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The opening act:

PIAC Response to the Transitional Regulatory Proposals by the electricity network service providers in NSW for 2014-15

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Introduction

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; and
- 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 the Trade and Investment, Regional Infrastructure and Services NSW for its work on energy and water, and from Allens for its Indigenous Justice Program. PIAC also generates income from project and case grants, seminars, consultancy fees, donations and recovery of costs in legal actions.

Energy + Water Consumers' Advocacy Program

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

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

1. Summary and Recommendations

1.1 Summary

PIAC welcomes the opportunity to comment on the transitional regulatory proposals by the three NSW distribution service providers (DNSPs), Ausgrid, Endeavour Energy and Essential Energy.

PIAC understands that the DNSPs have agreed with the Australian Energy Regulator (AER) that the transitional regulatory proposals will be prepared as a 'place holder' proposal for 2014/15 and there will be a 'true-up' of allowed costs and revenues for 2014/15 when the AER undertakes its full regulatory review in time for the start of the 2015/16 regulatory year. This process has been set out in the amended National Electricity Rules (NER).

As such, the DNSPs' transitional regulatory proposals provide only high-level forecasts and general qualitative information to support these forecasts for each of the building block cost items that determine the overall revenue allowances. The Australian Energy Market Commission (AEMC) has also established some general principles for the transitional regulatory proposals, including outlining certain factors that must be taken into account. One important principle is that the proposed network price movements should not create price-shock for consumers.

PIAC acknowledges these requirements and the practical necessity of approaching the review of the DNSPs' transitional proposals in less forensic detail than would otherwise be the case. However, PIAC also strongly believes that the AER and other stakeholders need to scrutinise the proposals with some degree of diligence.

It is still important that the allowed revenue reflects only the efficient costs of providing network services and the efficient of funding costs new and existing capital investment in the network assets. Moreover, if higher than efficient costs are allowed in the transition year, then the adjustments required in the remaining years of the 5-year regulatory period will be larger.

1.2 DNSPs' Revenue Proposals

Overall, PIAC appreciates the fact that the DNSPs have proposed network revenues for 2014/15 that are in line with the requirements of the NSW Government under the Network Reform Program to limit price increases to CPI or less. In addition, the indicative plans demonstrate a commitment to this 'cap' for the remaining regulatory period, subject to changes in energy demand.[1]

Figure 1 includes the actual and estimated revenue for the years 12/13 and 13/14 respectively. The transitional year (FY 15(T)) shows a distinct decline from the previous two years for all DNSPs in nominal dollar terms; the decline in real dollar terms would be even larger (with inflation at 2.5 per cent). The DNSPs predict growth in revenue after that. Figure 1 also compares the required revenue (based on the DNSP's cost stack in that year) and the 'smoothed' revenue that the DNSPs state is designed to reduce price shock.

[1] This is because average prices are the result of dividing revenues by demand. If demand is less than forecast,

Figure 1: NSW DNSP's Revenue Proposals

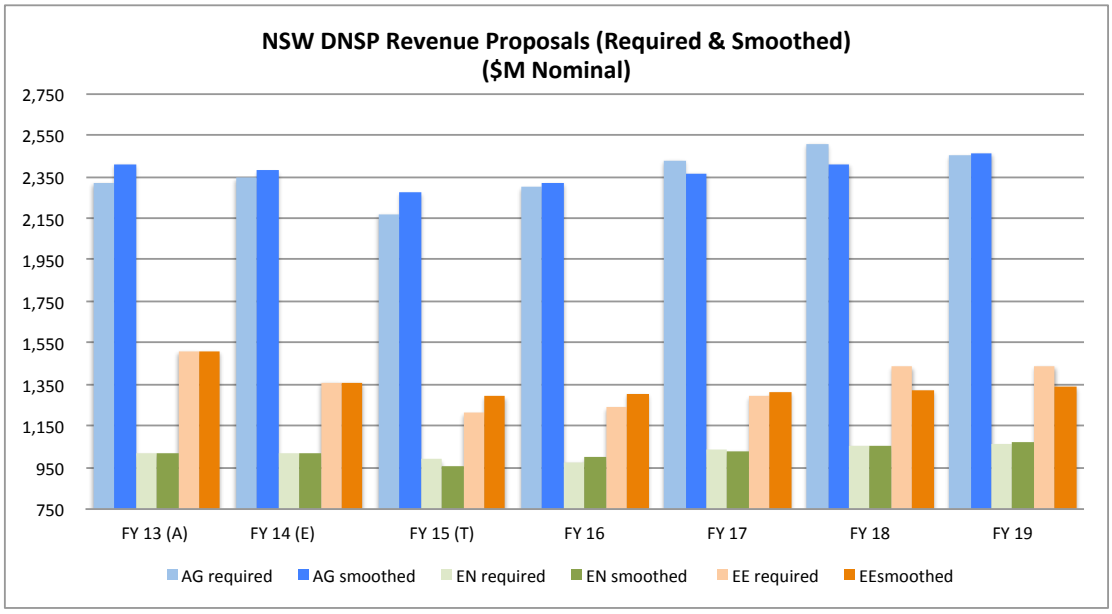

Figure derived by PIAC from figures in the revenue proposals of the NSW DNSPs

Table 1 below summarises the outcomes of the DNSP's revenue proposals in terms of the change in the average distribution charges (in $13/14) and in the network bill for a typical small consumer.

PIAC notes that it is important that the 'cap' does not become the 'target'. Improving efficiency and the prudent reduction of capital, operating and financing costs may well result in real decreases in prices; consumers can only hope so given the substantial rises in the last five years. There is value in the AER examining the DNSP's proposal in the context of the past five years as well as the transitional and subsequent four years of the next regulatory period.

Table 1: Estimated Changes in average distribution charges (smoothed revenue) and consumer bills for 2014/15

Changes in DNSP charges & bills	Ausgrid	Endeavour Energy	Essential Energy
Weighted average real price change - all consumers 2014/15 *(real $)*	-2.13%[2]	-2.68%	-0.01%
Typical Residential bill change 2014/15 *(nominal)*	-1.12%	-0.24%	2.49%
Typical Small Business bill change 2014/15 (*nominal)*	-1.67%	-0.24%	2.49%
Change in total demand 2014/15	-2.3%	-1.6%	-1.6%
Notes: Figures are from the DNSPs' transitional regulatory proposals. Ausgrid's average prices may include Ausgrid's transmission use of service (TUOS) charges. The % changes are based on the smoothed revenue. If this smoothing is not accepted by the AER, there will be larger decreases in 2014/15 for Ausgrid and Essential Energy.			

The AER's decisions on the transition should encourage such an outcome for 2014/15 (i.e., a decline in prices in real terms). This is particularly the case if the AER is of the view that there are still considerable savings to be made by the NSW DNSPs before they achieve benchmark efficiency levels in capital, operating and financing costs. This would be fundamental to avoiding price shock for consumers and the networks in future years.

1.3 Issues with the DNSP Proposals

In this submission, PIAC has identified a number of key areas where additional savings could be possible without compromising service quality and the reliability of the network system. These areas are summarised below.

1.3.1 Rate of Return

From PIAC's perspective, it is important for the AER to critically review the DNSPs' proposal for the cost of capital and the value of imputation credits.

PIAC finds it most disturbing that the DNSPs have put forward an approach to assessing the various input parameters into the cost of capital parameters that is inconsistent with both the existing approach and the approach set out in the AER's Rate of Return Guideline (RoR Guideline).

Instead, the DNSPs adopt some features of the AER's RoR Guideline but have then adopted different approaches to other parameters in ways that consistently result in higher revenue outcomes for the DNSPs at the expense of consumers. In so doing, the DNSPs appear to have ignored the outcomes of the extensive consultation processes conducted by the AER in the Better Regulation program.

[2] Ausgrid average prices may include the Ausgrid TUOS element.

Key areas of concern for PIAC with the cost of capital assessments are:

- the DNSPs' proposals to use a long-term average to calculate the risk free rate rather than the 'on the day' approach used in the past, and in the AER's RoR Guideline;

- the DNSPs continuing to apply an equity beta of 0.8, despite the findings of the extensive review of the conceptual and empirical data for Australian equity betas, as set out in the AER's RoR Guideline and Explanatory Statements;

- the shift to the agreed 10-year trailing average approach to the cost of debt, without a transition period as set out in the AER's RoR Guideline; and

- the continued adoption of a value of imputation credits without reference to the extensive body of conceptual and empirical work that the AER has undertaken to develop a more robust approach.

The outcomes of the DNSPs' approach are summarised in Table 2 below. For *illustration purposes only*, the table below constitutes PIAC's assessment of the likely outcomes of applying the approaches to the cost of capital parameters set out in the AER's RoR Guideline. Based on the information awarded to PIAC, there appears to be a significant 92 basis point difference between the two approaches.

Table 2: Summary of WACC Parameters in the DNSPs' Transitional Proposals for 2014/15

Component	Proposal by the NSW DNSPs for 2014/15 WACC components	PIAC's estimate (illustrative only) based on the AER's RoR Guideline
Cost of Equity:		
Risk Free Rate (Jan 2014)	4.78%	4.18%
Market Risk Premium	6.5%	6.5%
Equity beta	0.8	0.7
Total Cost of Equity	9.98%	8.73%
Cost of Debt:		
10-Year bond rate	7.55%	7.02%
TOTAL WACC (60% gearing)	**8.52%**	**7.6%**
Imputation Credits (gamma)	**0.25**	**0.5**

Note: DNSP proposal represented here is based on their 'conservative' proposal. PIAC's estimate relies on data provided by the RBA on 10-year Commonwealth Government Securities (Report F2), averaged daily rates for January 2014; and 10-year Commercial Bond rates for BBB rated organisations (Report F3). Commercial Bonds based on averaging the most recent 12-month data reported by the RBA as the F3 report only provides end of month results. The regulatory WACC is based on **the nominal post-tax return** on capital.

1.3.2 Cost of capital increases above CPI

A related concern for PIAC is the impact of the rapid growth in the regulated asset base (RAB) in the current determination period (with increases in the RAB value of between some 50 per cent to seventy five percent in five years; well above inflation and natural growth).

PIAC observes that there continue to be real increases in the cost tp provide a return on the regulated capital base despite the decline in demand and the significant pruning of capital investment in the last years of the current regulatory period and in the DNSPs transitional proposals. Table 3 below demonstrates the real and nominal increases in the cost of providing a return on capital as estimated by PIAC from the data provided by the DNSPs in their proposals.[3]

Table 3: Estimated percentage increase in return on capital costs from start to end of the next regulatory period (five years)

	Ausgrid	Endeavour Energy	Essential Energy
Increase in return on capital (real $13/14)	11%	10%	14%
Increase in return on capital (nominal)	23%	22%	26%
Note: PIAC's estimate from data provided in the DNSP proposals.[4] The assessment assumes constant inflation rate of 2.5% per annum.			

PIAC recommends that the AER conducts an additional assessment of whether efficient and prudent expenditure in other areas is being cut in order to keep the overall revenue requirements down and prices within the CPI 'cap'. This would be a matter of great concern and increases the vulnerability of the overall system, particularly if demand continues to fall as forecast in the proposals (demand growth provides some 'fat' in the system to recover from a period of over expenditure). Addressing this structural threat to the long-term profitability and service standards would require further acceleration of the efficiency drive by the DNSPs.

Figure 2 provides a further illustration of the potentially emerging problem using data from Ausgrid's Transitional Regulatory Proposal. It shows that the costs associated with return on the capital base continue to grow in both real and nominal terms, while capital and operating expenditures are declining quite rapidly.

Figure 2: Ausgrid cost forecasts for 2014–2019.

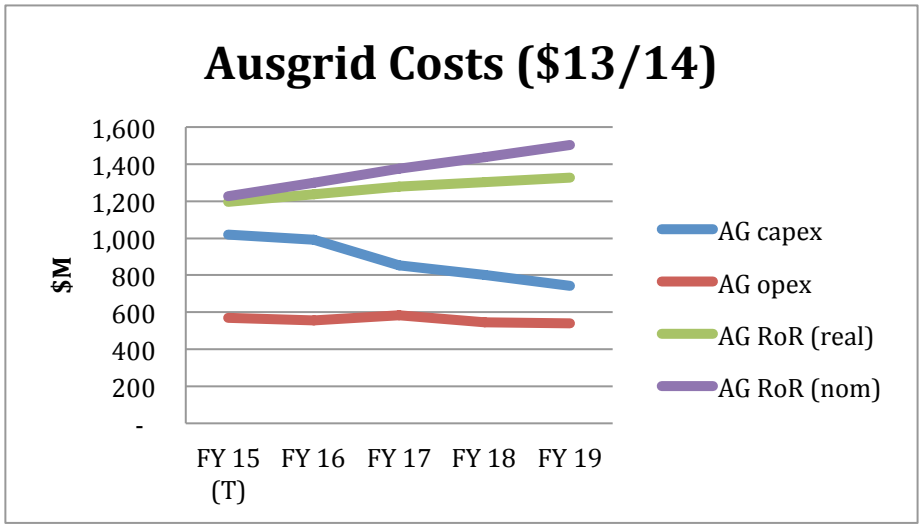

Chart derived by PIAC from figures in Ausgrid's Transitional Regulatory Proposal

3 The relevant data is not consistently available in the DNSPs' proposals.

4 Augrid, *Transitional Regulatory Proposal*, January 2014; Endeavour Energy, *Transitional Regulatory Proposal*, January 2014; Essential Energy, *Transitional Regulatory Proposal*, January 2014.

