Submission to Productivity Commission Draft Report: Electricity Network Regulation

CitiPower / Powercor Australia and SA Power Networks

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Contents

Executive summary

CitiPower, Powercor Australia and SA Power Networks (the **Businesses**) are pleased to respond to the Productivity Commission's (**PC**) Draft Report for its inquiry into Electricity Network Regulation. As stated in the Businesses' previous submission, the PC's final recommendations should coordinate with the outcomes of the other current reviews, focusing on outcomes which best serve to meet the National Electricity Objective (**NEO**). This outcome will best promote investor confidence in regulatory certainty and stability for the provision of electricity distribution services which meet both the current and future needs of consumers.

This submission focuses on three key areas:

- impact of structure and ownership arrangements on industry outcomes;
- importance of transparency, accountability and stability in regulatory administration; and
- appropriate role of benchmarking in regulatory determinations.

The opportunity is also taken to provide updated information and clarity to amend some aspects of the data presented in the PC's Draft Report in relation to the Businesses.

Importance of structural reform

Regulatory reform is not, and can never be, a substitute for structural reform of an industry. Ownership and structure of distribution network service providers (**DNSP**) are significant determinants of their efficiency. This is clear from the PC's own analysis but could be further illustrated through appropriate benchmarking of individual DNSP performance by the Australian Energy Regulator (**AER**).

A time series analysis of the various components of electricity prices demonstrates that the contribution of distribution network costs to prices for customers in Victoria and South Australia is well below that reported in other jurisdictions. This is despite the number of external factors that have increased cost pressures on the Businesses over the last five years.

These outcomes are the result of the disciplines of private ownership and its responsiveness to regulatory incentives provided under the National Electricity Rules (**NER**). It is unlikely the same levels of responsiveness can be replicated under public ownership given the multiple objectives faced by these organisations. Therefore, the Businesses strongly support Draft Recommendation 7.1 that State and Territory governments privatise their publicly owned DNSPs.

Future drivers of electricity prices include the need to replace ageing infrastructure, the changing way customers will generate and use electricity, policy overlays and the growth in peak demand. Structural reform, greater understanding of the underlying drivers of electricity prices and investment in demand side management (**DSM**) initiatives will be important in managing the impact of these factors.

Good regulatory practice

Principles of good regulation – such as transparency, accountability and stability in the design of regulatory parameters and their administration – are crucial to ongoing investment.

Accordingly, the following elements are important in the application of economic regulation to DNSPs:

- stability of regulatory settings over time;
- extent to which regulators focus on short term outcomes in their regulatory determinations relative to longer term outcomes;

- degree of discretion afforded to regulators in the interpretation and administration of regulatory obligations; and
- degree of accountability for regulators in terms of their pricing determinations.

The Businesses strongly oppose the introduction of any form of *de novo* review of regulatory decisions. *De novo* review will increase the cost and length of any appeal process, create uncertainty amongst investors, and have the potential to lead to an environment where the focus of the AER is on the short term impacts of their decision contrary to the NEO which requires a focus on the long term needs of consumers. A perceived risk and concern for all stakeholders is that the cost and complexity of *de novo* reviews will be a disincentive for DNSPs to challenge regulatory decisions and consequentially will dilute regulatory accountability.

We encourage policymakers to leverage the responsiveness of private DNSPs to regulatory incentives and to look for further opportunities to strengthen regulatory incentives where possible. The Businesses endorse the PC's Draft Recommendation 16.2 to bolster the Service Target Performance Incentive Scheme, and Draft Recommendation 12.2 to enhance the Demand Management and Embedded Generation Connection Incentive Scheme (**DMEGCIS**) and to increase its innovation component.

Over the longer term, the Businesses encourage consideration of output based models of regulation within the context of a mature, privately owned industry, i.e. one that is highly responsive to financial incentives and is rewarded when it innovates and benefits its customers. A reorientation of the focus of regulation is a logical progression, once appropriate structural and governance arrangements are in place and with appropriate tailoring to customer preferences (Draft Recommendations 8.4 and 8.5, following appropriate Rule change processes).

Benchmarking

The Businesses agree with the thrust of the PC's Draft Recommendations and findings in relation to benchmarking (refer Draft Recommendations 8.1 through 8.3, 8.6 and 8.7). Notwithstanding this, the Businesses make the following key points:

- benchmarking should not be used as a substitute for the detailed regulatory proposal prepared by the DNSP, and the building block analysis provided in Chapter 6 of the NER. This has been recognised by the Australian Energy Market Commission (**AEMC**) where they have stated that the AER should not be at large to replace a DNSP's proposal;
- the NER already allow for the use benchmarking approaches and indeed the AER has used such techniques extensively in revenue determinations made since the Rules were introduced;
- adjustments using partial indicators[1] are critical to benchmarking being effective;
- where the adjustment of benchmark data using partial indicators is unable to account for all exogenous differences, the AER needs to ensure it has consulted and understood the differences in uncontrollable cost drivers between DNSPs which may explain some or all of the comparative differences between DNSPs; and
- the AER needs to ensure transparency of the benchmarking methodologies it intends to rely upon, and needs to consult more with DNSPs on the source, relevance, accuracy, interpretation and use of relevant data for benchmarking purposes.

[1] Partial indicators are uncomplicated measures of the efficiency of a DNSP's capex and opex inputs, as described in the PC's Issues Paper. One example of a partial indicator is network expenditure divided by network scale, the denominator calculated from line length, customer numbers and maximum demand.

Data errors

In the final section of this submission, the Businesses provide updated information to clarify and correct some data in the Draft Report relating to the Businesses. Importantly, SA Power Networks did not overspend its capital allowance in the prior regulatory period.

1 Importance of structural reform

1.1 Introduction

Much of the commentary and debate surrounding the Australian electricity market has focused on the price impacts of the large capital expenditures by network businesses which are government owned in response to changed reliability standard requirements in those jurisdictions. This focus has meant that limited attention has been given to the considerable benefits that have been delivered to customers by private ownership. Data from Victoria and South Australia over the last decade illustrates that the real cost of distribution networks has either fallen or remained constant in real terms without compromise to safety or reliability standards. The Businesses welcome the PC's Draft Recommendations regarding the relative merits of private ownership.

In support of the PC's conclusions, the Businesses make the following key points:

- issues of ownership and structure are significant determinants of DNSP efficiency, which is illustrated by the PC's own analysis but could be further illustrated through appropriate benchmarking by the AER;
- time series analysis of the components of electricity prices reveals that the contribution of distribution networks in Victoria and South Australia is well below that reported in other jurisdictions, despite experiencing similar growth; and
- future drivers of electricity prices include the need to replace ageing infrastructure, policy overlays and the growth in peak demand. Structural reform, greater understanding of the underlying drivers of electricity prices and investment in DSM will be more effective than further Rule changes in offsetting the impact of these factors.

1.2 Benefits of private ownership

Observed outcomes during the previous decade provide evidence of the efficient performance of privately operated distribution networks. The Businesses endorse the PC's conclusions on this matter. As the PC highlights in its Draft Report:

> *While governments have a legitimate role in owning and operating many services in Australia, the rationale for state-ownership of electricity network businesses no longer holds. This reflects the development of sophisticated incentive regulations that function best when the regulated businesses have strong cost-minimising and profit motives.*[2]

The PC concludes that the best measure for encouraging efficiency in distribution networks is privatisation (Draft Recommendation 7.1).

