatory benchmarks ... [for example] during periods of flat TCorp curves, utilities can borrow longer, and shorter when the TCorp curve is steep.”³⁶
- TCorp provides flexibility to modify existing loans: “Utilities have the ability to switch existing loan between fixed, floating and YOY loans to cheapen interest costs and manage risk. The cost of exiting the switch is very low....For private sector borrowers, debt restructures would be costly, would likely involve swaps and would be likely to impact on the P&L accounts”.³⁷

NSW Treasury then states the following:³⁸

NSW businesses have the opportunity to manage debt funding risk, base interest risk, credit cost risk and inflation risk completely independent 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 finds these statements from the NSW Treasury puzzling in the context of the claims made by all the DNSPs of the nature of their portfolio. These include claims that not only has the AER adopted the wrong approach in its Draft Decision (although it was the approach that was set out in the Rate of Return Guideline), but if the AER adopted this approach it would be in breach of the NEL Revenue and Pricing Principles³⁹ and would seriously jeopardise the ability of the DNSPs to raise funds to invest in the business.

Putting aside the issue that the AER’s obligation is to set an efficient financing costs of a benchmark efficient entity rather than an individual business, at least part of the NSW DNSPs’ arguments appear to rest on the impact of the AER’s approach on their particular business.

PIAC believes this is incorrect; it is a benchmark approach that is the AER’s relevant reference point. However the discussion above on the GGF suggests that even using the specific situation of the NSW DNSPs, the AER’s approach would not create an actual financial crisis for the DNSPs. The GGF clearly provides an opportunity for the DNSPs to actively manage their portfolio of debt through (inter alia) low cost refinancing or of modifying existing loans at low cost.

That is, if the NSW businesses have simply sat on their portfolio of long-term debt, then consumers would hardly acknowledge that as efficient. The markets are replete with other businesses with long-term capital requirements refinancing debt to take advantage of lower

³⁵

ibid.

³⁶

ibid.

³⁷

ibid.

³⁸

ibid

³⁹

The RPP in Section 7A of the NEL, require the regulator to provide a sufficient opportunity for a return commensurate with the risks of providing the relevant network services.

loans. The GGF appears to provide this flexibility but at lower cost. It is hardly efficient for the NSW DNSPs to take no advantage of this opportunity.

At the very least, the DNSPs have the opportunity to move to lower rates over time, and/or to pay a lower GGF to Treasury (who can now raise funds 10-year bonds at between 3% and 5% (see Figure 10 below).

9.4 PIAC's concerns with the AER's constituent decisions

As noted above, PIAC has concerns with a number of the constituent decisions that form part of the AER's Rate of Return Guideline, and, in particular, the AER's Draft Decision on the rate of return to achieve the allowed rate of return objective.

1. PIAC rejects the DNSPs' assertions that the risk free rate used in estimating the cost of equity should be calculated on the basis of the long term (very long term) interest rates in order to be consistent with the calculation of the market risk premium (MRP).

In the first instance, the amended NER states that: "In estimating the return on equity under paragraph (f), regard must be had to the prevailing conditions in the market for equity funds".⁴⁰ The use of a very long-term interest rates series does not represent a regard for the prevailing market conditions. The prevailing market rates for CGS 10 year bonds are readily available and transparent, so there is no need to use historical interest data as a proxy for the risk free rate.

2. In 2013, the Tribunal ruled specifically on the issue of consistency between the use of a risk free rate calculated over a short period of time (e.g. averaged over 20 days) and the long-term historical data used to calculate the MRP. The Tribunal's decision is quite clear. There is no problem of consistency under the CAPM framework. When this issue was put to the Tribunal by APA GasNet in 2013, the Tribunal ruled that there was no inconsistency and the AER's approach of using historical market data is to provide the best estimate of the expected 10 year forward looking MRP was a legitimate use of the AER's judgement. The Tribunal also concluded that:⁴¹

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 [the AER's preferred MRP prior to the Guideline assessment].

PIAC has highlighted the Tribunal's decision in several submissions to the AER.⁴² However, it seems the NSW DNSPs propose to override both the AER's Rate of Return Guideline and

⁴⁰ NER, Clause 6.5.2 (g).

⁴¹ Australian Competition Tribunal, *Application by APA GasNet Australia (Operations) Pty Limited (No 2)* [2013] ACompT 8, 18 September 2013 @ 305. In this case, the Tribunal was examining whether the AER made an error by not using the short term calculated MRP given it was using the short term 10 year risk free interest rates. The NSW DNSPs have put the issue the other way, i.e, they propose to use the long-term risk free interest rates (from 1883-2013) in order to (it is alleged) be consistent with the long term calculated MRP. Either way, the Tribunal's logic prevails, there is no issue of internal consistency in the AER's calculation of the cost of equity using short term CGS 10 year bond rates and a forward looking MRP estimated on the basis of historical data.

⁴² For example, see PIAC, above n 12, 75.

the Tribunal's clear position on consistency between the risk free rate and the MRP. Both are forward looking estimates, the first using observable current market data, the second using historical data in the absence of short term observable data – but both are designed to measure the same thing; i.e. a forward-looking cost of equity.

3. PIAC disagrees with the sampling approach used to calculate the equity beta as US firms dominated the sample. The sample was not consistent with the conceptual model of the benchmark firm (i.e. a pure play firm operating Australia), nor did it include a representative sample of international firms (e.g from the UK). The observations on the equity beta for Australian network firms only, were very similar to empirical studies by the AER's experts. These studies suggested a range of equity beta between 0.4 and 0.7; the AER selected the top of this range, a choice that PIAC regards as overly conservative given the most recent updates to the empirical studies on Australian network companies.⁴³
4. PIAC considered that the data used to calculate the cost of debt (the Bloomberg data), did not represent a sample of BBB+ rated firms, the mid-point of the sample of bonds used to calculate the cost of debt was closer to BBB rating. There is little to suggest that credit agencies are rating electricity networks as BBB (at least if they are effectively managed). Even the privately owned SP Ausnet (now AusNet Services), despite suffering some major financial and operational challenges in 2013-14, reports its rating as A- by S&P, and A3 by Moody's.⁴⁴
5. PIAC has argued that the 10-year term for the risk free and commercial bond rates builds in a premium as these are higher cost bonds than the 7-year bond rate that the AER used to apply. While the spread is relatively small now, in other years it can be quite substantial as the 10 year bond rate is much more volatile. PIAC would prefer the AER to use a 5 year bond rate for risk free and commercial bonds to match the regulatory period, applying the NPV = 0 principle expounded by Professor Lally.⁴⁵ As an aside, the use of a 5 year period may have reduced the dispute over the transition period as well.

9.5 Transition to a trailing average – return on debt

The AER Guideline sets out a process for changing the approach to the return on debt from an “on the day” assessment of the commercial bond rate for debt of a 10-year tenor, to a 10 year long term average bond rate. The view of almost all parties was that this would provide more stability over time for the benefit of investors and consumers.