1.3.3 The smoothed revenue path

The DNSPs have all proposed a smoothed revenue path that, for two of the DNSPs, has the effect of increasing 2014/15 revenues (and prices) above the required revenue to cover their forecast costs.

PIAC understands the purpose of smoothing revenue across the regulatory period is to minimise price shocks at both the start and end of the regulatory period. However, PIAC is concerned with this approach being adopted in the transitional year and requests the AER to carefully examine this aspect of the DNSP's proposal. This is because:

- PIAC considers that the efficient costs for 2014/15 are already overstated;
- the revenue forecasts for the remaining years of the regulatory period are indicative only;
- the AER is making a placeholder determination and is not conducting a detailed review or making a commitment to the proposed expenditures, including the approved 2014/15 transitional revenue allowance;
- it is more likely than not, that the DNSP's indicative expenditures for the regulatory years 2 to 5 will be reduced by the AER; and
- in the absence of a good reason to increase 2014/15 revenues above efficient costs, consumers should be able to enjoy the benefit of lower prices sooner.

Figure 3 illustrates the point. Essential Energy's proposed revenue for 2014/15 is significantly greater than that required to cover efficient costs (based on Essential Energy's own forecast). However, in later years there is a significant jump in proposed revenue. The smoothed approach increases revenues and prices in 2014/15, but only on the basis that it will even out the subsequent rebound in required revenue. However, this revenue may not be required.

Figure 3: Essential Energy Proposed Revenue, Required and Smoothed.

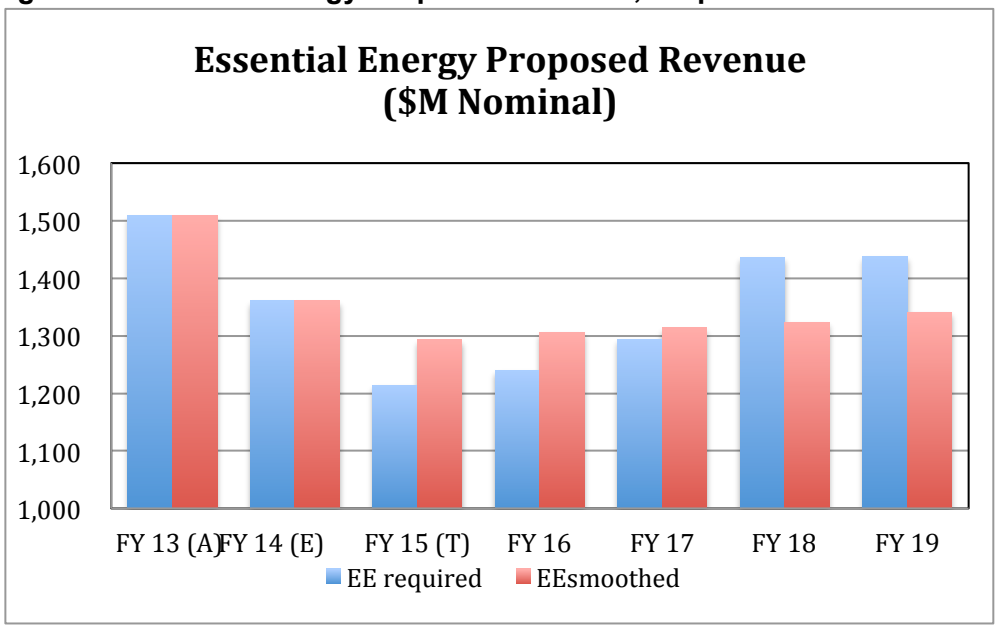

Chart derived by PIAC from figures in Essential Energy's Transitional Regulatory Proposal

In PIAC's view, it is wrong to celebrate price increases below CPI, if these prices continue to reflect inefficient or imprudent costs and practices. PIAC submits that the best course of action to avoid price shock is to approve only efficient costs in both the transitional year and the remaining four years of the regulatory period, rather than allow a 'smoothed' revenue path based on uncertain future costs.

1.3.4 Other Cost Items

PIAC has identified a number of other areas in the DNSPs' transitional proposal that warrant further investigation by the AER, notwithstanding that there will be a true-up of these costs in the full determination. In PIAC's view, it is still better to ensure the transitional proposals represent reasonably efficient costs. Areas of concern include:

- the reasonableness of the DNSPs' proposals to increase some aspects of operating expenditure (opex) because of the reduction in capital expenditure (capex). Given the substantial investments in the asset base in the current regulatory period, PIAC considers the there should be a decrease in capex without the need for an increase to opex;

- the significant increases in costs associated with vegetation management that are justified by reference to regulator compliance and 'duty of care';

- the continued high levels of capex invested in information technology; some DNSPs had very high allowances in the current regulatory period, and PIAC considers that the AER should examine the overall investment, and the possibility that consumers are paying twice;

- labour unit costs, including contractor unit contractor costs appear to be increasing above CPI, a trend that is unlikely to continue under current economic circumstances. More particularly, Ausgrid seems to be requesting consumers to pay for excess contractors taken on in the previous determination. PIAC recommends the AER investigate this claim further to ensure that consumers do not pay for management's overreach in the past.[5]

- The 'dis-synergy' costs that DNSPs claim arise from the sale of their retail arms. PIAC questions why such costs were not set off against the benefits derived from the sale to the NSW Government.

1.4 Recommendations

Note: The recommendations below are repeated in sections 2-5.

Recommendation 1

PIAC recommends that the AER reject the approach adopted by the DNSPs to the assessment of the cost of capital parameters.

[5] Ausgrid proposed an extremely large capital investment program, much of which was approved by the AER. However, it appears that Ausgrid was unable to fulfill this ambitious plan, although it has continued to receive the revenue that was based on the assumption that the capex would proceed. It seems reasonable for consumers to expect Ausgrid to accept some risk for their decision-making.

Recommendation 2

PIAC recommends that the AER prevent the DNSPs earning more than the efficient costs of the provision of services.

Recommendation 3

PIAC recommends that the AER address PIAC's concerns with the fact that the cost of capital to the DNSPs continues to rise in real terms and may have an adverse impact on the DNSPs ability to invest, particularly if subject to a CPI price cap.

Recommendation 4

PIAC recommends that the AER set an equity beta for the transitional year of no more than 0.7.

Recommendation 5

PIAC recommends that if the AER believes it does not have the appropriate data available to it at this stage to implement the QTC transition approach to calculating the cost of debt,[6] *then PIAC suggests the preferred approach for 2014/15 should be continuation of the current* ***'on the day'*** *approach based on the Bloomberg 7-year bond data for BBB+ ratings, extrapolated to 10 years using the agreed extrapolation methodology.*

Recommendation 6

PIAC recommends that the AER carefully review the proposed 'smoothed' revenue price path, taking into account the future costs (beyond the transitional year) are indicative only and not subject to the AER's assessment processes.

Recommendation 7

PIAC recommends that Networks NSW reinforce that the CPI cap on network prices, is a cap not a target. The default assumption should be that consumers only pay for the efficient costs, even if this means reductions in real electricity prices.

Recommendation 8

PIAC has identified a number of areas of DNSPs' expenditure that are of specific concern; PIAC recommends further examination of these items notwithstanding the high level nature of the transitional year, in the interests of a smooth transition to the full determination.

Recommendation 9

PIAC recommends that the AER stand by the principles and approaches set out in the guidelines for the 2014/15 transitional period. Where this is not feasible (e.g. due to data constraints), PIAC recommends that the current regulatory settings be put in place to at least minimise price shock from the current regulatory period.

Adopting a 'third' approach in the transitional year (neither the guideline nor the previous approach) as the DNSPs have done with respect to the rate of return calculation requires a

[6] PIAC is aware for instance, that the published RBA data for report F3 on Corporate bond spreads and yields does not include daily yield rates at this time, as the monthly published figures are for the last business day of the month, not an average of daily figures.

strong response from the AER. PIAC also notes that this aspect of the DNSPs' proposals has occurred without any additional consultation with consumers.

A high level review does not mean an uncritical review, particularly if the aim is to minimise price shock over the remaining years of the regulatory period.

2. The NSW DNSPs' transitional regulatory proposals

2.1 Background

The three NSW distribution network service providers (DNSPs), Ausgrid, Endeavour Energy and Essential Energy submitted Transitional Regulatory Proposals in January 2014, covering the transitional year of 2014/15. The NSW transmission service provider (TNSP), Transgrid, also submitted a proposal to the AER. However, PIAC is responding only to the DNSPs' proposals at this stage.

PIAC understands that the time allowed for the preparation of the proposals by the three DNSPs and the TNSP has been very short. Similarly, the AER and all other stakeholders have very limited time to review the transitional proposals. As noted above, PIAC's submission will, therefore, focus on the DNSP's proposals. However, the discussion herein on the regulatory rate of return is also relevant to Transgrid, the NSW transmission service provider.

The transitional NSW network proposals for 2014/15, and stakeholders' responses to these proposals, follow on from a period of intensive investigation into the effectiveness of the economic regulatory framework; an investigation that culminated in the development of the AER's Better Regulation guidelines during 2013.

Therefore, PIAC firmly believes that the transitional regulatory proposals must be considered against this background of community concern and subsequent regulatory reform, noting in particular the following key steps in the reform process.[7]

Firstly, there was very significant concern by the community, industry and policy makers arising from the extraordinary and unprecedented increases in electricity network prices in most jurisdictions between 2008 and 2012.

Secondly, The Australian Energy Market Commission (AEMC), in response to these widespread concerns, undertook an investigation of the effectiveness of the economic regulatory framework under the National Electricity Rules (NER).[8]

The AEMC conducted an extensive consultation process across all stakeholders and subsequently introduced significant amendments to the NER in November 2012. The rule

[7] The focus in this discussion is on the changes to the National Electricity Rules (NER). However, in parallel to the changes to the NER, the AEMC made important changes to the National Gas Rules (NGR), particularly with respect to the determination of the rate of return on regulated gas distribution and transmission network assets.

[8] The AEMC's rule change investigation followed on from two rule change applications, one from the AER (September 2011) and a separate application by the Energy Users' Rule Change Committee (EURCC) representing major energy using industries in Australia.

changes focussed on the areas of the rate of return, capital expenditure incentives, capital and operating expenditure allowances and the overall regulatory process (to encourage greater consumer engagement in the process). The AEMC encapsulated the purpose of the rule change by stating that:[9]

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

The AER then conducted a 12-month consultation program, the Better Regulation program, to investigate how the rule changes could be implemented to better align with the National Electricity Objective (NEO) and the long-term interests of consumers. The Better Regulation program was also tasked with developing a suite of guidelines that would provide a new framework for the AER's decision making and set out the AER's preferred methodologies, models and data to achieve this aim.

PIAC and other consumer representative bodies appreciated the extensive consultation processes that led up to these reforms that were conducted by the AEMC and the AER.

PIAC does not agree with all the final outcomes of the reform process, and will continue to engage in the reform process through the various regulatory channels. Nevertheless, PIAC accepts that the changes are an important step forward and it is to the benefit of consumers overall to 'get on with' the effective implementation of these reforms, particularly as expressed through the AER's Better Regulation guidelines.

It is, therefore, extremely disappointing that despite the extensive opportunities to put their case and to justify it to other stakeholders in the guideline development process, the NSW DNSPs have proposed different approaches to the cost of capital in particular. The approach to the cost of capital that is proposed by all the DNSPs is neither reflective of current practice, nor of the AER's RoR Guideline. It is a mix of approaches that has not been subject to consultation with other stakeholders, although it was debated with the AER.

It appears to PIAC that many of the issues with the rate of return assessment that were extensively explored, and resolved, through the guideline consultation processes may have to be 'debated again'; to ensure that the AEMC's objective that 'consumers don't pay any more than necessary for reliable electricity and gas' eventuates in practice.

In making such a strong criticism of the DNSPs 2014/15 regulatory proposals, PIAC is aware that the networks' proposals are undertaken under the special transitional provisions of the rules. PIAC also understands that the decision by the AER to approve the networks' transitional proposals does **not bind** the AER to accept the methodologies in the AER's full determination process.

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[9] From the AEMC's summary statement of benefits/impacts of the relevant rule changes. (Economic Regulation of Network Service Providers). http://www.aemc.gov.au/electricity/rule-changes/completed/economic-regulation-of-network-service-providers-.html.

Indeed, the NER specifically states that:[10]

> Nothing in this clause 11.56.4 has the effect of actually rendering the transitional regulatory control period as the first regulatory year of the subsequent regulatory control period and, except for the purposes of the application of paragraphs (b) to (f) in accordance with its terms, **the transitional regulatory control period must be treated as a regulatory control period that is separate from the subsequent regulatory control period**. [PIAC emphasis]

This provision notwithstanding, PIAC considers that the networks' transitional proposals provide a pointer to the approach that the NSPs are contemplating for their final regulatory proposals (due in May 2014 for the period 2015/16 to 2018/19).

In PIAC's view, therefore, it is essential that the AER stands by the principles and approaches it set out in the guidelines. As previously stated, a high level review does not mean an uncritical review, particularly if the aim is to minimise price shock over the remaining years of the regulatory period.