Most of the current reviews of the network sector are focused entirely on regulatory reform. In these reviews, the need for regulatory reform is almost always predicated on the growth of network costs in jurisdictions operating under public ownership. The Businesses consider the real issues are the objectives faced by those publicly owned DNSPs, not the regulatory framework.

The Australian regulatory framework is an incentive based approach predicated on profit being a motivating factor. Whilst this is true for privately owned DNSPs, it is not solely the case for publicly owned DNSPs who face multiple competing objectives of which profit is only one. Acknowledging these conflicting objectives for publicly owned networks, the Businesses consider that the regulatory framework changes being promulgated in themselves will not deliver the efficiencies being sought.

The PC is in a unique position in that it is able to comment on both regulatory and structural issues. We note that the PC has commented on the nature of the structural issues and has recognised that this

[2] Productivity Commission (2012), *Electricity Network Regulatory Frameworks: Draft Report*, page 19.

requires actions other than '*regulatory fixes*'. Noting the extensive work undertaken by the AEMC and the Rule changes issued on 29 November 2012, the Businesses consider there to be a need for a greater focus on structural reform rather than further regulatory reform.

1.3 Contribution of distribution networks to total electricity cost

The absence of detailed analysis of the impact of distribution network costs on electricity prices has lead to a relatively uninformed debate on appropriate reform measures. Too often the evidence and analysis prepared by governments, regulatory agencies and the media is based on information emanating from New South Wales (**NSW**) or Queensland. However, time series analysis of the components of electricity prices reveals that the contribution of distribution networks in Victoria and South Australia is well below that reported by PC, AEMC, government and media.

The PC states that:

> *… nationwide, retail electricity prices rose by around 50 per cent in real terms from June 2007 to June 2012. The rising costs of the electricity network … have been a major driver of these prices. Network costs are around 40–50 per cent of an average household's electricity bill, so any cost pressures on the network have a major impact.*

The PC then provides data on changes to NSW household electricity bills which demonstrate a 130% increase in the network charge component of the bill from 2007/08 to 2012/13.[3] It is unclear to the Businesses whether the data for this graph is sourced from the retailers, and represents their recovery of input costs from the retailer's customer segmentation for pricing purposes, or whether it has been derived from the average of the DNSPs' tariffs charged to the retailers, or from another source such as the standard offer tariffs. Further transparency would better inform debate with the public and industry stakeholders.

Unfortunately, the implications of this generalisation are misleading, given that it unfairly depicts outcomes seen in Victoria and South Australia. The Businesses acknowledge that there have been significant increases in the retail price path over the past decade but note there is insufficient differentiation between the observed outcomes for DNSPs from different jurisdictions in the PC's Draft Report. The inference from the PC analysis that the Victorian and South Australian DNSPs are inefficient and are the primary cause of retail price rises in these States is demonstrably incorrect.

Victorian data

Figure 1.1 below shows the time series of the two prime cost components, retail[4] and distribution network costs, components from the cost stack for a small residential customer using the average of the CitiPower and Powercor Australia standard offer tariffs in real terms (2012 dollars).[5]

For CitiPower and Powercor Australia distribution network costs have fallen in real terms in the eleven years from 2001 to 2012. In 2012, the distribution network charges at $183 pa were still $44 pa lower than they were at $227 pa in 2001. This reduction in cost to customers is one indicator of increasing business efficiencies.

On the other hand, the retail cost component for small residential customers in the CitiPower and Powercor Australia distribution networks has increased in real terms from $382 pa in 2001 to $636 pa in 2012 (a 66% increase in real terms over the period). The data indicates most of this increase has

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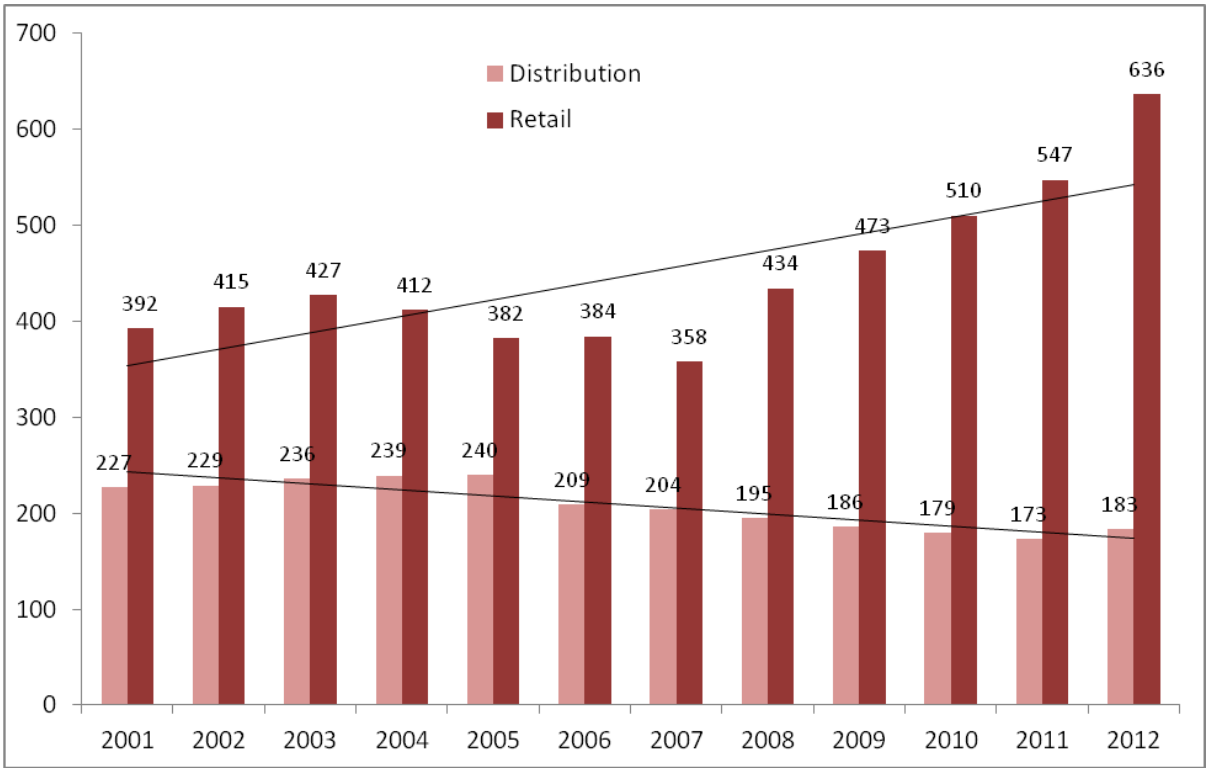
3 Productivity Commission (2012), *Electricity Network Regulatory Frameworks: Draft Report*, October 2012, Vol 1, Figure 1, page 4.

4 'Retail' combines the costs and profit margins attributable to the generation and retailing components of the supply of energy.

5 The separate data for CitiPower and Powercor Australia show similar results to the annual average data represented here.

occurred between 2007 and 2012, where the retail cost component increased at a compound rate of over 12% pa each year of those five years.

Figure 1.1: Average CitiPower and Powercor Australia residential customer primary cost components over time (real 2012 $)



Examination of the other cost components which have been omitted from Figure 1.1 for clarity, show that 61% of the cost stack in 2012 relates to retail costs and margins, and 18% relates to distribution (excluding metering and feed-in tariffs). A further 17% of the residential customer cost stack relates to taxes and charges resulting from various forms of Federal and State government policy (i.e. GST, feed-in-tariffs and Advanced Metering Infrastructure (**AMI**) metering rollout), and are effectively equal to the distribution cost proportion. At 18% of the cost for a small residential customer, the distribution charges in 2012 are considerably less than suggested by the PC.