Each year the bond rate would be adjusted as the DNSP's theoretical portfolio of debt progressively moved towards the 10-year average portfolio. The principle here was that this was

⁴³ See *ibid*, 78. This section also includes a detailed critique of the empirical studies of equity beta by SFG Consulting, in so far as they are used by the DNSPs to support a higher equity beta of 0.82.

⁴⁴ SP Ausnet, Half Year 2015 Results for the financial period ended 30 September 2014, 12 November 2014. 7. SP Ausnet's results were impacted by a tax settlement, bushfire class action settlement and an agreed AMI remediation plan – see “Key Developments”, 5. [http://www.ausnetservices.com.au/CA257D1D007678E1/Lookup/ASX2014/\\$file/2014-15%20HalfYearResultsandPresentation.pdf](http://www.ausnetservices.com.au/CA257D1D007678E1/Lookup/ASX2014/$file/2014-15%20HalfYearResultsandPresentation.pdf)

⁴⁵ See for example AER, *Explanatory Statement – Rate of Return Guideline*, 109. The AER quotes Prof. Lally as concluding that the present value principle informs the application of the CAPM equity return model. PIAC's position on this is summarized in the Explanatory statement, 203.

good practice and would provide time for DNSPs to wind back their portfolios of debt and swap contracts to match the new regulatory approach.

PIAC has noted during the Better Regulation program that consumers value predictability and stability; but also stated clearly that stability must not be at the sacrifice of an efficient rate of return on debt outcome. More generally, PIAC would have preferred a 5-year bond rate in line with the regulatory period and NPV=0 (see above), in which case transition would not be such an issue. For example, PIAC does not support the argument that the risk free rate should be assessed on a very long term basis to ensure that it is more stable (as proposed by the NSW DNSPs); this clearly locks consumers into levels of interest rate that have little to do with current market conditions.

It is also clearly a large issue if the transition period is 10 years from both a theoretical and practical perspective. A theoretical issue, because the process will not be complete for some time. A practical issue because without the transition process, consumers would be hit twice for the extreme rates that were priced into 10-year bonds at the start of the Global Financial Crisis when the NSW return on debt was being set for the 2009-14 period.

The 'moral hazard' arises because consumers suffered under the rate of return calculated at the start of the last regulatory period (2010-2014), as the "on the day" calculation meant consumers had high interest rates locked in for 5 years. If a 10-year averaging is applied now, consumers will have that same cost included again. This is a double jeopardy, and one that has all to do with circumstance and nothing to do with efficient financing.

From PIAC's perspective, the AER has exercised its judgement correctly. It has set out a process in the Guideline that provides a balanced approach to managing this unique situation. The AER has focussed on the overall reasonableness of the outcome – would an efficiently financed DNSP be paying debt costs over 8.1%, is it in the long-term interests of consumers to approve such a rate. The answer is clearly no, as a debt allowance of 8.1% will encourage inefficient investment in the network and/or additional profits to the owners.

In addition, for the reasons outlined above, PIAC does not consider the transition period poses a financial risk to the NSW DNSPs –and unlike their customers in 2010-14 period the DNSPs appear to have multiple ways of managing this risk including working with NSW Treasury to adjust the Government Guarantee Fee policy. Or the DNSPs can bear additional costs that would only reduce the level of excess profit and dividends. It would not threaten the viability of the companies.

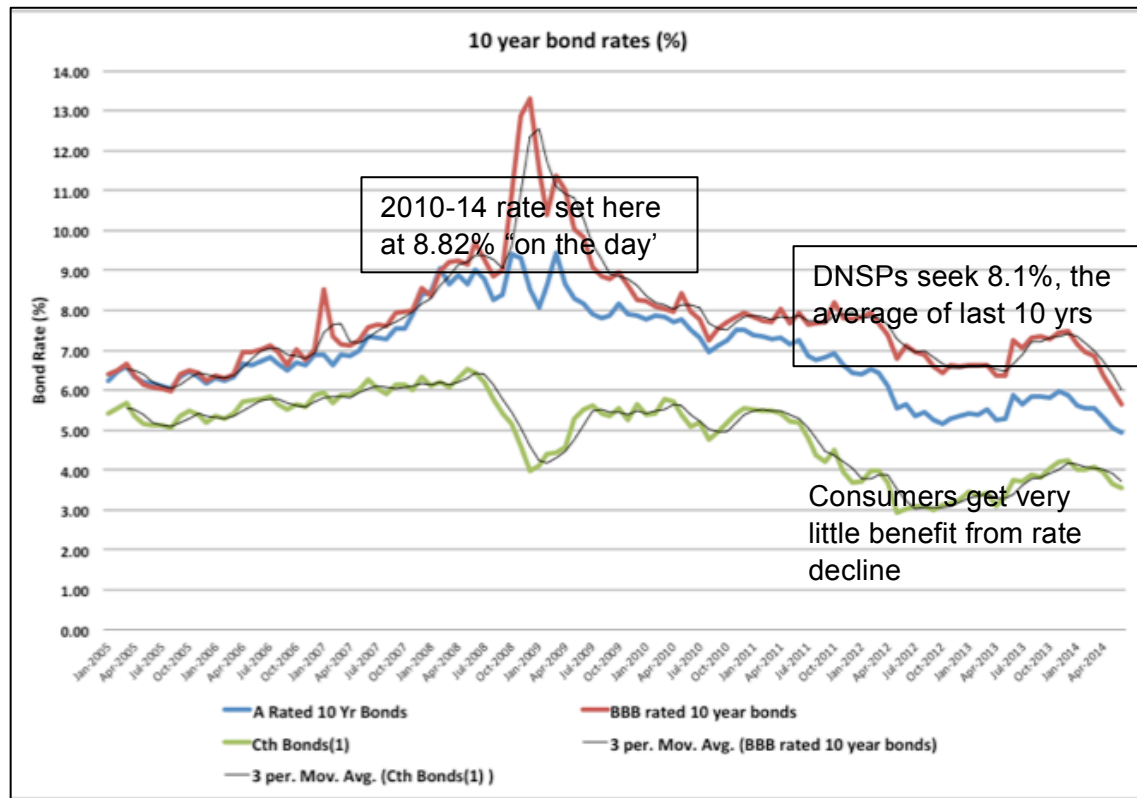
Figure 11, below illustrates the "moral hazard" problems that arise if a 10 year historical averaging was adopted directly. Consumers would get "hit" twice for the same unique event.

For all these reasons PIAC supports the AER exercising its judgement to adopt the transition approach to the assessment of the return on debt that (on balance) best meets the rate of return objective, the overall rate of return objective and the NEO.

PIAC has seen no specific evidence that indicates that the DNSPs will be unable to recover at least their efficient costs of debt, although the shareholder may not continue to enjoy the

additional large margins that existed previously between the Treasury cost of debt and the cost of debt Treasury allocated to the DNSPs under the GGF. Alternatively, the DNSPs have the flexibility under the GGF to rearrange their debt portfolio at little cost – as they would have had to do if the AER had decided to retain the “on the day” approach, which it was at liberty to do.

Figure 11: Commonwealth Government and commercial 10-Yr bond rates 2004-2014.