In the next sections, PIAC further expands on its understanding of the transitional regulatory arrangements, the principles of which are set out by the AEMC in its 2012 final determination and in the subsequent rule changes.

2.2 PIAC's understanding of the transitional year process for NSW DNSPs and TNSP

PIAC understands that the transitional arrangements were set out by the AEMC in consultation with the relevant networks to address the fact that the AER's guidelines would not be finalised until late 2013. This meant that many of the networks had already commenced or were due to commence their regulatory processes without adequate time to respond to all the requirements in the rule changes and the AER's directions in the guidelines.

Nevertheless, the AEMC and many other stakeholders, were very concerned to ensure that the new rules and guidelines applied to the next round of the AER's determinations. As a result, the AEMC proposed a number of different transitional arrangements depending on the timing of the commencement of the new regulatory periods.

In particular, as the new regulatory periods for the NSW DNSPs and the TNSP commence on 1 July 2014, there is clearly insufficient time for the networks, the AER and other stakeholders to engage in a full regulatory review process under the new rules and guidelines. The parties therefore agreed to a 'place marker and true-up' process that would involve a relatively short, and relatively high level, transitional determination process for the first year (2014/15) of the 5-year regulatory year.

The full determination process will be undertaken over a 12 months period prior to the commencement of the 2015/16 regulatory year. Importantly, this would also involve a true-up of

[10] NER clause 11.56.4 (g). The paragraphs (b) to (f) refer to operation of the capital expenditure incentive scheme, roll-over provisions and the regulatory asset base, re-openings, reporting and the like.

the 2014/15 determination based on revisiting the 2014/15 approved revenues and expenditures and adjusting these to accord with the approaches adopted in the full determination.[11]

In developing the transitional approach and timetable, the AEMC also set out five important principles, which are summarised below. PIAC's consideration of the networks' transitional proposals will be guided by these same principles. They can be summarised as follows [PIAC emphasis]:[12]

1. the final rules should apply to **all service providers as soon as possible**;

2. the transitional arrangements should allow **sufficient time for stakeholder consultation**;

3. the transitional arrangements should provide service providers with a **reasonable opportunity to recover at least the efficient costs** in providing the regulated services;

4. any transitional arrangements should be **practicable** having regard to the regulator's resourcing constraints, as well as the resourcing capacity of other stakeholders; and

5. any arrangements put in place to facilitate the transition to the new rules **should minimise the potential for one-off price shocks.**

The AEMC also provided a set of criteria to be applied by the AER in assessing the transitional regulatory proposals. The criteria include requirements that the AER:[13]

- is satisfied that the amount set out in the regulatory proposal is likely to be consistent with the NEO and the Regulatory Pricing Principles (RPP);

- is satisfied that the recovery of that amount is reasonably likely to minimise price variations between the current regulatory control period, the transitional regulatory control period and the subsequent regulatory control period and between regulatory years; and

- has regard to:

    - the fact that the revenue requirement is an estimate based on indicative inputs, and that the determination for the next regulatory period will provide a true-up; and
    - information provided with the regulatory proposals, stakeholder submissions and the AER's own analysis of the proposal.

PIAC generally supports these principles and criteria. PIAC's assessment of the proposals for instance, is tempered by the fact that the proposals are in fact 'estimates' based on 'indicative inputs'.

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11 A complication of this is the application of the various incentive schemes and how these would apply (or not) to the assessment of the 2014/15 year. PIAC notes this issue but at this stage, is not commenting on it.

12 AEMC, *Economic Regulation of Network Service Providers and Price and Revenue Regulation of Gas Services, Final Position Paper*, 29 November, 2012, Sydney [AEMC 2012, *Final Paper*]. The list of principles is adapted from page 218.

13 Summarised from Ibid, 238.

This submission will, therefore, not seek the same standards of evidence for the reasonableness of network expenditure claims that it would otherwise require from a network proposal. The approach will focus more on the higher-level principles that underpin the expenditure claims and, most particularly, the approach adopted by all the DNSPs to the assessment of the rate of return.

PIAC notes, in particular, the AEMC's fifth principle of 'minimising one-off price shocks' such as might occur between the existing regulatory outcomes, the transition year and the final determination for 2014-2019.

While PIAC is sensitive to the issue of 'price-shock' and the potential impact of this on consumers, PIAC is also concerned that the AER critically examines the networks' responses to the fifth principle in their transitional proposals for 2014/15. Avoiding price shocks is good, but this should not come at the expense of consumers taking on additional pricing risk or paying more than the reasonable recovery of DNSP costs.

Having borne the burden of very significant network price rises to efficiently deliver the network services (that may not have been all necessary given later events, and which includes costs for programs not delivered), consumers are entitled to expect some real pricing relief and a return to an environment of productivity growth and declining real energy costs that featured in the earlier days of energy market reform.

These issues will be discussed further in this submission.

2.3 PIAC's understanding of the directives of the NSW government.

PIAC's understanding is that the owner of the NSW DNSPs and TNSP, the NSW Government, has actively intervened in the last two years to ensure that planned capital and operating expenditures by the DNSPs is managed more effectively. The DNSPs appear to have responded by introducing new cost controls and systems to more efficiently manage capital investment.

The NSW Government network reform program, including the restructure of the three NSW DNSPs, had three objectives:[14]

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

It is stated that the reform program has delivered total savings of $1.1 billion in 2012/13 and is expected to deliver savings of $4.3 billion over the five-year period commencing July 2011.[15]

While these reforms may reduce the costs to the network, they do not directly affect the regulated revenue allowances and price paths for the *current regulatory period (*i.e., for 2009-2014). Rather, the saving to consumers will be seen in subsequent regulatory periods, including the 2014/15 transitional regulatory year. As the DNSPs state, 'the benefits of the reform program are included

[14] Summarised from Ausgrid, *Transitional Regulatory Proposal for 1 July 22014 to 30 June 2014*, [Ausgrid *Transitional Proposal*], 2014, 3.

[15] Ibid.

in the transitional regulatory proposal' and 'will result in lower distribution network charges for customers'.[16]

2.4 PIAC's overview of the DNSPs proposals

PIAC acknowledges that the DNSPs' transitional proposals comply with the NSW Government's intention of containing average DNSP price increases in the transitional year to around CPI and that this is a distinctly better outcome for consumers than the previous determination. PIAC also notes the statement that the Chief Executive Officer of Networks NSW (the recently established umbrella organisation for the three DNSPs) has personally undertaken 'to limit network price increases to CPI or less for the next three years'.[17]

However, PIAC also believes that there is a real risk that the NSW Government's objectives, couched as they are around CPI, will become a 'target' rather than a cap.

In particular, PIAC argues that CPI is a 'lazy ambition' and that there is every reason to believe that there could be a **reduction in real DNSP network prices in 2014/15** and beyond**.** While this may be a 'shock' to consumers, it is a pleasant shock, and one that does not necessarily put at risk the AEMC's objectives of smoothed pricing adjustments between the current and next regulatory period.

As noted above, PIAC makes this statement without a detailed examination of the expenditure requirements. The comment is based largely on two components of the transitional regulatory proposal and one general observation about the interim forecasts of expenditure. They are:

- The approach adopted in all the network transition proposals to assessing the regulated cost of capital is not in line with the AER's RoR Guideline and has overstated the cost of capital for the efficient financing of a benchmark efficient network service provider.[18]

- Even on this higher cost base, both Ausgrid[19] and Essential Energy are proposing a revenue allowance in 2014/15 that is higher again as illustrated in Figure 1.

  That is, their revenue proposals for 2014/15 are above the revenue required to recover their claimed 'efficient costs' in 2014/15. The DNSPs claim in their proposals that this is designed to promote a smooth revenue price path over the five years,[20] although it also means that consumers pay above the DNSPs' own assessments of their efficient costs in 2014/15.

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16 Ibid.

17 See Essential Energy, *Annual pricing proposal 2013-14*, 2013, 14.

18 This statement is made while 'accepting' for the purposes of the argument that the NSW networks should be charged a commercial rate for funding money from the NSW Government. While the actual cost of capital to the network owners (the NSW Government) is substantially lower than a commercial rate, PIAC has assessed the DNSPs rate of return proposal on the basis of a benchmark efficient network service provider.

19 The revenue path referred to here includes a small component (approximately 13 per cent) of transmission charges. However, the revenue associated with the transmission component is relatively constant in nominal terms, increasing by only 8 per cent across the five years (i.e. a real $ decline).

20 For example, Ausgrid states '…to minimise the potential price variations we have used our best forecasts of required capex and opex (for standard control services) over the full 2014-2019 period and smoothed the resulting revenue requirements over a 5 year horizon.' Ausgrid, *Transitional regulatory proposal*, January 2014, 18.

In PIAC's view, it is not reasonable to celebrate price rises less than CPI, if these prices continue to reflect inefficient costs and practices. PIAC questions whether the best course of action to avoid price shock is to approve only the most efficient costs and practices in both the transitional year and the remaining regulatory period, rather than second guessing the rate of efficiency improvement, the level of demand and the final approved expenditures on the basis of the limited data provided in the transitional proposals.

These issues will be discussed further in Sections 3 to 5 in this submission. Table 4 below summarises PIAC's concerns with the estimates of the various building block components that have contributed to the overall revenue claims for the transitional year 2014/15.

Table 4: Summary of Key Components of the DNSPs' Transitional Revenue Forecast

Building Block Components for Revenue Forecast	Requirements	Components	PIAC's position
Return on Capital	Regulatory Asset Base (RAB)	(1) Opening RAB (2) Capital expenditure	PIAC has no comment on the opening RAB. PIAC requests more investigation of the capex proposals
	Rate of return	(1) Return on equity (including equity beta) (2) Return on debt	PIAC disputes both the return on equity and return on debt proposals
Return of Capital - Depreciation	RAB	Use AER preferred approach, straight-line depreciation.	PIAC has no comment on the depreciation costs
Operating Expenditure	Opex forecast	(1) Base year opex (2) Step & Trend	PIAC does not dispute the DNSP proposal to use 2012/13 as the base year for their opex. However, PIAC requests more investigation of the step increases proposed for 2014/15.
Taxation	Adjusted income tax forecast	(1) Tax rate (2) Imputation Credits	PIAC disputes the gamma value proposed by the DNSPs
Other Allowances	Carry over allowances	(1) EBSS carry over (2) DMIA carry over	PIAC has no comment on the claimed allowance for the EBSS carry over.
TOTAL REVENUE		(1) Required revenue (2) Smoothed revenue	PIAC has some concerns with the application of the smoothing approach

3. The Regulated Rate of Return

The regulated rate of return is a key component of the overall revenue requirement. When applied to the regulated asset base it represents around 50 per cent of the total costs of the networks. The amended NER states the *allowed rate of return objective* as follows:[21]

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

All the DNSPs have adopted the same approach to assessing the regulated rate of return, and refer to the same consultancy reports. In particular, the DNSPs (and Transgrid) have relied on a recent paper prepared by the Competition Economics Group (CEG) that provided estimates of the WACC parameters, including point estimates and/or ranges for the cost of equity (including the equity beta estimate), the cost of debt and the value of imputation credits.[22]

CEG have provided regulatory advice to the DNSPs for some time, and the CEG reports have been also used by the DNSPs to support a number of appeals to the Australian Competition Tribunal (Tribunal). Both the AER and the Tribunal have, therefore, already carefully assessed CEG's arguments with respect to most components of the WACC calculation.

From PIAC's perspective, therefore, it is disappointing to see the networks and their consultants adopt a different approach to assessing the regulatory rate of return, based on CEG's analysis of the components of the weighted average cost of capital (WACC) rather than the AER's RoR Guideline.

There is no legal obligation on the DNSPs to adopt the RoR Guideline approach in either the transition year or in the full determination. However, in proposing an alternative approach that is neither consistent with the existing rate of return approach, or with the RoR Guideline, the DNSPs should demonstrate that the alternative proposal is a better way to achieving the NEO and the long-term interests of consumers. PIAC does not believe the DNSPs have done so. Nor have the DNSPs demonstrated that their new approach to the rate of return minimises price shock between the existing and the next regulatory periods.

Moreover, the DNSPs do not appear to have consulted directly with their consumers on their plans to adopt a 'novel' approach.[23] PIAC has certainly not been part of any such efforts at consultation.

PIAC has strong objections, as a matter of principle and practice, to the DNSPs effectively ignoring the outcomes of the recent and very comprehensive consultation process led by the AER that involved a broad range of stakeholders.

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21 NER, clause 6.5.2 (c)

22 Competition Economics Group (CEG), *WACC estimates. A report for NSW DNSPs*, 2014.

23 A number of these elements have been put forward by the DNSPs to the AER during the Better Regulation program. However, in the context of an actual regulatory determination, PIAC does not consider this an appropriate level of consumer consultation on such an important matter.

In addition, PIAC considers that there is no reason why the RoR Guideline parameters and approaches cannot be used in the transitional place-holder determination. Unlike some of the other guidelines, much of the data inputs required to adopt the approach in the RoR Guideline are readily available and simply require updating for 2014/15.[24]

However, PIAC submits that as the DNSPs have chosen to take a different approach, their transitional proposal should be subject to the same rigour of analysis as applied to the development of the RoR Guideline, before it is imposed on consumers. This does not appear to have happened.