South Australian data

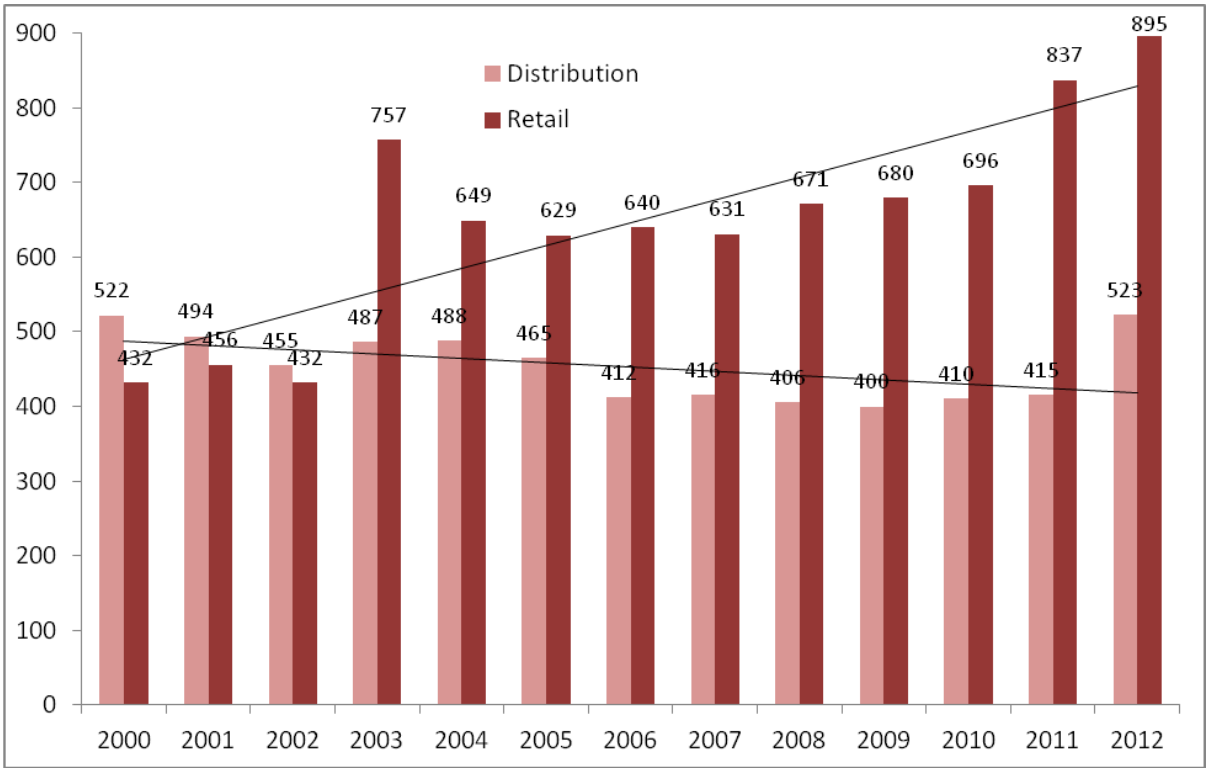
Figure 1.2 below shows the time series of the two prime cost components from the cost stack for the small residential customer segment in real terms (2012 dollars) using the standing and default tariffs for SA Power Networks.[6] The retail cost component for small residential customers in the SA Power Networks distribution network has increased in real terms from $432 pa in 1999/2000 to $895 pa in 2011/12 (a 107% increase in real terms over the period). As with the Victorian data in Figure 1.1 above, these costs include recovery of both wholesale energy and retail service delivery costs. The data indicates the more recent increase has occurred between 2006/07 and 2011/12, where the energy cost component has increased at a compound rate of over 7% pa for those five years.

Distribution network charges in 2011/12 returned to the same level as 1999/2000 reflecting a number of factors particularly the need to comply with new regulated supply reliability standards for the

[6] Analysis assumes a low voltage residential customer on a single rate tariff without controlled load, and consuming 5,000 kWh pa. The retail tariff is extracted from the Gazette of AGL's Standing and Default Contract Prices schedule, hence for 2012/13 the schedule in SA Gazette dated 21 June 2012, page 2784.

Adelaide CBD, capacity expansion to meet growing customer demand, replacement of ageing infrastructure and higher cost of debt after the global financial crisis.

Figure 1.2: SA Power Networks residential customer primary cost components over time (real 2012 $)



Note: Time series is for FY ending 30 June in relevant year.

Examination of the other cost components which have been omitted from Figure 1.2 for clarity shows that 52% of the cost stack in 2011/12 relates to retail costs and margins, 8% for transmission, and 31% relate to distribution (including metering). A further 9% of the residential customer cost stack in 2011/12 relate to GST[7]. At 31% of the cost for a residential customer, the distribution charges are considerably less than suggested by the PC.

Growth

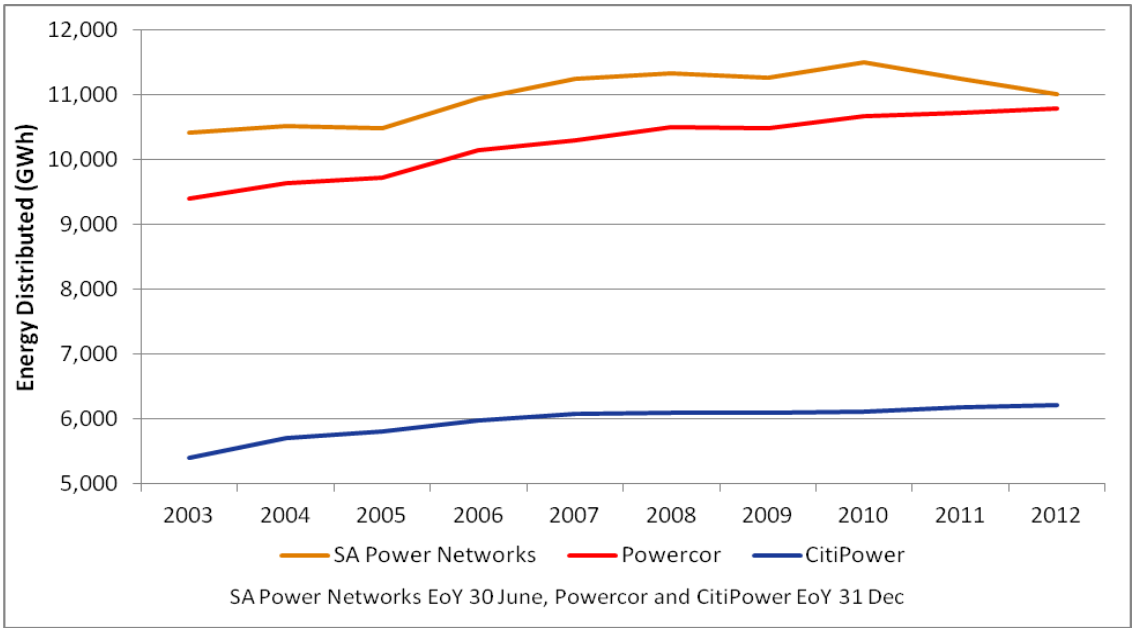
There have been no discernable increases in real distribution network charges over the last decade for small residential customers of SA Power Networks, CitiPower or Powercor Australia, despite the growth in peak demand and customer numbers.