Source: PIAC, Moving to a New Paradigm, submission on NSW DNSPs’ regulatory proposal, August 2014

9.6 Imputation credits

PIAC notes that the AER has revised downward the value of imputation credits (gamma) from 0.5 in the Rate of Return Guideline to 0.4. The AER states that it has considered a variety of evidence on both the distribution rate and the utilisation rate, and considers the value of imputation credits is within the range of 0.3 to 0.5. From within this range, the AER has chosen a value of 0.4.

PIAC provided a deeper discussion on this matter in its response to the DNSPs’ initial proposal. PIAC does not propose to repeat those arguments here. However, the main point was that the DNSPs draw on the decisions of the Tribunal in 2011 when the Tribunal ruled that the AER must accept a gamma value of 0.25 as argued by the networks at the time. The DNSPs have continued to point to the Tribunal’s ruling. However, PIAC has reviewed the decision and it seems clear to PIAC that the Tribunal’s ruling was carefully and deliberately qualified. In fact, the Tribunal directed the AER to adopt 0.25, only because its own study was not adequate to disrupt the balance of argument from the DNSPs at the time. The AER has since conducted those studies and is in a position now to exercise its judgment – which it has done so. PIAC supports the AER’s efforts in this difficult area, and will accept the reduction imputation credit to 0.4. PIAC does not support the DNSP’s proposal.

Recommendation 7

PIAC recommends that the AER reject the DNSPs revised proposals in relation to the WACC and determine a WACC that meets the rate of return objective.

10. Demand Management

10.1 The importance of Demand Management

Demand management (DM) needs to be part of ensuring efficient costs for consumers, which is why it included in the National Energy Market (NEM) ambitions from the beginning. The National Grid Management Protocol in 1992 included the objective ‘to provide a framework for long-term least cost solutions to meet future power supply demands including appropriate use of demand management’. The AER’s findings and estimates on demand management for Ausgrid notes that ‘Demand management is an integral part of good asset management for network businesses’.

Further, as discussed in both Ausgrid’s proposal and the AER’s draft determination, the option value of DM increases with flat, falling or uncertain demand. DM is quick and flexible to deploy compared with asset replacement or augmentation. DM is also relatively low cost especially compared to the large capex required over a 40 year payback period, for example, for new substations.

PIAC stated its concern with the lack of priority given to DM by the DNSPs in its submission to the revenue proposals. PIAC further notes, by way of contrast, the comments by SA Power Networks CEO Rob Stobbe in December last year

“We will have a totally new business model going forward,” Stobbe told analysts during the presentation. “There is no doubt about that. We just need to be part of it.”

Asked by analysts about the future role of networks in a decentralised grid, Stobbe said: “I’d be more concerned about the generators and the retailers and what their future is. They don’t have one.”

He continued: “At least we have got the network that can be utilised in micro grid environments. It is easier for us to move into that environment. A lot of people still don’t believe it will happen. We think it is a long way off, but we may be proved wrong.”⁴⁶

As a further example, while SA Power Networks, [Ergon Energy in Queensland](#), and [Horizon Power in WA](#), are trialing the [use of battery storage to replace poles and wires](#) and are looking at how encourage more local renewable generation, there are few signs that the NSW DNSPs are changing their business models or operations to fit the current or future circumstances. As such, PIAC believes the consumers of NSW are paying more than is needed for an out-of-date approach to managing electricity networks.

Within this overarching criticism, we acknowledge the stated efforts of Ausgrid to incorporate DM into its business model, noting that it claims that:

Demand management is built into Ausgrid’s spatial demand forecasts, part of underlying Area Planning and resultant augmentation capex, applied in top-down adjustments to our HV distribution capex model and subject to a regulatory incentive scheme.⁴⁷

⁴⁶ Giles Parkinson, *Network operator sees no future for generators, retailers* (Renew Economy, 16 December 2014) <http://reneweconomy.com.au/2014/network-operator-sees-no-future-for-generators-retailers-24660>.

⁴⁷ Ausgrid, *Demand management opex and capex overview* (Ausgrid revised regulatory proposal attachment Attachment 5.14, January 2015).

As highlighted in our submission to the initial revenue proposals, we also support Essential Energy's stated commitment to changing its culture to prioritise DM, and, in particular, PIAC supports Ausgrid and Endeavour's proposals for broad based DM.

10.2 Proposed DMIA-A expenditure

The Productivity Commission's (PC's) 2013 Report on Electricity Network Regulatory Frameworks noted that 'there are several reasons why, at present, the network business's decision might be skewed unduly towards undertaking network investments'.⁴⁸ The PC recommended the introduction of an efficiency benefits sharing scheme 'to ensure that network businesses earn an equal return from reductions in capital or in operating expenditure'. Pragmatically, the Commission also stated that 'in the short term, unless other changes are made to the DMEGCIS [Demand Management and Embedded Generation Connection Incentive Scheme] to encourage demand management, the innovation allowance should be increased'.⁴⁹

Given this recommendation, it is unclear why the AER's Draft Determination limits the innovation allowance to \$1 million per year. PIAC appreciates that in the past not all the funds available under the DMIA have been spent, but as DM develops it may be that an increased allowance for innovation is appropriate, especially to fund the 'pilots and trials' projects which Ausgrid proposed undertaking for a total cost \$8.2m and Endeavour for \$3m.

Recommendation 8

PIAC recommends that the AER consider whether there is a case for increasing the DMIA above \$1m and whether the criteria for the use of these funds be reviewed (particularly to fund proposed 'pilots and trials').

10.3 Proposed broad-based DM expenditure

PIAC agrees with Ausgrid's assessment that:

The draft determination's rejection of both the replacement of the D-factor incentive with the proposed demand management benefit sharing scheme (DMBSS) and the broad based demand management program is a backwards step in the development of demand management. The draft determination has failed to recognise the ongoing absence of any actual incentive for DNSPs to pursue demand management as a solution to network needs, the value of demand reductions to the wider energy supply chain and the need to invest to assist customers in responding to price signals and lower their peak demand. Reliance on a modest innovation fund, the RIT-D or the uncertain impact on localised constraints from future cost reflective prices will not be sufficient to build such capacity. This will result in significantly less demand management than is cost effectively viable and higher levels of augmentation capex in the following regulatory periods.⁵⁰

⁴⁸ Productivity Commission, 'Electricity Network Regulatory Frameworks', (Productivity Commission, Report No. 62, 2013), 479.

⁴⁹ Productivity Commission, 'Electricity Network Regulatory Frameworks', (Productivity Commission, Report No. 62, 2013), 481.