For example, the AER sets out some key elements relevant to any approach, as follows:[25]

- the proposed approach should be based on determining the efficient financing costs of a benchmark efficient entity of similar risk; it is **not a proposal that relates to the specific financing circumstances of an individual network business,** whether public or privately owned.

- application of **objective assessment criteria** to guide the selection and use of estimation methods, market data and other evidence. The AER undertook an extensive process of reviewing the alternative financial models and other data before selecting its approach and a business proposing an alternative should undertake and equivalent level of consultation and assessment.

- adoption of an approach that is **responsive to changing market conditions and new evidence but at the same time provides sufficient certainty** to network businesses, investors and consumers regarding the approach; PIAC finds there is a lack of certainty for consumers arising from the absence of any decision criteria in the use and 'weighting' of different models used in the networks' proposal.

- promotion of **effective consumer participation** through an accessible consultation process; PIAC is not aware of further consultations by the DNSPs with consumers specifically on the proposed rate of return approach [PIAC's emphasis].

The DNSPs proposals for the WACC components, while varying from the AER's Guideline, do not follow these key elements for the objective assessment of their alternative rate of return approaches, and are not aligned, therefore, with the policy intent and the regulatory requirements including the NEO.

These issues are further examined below in the context of each of the primary components of the WACC assessment.

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24 For example, although the RBA's reports on commercial bond rates currently includes only end of month data for A and B credit rated companies, daily bond rates can be effectively estimated, as suggested by IPART in their most recent publication, IPART, *Fact Sheet, New Approach to Estimating the Cost of Debt: Use of the RBA's Corporate Credit Spreads*, 2014, 4.

25 Adapted from the AER, *Explanatory Statement, Rate of Return Guideline*, 2013, 8.

Recommendation 1

PIAC recommends that the AER reject the approach adopted by the DNSPs to the assessment of the cost of capital parameters.

3.1 Return on Equity

The NER requires that the return on equity must be estimated such that it contributes to the *allowed rate of return objective* and that, in estimating the return on equity, regard must be taken to the prevailing conditions in the market for equity funds.[26] The emphasis in the return on equity under the rules is, therefore, on establishing a forward-looking estimate of the return on equity.

The AER's RoR Guideline suggests that, following its detailed evaluation of all the alternative methodologies, the return on equity for the benchmark efficient entity is best assessed by:[27]

- using the Sharpe-Lintner capital asset pricing model (S-L CAPM) as the 'foundation' model to determine both a starting point estimate and a range for the return on equity;
- using the Black CAPM and estimates from dividend growth models (DGM),[28] and other information sources, to inform the estimation of the S-L CAPM input parameters (such as the market risk premium (MRP)); and
- having regard to the overall return on equity suggested by the Wright approach,[29] valuation and broker reports and decisions by other regulators.

In most circumstances this approach will mean that the upper and lower bounds are set using the S-L CAPM, but the AER will consider certain other models (selected on the basis of their performance against the criteria) to influence the selection of a point estimate within the range.

The network proposals have adopted the general approach of establishing a range and selecting a point estimate within the range, but differ significantly in the detail of the approach to the cost of equity. These differences will be identified in the following sections that will consider each of the key parameters in the CAPM framework and the networks approach to them, namely:

- calculation of the risk free rate;
- assessment of the MRP; and
- assessment of the equity beta.

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26 NER, clause 6.5.2 (f) and (g), respectively.

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

28 There are a number of different specifications of the DGM approach of increasing complexity, such as the two stage and three stage models, which can lead to different results. The variability of the DGM outputs, and their dependence on input assumptions, is one of the major limiting factors in its use as the main model for regulatory purposes.

29 The approach proposed by Professor Wright recognises the possibility of a perfectly negative relationship between the risk free rate and the MRP, while also recognizing the importance of the equity beta estimate to estimating the overall return on equity. See ibid, 77.

3.1.1 Calculation of the risk-free rate

The AER states in the RoR Guideline that the risk free rate will be calculated at the time of each determination based on the 'prevailing yield on 10-year Commonwealth Government Securities (CGS) over a short (20 business days) period as close as possible to the commencement of the regulatory period.'[30] The dates of the averaging period will be determined by the AER.[31]

The risk free rate can be observed from current market data with reasonable certainty and reflects prevailing market conditions. It should not be a matter of controversy. The relevant data is robust and transparent, it has been adopted through all the more recent network proposals and AER determinations without appeal[32] and is consistent with the rules that require a forward looking estimate of the return on equity. Nor was it raised as a significant issue to networks or consumers during the Better Regulation consultation process[33] (although mooted by some as an option in the Better Regulation and other determination processes as discussed below).

It is, therefore, a matter of considerable frustration to consumers, that without consultation or prior announcement, the NSW DNSPs' propose to determine the risk free rate on a quite different basis. That is, while adopting the 10-year CGS as the measure, the DNSPs have also proposed that this rate be calculated by averaging the 10-year CGS rates across a long historical period. For example, in the DNSPs' proposals, the 10-year term CGS rate was averaged over two periods, a very long-term period of 1883- 2011, and a second, somewhat shorter period, of 2003 to 2013.[34]

As a result, the DNSPs' proposals provide a range of risk-free rate from 4.78 per cent (the so called 'low rate') to 5.17 per cent (the 'high rate'). Both these historical observations, however, are well above the rate that would apply by averaging 20 business days of the most current 10-year CGS[35] rates. The approach is clearly inconsistent with the AER's RoR Guideline.

To quote from Ausgrid's transitional proposal, the purpose of calculating a risk free rate based on long-term historical data is 'to be consistent with the period over which they calculate our proposed estimate of historical excess returns and an implied risk premium'.[36]

While this was not an issue of focus in the consultation process, at least as far as consumers were concerned, the AER indicates that the Energy Networks Association (ENA) and the NSW DNSPs mooted the long-term averaging approach during the Better Regulation program. The AER had considered this approach (long-term averaging of the risk free rate) during the Victorian gas distribution draft and final determinations but 'did not find the arguments in support of a long term average compelling'.[37]

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30 AER, *Explanatory Statement, Rate of Return Guideline*, December 2013, 10.

31 Ibid 11.

32 Although under the previous rules, the networks selected the averaging period, subject to agreement with the AER.

33 For example, the AER reports that the service providers supported maintaining a 10-year term for equity. See AER, *Explanatory Statement, Rate of Return Guideline*, December, 2013, 49.

34 More correctly, the proposals refer to averaging the 10-year CGS rate over 10 years.

35 PIAC has reviewed data from the RBA for the month of January. See discussion in 3.2.

36 Ausgrid, *Transitional regulatory proposal*, January, 2014, 22.

37 See AER, *Explanatory Statement, Rate of Return Guideline*, December, 2013, 76.

The AER also highlighted that 'where the equity beta is not equal to one, using a long term average risk free rate can have a significant impact on the return on equity estimate'.[38] For all these reasons, the AER has rejected the use of long-term averaging for the risk free rate in past determinations and has not proposed such an approach in the RoR Guideline.

While PIAC cannot independently verify the AER's claims, it is also clear to PIAC that there has been little (or no?) on going consultation with other stakeholders on the current DNSPs' proposals, nor do the DNSPs' proposals seek to address the issues raised previously by the AER or attempt to demonstrate why the approach would better achieve the NEO.

More significantly, however, PIAC contends that the argument posited by the NSW networks to explain the change in approach is fundamentally flawed. In fact the argument of aligning with the MRP represents just the other side of an argument that has been litigated on several occasions. That is, the Tribunal did not find fault with the AER's position that the use of historical data to calculate the MRP does not mean that the MRP is not a measure of future investor expectations.[39]

In particular:

- The use of historical data to calculate the MRP and/or the cost of equity reflects the fact that these parameters cannot be directly observed in the market; they must be inferred from other data. Therefore, a method has to be adopted that provides the best estimate of the forward-looking MRP. One such method is to use long-term historical data to provide the best estimate of the *future MRP or cost of equity*. As the Tribunal has confirmed, this does not mean that the estimate is a historical estimate only, but it does have a particular benefit as an approach to estimating expectations for future average returns.

- In addition, as discussed below in section 2.1.2, the AER is proposing to supplement the forecasts based on historical trend data with forecasts that rely on contemporary data, such as the DGM and broker reports. The final number is therefore a blend of methods and other approaches; each designed to provide an alternative way of estimating future equity costs.

In contrast to the MRP, however, the expectations regarding the risk-free rate can be objectively observed by considering current CGS markets of different tenor, and in particular, the 10-year securities. The use of the most recent data (given it is available) is consistent with the CAPM theory and there is no need to, or benefit from, relying on historical data to identify the expectations of investors for rates on risk-free assets.[40]

For reasons, therefore, of both principle and policy, PIAC strongly opposes the introduction of a new approach to assessing a forward-looking risk free rate as proposed by the networks. It is irrelevant that the proposal only relates to the transitional year and is non-binding on the AER's

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38 Ibid.

39 Australian Competition Tribunal, *Application by APA GasNet Australia (Operations) Pty Limited (No 2) [2013] ACompT 8*, 18 September 2013, @ 227-311.

40 The AER cites the work, for example, of Associate Professor Lally who concludes that 'Rates averaged over a much longer historical period would be inconsistent with the present value principle [in the CAPM approach], i.e. they would violate it without offering any incremental pragmatic justification.' See AER, *Explanatory Statement, Rate of Return Guideline*, December, 2013, 78.

full determination. The AER still has the obligation to prevent the NSPs earning more than the efficient cost of financing the provision of services. Accepting such a proposal would undermine the confidence consumers have in the ability of the RoR Guideline to deliver on its intent.

Recommendation 2

PIAC recommends that the AER prevent the DNSPs earning more than the efficient costs of the provision of services.

3.1.2 Assessing the MRP

For example in assessing the MRP the AER proposes the following:

- To calculate the MRP (which cannot be readily observed), the AER states that it has placed 'most emphasis on historical estimates' which gives an MRP point estimate of approximately 6 per cent, with a lower bound estimate of 5.0 per cent and upper bound of 6.4 per cent.[41] This is illustrated in the Figure below from the AER's explanatory statement to the RoR Guideline.

- The AER then suggests that it will modify the point estimate for the MRP depending on the outcomes of the various Dividend Growth Models (DGM) used by the AER.[42] That is, when the DGM is above the historical estimates, then the AER is more likely to adopt an MRP of above 6 per cent and when the DGM is below historical estimates, then the AER is more likely to adopt an MRP below 6 per cent.

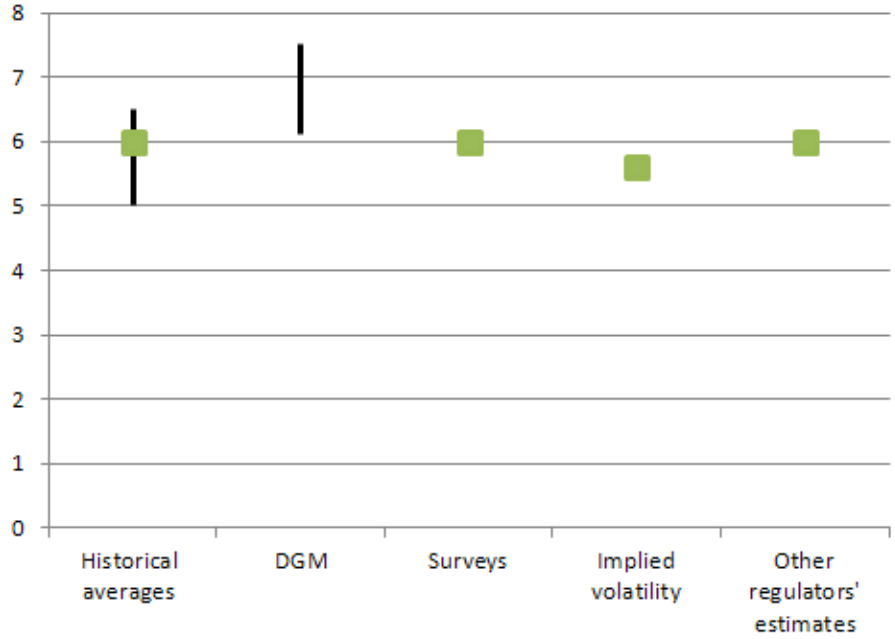
  As at December 2013, the DGM models provide an estimated range for the MRP of between 6.1 and 7.5 per cent. This is illustrated in Figure 4 below.

- Other sources of information, such as surveys, volatility measures and other regulators all suggest an MRP value of around 6.0 per cent.

[41] AER, *Explanatory Statement, Rate of Return Guideline*, December 2013, 95-96.

[42] The AER indicates a preference for assessing the DGM using both a 2-stage and 3-stage DGM reflecting the sensitivity of the DGM to economic growth rate assumptions.

Figure 4: Empirical Estimates of MRP (per cent)[43]



On the basis of this analysis, the AER has suggested that as at December 2013, the MRP is estimated to be about 6.5 per cent.

In PIAC's view, this places too high a reliance on the MRP assessment provided by the DGM at a single point in time. Nevertheless, **providing the approach will, in practice, be symmetrical**, that is, the AER will respond appropriately to a DGM that delivers an estimate of MRP below 6 per cent,[44] PIAC accepts that this use of the DGM by the AER to guide the decision on the MRP with the CAPM range, is the approach relevant to the NSW DNSPs and TNSPs.