It is widely recognised that electricity distribution networks are designed to ensure peak demand (in MW) is handled by the installed equipment with minimal risk of system failure, even in the face of factors such as a decline in total energy throughput (in GWh), the adoption of various forms of in-house energy efficiency measures, and distributed generation (i.e. PV cells or fuel cell generators on houses and SMEs).

Figure 1.3 below shows the actual growth in energy sales across each of the Businesses' networks between 2003 and 2012. It shows that energy sales grew slowly across all three Businesses over the period to 2008, then continued to grow for CitiPower and Powercor Australia while SA Power Networks' sales stabilised.

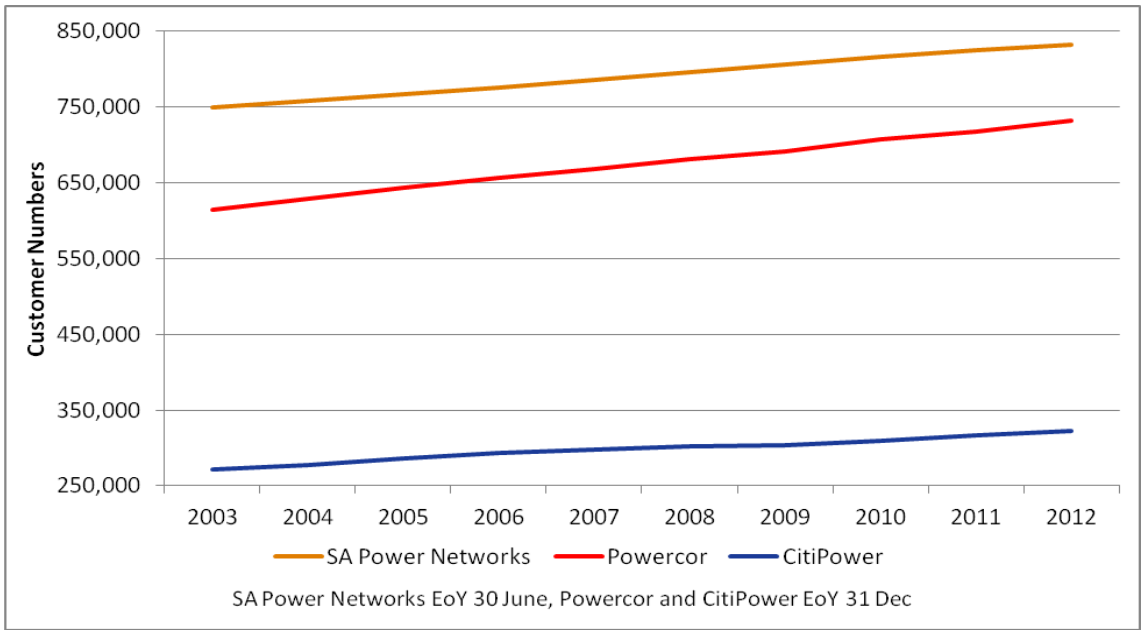
[7] In the year ended 30 June 2013, these changed to 47% retail, 18% GST, PV feed in tariffs and carbon tax, 7% transmission, and 28% distribution and metering.

Figure 1.3: Actual energy sales (GWh)



Analysis of the continuing growth in customer numbers across the three networks (Figure 1.4), combined with energy growth from Figure 1.3, indicates that electricity consumption per customer has remained relatively stable over the period. The historical trend suggests that further declines in energy distributed per customer are likely.

Figure 1.4: Actual customer numbers

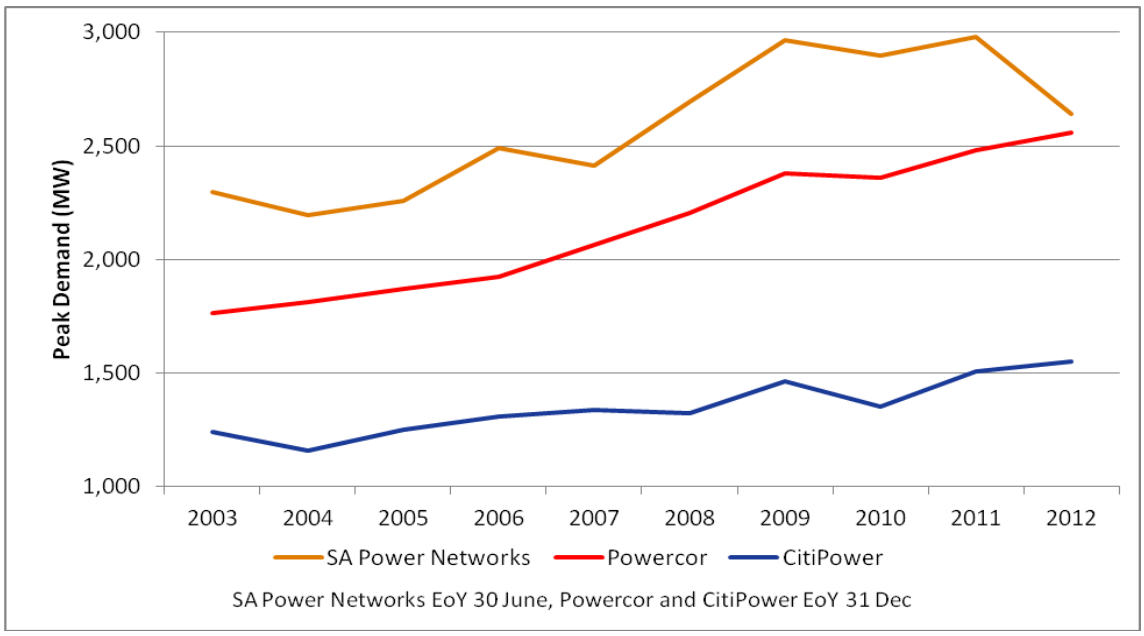


At the same time, Figure 1.5 demonstrates that peak demand continues to increase for SA Power Networks, CitiPower and Powercor Australia[8]. In South Australia, mild summers (i.e. a lack of extreme temperatures) can have a short impact on peak demand as was the case during the summers

[8] Peak Demand is global peak for SA Power Networks, Sum Coincident ZSSs for Powercor, Sum Non-coincident ZSSs for CitiPower.

of 2006/07 and 2011/12. Given forecasts of declining energy throughput, network load factor (i.e. the ratio of average demand to peak demand) is expected to decline.

Figure 1-5: Actual Peak Demand (MW)



Therefore, Figures 1.3, 1.4 and 1.5 provide further evidence of the Businesses' efficiency in delivering services, i.e. they have maintained stable prices for the past decade even as customer numbers have increased and in the face of growing peak demand.

1.4 Future challenges

While the Businesses in Victoria and South Australia have been successful in controlling their costs in real terms for over a decade, challenges are mounting from external events beyond the DNSPs' control. These challenges were identified by the AER in the most recent regulatory decisions and include:

- the need to replace ageing assets;
- the global financial crisis;
- increasing input costs;
- new legislative requirements, for example in the case of the Victorian DNSPs, the Victorian Governments' AMI obligations and bushfire safety standards and in the case of SA Power Networks in South Australia, obligations flowing from changes by the Essential Services Commission of South Australia to CBD supply reliability requirements under the Electricity Transmission Code.
- increases in capacity to meet future growth in peak demand.

These challenges will be the fundamental drivers of the quantum and cost of network investment in the future moderated to the extent that the Businesses continue to deliver efficiencies in the performance of their work.