⁵⁰ Ausgrid, 'Demand management opex and capex overview' (Ausgrid revised regulatory proposal attachment, Ausgrid, 2015)

The AER's primary grounds for rejecting Ausgrid's broad based DM program appear to be that network tariff reform will do the work of demand management. The AER's Draft Determination in response to Ausgrid's revenue proposal states:

In particular we are not satisfied that Ausgrid's proposal adequately takes into account forthcoming NER changes that will affect how network tariffs are set. Under new proposed rules, network tariffs will be based on the long run marginal cost of providing the service. That means consumers will in the future face better price signals about usage of electricity during peak times. We would *expect this will have a significant effect* on how consumers use electricity during those times.⁵¹ [emphasis added]

However, the evidence that cost-reflective pricing creates changes in user behaviour is inconclusive. In particular, PIAC recommends the AER read closely the recent RMIT research that found:

- Engagement with tariff and retailer choice was low in many households with children. Many parents had little time, interest or trust to investigate tariff choice and available energy information. Provision of more information through websites or printed materials is unlikely to resolve this issue.
- Just under half the survey respondents who reported being on a tariff with an off-peak rate (TOU or two part off-peak tariff) did not know what time their off-peak tariff started.⁵²

The research concluded that:

occasional requests for households with children to disrupt their routines to assist with managing peak demand issues were a more positive proposition than incentivising families to regularly shift their weekday routines in response to a TOU tariff. While occasional and non-financial demand management programs, such as a 'peak alert', are unlikely to appeal to all households with children, they may provide a more positive platform to address demand management issues with this group of households.⁵³

In comparison, the AER's stated expectations of future customer behaviour is that:

If electricity network consumers face more cost reflective price signals regarding electricity usage during peak periods, we would expect consumers will take their own actions to reduce their usage during peak periods.

The proposition that changing price automatically changes behaviour has been comprehensively refuted by behavioural economics.⁵⁴

In effect, the AER is asking network businesses to defer investment in DM on the speculative grounds that network pricing will result in significant changes to consumer behaviour, which will in turn will yield results equivalent to network demand management. PIAC is concerned that it is

⁵¹ AER, above n 1 (Ausgrid).

⁵² Nicholls, L & Strengers, Y 2015, Changing demand: Flexibility of energy practices in households with children, Final report, Centre for Urban Research, RMIT University, Melbourne, Australia.

⁵³ Ibid.

⁵⁴ See, for example, Daniel Kahneman, *Thinking Fast and Slow*, Farrar, Straus and Giroux (2011).

pre-emptory for AER to put such a belief ahead of the actual implementation of time of use pricing. Further, it is noted that time of use pricing requires smart meters which are only currently installed in a small proportion of NSW households.

While the AER claims 'We are not confident that the benefit of these initiatives will outweigh the costs', the businesses have developed highly positive (and not marginal) business cases. Ausgrid in their revised proposal have verified the business case for the optimised broad-based DM program such that a positive NPV is returned in 6.5 years and the total NPV (10 year) through to 2024 is \$31 million.⁵⁵ Ausgrid projects that cost-reflective pricing would lead to only a 1-2 month delay in the project achieving a net positive NPV. As far as PIAC is aware, while preferable, there is no reason why the NPV needs be within the five-year regulatory period.

Furthermore, for consumers to be able to respond to any signals (price or otherwise), they need to have smart meters and behind the meter technologies installed that enable them or third parties to change their energy use. Ausgrid are proposing to undertake residential direct load energy efficiency, power factor correction and non-residential demand energy efficiency, none of which is innovative risky technology. PIAC supports Ausgrid's contention that 'Broad based demand management solves the problem for the consumer'.⁵⁶

10.4 An incentive scheme is a priority to facilitate DM

To combat the cultural barriers that exist to DM, an effective DM Incentive Scheme and other mechanisms (beyond monitoring through the Annual Planning Reports) is required.

Unfortunately, regardless of how long DM has been a stated priority for the NEM, there is still a capex-bias in the way the NSW network businesses operate. Until such time as there is a wholesale reform of the NEM to counter-act this bias, an incentive scheme can provide a mechanism to encourage cultural change in business practices.

It is disappointing that the AEMC has not progressed a rule change for the replacement of the Demand Management and Embedded Generation Incentive Scheme (DMEGIS). Indeed, the Productivity Commission recommended that:

if the implementation of the Commission's recommendations were to significantly fall behind schedule, or if there was evidence that opportunities for efficient demand management were being forgone by network businesses, the AER should investigate expanding the scope of the DMEGIS to provide network businesses with additional incentive payments or penalties.⁵⁷

10.4.1 Ausgrid's demand management benefit sharing scheme

In its submission on the networks revenue proposal PIAC commended Ausgrid for proposing a demand management benefit sharing scheme (DMBSS) and supported it as an interim measure before the reformed DMIS is introduced. PIAC supports the argument put by Ausgrid in its revised proposal that:

⁵⁵ PIAC, above n 12, 94.

⁵⁶ Ausgrid, 'Demand management opex and capex overview' (Ausgrid revised regulatory proposal attachment, Ausgrid, 2015)

⁵⁷ Productivity Commission, 'Electricity Network Regulatory Frameworks', (Productivity Commission, Report No. 62, 2013), 480.

There is nothing in the current rules that would prevent the consideration of a DM incentive scheme of the type proposed. Ausgrid's proposal reflects our concern regarding the ongoing absence of any actual incentive for DNSPs to pursue demand management opportunities, and the absence of any mechanism to recognise the value of demand reductions to the wider energy supply chain.

Recommendation 9

PIAC recommends that the AER accept Ausgrid's DMBSS proposal and also apply it to Endeavour's broad-based DM proposal.

10.5 AER's role in providing support for DM

While the AEMC has failed to progress both the COAG Energy Council and the Total Environment Centre's rule changes on Demand Management, PIAC does not believe that this absolves the AER of its responsibility to ensure efficient costs for consumers, especially if network businesses are proposing DM spend which has a positive business case.

The AER argues that:

We do not intend to pre-empt consultation on the AEMC's review of the current demand management arrangements by commencing a separate consultation process on a new DMIS [Demand Management Incentive Scheme] before the outcomes of the review are finalised.

And:

the confines of a distribution revenue review make it ill-suited to driving regulatory reform.

PIAC agrees that ideally the AER's development of a new Incentive Scheme should follow from the AEMC's rule change process, but given the delay to date and the importance of DM to consumers, PIAC continues to recommend that the AER proceed to develop a new Demand Management Incentive Scheme.

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 10

PIAC recommends that the AER develop a new Demand Management Incentive Scheme and that this be undertaken a way that is outcomes-focused and seeks to ensure DM becomes central to DNSPs' activities. The process should also ensure it can be implemented in the current regulatory period.

PIAC's view is that it is the responsibility of the regulator to try to correct for the traditional capex bias of network businesses and ensure that there is sufficient support available for DM to ensure efficient costs for consumers.

Clearly with falling demand, network businesses are focusing capex spend more on replacement (repex) than augmentation. PIAC understands that Ausgrid currently applies the RIT-D to repex which is in the long-term interests of consumers.

While the AER is not the rule maker, it is in the ideal position to initiate rule change proposals that would improve the governance, scope and implementation of the RIT-D as recommended by the Productivity Commission.

Recommendation 11

PIAC recommends that the AER develop a rule change proposal to improve the governance, scope (including replacement capex) and implementation of the RIT-D.

PIAC appreciates that the AER is seeking to ensure adequate investment in DM through monitoring of Annual Planning Reports and implementation of the RiT-D and would welcome any further actions (in addition to those recommended above) that the AER could take to support DM development by network businesses. It continues to be an area of high importance for consumers.

Recommendation 12

PIAC recommends that the AER consider how all network businesses might be further supported and encouraged to undertake demand management.