What is far less acceptable is the approach taken by the NSW networks in their transitional proposal to the calculation of the MRP (and therefore, the overall cost of equity). Although the networks proposals ultimately uses a MRP of 6.5 per cent, based on historical excess returns to stocks above the risk free rate, they have done so in conjunction with adopting a novel approach to the calculation of the risk free rate and a higher equity beta than the beta expressly set out in the AER's guideline. These are discussed in the next sections.

3.1.3 Equity Beta

The AER also undertook extensive analysis of the equity beta during the Better Regulation project. This included two detailed theoretical studies of the risks facing the regulated electricity networks. Both studies found that the non-diversifiable risks facing the network businesses are significantly less than the risks facing the market as a whole.

Similarly, the AER investigated a range of empirical studies undertaken to identify the equity beta for the industry and for the market as a whole. As a result, the AER concluded in the Guidelines

43 Ibid, 95.

44 As the Tribunal pointed out in Australian Competition Tribunal, Application by *APA GasNet Australia (Operations) Pty Limited (No 2) [2013] ACompT 8*, 18 September 2013, @ 267, there have been times when the DGM style analysis pointed to a MRP of around 2 per cent. PIAC expects that in fairness to consumers, if some subsequent calculation of the DGM produces numbers below 6 per cent, the MRP will be adjusted downwards.

that the empirical studies supported an equity beta range of between 0.4 and 0.7. Based on the additional theoretical position of the Black CAPM, the AER selected the upper end of the range, 0.7, as the appropriate figure for inclusion in the RoR Guideline.

Again, PIAC and other stakeholders believed an equity beta of 0.7 overstates the non-diversifiable risks of an efficient benchmark Australian regulated network company given the many economic protections provided by the regulatory arrangements (such as a near guaranteed annual revenue) to the networks and the consequent imposition of risk onto consumers. However, PIAC accepts that this is the status for the next three years of the equity beta.

It is, therefore, another matter of deep concern that the NSW networks have prepared their proposal on the basis of equity beta of 0.8, selected from a range of 0.8 to 1.0. In doing so, the networks have largely relied on the estimates based on long-term empirical analyses conducted by their consultants, Strategic Finance Group (SFG) and CEG. The SFG study results, however, derive from the analysis of a combination of firms from the USA and Australia, with the great majority being from the USA. As PIAC stated during the Better Regulation program, it is simply not appropriate to place such reliance on data from US companies that are subject to a very different regulatory and market environment.[45] For instance, many of the US companies are integrated energy service providers and include generation and retail as well as networks in their portfolio of activities. The sample is very far removed from the pure-play efficient benchmark network company operating in Australia. Interestingly, the SFG 2013 study also revealed much lower equity betas when looking at only the Australian networks.

As a result, PIAC strongly opposes the adoption of an equity beta of 0.8 as set out in the network proposals.

Recommendation 4

PIAC recommends that the AER set an equity beta for the transitional year of no more than 0.7.

3.1.4 Overall cost of equity

The NSW networks are proposing an overall cost of equity of 9.98 per cent, based on a calculation of the long-run historical risk-free rate. The networks claim that this is a 'conservative' estimate.

The 9.98 per cent is built up from the rate of return components as set out in Table 5 below.

[45] PIAC, Better equity submission to the AER's equity beta issues paper, October 2013, 21-23.

Table 5: Rate of Return Components

Rate of Return Parameter	DNSP Transitional Proposals	AER RoR Guideline (Estimates)	Comment
Risk Free Rate	4.78% (range 4.78%-5.17%)	4.18% (from RBA report F2 for January 2014)	Difference is due to the DNSPs using a long-term average
Market Risk Premium	6.5% (range 6.5% to 7.22%)	6.5% (as per Guideline)	DNSPs propose the 'conservative' estimate
Equity Beta	0.8 (range 0.8 to 1.0)	0.7 (range 0.4 to 0.7)	Difference reflects DNSPs reliance on the updated SFG and the CEG analyses.
Overall Return on Equity	**9.98%**	**8.73%**	
Overall Return on Debt	**7.55%**	**7.02%**	

Table 5 also sets out the cost of equity that is estimated would arise if the DNSPs had used the approach set out in the AER's RoR Guideline. Noting that the risk free rate is calculated for January 2014 (and would therefore be updated by the AER for the transitional determination), the return on equity is estimated to be around 8.73%, or 125 basis points below the DNSPs' proposals.

Even using the current regulatory settings (which includes an equity beta of 0.8 rather than the revised 0.7) the cost of equity would be 9.38%, still 60 basis points less than the DNSPs' proposals.

3.2 Return on Debt

In theory, assessing the return on debt should be a reasonably transparent process, relying on independent data sources, empirical assessments of what networks actually do and economic theory on optimal financing practices for a businesses operating long-life low risk assets.
In practice, there has been considerable debate and legal challenges (funded by consumers in their network prices[46]) over the best approach to assessing the return on debt for the benchmark efficient network entity.

The debate has been complicated by changes to the availability of independent data on commercial bond rates, including the demise of one agency and the remaining agency, Bloomberg, ceasing production of data for Australian bonds of 10-year tenor.

The AEMC's changes to the NER (and NGR) provided greater flexibility for the AER to assess a range of methodologies to assess the cost of debt. For instance, the rules provide the AER with the flexibility to determine whether to:[47]

[46] Until the recent changes to the NEL regarding the operation of the Tribunal, networks were able to pass the costs of a legal challenge to the AER's decision through to consumers in network prices.

[47] NER, clause 6.5.2 (j) and (i) respectively.

- adopt an 'on-the day' approach to the assessment of bond rates, a trailing average or an hybrid portfolio approach; and

- update the return on debt on an annual basis (that is, update the return on debt each year using updated data on bond rates) or set a single return on debt to apply for the whole of the 5-year regulatory period.

3.2.1 The AER RoR Guideline

Following extensive discussion on all the options, the RoR Guideline adopted an approach that recognised in principle that networks raise their debt finance over a number of years, and that this generally is best approximated by adopting a trailing average approach. The key features of the RoR Guideline approach are therefore:[48]

- use a single definition of a benchmark efficient entity and a single approach to estimating the return on debt;

- use of a trailing average approach as the single approach, with equal weighting applied to to each of the historical years;

- update the return on debt estimate annually (that is, for each regulatory year);

- adopt a 10-year bond rate for commercial entities of credit rating of BBB (average, including BBB+, BBB and BBB- rating); and

- implement a 'transitional arrangement', consistent with the proposal by the Queensland Treasury Corporation (QTC); these arrangements allow a transition from the current 'on the day' assessment of bond rates to an assessment based on the 10-year moving average (of bonds with 10-year tenor).

The AER's decision on each of these matters followed a period of extensive consultation and debate. From PIAC's perspective, there area number of important features of the AER's decisions on the RoR Guideline.

The first is that the RoR Guideline sets out a *single approach* to estimating the return on debt as PIAC had been very concerned that the so called 'menu approach' (i.e. providing multiple approaches to the cost of debt assessment) would leave wide open the opportunity for regulatory gaming by the networks, at the cost to the consumer.[49] A single approach also provided greater transparency and certainty to consumers, finance managers and investors. When combined with annual updating of the cost of debt, any risk to the business is further reduced.

Similarly, PIAC supports the emphasis by the AER on the rate of return objective, i.e., to determine the efficient financing strategy of a *benchmark efficient firm with similar risk*. It was a clear statement that the cost of debt would be assessed against the efficient financing of a

[48] AER, *Explanatory Statement, Rate of Return Guideline*, December 2013, 98-102.

[49] For example, a menu approach would allow a network to change from one approach to another, depending on which gave a more favourable outcome at a particular point in time.

benchmark efficient firm, not the actual financing costs or financing strategy of a particular firm although this may be indicative of efficient financing option.

3.2.2 The DNSPs' approach to the cost of debt.

The NSW DNSPs have adopted the broad outline of the AER's RoR Guideline approach with one important exception. That is, the networks propose to adopt 'a trailing average cost of debt using yields over the past 10 years on Australian BBB+ corporate bonds with a term to maturity of 10 years'.[50]

The networks also state that they have used a 'conservative' cost of debt estimate based on the average of the long run estimate of the cost of A and BBB rated corporate debt as estimated by the Reserve Bank of Australia (RBA).[51] They assess this cost as 7.55 per cent. The networks also provide an upper estimate for reference of 7.84 per cent. This is based on the trailing average approach but uses Bloomberg data for yields on 7-year corporate bonds and applies 'regulatory precedent' to extrapolate from a 7-year yield curve to an 'implied' 10-year yield.[52]

PIAC considers this is a reasonable approach, and consistent with the Guidelines, although PIAC relies on the AER to confirm the actual calculations.

The difficulty arises in the use of a transition mechanism from the current 'on the day' approach to the trailing average approach.

The networks have proposed moving straight to the 10-year trailing average without a transition period where the AER's Guideline specifies a transition period. Moving directly to a trailing average, without the transition approach set out in the RoR Guideline, would produce a return on debt of 7.55 per cent (based on RBA data).

3.2.3 Implementation of a transition mechanism to the new approach.

Again, there has been much discussion over the last year on how the regulatory determination can transition from the current 'on the day' assessment of the cost of debt, to a trailing average without substantially increasing regulatory risk for networks, investors and consumers.

The AEMC also considered this matter and sought advice from stakeholders and consultants. For example, the AEMC asked SFG to review all the risks facing different networks in moving from on the day to a trailing average approach. The AEMC quotes SFG as follows:[53]

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

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50 For example, see Ausgrid – *Transitional regulatory proposal*, January 2014, 21.

51 Ibid.

52 Ibid

53 AEMC 2012, *Economic Regulation of Network Service Providers and Price and Revenue Regulation of Gas Services, Final Position Paper*, 29 November 2012, Sydney. 76. See also note 54.

> **consideration be given to transitional arrangements when changing the approach to estimating the return on debt**. [PIAC emphasis]

The Queensland Treasury Corporation (QTC) was also concerned with the transition process. The QTC's recommendations on how this might occur to minimise risk and uncertainty for all stakeholders forms the basis of the approach set out by the AER in the Guideline. It involves annual updating of the cost of debt such that Year 1 of the first regulatory period proxies the existing 'on the day' approach (albeit using a different data set, from the RBA). In Year 2, the cost of debt will be based 90 per cent on the Year 1 outcome, and 10% on the cost of debt observed for Year 2 (again using on the day data). By year 10, there will be a complete transition from an on the day approach to a 10-year rolling average.[54]

As SFG suggested to the AEMC, when noting the benefits of an orderly unwinding of hedged positions:[55]

> The type of 'rolling in' arrangement that has been proposed by the QTC would be an effective means of transitioning from the current Rules to the use of an historical cost of debt approach.

PIAC suggested during the Better Regulation process that a transition period may not be necessary, **if,** the AER was revisiting the cost of debt every 5 years (not annually) and using bonds with a 5-year tenor. However, the decision to use 10-year bonds and update annually is probably more consistent with implementing a transition process. More generally, consumer representatives had various views about the necessity or otherwise of adopting a trailing average.

However, PIAC acknowledges that the AER has undertaken an extensive consultation process on this issue, including risk analyses, and has also sought the advice of relevant experts. PIAC's very strong preference therefore, is for the AER to adopt its transitional approach as set out in the RoR Guideline. PIAC's reasons for this strong preference include the following:

- There are strong policy reasons for the transition determinations to be made consistent with the approaches set out in the RoR Guideline, particularly as the Guideline is itself the result of extensive consultation with all stakeholders. If businesses vary from the RoR Guideline in their proposals then considerable uncertainty is created for stakeholders and investors about the outcomes of the regulatory process and its ability to act in the long-term interests of consumers as required by the NEO and NGO. In other words, there must be very good reasons provided for variation from the RoR Guideline.

- The NSW networks claim they have adopted a staggered portfolio approach to the issuance of debt and 'prudently managed refinancing risk over the past 10 years'.[56] They also claim that the introduction of a transition approach would 'not allow us the opportunity to recover at

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54 The AER's Rate of Return Guideline provides a detailed description of the application of this transition methodology.

55 SFG Consulting, *Rule change proposals relating to the debt component of the regulated rate of return, Report to for AEMC,* 21 August 2012, 45.

56 Ausgrid, *Transitional regulatory proposal*, 31 January, 2014, 21. The other DNSPs have put similar arguments.

least our efficient costs of debt finance',[57] and would greatly add to financing costs and risks if they were required to raise the money in a very short period of time.[58]

- PIAC notes that it is clearly the case that the transitional approach would lead to a lower initial return on debt for Year 1 (2014/15), as under the transitional approach set out by the QTC, and accepted by the AER, the return on debt for Year 1 would largely replicate the existing 'on the day' approach. This would generate an estimated return on debt (as of January 2014 and based on RBA data) of around 7 per cent for a 10-year corporate bond. However, PIAC also highlights:

    - The decision by the AER to adopt a trailing average with a transition period has been made very recently. There is no reason to assume that the NSW networks were planning their loan portfolios and hedging arrangements on this basis over the last 10 years. Rather, it is reasonable to assume that the great majority of the debt arrangements were made on the assumption that an 'on the day' approach would be applied by the regulator. This suggests that a 'prudent 'network business would have adequate mechanisms in place to manage any potential exposures in 2014/15.