The key to addressing these issues from the Businesses' perspective is initiatives such as smart grid (network automation and metering), demand side participation and customer education. Associated improvements to building codes and the efficiency of appliances will also assist in managing the electricity requirements of consumers. These initiatives are the key to unlocking and introducing innovations that will ultimately allow customers to reduce their demand and prolong the life of the existing network infrastructure. Regulatory reform that provides the AER with greater discretion

places a higher responsibility on the AER to look beyond a forensic analysis of networks' historical costs to creating an environment which enables (and does not constrain) innovations to be identified, developed, tested and implemented. A critical imperative is that the AER provides regulatory decisions which support appropriate and timely investment in network infrastructure to meet the changing needs of customers.

The Businesses again reiterate their point that an exclusive focus on regulatory reform should not be a substitute for more valuable structural reform.

2 Good regulatory practice

2.1 Introduction

This section focuses on regulatory practice, with the Businesses emphasising the importance of a number of factors in the application of economic regulation to DNSPs, namely:

- stability of regulatory settings over time;
- extent to which regulators focus on short term outcomes in their regulatory determinations relative to longer term outcomes;
- degree of discretion afforded to regulators in the interpretation and administration of regulatory obligations; and
- degree of accountability for regulators in terms of their pricing determinations.

Principles of good regulation – such as transparency, accountability and stability in the design of regulatory parameters and their administration – are crucial to ongoing investment. This means that where there is increased discretion given to the AER, a commensurate reinforcement of the accountability placed on the use of that discretion is imperative. Any weakening of the accountability mechanism has the potential to increase investor uncertainty.

We encourage policymakers to leverage the responsiveness of private DNSPs to regulatory incentives and to look for further opportunities to strengthen regulatory incentives where possible. The privately owned DNSPs respond to these incentives by finding the best methods to deliver improvements at the lowest cost which benefit customers in the longer term. The PC has identified some particular examples – such as a bolstered Service Target Performance Incentive Scheme (**STPIS**) – where inclusion of customer focused metrics would provide incentives for the DNSPs to have regard to customer preferences and value placed on electricity services.

Over the longer term, the Businesses encourage consideration of output based models of regulation within the context of a mature, privately owned industry, i.e. one that is highly responsive to financial incentives and is rewarded when it innovates to the benefit of its customers. A reorientation of the focus of regulation is a logical progression, once appropriate structural and governance arrangements are in place and with appropriate tailoring to customer preferences.

2.2 Commentary on current regulatory practice

In practice, pursuit of the NEO means the AER must make judgments about the appropriate trade-off between immediate pricing outcomes and the potential longer term implications of DNSPs' expenditure plans to deliver safe, reliable and secure electricity supply.

Recent debates have focused heavily on achieving short term price reductions via, among other things, forensic input based cost assessments. Whilst rising prices are a politically sensitive issue there remains the need to balance the current impact on customers with the best interests of future customers and future national economic growth. Inappropriate short term decisions may have longer term cost consequences for future generations (price shocks) and constrain future growth in the economy. Similarly forensic input based costs assessments run counter to the principles of incentive based regulation and potentially place the AER in the role of managing the network.

The Businesses note that the current NER has yet to be in operation for a full cycle of a regulatory period. The Businesses are of the view that the AER had not fully utilised the discretions under those Rules nor exhausted the opportunities under those Rules to further develop its approach to regulation. Notwithstanding this, the AEMC review of the AER-proposed Rule changes has resulted in a number of changes and improvements to the regulatory framework particularly in the area of stakeholder engagement and consultation. The AEMC has stated that their decision on the Rules improves the

strength and capacity of the Regulator to determine network price increases so that consumers do not pay more than necessary for a reliable supply of electricity.

The AEMC decision is the result of an exhaustive year long process and the Commission has opined that the new Rules will promote efficiency in a changing environment whilst providing regulation that is adaptive to changing circumstances. The Commission further states the reasons that the environment has become more dynamic include peak demand increasing relative to average demand which requires additional infrastructure, increased reliability requirements and changed costs associated with more volatile capital markets following the global financial crisis.

The challenge for the AER is to fully use the opportunities under the new Rules, to develop effective guidelines which assist DNSPs in understanding how the Rules apply, and to further enhance the incentive aspects of the regulatory framework.

The Businesses now consider that sufficient time should be allowed for the new Rules and the many associated guidelines to be developed by the AER which will govern the economic regulation of network businesses to be implemented and bedded down. An important consideration is to deliver a regulatory framework that has a level of stability over time to support investor certainty and confidence. It would now be premature to suggest further amendments to these Rules.

While made in the context of proposed changes to Rules relating to regulated returns, the Financial Investor Group's (**FIG**) observations on the importance of stability, transparency and accountability in regulatory frameworks in its submission to the AEMC's proposed rule amendments provide an important stakeholder perspective on the risks of sub-optimal regulatory reform.[9]

FIG's views are summarised as follows:

- regulation is the single most important factor in deciding whether to invest in energy networks;
- regulation can not require capital markets to fund new investment so they will allocate funds to competing investment opportunities according to investors' perceptions of risk and reward;
- energy networks compete for funding on a level playing field with non-regulated investment opportunities and with regulated sectors in other regulatory jurisdictions around the world; and
- investors strongly prefer a stable, predictable regulatory framework in which the regulator is accountable for its decisions.

Finally, FIG states that:

> *The Commission should consider carefully whether the overall effect of the amended Rules is to promote or diminish investor confidence. It is axiomatic that a diminution in investor confidence is inconsistent with promoting the national objectives specified in the energy legislation. Investor confidence – once lost – is not easily restored.*[10]

2.3 PC and Expert Panel recommendations regarding regulatory practice

2.3.1 Recommendations of the PC

The PC has made a number of Draft Recommendations about the regulatory and institutional framework on which the Businesses would like to make comment. Examples of potentially problematic recommendations that could create unguided discretion for the AER or erode its accountability include:

- **Draft Recommendation 5.5:** The PC's Draft Recommendation that the AER should only be required to test the reasonableness of the overall revenue expenditure proposal. Such a

[9] The Financial Investor Group is an affiliation of the major investors in Australian energy network assets. FIG members have interests in well over $30 billion of Australian energy network assets, most of which are regulated.

[10] The Financial Investor Group (2012), *Submission to AEMC Draft Determination on the economic regulation of network services*

recommendation provides the AER with the opportunity to make trade-offs in determining a reasonable level of revenue rather than assessing the DNSP's specific expenditure proposal and determining the reasonableness of its proposals.

- **Draft Recommendation 8.8:** The PC's Draft Recommendation for the AER to have regard to any discrepancy between AEMO's top-down peak and average demand forecasts and the aggregate of DNSP's bottoms-up peak and average demand forecasts. The AER is encouraged to use benchmarking of the discrepancies between previous expenditure forecasts and actual outcomes by different parties to inform that process. The Businesses question whether AEMO is the appropriate reference point and whether it has sufficient knowledge of demand within jurisdictions, let alone within distribution areas at a regional and customer segment level or the extent to which various customer segments might participate in demand side management.
- **Draft Recommendation 21.4:** The PC's Draft Recommendation to amend the AEMC and South Australian Minister's powers to fast track rule and legislative changes. This recommendation raises serious concerns as to whether stakeholders will have a reasonable opportunity to comment on all proposed Rule changes, which clearly reduces regulatory certainty and allows additional opportunity for short-term political considerations to outweigh the proper focus on the NEO.