11. Consumer engagement since the Draft Determination

PIAC has been a strong supporter of the AEMC's decision to enhance the role of consumer engagement in the regulatory process. After all, if the regulatory objective is to serve the long-term interests of consumers, then consumers should have a powerful role in the regulatory decision making process.

Once again PIAC believes that the intentions of the rule maker have been somewhat sidelined in the current regulatory process.

DNSPs have certainly spent considerable time and money on consumer engagement (another uncapped expenditure). Moreover, there have been instances where the consumer engagement has been conducted in good faith and with the best of intentions. PIAC considers, for instance, that such research can be valuable to the DNSPs in evaluating consumers' satisfaction with the DNSPs' services and it may assist in prioritising expenditures.

However, given PIAC's experience to date, PIAC is most doubtful that consumer engagement research can be used as a justification for undertaking long term investment decisions that will have an impact on consumers both now and in the future.

PIAC also has significant reservations about the validity of DNSPs applying this research, which is based on surveys of relatively uninformed consumers, to make investment decisions and/or to attempt to over-ride the decisions of the regulator.

If information asymmetry is a problem for the regulator, how much more is it a problem for an average consumer? The regulator has data, for example, on the age profile and residual life of the DNSP's assets and the technical resources to assess the risk of failure, the cost benefit of an investment, the existence of efficient alternatives. Consumers do not, so their answers provided in willingness-to-pay studies are made without any context in which to assess expenditure options in the real world of long-lived assets where expenditure assessment and the timing of expenditure is based on probabilities of failure under varying conditions. PIAC is highly sceptical of the value of willingness-to-pay studies in the regulatory process.

For example, an willingness-to-pay question might be: 'our poles have an average life of 50 years, that means some will need replacement before 50 years and some need replacement after 50 years. Would you be willing to pay \$X now for all poles to be replaced at 40 years (even though some will be working for 60 years) to reduce the risk of failure by Y% and interruption to your supply by Z minutes?'. Of course, that is too complicated an assessment for a survey of consumers in the absence of knowledge of the probability density function of the life-time failure rates of electricity poles or substations. That is precisely the point. Willingness to pay studies may be able to handle dichotomous choice. However, choosing options against a probability/cost curve requires a great deal more sophistication and knowledge of the industry.

Further, PIAC takes objection to (for example), Ausgrid's high-handed dismissal of the 21 submissions made to the AER on Ausgrid's proposal, and specifically its consumer research.⁵⁸

⁵⁸ See, Ausgrid, *Revised Regulatory Proposal (amended)*, February 2015, 11.

While some 2,000 largely uninformed consumers (from an energy industry point of view) took part in various aspects of Ausgrid's research, many of the 21 submissions to the AER came from organisations who represent a much larger constituency. It is reasonable to assume that these organisations have a sound and informed understanding of how Ausgrid's dramatic price increases have impacted on families and businesses in NSW. Ausgrid could benefit by listening more closely to the concerns of consumer advocates and community welfare organisations and placing less faith in consumer research (such as focus groups) that has its origins in consumer goods marketing and advertising.

11.1 DNSPs' response to PIAC's submission

Consistent with its revised proposal as a whole, Ausgrid seeks to strongly refute and counter criticism of its consumer engagement activities. This is largely directed at the AER, with Ausgrid noting, for example, that the regulators 'alternative findings [are] based on threadbare anecdotal evidence and a complete lack of robust testing of consumer views'.⁵⁹ Statements from PIAC are also refuted, in particular the observation that DNSPs plain English overview sought to present the networks in the best light possible, while giving an incomplete picture of the regulatory proposal (to 'spin' their plans).⁶⁰

Ausgrid also goes to some length to note where its consumer engagements have been complimented. This includes a quote from a senior AER staff member that they had undertaken 'significant levels of consumer engagement',⁶¹ and from consumer representatives, such as the Council of Social Services of NSW (NCOSS).⁶² Quotes from PIAC in relation to consumer engagement are discussed separately in section 6.3, below. In addition, Ausgrid notes that the AER's Consumer Engagement Guideline states that 'service providers will need some time to develop and implement robust and comprehensive engagement strategies and approaches'.⁶³ Stakeholders, including PIAC, accept that any DNSPs will need time to develop and refine their approaches to consumer engagement. In light of this statement by the AER, Ausgrid states that it finds it 'contradictory for the AER to clearly lay down these expectations and then ignore them when judging our consumer engagement'.⁶⁴

PIAC submits that whether or not the AER has been overly critical of engagement by the NSW DNSPs, consumer engagement is not an end in itself, but an important part of the regulatory process, included since the AEMC's 2012 rule change determination.⁶⁵ Even if Ausgrid had not received any criticism of its consumer engagement, PIAC takes the view that this is not a basis on which the AER can accept a revenue proposal that includes inefficient opex, capex and a very high WACC.

11.2 Consumer engagement by Networks NSW since the AER's Draft Determination

Networks NSW held a forum with consumer representatives on Friday 6 February 2015. In his introductory remarks for the event, Vince Graham noted that the purpose of the event was not to

⁵⁹ Ibid, 46.

⁶⁰ Ibid, 50.

⁶¹ Ibid, 40.

⁶² Ibid, 51.

⁶³ AER consumer engagement guideline, 12, in Ibid, 43.

⁶⁴ Ibid, 43.

⁶⁵ AEMC, *Economic Regulation of Network Service Providers*, 2012.

seek to change the positions of consumer advocates prior to making their submissions to the AER. Rather, the aim was to ensure that attendees were 'better informed' about the risks to safety and reliability that Networks NSW argues would stem from the AER's determination.

While PIAC welcomed the Networks NSW forum with consumer representatives, the tone of these introductory remarks is significant. Rather than seeking to consult, engage or collaborate with consumers, the emphasis was solely on the provision of information. The timing of the event – after the NSW DNSPs had submitted their revised proposals and a week before submissions from stakeholders are due to the AER – did not allow for meaningful engagement.

11.3 Clarification of quote from PIAC

Ausgrid's Revised Proposal includes a quote from PIAC's Oliver Derum in relation to a one-off stakeholder forum held by Networks NSW in March 2014. The quote first appeared in the Endeavour Energy staff newsletter, *Essential Endeavours* and Ausgrid uses the same quote:

While Networks might stumble with engagement approaches in the early stages, just to have made this effort is recognition of the preparedness of the industry to listen and to value customers.⁶⁶

While this is an accurate quote, PIAC wishes to bring to the AER's attention the second half of the quote, which noted that:

Now we need to build on this good start. If customers are better included and considered in network business decisions, we can build a network that's best for everyone.⁶⁷

For the avoidance of doubt, PIAC wishes to clarify the intended message of the quotes in *Everyday Endavours*. The comments sought to convey that while the specific event in question had been positive, it was now crucial that a good start was built on as part of increasing engagement between networks and consumers. It is insufficient to simply convene meetings with consumers, there needs to be on-going and genuine engagement with consumers, consumer advocates and community welfare organisations.