    - The DNSPs have argued that they could not raise the quantum of debt in a short period, and even if they could, there would be significantly greater costs associated with this.[59] However, as has been discussed during previous regulatory determinations and in the Better Regulation program, there is no obligation on the networks to 'mirror' the regulatory approach. Indeed, the networks themselves in this proposal highlight that they have been successfully issuing debt on a staggered portfolio basis notwithstanding the 'on the day' approach adopted by the regulator in that period. That is, there is nothing new, in principle and practice, in the risks of the first year in the new transition approach (as promoted by the AER) that has not been successfully and prudently managed in the past by the NSW DNSPs.

    - In addition, the networks cite the difficulties of raising funds over a 10-40 day period close to the start of the next regulatory period. However, the RoR Guideline does not require this; the Guideline allows the network to nominate any period between 10 business days and 1 year for averaging the debt costs, providing it is nominated in advance.[60]

    - The overall package for assessing the cost of debt proposed by the AER provides further protection. For instance, the annual updating of the cost of debt will allow progressive movement towards a staggered portfolio approach, and this is a significant advance over the previous regulatory arrangements in managing the networks financing risks. Again, the networks are clearly better off in the longer term.

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57 Ibid.

58 Ibid.

59 The DNSPs refer, inter alia, to advice from UBS to the effect that 'it would be difficult and costly for the NS DNSPs to refinance their debt portfolios over a 10-40 day period close to the start of the next regulatory control period.' See for example, Endeavour Energy, *Transitional Regulatory Proposal,* January 2014, 19.

60 However, PIAC notes that it is not clear how this will be adopted in the transition year, 2014/15.

- In the 2009–2014 regulatory period, the NSW networks and their owners, the NSW Government, received a very significant 'bonus' from the on the day approach adopted at that time; and they were more than comfortable accepting that 'bonus'.[61] Both the state and the DNSPs have been the beneficiaries, and it is important that there is now some balancing of these outcomes through the period of transition to the trailing average.

PIAC concludes, therefore, that the AER should be cautious about accepting a proposal that does not comply with the transitional approach set out in the Guideline. Clearly, there are benefits to some businesses, and costs to others of adopting a transition approach as SFG highlighted in the previous quote.[62] The task of the AER is to assess whether the claimed benefits of directly moving to a trailing average, and the risks of transition are substantive enough, or whether the approach proposed by the NSP networks is simply to increase the allowed rate of return.

From PIAC's perspective, in the short-term, the networks are no worse off than if the trailing average had not been adopted and the on-the-day approach had continued, and there is no reason to believe that the NSW DNSPs were not prepared for a continuation of the on the day approach in their risk management strategies. In addition, the extended averaging period reduces the exposure of the networks to being 'taken advantage of' and the annual update process means progressive alignment with the staggered portfolio. All of these additions are improvements on the current arrangements, which the networks have clearly being able to manage, and manage profitably.

PIAC is not convinced that merely because the cost of debt will be lower in year 1 under the QTC transition process than under the full trailing average, that this is sufficient reason to put aside the AER RoR Guideline. Moreover, it assumes that consumers should continue to pay for the very high bond rates that occurred at the start of the GFC when they have already paid for this in the current regulatory period.

PIAC does not consider this an equitable sharing of risks and benefits between consumers and networks, nor is it in accordance with the NEO.

3.2.4 Implications for the overall WACC

Table 6 below summarises the components of the WACC as proposed by the networks. The regulatory WACC is expressed as the nominal post-tax WACC in accordance with the requirements under the NER and NGR.

The NSW networks state that their WACC proposals represent the 'most conservative' (i.e. the lowest) point estimates within the range of possible estimates for each of the WACC components. Application of the Guideline parameters, however, would suggest otherwise.

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61 In particular, the networks proposed an averaging period for the cost of debt "on the day' taken in August-September 2008, when bond rates were still close to their peak because of the Great Financial Crisis (GFC). The AER had sought an averaging period much closer to the start of the determination (i.e. March 2009) - an outcome that appeared to be more in line with the NER. The AER's approach would have generated somewhat lower rates for cost of debt. However, the Tribunal disallowed this. It is estimated that the difference between the AER and the determination based on the networks proposed averaging period has cost NSW consumers some $2 billion dollars over the regulatory period, as the networks have been remunerated for forecast financing costs that in fact were well in excess of their actual financing costs as corporatised businesses.

62 See notes 52 and 54. SFG is reported to state that: 'any change in approach could lead to some service providers gaining extra revenue or losing revenue as a result of unwinding those financial arrangements.

To illustrate this, Table 6 below also includes PIAC's estimate of the possible outcomes of a WACC assessment that is based on the Guideline parameters and approaches. PIAC emphasises that this is an estimate only, designed to illustrate the overall impact of the different approaches, that is, the approach proposed by the NSPs and the estimate of the Guideline approach.

Table 6: Summary of WACC Parameters in the DNSPs' Transitional Proposals for 2014/15

Component	**Proposal by DNSPs for 2014/15 WACC components**	**PIAC's estimate (for illustration only) of AER's RoR Guideline outputs**
Cost of Equity:		
Risk Free Rate (Jan 2014)	4.78%	4.18%
Market Risk Premium	6.5%	6.5%
Equity beta	0.8	0.7
Total Cost of Equity	9.98%	8.73%
Cost of Debt:		
10 Year bond rate (RBA)	7.55%	7.02%
TOTAL WACC (60% gearing)	**8.52%**	**7.6%**
Note: DNSP proposal represented here is based on their 'conservative' proposal. PIAC's estimate relies on data provided by the RBA on 10-year Commonwealth Government Securities (Report F2), averaged daily rates for January 2014; and 10-year Commercial Bond rates for BBB rated organisations (Report F3). Commercial Bonds based on averaging the most recent 12-month data reported by the RBA as the F3 report only provides end of month results. The regulatory WACC is based on **the nominal post-tax return** on capital.		

Although the current proposals by the NSW DNSPs are proposals for the transition year (2014/15) only, PIAC again stresses the importance of the AER implementing the approach it developed and set out in the AER's RoR Guideline, in consultation with multiple stakeholders.

PIAC recommends that if the AER believes it does not have the appropriate data available to it at this stage to implement the QTC transition approach to calculating the cost of debt,[63] then PIAC suggests the preferred approach for 2014/15 should be continuation of the current **'on the day'** approach based on the Bloomberg 7-year bond data for BBB+ ratings, extrapolated to 10 years using the agreed extrapolation methodology.

This will provide continuity with the past. As noted above, the AER has confirmed its intention to use a trailing average only in the last 6 months (i.e. at the Draft Determination stage). It is reasonable therefore to assume that the structure of the DNSPs historical borrowings and risk management arrangements (such as interest rate swaps) is compatible with the expectation that the regulatory rate of return would be based on the 'on the day' approach.

What *is* important is that the AER does not accept the proposed approach simply on the basis that 2014/15 is a 'place-holder year'. There may be many complications in the AER attempting to unwind the DNSP's proposed approach for the transition year when the AER comes to make the

[63] PIAC is aware for instance, that the published RBA data for report F3 on Corporate bond spreads and yields, does not include daily yield rates at this time, as the monthly published figures are for the last business day of the month, not an average of daily figures.

full determination for 2014/15 to 2018/19. It is much better to get it 'right' in 2014/15, or at least 'nearly right'.

Recommendation 5

PIAC recommends that if the AER believes it does not have the appropriate data available to it at this stage to implement the QTC transition approach to calculating the cost of debt,[64] *then PIAC suggests the preferred approach for 2014/15 should be continuation of the current* ***'on the day'*** *approach based on the Bloomberg 7-year bond data for BBB+ ratings, extrapolated to 10 years using the agreed extrapolation methodology.*

3.3 Imputation Credits ('gamma')

Imputation credits in the Australian taxation system are the credits domestic investors receive for tax paid at the company level that offsets part or all of their personal income tax liabilities (from an investors point of view, these are expressed as franking credits which reduce the tax that domestic investors would have to pay on dividend income). In theory, where a company provides franking credits, then the cost of equity will be somewhat offset (eligible investors will be willing to invest at a somewhat lower rate of return because of the taxation benefits).

Imputation credits therefore impact on the value of stocks. However, the NER requires the regulator to assess the WACC on a nominal post-tax basis and, under a post-tax framework, the value of imputation credits is not a WACC parameter but is assessed separately. Instead, the value of the imputation credits is in the adjustment of the regulatory allowance for taxation costs.

The value of the imputation credits (gamma) in the regulatory process sits between 0 and 1, and is a product of two other variables to be determined by the regulator. They are, the imputation credit payout ratio (F) and the utilisation rate (Theta).

A low gamma value means that the business will receive a higher regulatory allowance for tax costs and, therefore, a higher revenue allowance to pay for these costs. Some years ago, the Queensland networks launched an appeal to the Tribunal over the AER's assessment of gamma. The appeal was successful and the Tribunal ordered the AER to accept the networks' proposal for a low gamma of 0.25 (and, therefore, a higher tax cost allowance).[65]

The AER has applied this lower gamma of 0.25 for most of the subsequent regulatory decisions. However, the AER has since also undertaken an extensive review of the assessment of gamma as part of the Better Regulation program.

As a result of this review, which addressed the issue from both a conceptual and empirical perspective, the AER has reverted to a higher value of gamma, based on revised value of theta. However, the NSW DNSPs propose to continue to apply a gamma value for imputation credits of 0.25.

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64 PIAC is aware for instance, that the published RBA data for report F3 on Corporate bond spreads and yields, does not include daily yield rates at this time, as the monthly published figures are for the last business day of the month, not an average of daily figures.

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

For instance, the CEG report on the WACC estimates for the transitional regulatory year states that the Energy Networks Association (ENA) retained SFG in 2013 to 'update the dividend drop-up study'[66] from the 2011 SFG study that was prepared as part of the appeal to the Tribunal. The Tribunal had accepted the 2011 SFG study as being the 'best dividend drop-off study currently available for the purpose of estimating gamma'.[67]

CEG concludes that the 2013 SFG study confirms that the NSW DNSPs' proposed value of gamma of 0.25 was 'reasonable' and should be applied in the current transitional year proposal.[68] These outcomes are summarised in the Table 7 below.

Table 7: Value of Imputation Credits for the 2014/15 Transition Regulatory Year

Component	DNSP Proposal for 2014/15	AER's RoR Guideline (December 2013)	AER review of the WACC parameters (2009)
Payout ratio (F)	0.7	0.7	
Utilisation rate (theta)	0.35	0.7	
Gamma (Value of credits = F * theta)	0.25	0.50	0.65

As noted, the AER has investigated the various approaches to estimating the utilisation rate and provided an extensive assessment of the various approaches in the Explanatory Statement to the RoR Guideline.

PIAC believes that in doing so, the AER has addressed much of the criticism raised by the Tribunal of the studies that have been undertaken to evaluate the value of gamma and, in particular, the value of theta within the regulatory context. PIAC supports the AER's conclusions that:

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

PIAC agrees with the arcane nature of the debate thus far and considers that the AER's recent conceptual and empirical analysis of gamma[69] has, as noted above, gone some way to addressing the Tribunal's previous criticisms of the AER's decision making. That is, the Tribunal

66 See CEG, *WACC estimates – A report for NSW DNSPs*, 2014, 22 @ 72.
67 Australian Competition Tribunal, *Application by Energex Limited (Gamma)(No 5) [2011*] ACompT 9 (12 May 2011) @ 29.
68 CEG, *WACC estimates – A report for NSW DNSPs*, January 2014, 23 @ 73.
69 See AER, *Explanatory Statement, Rate of Return Guideline*, 2013, 158-182.

‘found some deficiencies in its understanding of the foundations of the task facing it, and the AER, in determining the appropriate value of gamma’.[70]

PIAC also considers that even though the Tribunal required the AER to adopt a gamma value of 0.25 in the Tribunal’s 2011 Energex Limited decision (reflecting a lower value for theta of 0.35 that was derived from the 2011 SFG dividend drop-off study), the Tribunal’s decision was by no means determinative. The Tribunal’s statements have been heavily qualified throughout its analysis of the value of gamma, by its concern about the lack of a sound conceptual base for the assessment of gamma in the regulatory context, as indicated in the quote from the Tribunal cited above.

The Tribunal considered that the 2011 SFG dividend drop-off study was the best of the dividend studies put to the Tribunal for its consideration, but the Tribunal was not endorsing the dividend drop-off approach as the best, or only, approach to assess the value of imputation credits within the regulatory context. On the contrary, it was left open for the AER to investigate a wider range of approaches and, importantly, to better establish the conceptual framework in which the regulatory value of gamma is determined. Indeed the Tribunal positively encouraged such a review.

The NSW DNSPs’ proposals on the value of gamma for the transition year are based on the updated SFG study. However, this approach does not address the fundamental questions raised by the Tribunal in its criticisms of the debate on gamma.[71] In the absence of a broader conceptualisation and assessment of gamma by the DNSPs, PIAC is minded to support the application of the AER’s estimate of 0.5 (based on a payout ratio of 0.7 and a utilisation rate of 0.7) in the 2014/15 transitional determinations.