2.3.2 Recommendations of the Expert Panel

The Expert Panel provided its Stage Two Paper of the Limited Merits Review Regime to the Standing Committee for Energy and Resources (**SCER**) on 9 October 2012, which included some recommendations that if enacted, would substantially erode some important aspects of regulator accountability. As discussed earlier, it is good regulatory practice that the level of discretion the AER has in making revenue determinations should be accompanied by an equivalent effective accountability regime for the exercise of that discretion. The Businesses have particular concern with the proposal to introduce a form of *de novo* review of regulatory decisions. This is due to the inherent uncertainty, cost and length of such reviews for DNSPs, the potential for regulators to focus on immediate issues rather than longer term benefits and the subsequent disincentive for DNSPs to appeal regulatory decisions and therefore, the consequential dilution of regulatory accountability.

The AEMC has supported the need for accountability of the regulator through merits review.

The Businesses' submission on 23 August 2012 to the Panel's Stage One Report and Stage Two Discussion Paper emphasised that:

- the intent of the NEO was not to be a proxy for an 'overall reasonableness test' on a revenue decision;
- empowering the review body to assess the overall decision based on the NEO is introducing *de novo* by stealth. A *de novo* review mechanism will actively deter review of regulatory decisions which was not the Panel's intention; and
- there are serious shortcomings with proposals to replace the Australian Competition Tribunal with a non-judicial body such as a panel of experts who could potentially undermine the appeal being run in an objective, open and transparent manner.

The Expert Panel also considered de-emphasising economic efficiency in the NEO on the grounds that efficient outcomes are not necessarily in all consumers' interests (under perfect price discrimination, for example). However, the Businesses hold the view that the AER requires greater clarity with respect to its role and how to achieve the NEO under the current approach to incentive regulation. The AER should be focused on economic regulation, having regard to outcomes that benefit consumers over the longer term (as opposed to seeking to drive down costs within the context of a single price review, or through consideration of matters best left to the policy making bodies which support the current framework).

2.3.3 AER's regulatory practice

The Businesses' experiences with the AER are similar to the commonly expressed concerns of stakeholders in areas such as industry expertise and resourcing, which the PC reports on in Chapter 21 of its Draft Report.

The Businesses would welcome improvements to the AER's approach to communicate and engage constructively with industry, as this will assist AER staff in gaining a more thorough understanding of the electricity industry, how it operates and key factors influencing critical network investment decisions, and allow improved understanding of the specific characteristics of individual DNSPs and their respective customer groups. The Businesses are confident that more effective engagement and greater understanding of network operation on the part of the AER will lead to improved regulatory outcomes.

In terms of institutional governance, the Businesses endorse the PC's principles for good governance for regulators as stated in Box 21.1 in Chapter 21 of the Draft Report (in terms of independence, effective leadership, appropriate expertise and skill, and consultation, for example). The Businesses are of the view that the AER's ongoing residence within the ACCC may limit the availability of resources and its ability to focus specifically on the energy sector.

As such, the Businesses agree with the PC's Draft Recommendations 21.1 and 21.2 that there should be an independent review of the resourcing and capacity of the AER to undertake all its functions, and that the AER should have greater control over, and accountability for, the resourcing and management of its functions.

2.4 Consumer focus in regulatory decision making

The NEO seeks to encourage efficiency in the delivery of network services to the longer term benefit of customers. Therefore, the Businesses are supportive of measures that incentivise DNSPs to deliver services provided the parameters reflect their customers' preferences and longer term interests. The Businesses agree that the creation of stable and powerful incentives will encourage efficient expenditure both at an aggregate level and in terms of the mix of operating and capital expenditure.

The Businesses believe there is scope to strengthen incentives provided to DNSPs and are supportive of specific measures the PC has proposed to broaden and strengthen incentives within the regulatory framework, including:

- the PC's Draft Recommendations for a 'bolstered' STPIS – provided its parameters are prescribed with adequate regard to the characteristics of the different DNSPs' networks and their respective customers (Draft Recommendation 16.2);
- opportunities for negotiation between the AER, DNSPs and their customers of the proportion of revenue at risk under the STPIS as part of the price determination process (Draft Recommendation 8.4). This highlights the importance of aligning STPIS targets with customer preferences on service delivery given they ultimately pay for the improved performance; and
- specific incentives to facilitate demand side participation such as the DMEGCIS and the recommendation to increase the innovation component of the Scheme (Draft Recommendation 16.2).

The Businesses welcome the PC's observation:

> *It is important moving forward that distribution businesses and the AER spend adequate time gathering feedback from end customers about their views in regard to supply interruptions, and that over time the STPIS targets are adjusted to reflect this feedback.*[11]

[11] Productivity Commission (2012), op. cit., page 553.

These elements of the regulatory framework are specific examples of the manner in which effectively designed incentive regulation can generate superior outcomes for DNSPs and their customers.

2.4.1 Mechanisms for encouraging effective customer engagement

The Businesses agree with initiatives to incorporate greater focus on consumer engagement and negotiated outcomes into regulatory determinations and are confident this will lead to superior outcomes in terms of efficiency and service quality over the longer term.

The Businesses note the PC's Draft Recommendation 14.1 for the Australian Bureau of Statistics (**ABS**) to have a role in calculating value of customer reliability (on behalf of AEMO), which would be used for probabilistic planning and reliability standards and the establishment of other parameters under a bolstered STPIS. The Businesses support a more sophisticated approach and note the importance of consistency in valuation methodologies to the valuation placed by customers on reliability.

The PC's analysis of the complexity of this task (discussed in Chapter 14) is welcome. However, the Businesses recommend that the ABS – or indeed any other party granted a formal role in quantifying the value of consumer reliability – should ensure it fully understands and accounts for the diversity of consumption profiles across jurisdictions and within an individual DNSP (residential and commercial, across different industries and different regions within a distribution area, for example).

The PC has also advocated a formal role for an adequately funded, broadly representative consumer body with expertise in economic regulation and relevant knowledge and understanding of energy markets that would 'represent the interests of all consumers during energy market policy formation, regulatory and rule-making processes, merit reviews, and negotiations with providers of electricity networks and gas pipelines' (Draft Recommendation 21.3).

The Businesses agree that effective consumer engagement between distributors and their customers has strong potential to be a facilitator of improved outcomes for all parties over the longer term (reflecting the triangular relationship between DNSP, retailer and end consumer). Furthermore, there is considerable merit in promoting greater awareness among electricity consumers of the role of DNSPs in the electricity supply chain and their relative contribution to the prices that consumers face. Therefore, the Businesses are broadly supportive of the PC's views on the need for greater engagement with consumers, and in a different and more sophisticated manner than has previously been the case.

However, the Businesses want to emphasise that a single body is unlikely to have detailed understanding of the specific preferences, characteristics or circumstances of an individual DNSP's customers. At the same time, it is not clear that the representative body will necessarily understand the circumstances and characteristics of individual DNSPs, including their various regulatory and statutory obligations, which can differ substantially. In other words, it is important to bear its limitations in mind, and involving the newly formed representative body in the price determination process would not be a perfect substitute for effective engagement by a DNSP with its own end-use customers.

The risk is that such a body would fail to have sufficient regard to the specific preferences of the customers of individual DNSPs. Rather, DNSPs should have the flexibility and incentive to be innovative in their customer engagement, rather than adhere to mandatory procedures.