11.4 The future of consumer engagement

PIAC is encouraged by statements from Ausgrid about the future of consumer engagement. For example, Ausgrid's revised proposal contains a commitment to 'engage with consumers beyond our regulatory proposal and to review and renew our engagement strategies and activity'.⁶⁸ PIAC takes the view that, like all aspects of network operation, consumer engagement should be the subject of efforts at continuous improvement.

In its submission in response to the DNSPs initial proposals, PIAC noted that it was not able to provide comment on Ausgrid's consumer engagement, because it was not a member of Ausgrid's Customer Council and had had limited contact with the network before its regulatory proposal was submitted. In response to these statements, Ausgrid's revised regulatory proposal notes that

⁶⁶ Ausgrid, above n 1, 42.

⁶⁷ Endeavour Energy, Pricing and affordability centre stage at customer forum', *Everyday Endeavours*, April 2014, 4.

⁶⁸ Ausgrid, above n 1, 43.

it has invited PIAC to be a member of Ausgrid's customer council 'in the past'.⁶⁹ Ausgrid further states that it is keen for its 'relationship and engagement to grow as part of our genuine and ongoing commitment to greater consumer engagement'.⁷⁰ To this end, PIAC has contacted Ausgrid to indicate its desire to join the Customer Council.

PIAC acknowledges that aspects of the dialogue between networks, the AER and consumers has become strained as part of this regulatory determination. Consumer engagement will only be worthwhile for any of the parties involved if it contributes to more effective outcomes and lower costs for electricity consumers. As all sides have acknowledged, giving effect to the spirit of the AEMC's rule change in relation to consumer engagement will require significant development and evolution. It is important that such development takes place in an atmosphere of cordial cooperation on the part of all participants.

⁶⁹ Ibid, 51.
⁷⁰ Ibid.

12. Future improvements in network regulation

Regardless of the shape of the AER's Final Determination, PIAC intends to use its experience with the regulatory process in NSW to highlight areas of the economic regulatory process in need of reform. These include the following areas where PIAC believes that the long-term interests of consumers are not currently being served by the regulatory process.

12.1 The Propose-Respond model of national regulation.

Since the economic regulation of networks moved to the national regulatory regime under the NEL and NER, there has been an enormous growth in amount of material produced by the networks. Proposals amount to hundreds of pages plus additional detailed attachments, expert reports and supporting legal analysis and spreadsheets. The AER, in turn, has to reply with longer and longer material to address all the matters raised. And this is without the additional material that will be produced if the AER's decisions are appealed by the networks.

Moreover, the national process was supposed to represent a move towards more 'light-handed, incentive-based' regulation; in practice, the reverse has happened. Despite the recent efforts of the AER to take a big picture incentive oriented view of regulation (as intended by the AEMC), they are being challenged by the networks for not engaging in the micro-detail of the businesses and their 'special circumstances'.

Consumers in the end, fund all of this ever-expanding and increasingly legalistic process. The question must be asked, are consumers' long-term interests being served by this?

PIAC is suggesting that there is something fundamentally wrong with a regulatory process that requires such expenditure of time and money, without discernable improvement in outcomes. Consumers are overwhelmed and isolated from *meaningful* participation in the process and have lost confidence that the current regulatory model can deliver on the long-term interests of consumers.

As a result, PIAC has come to the view that the current 'propose-respond' model as it operates under the NEL and NER, must be critically reviewed by an independent body to assess whether it is delivering on the long term interests of consumers, or whether it places the regulator constantly on the back foot against extremely well resourced claimants with seemingly open budgets.

This outcome arises because the starting point of the current regulatory process is a proposal by a network that is put to the AER,⁷¹ a proposal that inevitably represents the interests of the network owner. The starting point is therefore not necessarily aligned with the NEO. The AER is left with the task of responding to the thousands of pages of proposal; a task that increasingly (and despite the AER's intent) requires detailed assessments.⁷² The propose-respond model effectively exacerbates the problem of information asymmetry for the regulator as well as isolating consumers.

⁷¹ PIAC is aware that the AER sets out a Framework and Approach paper at the initial stages of the regulatory process, however, this is a very high level statement of approach, not a decision.

⁷² The AER's benchmarking and productivity measures are intended to allow the AER to make decisions from an overall perspective (as intended by the AEMC), leaving management to set priorities within the overall expenditure allowance. However, the DNSP's are disputing the AER's "big picture" approach and are instead providing detailed bottom up analysis of expenditures.

PIAC suggests as an alternative that the starting point should be a statement by the regulator of its view of how best the long-term interests of consumers can be addressed in the coming regulatory period. In this way, the starting point of the process is clearly aligned with the NEO. Of course, all stakeholders, including the networks, then have the opportunity to put their case, but at least the onus of proof is reversed from the current propose-respond model.

PIAC notes that the reforms to NEL regarding the process of appeal to the Australian Competition Tribunal (Tribunal) now requires the DNSPs to demonstrate at the outset why their appeal would lead to a preferable outcome in the long-term interests of consumers.

12.2 The need to control the costs of the regulatory process.

As an alternative process (although less favoured by PIAC), the DNSPs should be required to first reveal the amounts expended on their regulatory process and then have a cap on the amount that the DNSP can pass through to consumers. At the moment there are no price signals for the DNSP as all costs for these proposals are passed through to consumers.

It has been estimated that the regulatory processes are now costing more \$330 million dollars⁷³, and that is without accounting for the pro-bono efforts of consumer advocates. There must be, at the very least, a limit on this expenditure pass-through in the future.

PIAC notes by way of comparison, that the reforms to the process for appeal to the Tribunal means that the costs of this appeal can no longer be passed onto consumers. Like any business, the risk–reward equation of a legal appeal sits with the appellants, not their customers.

12.3 The use and abuse of flexibility under the rules in the approach to the cost of capital

The recent amendments to the NER were designed to reinforce the centrality of the NEO, and to provide more discretion to the AER to make a decision in the long-term interests of consumers. However (at least in NSW), this greater flexibility appears to have opened the door for DNSPs to broaden their ambit claims, compared to the more prescriptive approaches adopted under the previous NER, and by most other regulators.

For example, PIAC notes the many pages that the DNSPs have devoted to their claim that the NER requires the AER to apply all models of the cost of equity that the DNPSs choose to apply in their regulatory proposal. PIAC considers that the intent of the NER amendments was to provide greater scope for the AER to select the approach to the cost of equity that would best achieve the NEO. Following a very extensive consultation process, the AER published the RoR Guideline, which set out how it would exercise its discretion and what factors it would take into account.

⁷³ In 2013, the Productivity Commission estimated that that the approximate administrative costs for the regulator and the businesses in the last complete cycle of revenue determinations was around \$330 million (which excludes the merits review costs). See Productivity Commission, 2012, *Electricity network regulatory frameworks - Overview*, 27. Under the new rules there are even more thousands of pages of material from the businesses and the AER, without include the many submissions from very concerned stakeholders. PIAC believes the total costs of this round of determination will be much greater than the Productivity Commissions 2012 assessment.

In contrast, PIAC is not aware of any significant consultation by the DNSPs in developing their alternative approach to the rate of return, and demonstrating its benefit to consumers.⁷⁴ As such, the NSW DNSPs have continued to spend consumers' money on pursuing their abstract and untested alternative.