4. Revenue and Cost Allowances in the Transition Determination

PIAC recognises that the NSW DNSPs are proposing interim expenditures for the transition year, and for the remaining years of the next regulatory periods. PIAC also recognises that the AER’s intention is to conduct a ‘true-up’ of expenditures and revenues for 2014/15 as part of the full determination.

It is therefore neither required, nor appropriate, to undertake a forensic investigation of the DNSPs’ cost proposals. On the other hand, it is in the interests of transparency and avoiding price shock in the future if there is some level of consumer and regulatory oversight of the expenditure proposals.

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

71 PIAC is aware that the ENA provided a more extensive critique of the AER’s approach and exposition of alternatives during the Better Regulation program. However, PIAC also notes the subsequent assessment by Associate Professor Lally who, after reviewing the ENA’s criticism, concluded inter alia that: ‘However, estimates of [the utilisation rate] that are significantly less than 1, constitutes a defacto form of cherry-picking of parameter values and models that maximizes the price or revenue cap for regulated businesses’. (Lally, *The Estimation of gamma,* November 2013, 46-47. Cited by the AER, *Explanatory Statement – Rate of Return Guideline*, December 2013,180-181).

4.1 Smoothing of Revenue Allowances

As highlighted previously in this submission, PIAC has no objection in principle to the smoothing of annual revenue allowances (on a net present value basis) within and between regulatory periods. In normal circumstances, this smoothing is in the best interests of consumers and network investors as it stabilises cash flows both within and between regulatory periods.

However, these are not normal circumstances, and the assumption that the best result is achieved by smoothing the transitional year with the unexamined estimates of future year revenue requirements may be fraught with danger and result in just the outcome that it was desired to cure. For example, increasing the proposed revenue allowance above the claimed efficient costs for the 2014/15 transitional year also means that the DNSPs have the expectation that future costs will increase more quickly than CPI.

The issue is well illustrated in Figures 5 to 8 that demonstrate, for each of the NSW DNSPs, the pattern of smoothed revenue relative to the required revenue (i.e. the revenue required to recover the claimed costs). Two of the DNSPs follow the pattern of higher revenue than required at the start of the regulatory period and, in particular, in the transitional year, followed by sharper increases in revenue requirements in the later years.

However, it is not possible for the AER, or other stakeholders, to be certain how prudent and efficient that extra expenditure at the end of the regulatory period will be, because the forecasts are only indicative, and based on limited data. Consumers could well end up paying more in 2014/15 for events that do not eventuate in later years.

This is a significant risk, and may well be an unnecessary risk if the AER considers that these future costs are unlikely to represent the benchmark efficient firm. PIAC therefore urges considerable caution in adopting a smoothed revenue approach.

Figure 5: Ausgrid Revenue Proposed Forecasts

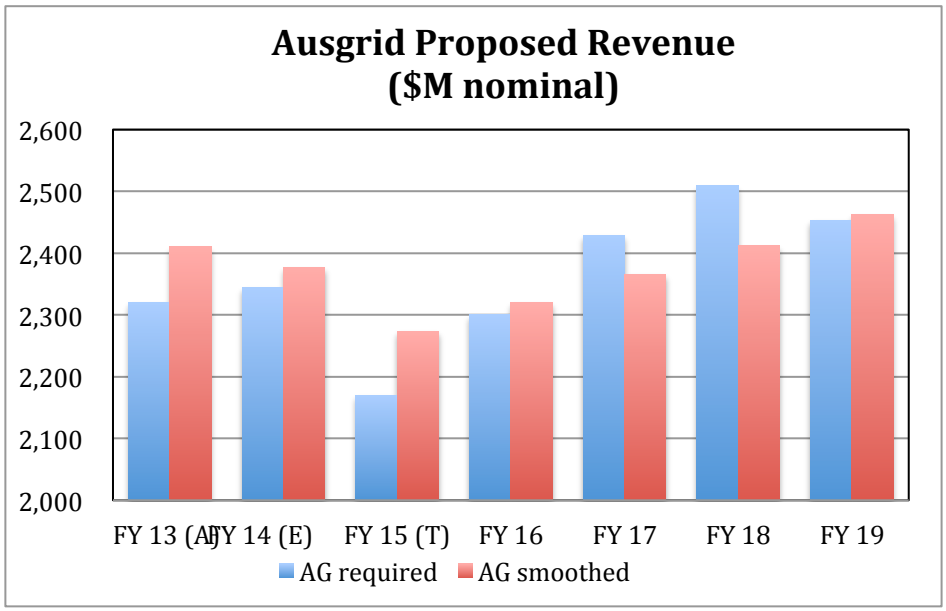

Figure derived by PIAC from data in Ausgrid's Transitional Pricing Proposal

Figure 6: Endeavour Energy Proposed Revenue Forecasts

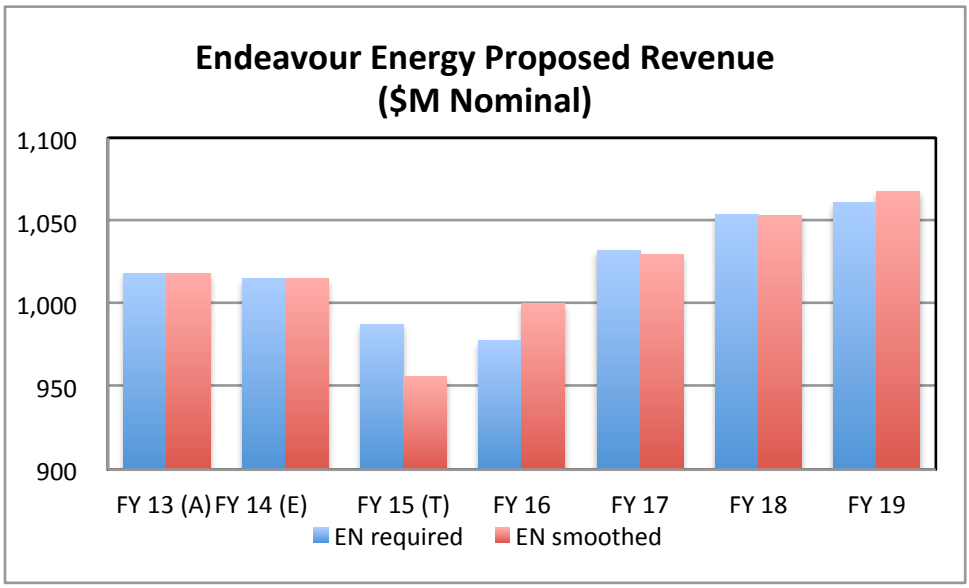

Figure derived by PIAC from data in Endeavour Energy's Transitional Pricing Proposal

Figure 7: Essential Energy Proposed Revenue Forecasts

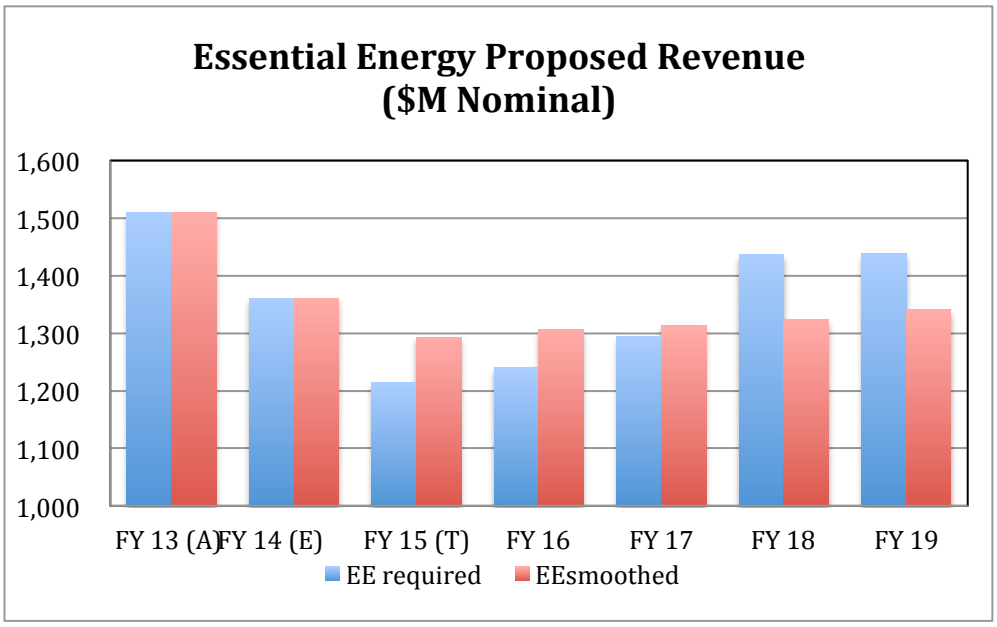

Figure derived by PIAC from data in Essential Energy's Transitional Regulatory Proposal

Recommendation 6

PIAC recommends that the AER carefully review the proposed 'smoothed' revenue price path, taking into account the future costs (beyond the transitional year) are indicative only and not subject to the AER's assessment processes.

4.2 Costs arising from Return on Capital

Clearly, PIAC's primary concern is the ever-increasing costs associated with the DNSPs' proposed allowances to fund payment of a return on capital.. Even though the DNSPs are significantly decreasing their capital expenditure over the forecast period and have proposed a lower rate of return than was allowed in the current determination period,[72] the allowed regulatory cost of funding the capital to build the asset base continues to increase in real terms, by around 12 per cent (or 23 per cent in nominal terms). Table 8 sets out the real and nominal increases in the return on capital over the 5-year forecast regulatory period for each of the three NSW DNSPs

This conundrum is, in turn, a 'hang-over' from the very large increases in capital expenditure over the current regulatory 5-year period that has greatly increased the RAB by 76 per cent, 52 per cent and 57 per cent for Ausgrid, Endeavour Energy and Essential Energy respectively.[73]

PIAC would be most concerned if the CPI 'cap' on DNSP prices, when combined with the growth in capital costs above CPI, is forcing cuts in other expenditures below responsible levels. If this is the case, then the drive for efficiency improvement is even more urgent.

[72] The DNSPs propose an overall rate of return of 8.52%; the previous rate of return (after appeal) was 10.02%.

[73] See Ausgrid, *Transitional Regulatory Proposal*, January 2014, 10; Endeavour Energy, *Transitional Regulatory Proposal,* January 2014, p 17 and Essential Energy, *Transitional Regulatory Proposal*, January 2014, 22.

Table 8: Estimated percentage increase in return on capital costs from start to end of the next regulatory period

	Ausgrid	Endeavour Energy	Essential Energy
Increase in return on capital (real $13/14)	11%	10%	14%
Increase in return on capital (nominal)	23%	22%	26%
Note: PIAC's estimate from data provided in the DNSP proposals.[74] The assessment assumes constant inflation rate of 2.5% per annum.			

Figures 8 to 10 further illustrate the relative impact of the cost of capital on the overall costs of the DNSPs.

Figure 8: Ausgrid Forecast Costs (Real)

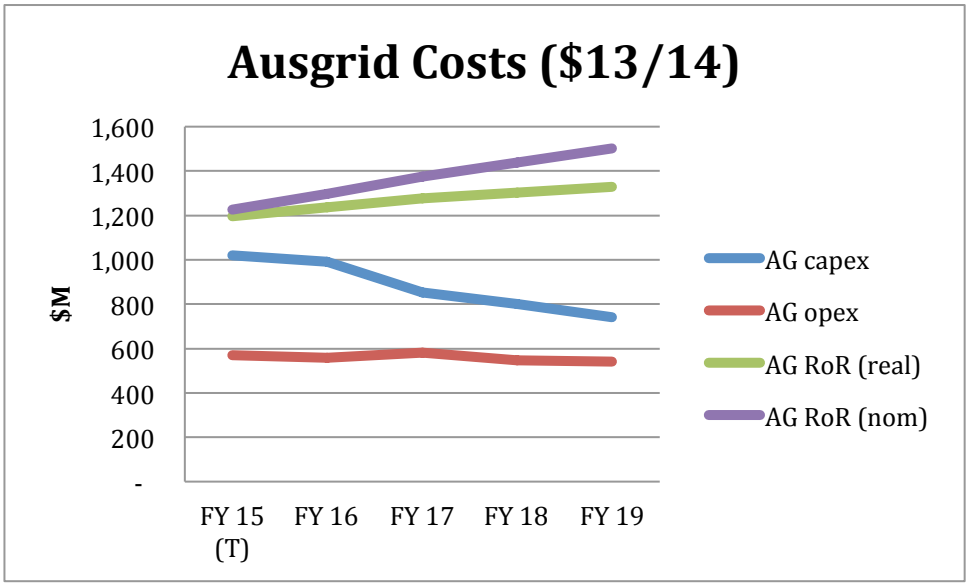

Figure derived by PIAC from data in Ausgrid's Transitional Regulatory Proposal

[74] See note 71. Ausgrid, 19; Endeavour Energy, 17; and Essential Energy, 17.