2.5 Alternative approaches to infrastructure regulation

The Businesses believe there is a need for a revised focus on incentive regulation to provide DNSPs stronger incentives to engage with their customers to understand their preferences, requirements and valuations with financial rewards available where they deliver services in line with or exceeding predetermined outputs. Outputs in some instances would be specific to an individual DNSP, reflecting the particular characteristics of its various consumer groups. The regulatory framework could have explicit regard to such preferences and the possibility of financial gains or losses if actual outcomes exceed or fall below those standards, while also offering other gains for DNSPs – such as a fast-tracked determination process – if they can demonstrate effective customer engagement.

The reorientation of the focus of infrastructure regulation (from inputs in a single regulatory period to outputs over a longer term) is being pursued in other countries. The PC notes that more output focused models of regulation are being implemented in the UK under the Revenue using Incentives to deliver Innovation and Outputs (**RIIO**) approach.

The Businesses are of the view that regulatory models that have explicit regard to outputs that are identified through interaction and negotiation between DNSPs and their customers – as opposed to a framework that primarily focuses on cost inputs – are equally applicable to Australia provided the appropriate ownership and institutional arrangements are in place.

Output based models are capable of generating highly efficient outcomes within the context of a mature, privately owned industry, i.e. one that is highly responsive to financial incentives and is rewarded when it innovates to the benefit of its customers. At the same time, the presence of opportunities for streamlining the regulatory process – based on initial assessments or 'sweeps', which could incorporate benchmarking – provides for a more efficient and proportionate regulatory process.

Such an approach to network regulation is a logical progression, once appropriate structural and governance arrangements are in place and with appropriate tailoring to customer preferences. Regulation should evolve in line with the evolution and maturity of the regulated industries.

2.5.1 The RIIO approach

Ofgem has already launched the first price control reviews under the RIIO for the UK electricity and gas transmission networks and gas distribution networks. The price control periods start in April 2013 and will run for eight years – notably longer than the five year pricing period under the NER – with Ofgem having specified primary outputs relating to safety, customer satisfaction, network connections and reliability, alongside indications about the form and strength of financial incentives for delivering these outputs.

The key elements of the RIIO model as it will be applied in the UK are summarised in Text Box 2.1.[12]

[12] A more detailed description of Ofgem's proposed application of the RIIO model is contained in the Ofgem (2010), *RIIO: A New Way to Regulate Energy Networks, Final Decision*.

Text Box 2-1: Key elements of Ofgem's RIIO model for network regulation

Key elements of RIIO as it will apply to electricity and gas networks in the UK include the following:

- Stakeholders are provided with greater opportunities to influence Ofgem and network companies' decisions.
- The outputs that network companies are expected to deliver – to ensure safe and reliable services, non-discriminatory and timely connection and access terms, customer satisfaction, limited impact on the environment and delivery of social obligations – are determined during the determination process. A network company is ultimately rewarded or penalised based on its performance against the targets (or secondary deliverables if a primary output cannot be defined with precision).
- Ofgem will set an up front price control to ensure the efficient delivery of outputs is financeable by committing to published principles for setting a weighted average cost of capital (WACC)-based allowed return to reflect the cash flow risk of the business over the long term.
- The onus is on the network companies to determine how best to deliver outputs over time, reflecting on the results of their stakeholder engagement and subsequently developing well-justified business plans.
- The price control is set for eight years, with provision for a mid period review of the outputs that network companies are required to deliver.
- Ofgem will employ a tiered approach to assessment following an 'initial sweep' – in terms of intensity and timescale – that will reflect the quality of an individual company's business plan, its record for efficient output delivery and with reference to appropriate benchmarks.

As Ofgem states:

> *Under RIIO, network companies, backed up by effective engagement with stakeholders and incentives, will work out how best to deliver. Companies that rise to the challenge and deliver for consumers will be rewarded, in terms of financial returns and a lighter touch regulatory approach that frees up management time to focus on running the networks.*[13]

Of particular note is Ofgem's guidance to DNSPs about its expectations with respect to customer engagement (outlined in its *Handbook for implementing the RIIO model*). Notable aspects include:

- Ofgem has not prescribed how companies should engage with their customers; rather, discretion is granted to companies about how best to understand and respond to the needs of their consumers;
- Ofgem will assess a company's engagement by considering the range of stakeholders whose views had been sought, the information provided to stakeholders and the form engagement took;
- Ofgem will assess the impact of engagement; companies should demonstrate how they used the views expressed through engagement and provide robust reasons where they have not made use of stakeholder views;
- companies may face less regulatory scrutiny if they demonstrate effective engagement; and
- Ofgem will measure customer satisfaction by considering the experiences of a range of users of network services and the extent to which the level/quality of engagement aligned with their expectations.

The administration of this model will generate lessons for Australian policymakers and regulators and should be closely monitored in the coming years. It will also rely extensively on appropriate benchmarks, which are considered in more detail in the next section.

[13] Ibid, page 11.

2.6 Network tariff reform

The Businesses have commented on issues of network tariff reform in their respective responses to the AEMC's Power of Choice review. However, the PC's Draft Report raised some points and made recommendations with respect to network pricing to which they would like to respond. These relate to:

- adequacy of the current NER in terms of their ability to accommodate revised tariff structures (Draft Recommendation 11.3); and
- opportunities to strengthen incentives for DNSPs to facilitate demand side participation in energy markets (Draft Recommendation 16.2).

As a general point, the Businesses consider there is sufficient flexibility in Chapter 6 at present to allow for a range of network tariff structures so further amendments to the NER with respect to pricing or AER publication of a mandatory tariff guideline are unnecessary. Moreover, the Businesses necessarily have the best understanding of their cost structures, the preferences of their various classes of customers and therefore, pricing structures that best reflect the long run marginal cost (**LRMC**) across their individual network.

In terms of a move towards time based pricing, the Businesses broadly agree with the PC when it states that it '*envisages that much of the necessary development work will occur within distribution businesses and the AER — including in regard to the methodologies for estimating LRMC and future demand within a time-based regime, supporting data collection, definitions of peak demand, and the options for translating all of this into network charges.'*

However, the Businesses do not agree that the current NER present an obstacle to network tariff reform or that further Rule changes – to strengthen the requirement for DNSPs to propose tariffs that reflect LRMC – are necessary in order to 'penalise distribution businesses that do not take reasonable steps along this path'.[14]

As a general point, the Businesses are of the view that increasing prescription in the pricing principles – particularly in relation to the concept of LRMC where its estimation will always incorporate a degree of imprecision – will only act to reduce flexibility for DNSPs to develop innovative and efficient network tariffs.

However, the main impact of network tariff initiatives is potentially lost if end users do not understand the contribution of different cost components on their electricity bills and there is no scope for them to understand the precise nature of their energy use. This means that network tariff reform may be undermined if it is not accompanied by:

- an effective, appropriately funded and DNSP administered AMI roll out (assuming an appropriate cost-benefit analysis can demonstrate a net benefit for electricity consumers);
- retailers not reflecting DNSP price signals in their retail tariffs; and
- other policy constraints being removed (such as the Victorian Government's moratorium on time of use tariffs).

The Businesses' positions were stated in respective submissions to the AEMC's Power of Choice review, the key points from which are briefly restated:

- cost reflective tariffs and locational pricing signals, as enabled by the installation of smart meters may assist in promoting the efficient use of the network; and
- the Businesses support the proposed "cost reflective network tariff" approach set out in the AEMC's Draft Report, subject to:
    - removal of the consumption thresholds, which are complex and unnecessary;

[14] Productivity Commission (2012), op. cit., page 397.