PIAC is seeking an examination from the AER of whether a return to a more prescriptive approach may better serve consumers' interests. PIAC's preference is for flexibility so that the AER can respond to changing circumstances. However, if this flexibility is, in practice, just a reason for even more thousands of pages and millions of dollars expended, then PIAC believes more prescription in the rules may be preferable.

12.4 The dilemma of the Regulatory Asset Base (RAB)

PIAC has recently published a research report on the excessive valuation of the regulatory asset base of the NSW DNSPs.⁷⁵

It is PIAC's strong view that this is an area that must be addressed by the rule makers if the cycle of price rises and declining energy use is to be broken. While the surge in capital investment has aggravated this issue, it has its roots in the commencement of the national regulatory market. In particular:

- The asset base of each DNSP was revalued to reflect a replacement cost methodology. The new asset valuations were locked into the NER and automatically indexed by CPI each year. This meant that electricity prices now had to increase simply to recover a return on a higher asset values plus additional depreciation costs. No new services were added in this process, it was simply an accounting rearrangement.

The ACCC, for instance, has been quite critical of this revaluation process when looking at the transmission businesses it regulated between 2003 and 2006. The ACCC's views on this initial revaluation of the assets by the state governments are summarised in a later investigation of Tasmanian transmission pricing:⁷⁶

...[revaluation will] result in higher transmission charges without any corresponding benefit to customers. Such an increase in revenue would, according to the ACCC, translate directly to profits, as Transend has not incurred any additional expenses in order to receive the revenue.

⁷⁴ PIAC is not aware of any substantive consultation by the DNSPs with consumers or consumer representatives demonstrating why their model of return on equity is a preferable model in the long-term interests of consumers. Were they to do so, consumer advocates may point to the very large profits that DNSPs have earned in the last regulatory period when a similar cost of equity outcome was applied (albeit one assessed under different methodology). Consumers would also question why it is in the long-term interests of consumers that this situation should be allowed to continue in the next regulatory period. Consumer advocates would seek information on profits, dividends, actual cost of debt and equity, return on debt and equity and other such data to guide them in this assessment.

⁷⁵ Mountain, B, *Privatisation and the regulatory valuation of electricity distribution network service providers in NSW: Evidence and Issues*, 2014, available at:

⁷⁶ http://www.piac.asn.au/sites/default/files/final_report_to_piac_on_asset_valuation_and_stranding_erratum.pdf
The Electricity Supply Industry Expert Panel, *An Independent Review of the Tasmanian Electricity Supply Industry, Final Report*, Volume 1, 170-171. The ACCC noted that the Treasurer's valuation of the RAB was \$525 million, which was 15.9% higher than the valuations previously used by the Tasmanian Energy Regulator. The CPI indexation effectively maintains this valuation (offsetting depreciation on long lived assets).

PIAC's research indicates that the same could be said for the NSW networks.

- Additional assets and capacity have been built to meet a forecast of demand and energy usage that has never eventuated. A review of the history since 2006 suggests that these excessive forecasts were strongly promoted by the DNSPs and (in addition) some DNSPs spent well in excess of their regulatory capex allowance. Arguably, the regulatory value of the assets is now significantly above the economic value of the assets.⁷⁷

PIAC suggests that in a normal competitive market, this would lead to a process of reducing prices to increase demand and/or devaluing or writing off some parts of the asset base. The monopoly regulation is intended to put the same market disciplines on monopolies as occur in the commercial world, yet the NER does not envisage this as an option. This places risks on both consumers and businesses over the longer term, as it restricts businesses ability to adjust prices– therefore consumers adjust by using less electricity.

⁷⁷ This is supported, for instance, but the observation of declining total factor productivity – input costs have grown substantially faster than outputs such as energy, demand, and customer numbers.

13. Conclusion

Broadly speaking, PIAC is supportive of the AER's Draft Determination. PIAC takes the view that the allowed revenue contained in that determination delivers an outcome that is more in the long-term interests of consumers than the DNSPs spending proposals. PIAC was disappointed that the DNSPs seem to have largely ignored the outcomes of the significant regulatory reform process conducted in 2012-13 in developing their revenue proposals.

PIAC does not share the concerns of the NSW DNSPs regarding the AER's approach to the development of an opex benchmarking report, and the use of that report in making its Determinations. PIAC takes the view that benchmarking the three DNSPs against their counterparts across the NEM (and internationally) has consistently shown that those in NSW lag behind many in terms of the efficiency of their operations. The NSW DNSPs must increase their efficiency in order to deliver better outcomes, especially lower costs, for consumers. PIAC submits that this should be achieved by granting the DNSPs revenue that is broadly in line with that required by a 'benchmark efficient' business.

Accordingly, PIAC submits that the AER should make Final Determinations that represent efficient DNSP revenue, as determined under the NEL, NER and the Guidelines. To do so, PIAC believes that the AER must reduce the allowance for aspects of the WACC, in particular the Equity Beta. Similarly, the AER should support efficient expenditure on Demand Management, including through an incentive scheme.

The current regulatory framework is characterised by increasing requirements for networks to engage with their consumers. PIAC has taken the opportunity provided by this submission to clarify statements by Ausgrid about its engagement with PIAC. PIAC has also expressed the hope that NSW DNSPs will enter into more on-going and genuine engagement with consumer advocates and community welfare organisations. Such an approach would mean residential consumers are able to contribute to outcomes that are better for all users of the electricity network.

Finally, PIAC has outlined areas where the regulatory framework needs further reform. The need for such changes has been heightened by PIAC's involvement in this price determination process. PIAC intends to continue to pursue these reforms and is hopeful that progress will have been made by the time the next revenue determination process for NSW energy networks commences in 2018.

Appendix A: PIAC submissions on behalf of residential consumers

The list below is divided into four categories:

- submissions to the AER on network regulation and price determinations;
- submissions to IPART on retail price regulation and competition;
- submissions to AEMC rule changes and market reviews; and
- submissions to other energy policy development matters, including inquiries by the Productivity Commission and the development of Australian Government Energy White Papers.

Submissions within each category are listed in reverse chronological order. Links are provided to each submission, which includes an abstract, on PIAC's website.