Figure 9: Endeavour Energy Forecast Costs (Real)

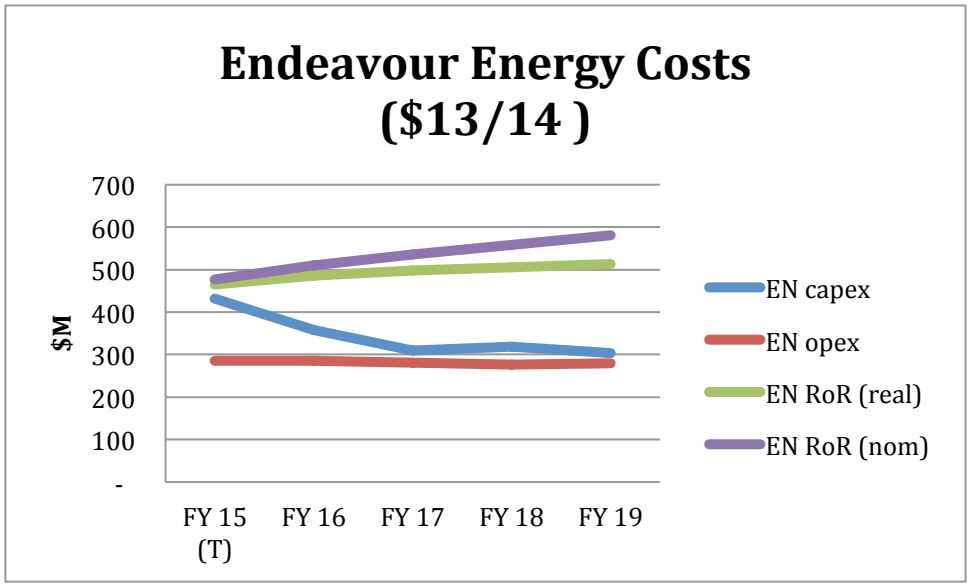

Figure derived by PIAC from data in Endeavour Energy's Transitional Regulatory Proposal

Figure 10: Essential Energy Forecast Costs (Real)

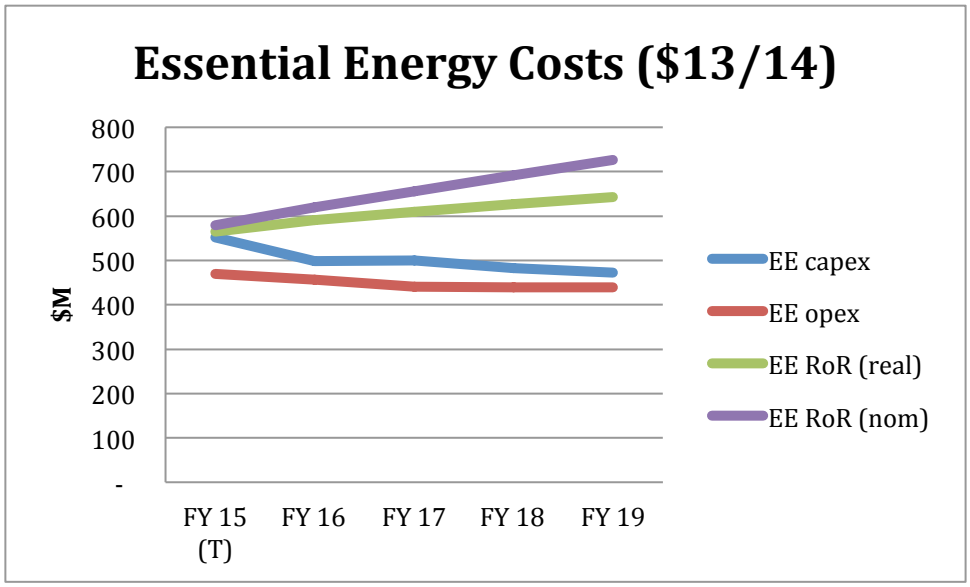

Figure derived by PIAC from data in Essential Energy's Transitional Regulatory Proposal

Recommendation 7

PIAC recommends that Networks NSW reinforce that the CPI cap on network prices, is a cap not a target. The default assumption should be that consumers only pay for the efficient costs, even if this means reductions in real electricity prices.

4.3 Other Costs

Generally, the DNSPs' proposals include reductions in operating costs (opex) and capital costs (capex) in real terms. In addition, the DNSPs have proposed 2012/13 as the base year for their opex proposals. The DNSPs have also demonstrated that the actual 2012/13 opex spend was

either in line with the AER's allowed amount (Essential Energy) or significantly below the AER's allowance (Ausgid and Endeavour Energy).[75]

Moreover, the task is made more difficult because on the one hand, the DNSPs are required to limit the network price increases to equal to or less than CPI, and on the other there are factors pushing prices above that, including in the transition year. They include:

- the continued growth in the return on capital costs in real dollar terms (as above);
- falling demand which, all else being equal, pushes average prices upwards under a revenue cap.

However, PIAC considers that there are a number of areas of expenditure that should still be carefully scrutinised by the AER, particularly in the context of the proposed 'step' changes in operating costs from the base year. Addressing these issues in the transitional year will facilitate a smooth transition to the full determination, at which time, the AER will have considerably more data to scrutinise and benchmark both the operating and capital costs proposed by the DNSPs.[76]

- *Increased opex in response to reduced capex*: The DNSPs have proposed quite significant reductions in capital expenditure, which PIAC would expect given the levels of previous expenditure and the decline in demand. However, there have been claims by the DNSPs for increased operating expenditure as a result of this. PIAC considers this needs closer examination by the AER, particularly given the extraordinary level of capital investment in the network system over recent years.
- *Vegetation management*: There seems to be a significant increase in vegetation management costs. In Victoria, these can be traced back to the directions of the Victorian Bushfire Inquiry. However, it is not clear to PIAC whether there is sufficient justification for the significant increases in costs in other jurisdictions, and these claims should, therefore, be scrutinised.
- *Non-system expenditures, particularly for information technology (IT):* It is not possible for PIAC to investigate the proposed expenditures on IT. However, PIAC does note that IT was a significant item of increased expenditure in the previous regulatory determination for a number of the NSW DNSPs. It is important therefore to clarify:
    - is this proposed expenditure new, or is it for IT investment that was deferred from the current regulatory period? (the 'double-dipping' problem)
    - are there clear benefits associated with the IT investment for consumers in terms of more efficient services or costs over time?
    - If so, how have the benefits from previous IT investments been captured in the regulatory proposal?

[75] See note 71. Ausgrid 23, Endeavour Energy, 21; Essential Energy, 25.

[76] The presumption here is that benchmarking will create even further pressure to reduce unit costs, particularly if the AER considers that the NSW DNSPs efficiency performance is less than its view of the efficient benchmark service provider. As the AER is obliged to approve revenue to cover only efficient costs, PIAC expects that there might be further reductions in allowed costs in the final determination for this regulatory period.

- *Overall labour costs, including contractors*: These costs are increasing for some of the DNSPs in real terms. While the DNSPs are pursuing productivity efficiencies to offset these costs, PIAC would still seek some examination of why internal or contracted labour unit costs would rise in real terms.

- *TSA and 'dis-synergies'*: There appear to be significant costs associated with 'dis-synergies' arising from the sale of the retail businesses. For instance, Ausgrid is claiming a total of $105.5M for 'TSA loss of synergy costs'. [77] PIAC considers that there should be more clarity about these costs and why these sale costs were not booked as a cost against the revenue recovered from the sale of the retailers, rather than recovered in consumer electricity prices.

Recommendation 8

PIAC has identified a number of areas of DNSPs' expenditures that are of specific concern; PIAC recommends further examination of these items notwithstanding the high level nature of the transitional year, in the interests of a smooth transition to the full determination.

5. Conclusion

PIAC acknowledges that the revenue plans provided by the three DNSPs all demonstrate a commitment to keeping network price increases below the forecast CPI of 2.5 per cent in the transitional year and all subsequent years. Table 9 below summarises the DNSPs' advice of the impact of their proposal on:

- The weighted average real price change for distribution charges; and
- The change in network charges for a 'typical' residential and small business consumer.

Table 9: Estimated Changes in average distribution charges (smoothed revenue) and consumer bills for 2014/15

Changes in DNSP charges & bills	Ausgrid	Endeavour Energy	Essential Energy
Weighted average real price change - all consumers 2014/15 *(real $)*	-2.13%[78]	-2.68% (Table 10, p 26)	-0.01% (Table 3-7, p 28)
Typical Residential bill change 2014/15 *(nominal)*	-1.12% (Table 1, p 4)	-0.24% (Table 1, p 2)	2.49% (Table 3-9, p 28)
Typical Small Business bill change 2014/15 (*nominal)*	-1.67% (Table 1, p 4)	-0.24% (Table 1, p 2)	2.49% (Table 3-9, p 28)
Change in total demand 2014/15	2.3% (page 25)	-1.6% (page 23)	-1.6% (page 27)
Notes: Figures are from the DNSPs' transitional regulatory proposals. Ausgrid's average prices may include Ausgrid TUOS charges (not Transgrid). The % changes are based on the smoothed revenue. If this smoothing is not accepted by the AER, there will be larger decreases in 2014/15 for Ausgrid and Essential Energy.			

[77] Ausgrid, *Transitional regulatory proposal*, January 2014, 33. PIAC recognises that Ausgrid is committed to 'fully eliminate the cost impact of losing the synergies' through plans to be more cost efficient (page 33). However, these efficiencies gains are netted against a cost that PIAC queries as a question of principle.

[78] Ausgrid average prices may include the Ausgrid TUOS element.

Figure 11 also illustrates the change in the weighted average real price for distribution charges.

Figure 11: Change in Average Real $ Distribution Charges

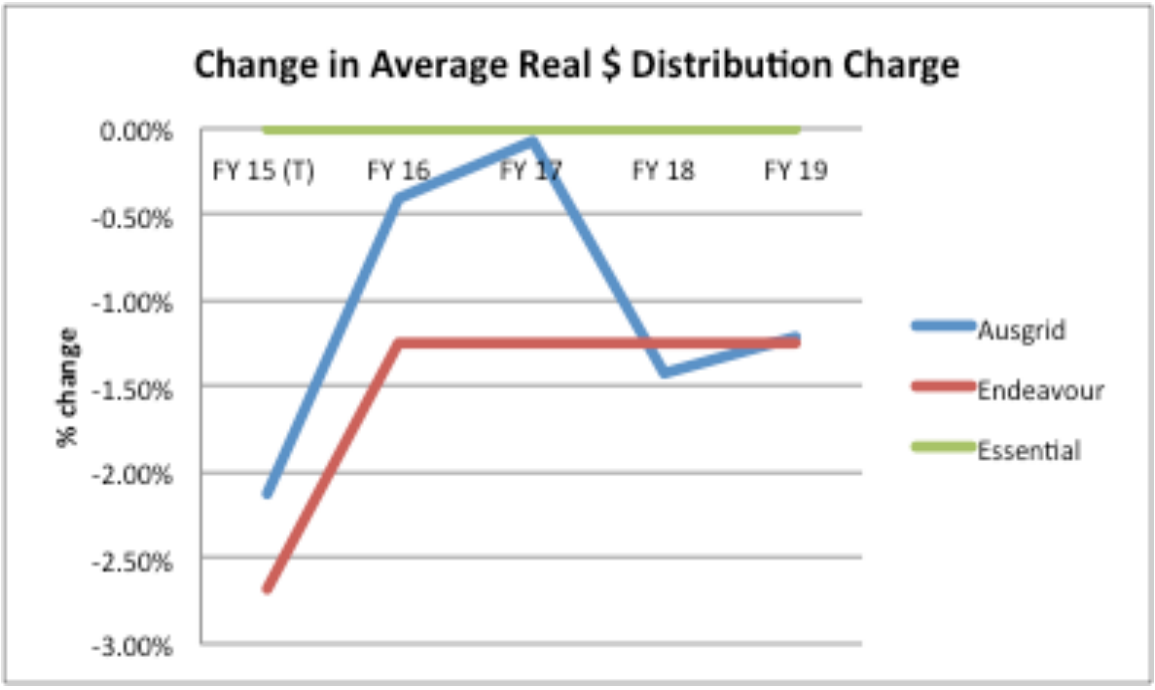

Figure derived by PIAC from data in Essential Energy's Transitional Regulatory Proposal

PIAC also notes that the final outturn in prices cannot be predicted with absolute accuracy given the sensitivity of network prices to variations in demand from the forecast demand. It is essential therefore, that there is no complacency emerging network costs. PIAC considers that with the right settings on the rate of return and with further efficiencies in expenditure, network prices can reduce in real dollar terms in the transitional year, without risking price shock in subsequent years.

PIAC also cautions against any tendency, even in the transitional year, to make the CPI cap become a CPI 'target' or ambit claim for the DNSP proposals. After such substantial, and fundamentally harmful, increases in electricity prices over the last 5 years, consumers should be able to expect some downward adjustments in the real price of electricity.

The problem as PIAC sees it, is the cost to the DNSPs associated with payment of the return on capital, as discussed above. This component of the revenue proposal continues to rise and put pressure on other elements of the DNSPs' cost stacks.

PIAC has suggested that the rate of return claimed by the NSW DNSPs is higher than the efficient cost of capital for a benchmark efficient firm. Addressing this will somewhat reduce the pressure on costs. However, to continue to keep network price increases to levels below CPI, without compromising the future reliability of the system, may require some increasingly difficult choices to be made.

Finally, PIAC wishes to emphasise that it would not be appropriate for the AER to ignore the Better Regulation Guidelines at the first opportunity for their use. Firm and courageous regulation is required to give effect to the NEO and see that energy markets work in the long-term interests of consumers.