- flexibility to introduce other types of cost reflective tariffs that may assist in promoting the efficient use of the network including capacity / volume based tariffs and dynamic or critical peak pricing tariffs; and
- clarification of how the proposed 'time varying network tariff' approach will accommodate the Victorian Government's 'flexible tariff' initiative, which will commence from mid-2013.

These recommendations are further supported by the PC's Draft Recommendations with respect to the incentives for DNSPs to facilitate demand side participation and distributed generation.

3 Benchmarking

3.1 Introduction

The Businesses agree with the thrust of the PC's Draft Recommendations in relation to benchmarking (refer to Draft Recommendations 8.1 through 8.3, 8.6 and 8.7). They do however make the following key points:

- benchmarking should not be used as a substitute for the detailed proposal prepared by the DNSP, and the building block analysis provided in Chapter 6 of the NER;
- the NER already allow for the use of benchmarking approaches and indeed the AER has used such techniques extensively in past decisions;
- adjustments using partial indicators are critical to benchmarking being effective;
- where the adjustment of benchmark data using partial indicators is unable to account for all differences, the AER needs to ensure it has consulted on and understood the differences in uncontrollable cost drivers in the DNSPs which may explain some or all of the comparative differences between DNSPs; and
- the AER needs to ensure transparency of the benchmarking methodologies it intends to rely upon, and needs to consult more with DNSPs on the source, relevance, accuracy, interpretation and use of relevant data for benchmarking purposes.

3.2 Benchmarking as an enhancement to the building block approach

The regulatory regime has always relied to some degree on comparative analysis, whether that is from the individual consultants engaged by both the regulator and the DNSPs or analysis of performance through the use of formal benchmarking approaches. The use of benchmarks within these comparisons, either formally or informally, has been a large part of the assessment of prudence and efficiency. The formalisation of these comparisons has long been held out as solution to the reducing the regulatory burden faced by DNSPs and improving the correctness of regulatory decisions.

The PC makes the following observation on benchmarking, as it currently stands in the electricity regulatory framework:

> *At this stage, aggregate benchmarking models are ill suited to setting regulatory revenue allowances. However, benchmarking:*
>
> - *is a useful diagnostic tool that can help assess the reasonableness of bottoms-up proposals. More elaborate benchmarking should act as a discipline on proposals by network business and should be implemented as soon as possible*
> - *may facilitate negotiated arrangements that bypass the current costly and protracted regulatory processes. This 'short circuit' approach should only apply where the benchmarking models suggest that costs are reasonable*
> - *can provide information to consumers and others that provides pressure for improved performance by network businesses.*[15]

The Businesses are in broad agreement with the focus recommended by the PC in regard of these three points. The Businesses believe that benchmarking should play a role in the regulatory determination processes that relies primarily on the building block model approach to setting efficient costs for each regulatory period. As guided by the NER, benchmarking can be applied to assess the reasonableness of each element of the building block and at the total business level to get an idea on what cost drivers are affecting the overall efficient level of service delivery.

The Businesses are pleased that the PC recognises that replacement of the building block approach by a high-level (or aggregate) benchmarking approach is not an option at this stage of regulatory

[15] Productivity Commission, op. cit., page269.

development in Australia. A simplified stand-alone benchmarking application can be extremely problematic as data sets of comparable businesses are exceedingly difficult to develop.

The Businesses note that there appear to be no legal obstacles to appropriate use of benchmarking by the AER under Chapter 6 of the NER. As was stated in the Businesses' prior submission, the Businesses consider that the Chapter 6 Rules have not constrained the AER in effectively discharging its responsibilities as the economic regulator. The prior submission also indicated in an attachment the many ways the AER already uses benchmarking techniques to support its analysis of the bottom-up building block analysis. As has been stated by Professor Yarrow:

> *The evidence indicates that the AER has and does adopt benchmarking approaches, so the argument must be that the regulator would like to make greater use of the approach but is precluded from doing so by the sections of the rules that indicate that assessments need to be made which reflect the actual circumstances of the regulated firm. …*
>
> *It is therefore not clear to me that, even on a relative(ly) narrow interpretation, the rules do anything other than preclude uninformative benchmarking.*[16]

In conclusion, the Businesses support transparent use of benchmarking but believe it is important that regulators are accountable for its use and their analysis is clear and transparent. Where adjustments using partial indicators are not possible, consideration of the impact of differences in the network and customer characteristics and uncontrollable cost drivers should be made to better inform the comparison being made using benchmarks.

[16] Professor George Yarrow (2012), *Preliminary views for the AEMC*, p.17

4 Data errors

4.1 Introduction

In developing benchmarks and comparisons between DNSPs' performance on operational, expenditure or financial metrics, there is always the need to consult with stakeholders on interpretation of their data, how it will be used in benchmarking comparisons and how draft results will be published so that further stakeholder and public consultation can occur. Only in this way can inadvertent errors in data or the interpretation of data be clarified before regulatory decisions are made. Omission of such error checks may show a DNSP in a poor light, and this should be addressed before decisions are made.

4.2 Data errors in PC's Draft Report

A review of the data within the PC's Draft Report relating to the Businesses has identified a number of areas where the information requires updating or correction. We are pleased that the Commission has advised that it will make the appropriate adjustments to these data in its Final Report.

The PC's experience in this area helps to illustrate the benefit where network businesses are afforded the opportunity to review the use of data. From the Businesses' perspective this will be even more critical when the AER develops and utilises further benchmarking approaches as is required under the new Rules.

4.2.1 Figure 5.2 Overspending tends to increase later in the regulatory period and Figure 6.13 Annual capital expenditure above allowances in the period prior to AER regulation

The data presented for SA Power Networks (referred to as ETSA) in these two graphs is incorrect. Further it is not clear whether the graphs represent gross capital expenditure or net capital expenditure after allowing for customer contributions. Net capital expenditure is the expenditure used for updating the regulatory asset base and hence future customer prices. As detailed in Table 4.1 below, SA Power Networks underspent their net capital expenditure allowance by 14.5% over the previous regulatory control period and underspent by 13.8% in the final year of 2010.

Table 4-1: Capital expenditure data for SA Power Networks

	Year ended 30 June					$'000 Nominal
Net Capex	**2006**	**2007**	**2008**	**2009**	**2010**	**Total**
Actual	145,880.0	122,797.0	115,434.0	166,581.0	161,786.0	712,478.0
Allowance	152,723.8	159,814.4	162,140.7	171,201.6	187,746.9	833,627.3
Underspend ($)	6,843.8	37,017.4	46,706.7	4,620.6	25,960.9	121,149.3
Underspend (%)	4.48%	23.16%	28.81%	2.70%	13.83%	14.53%

4.2.2 Figure 4.9 Customer density differs between networks

It appears the PC has confused CitiPower and Powercor Australia data in developing this figure. Powercor Australia is the business with the customer density per km line of line below 10 in this figure, and not CitiPower. Refer to Figure 4.9 on page 162 of the PC's Draft Report.

4.2.3 Figure 6.1 Approved network revenues have risen

The Businesses are not sure what data source the PC has used to develop this figure, nor what methodology has been used for the calculation, but according to the Businesses' calculations CitiPower's revenue increased 4% in real terms and Powercor Australia's by 12% in real terms. The Businesses suspect the PC has somehow confused the DNSPs and the data associated with each. The percentage increases provided above have been calculated inclusive of the impact of the appeal outcomes and VBRC pass through allowances in the 2011 to 2015 period. Refer to Figure 6.1 on page 221 of the PC's Draft Report.