Submissions to the AER on network regulation

Moving to a new paradigm: submission to the Australian Energy Regulator's NSW electricity distribution network price determination, 8 August 2014, available at: <http://www.piac.asn.au/publication/2014/08/newparadigm>

Return on debt: choice of third party data provider, 19 May 2014, available at: <http://www.piac.asn.au/publication/2014/06/return-debt>

The opening act: PIAC response to the Transitional Regulatory Proposals by the electricity network service providers in NSW for 2014-15, 3 March 2014, available at: <http://www.piac.asn.au/publication/2014/03/opening-act>

Better equity: submission to the AER's Equity beta issues paper, 28 October 2013, available at: <http://www.piac.asn.au/publication/2013/11/better-equity>

Draft Australian Energy Regulator Stakeholder Engagement Framework, 20 August 2013, <http://www.piac.asn.au/publication/2013/09/draft-australian-energy-regulator-stakeholder-engagement-framework>

Draft Consumer Engagement Guideline for Network Service Providers, 16 August 2013, <http://www.piac.asn.au/publication/2013/09/draft-consumer-engagement-guideline-network-service-providers>

Better incentives, better outcomes: PIAC submission to the AER's Issues Paper - Expenditure incentives guidelines, 10 May 2013, available at: <http://www.piac.asn.au/publication/2013/05/better-incentives-better-outcomes>

Seeking better outcomes: PIAC submission to the AER's Issues Paper - Expenditure forecast assessment guidelines, 20 March 2013, available at: <http://www.piac.asn.au/publication/2013/03/seeking-better-outcomes>

Better returns for consumers: PIAC submission to the AER's Issues Papers - Rate of return guidelines, 15 February 2013, available at:
<http://www.piac.asn.au/publication/2013/03/better-returns-consumers>

Network regulation for all: submission to the AER's preliminary Framework and approach paper for Ausgrid, Endeavour Energy and Essential Energy, 10 August 2012, available at: <http://www.piac.asn.au/publication/2012/09/network-regulation-all>

Submissions to the NSW Independent Pricing and Regulatory Tribunal (IPART) on retail matters

Looking forwards, not counting backwards: PIAC submission to IPART's Draft Report, Early termination fees - Regulating the fees charged to small electricity customers in NSW, 18 November 2013, available at:
<http://www.piac.asn.au/publication/2013/11/looking-forwards-not-counting-backwards>

A friendly goodbye: PIAC submission to IPART's Issues Paper, Early termination fees - Regulating the fees charged to small electricity customers in NSW, 6 September 2013, available at: <http://www.piac.asn.au/publication/2013/09/friendly-goodbye>

In who's interest? PIAC submission to IPART's Review of regulated retail prices for electricity, 2013 to 2016: Draft report, 20 May 2013, available at:
<http://www.piac.asn.au/publication/2013/05/whos-interest>

Charting the affordable course: submission to IPART's Issues Paper, Review of regulated retail prices and charges for electricity 2012-16, 20 December 2012, available at: <http://www.piac.asn.au/publication/2013/01/charting-affordable-course>

Meeting the continuing challenge of affordability: submission to IPART's Draft Report, Changes in regulated electricity retail prices from 1 July 2012, 10 May 2012,
<http://www.piac.asn.au/publication/2012/05/meeting-continuing-challenge-affordability>

Solar feed-in tariffs: Setting a fair and reasonable value for electricity generated by small scale photovoltaic (PV) units in NSW, 30 January 2012, available at:
<http://www.piac.asn.au/publication/2012/02/solar-feed-tariffs-setting-fair-and-reasonable-value>

Submissions to the AEMC

A journey of a thousand miles starts with a single rule change: PIAC submission to the AEMC's Draft Determination, National Electricity Amendment (Distribution Network Pricing Arrangements) Rule 2014, 17 October 2014, available at:
<http://www.piac.asn.au/publication/2014/11/journey-thousand-miles-starts-single-rule-change>

National Electricity Amendment (Generator ramp rule and dispatch inflexibility in bidding) Rule 2014, 9 October 2014, available at:
<http://www.piac.asn.au/publication/2014/11/national-electricity-amendment-rule-2014>

National Energy Retail Amendment Rule (Retailer price variations in market retail contracts) Rule 2014, 10 September 2014, available at: <http://www.piac.asn.au/publication/2014/09/national-energy-retail-amendment-rule>

Let's be clear: PIAC submission to the AEMC's Consultation Paper - National Energy Retail Amendment (Retailer price variations in market retail contracts) Rule 2014, 27 March 2014, available at: <http://www.piac.asn.au/publication/2014/05/lets-be-clear>

Application for Merger Authorisation of Macquarie Generation, 28 April 2014, available at: <http://www.piac.asn.au/publication/2014/05/re-application-merger-authorisation-macquarie-generation>

The next piece of the puzzle: PIAC submission to the Australian Energy Market Commission's Approach Paper: 2014 Retail Competition Review, 28 February 2014, available at: <http://www.piac.asn.au/publication/2014/03/next-piece-puzzle>

Reflecting prices and preferences: PIAC submission to the AEMC's Consultation Paper National Electricity Amendment (Distribution Network Pricing Arrangements) Rule 2014, 19 December 2013, available at: <http://www.piac.asn.au/publication/2014/01/reflecting-prices-and-preferences>

Where to and how? PIAC submission to the AEMC's Draft Report: Review of competition in retail electricity and Natural gas markets in NSW, 5 July 2013, available at: <http://www.piac.asn.au/publication/2013/08/where-and-how>

National Electricity Amendment (Annual Pricing Arrangements) Rule 2013, 3 July 2013, available at: <http://www.piac.asn.au/publication/2013/07/national-electricity-amendment-annual-pricing-arrangements-rule-2013>

Marking the market: PIAC submission to the AEMC's Issues Paper - Review of Competition in the Retail Electricity and Natural Gas Markets in NSW, 8 February 2012, available at: <http://www.piac.asn.au/publication/2013/03/marketing-market>

Reliably affordable? PIAC submission to the AEMC's Review of Distribution Reliability Outcomes and Standards - NSW Workstream, 11 July 2012, <http://www.piac.asn.au/publication/2012/07/reliably-affordable>

National Electricity Amendment (Economic Regulation of Network Service Providers) Rule 2012, 16 April 2012, available at: <http://www.piac.asn.au/publication/2012/04/national-electricity-amendment-economic-regulation-nsp-rule-2012>

Rule change proposal - economic regulation of Network Service Providers, 8 December 2011, available at: <http://www.piac.asn.au/publication/2012/05/rule-change-proposal>

Submissions to other energy policy processes

Necessity and complexity: Submission to the Senate Environment and Communications References Committee Inquiry into the performance and management of electricity network businesses, 18 December 2014, available at:

<http://www.piac.asn.au/publication/2015/01/necessity-and-complexity>

Renewable Energy Target (RET): in the interests of consumers, 15 May 2015, <http://www.piac.asn.au/publication/2014/05/renewable-energy-target-ret-long-term-interests-consumers>

Putting consumers first: PIAC submission to the Australian Government's Issues Paper for the development of an Energy White Paper, 7 February 2014, available at:

<http://www.piac.asn.au/publication/2014/03/putting-consumers-first>

The big picture: PIAC submission to the Productivity Commission Inquiry Electricity Network Regulatory Frameworks, 23 November 2012, available at:

<http://www.piac.asn.au/publication/2013/01/big-picture>

Equitable access to the essential: PIAC submission to the Senate Select Committee on Electricity Prices, 14 September 2012, available at:

<http://www.piac.asn.au/publication/2012/10/equitable-access-essential>

A fair comparison: PIAC submission to the Productivity Commission Inquiry, Electricity Network Regulation, 23 April 2012, available at:

<http://www.piac.asn.au/publication/2012/07/fair-comparison>

Complementary modernisation: options to address the issue of affordability in the Energy White Paper, 16 March 2012, available at:

<http://www.piac.asn.au/publication/2012/03/complementary-modernisation>