





# Agricultural Industries Electricity Taskforce

Submission to
Senate Inquiry into
The performance and management of electricity network companies

December 2014









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## 1. Introduction

The **Agricultural Industries Electricity Taskforce** (Communique at Attachment 1) made up of a group of Australia's key agricultural industry organizations, was established in September 2014. Its formation was driven by the crippling costs of electricity network charges on agricultural industries which is undermining the viability of rural businesses and impacting on the social and economic wellbeing of rural and regional communities. The Taskforce reached unanimous agreement to call on federal and state governments to take action to reform electricity network charging regimes.

Typically network charges represent around 50% of farmers' electricity bills, environmental charges 20%, and electricity usage making up less than 26%. Around 4% is reflected in administration charges. While it is acknowledged that the removal of the Carbon Tax will reduce the environment component of bills, real benefits will only be achieved from genuine reform of network charges which continue to have a highly distorting effect on the energy market.

The Taskforce proposes a package of measures designed to improve the energy productivity of Australian irrigated agriculture. These measures include reform of network charging that would deliver in the order of a 30% reduction in electricity prices.

This submission is provided by certain members of the Electricity Taskforce including:

- National Irrigators' Council (NIC) (NIC Electricity Position Statement Attach 2)
- NSW Irrigators' Council
- CANGROWERS
- Cotton Australia
- Central Irrigation Trust, SA

This introduction will provide summary information on irrigated agriculture and our (and our members') involvement in the electricity debate. The submission will seek to provide responses to the various questions that the Committee has raised.

## a) About irrigated agriculture

The total Gross Value of Irrigated Agricultural Production (GVIAP) for Australia was \$13.4 billion in 2012-13. Over the same period, the total Gross Value of Agricultural Production (GVAP) was \$48 billion. (Australian Bureau of Statistics)

## **b)** Agricultural Water Use in Australia (ABS)

- Australia's total agricultural water use for 2012-13 was 11.9 million megalitres, which was 2.9 million megalitres (32%) more than in 2011-12.
- More than two-thirds (72%) of this use was in the Murray-Darling Basin, which amounted to 8.6 million megalitres.
- Water applied for irrigation accounted for 93% of total agricultural water use nationally in 2012-13.









Table 1. Agricultural Water Use, year ended 30 June 2013 (ABS)

	Agricultural businesses	Agricultural businesses irrigating	Water applied for irrigation	Water applied for other agricultural purposes	Total water use t	Change in otal water use from 2011-12
	no.	no.	ML	ML	ML	%
NSW	42 141	7 584	4 975 585.1	226 277.5	5 201 862.6	39
Vic.	30 921	8 379	2 449 685.3	164 338.5	2 614 023.8	44
Qld	26 648	6 685	2 359 652.9	263 575.2	2 623 228.1	24
SA	13 039	4 279	769 097.4	73 786.2	842 883.6	17
WA	11 700	2 139	239 224.9	84 781.6	324 006.5	-4
Tas.	3 937	1 364	248 786.4	23 097.2	271 883.5	25
NT	462	191	17 891.7	32 502.7	50 394.4	-13
ACT	71	8	75.8	375.0	450.8	2
Aust.	128 917	30 629	11 059 999.4	868 733.8	11 928 733.2	32
MDB (a)	49 305	12 954	8 273 450.5	300 892.9	8 574 343.4	39
Non MDB	79 612	17 676	2 786 549.0	567 840.9	3 354 389.8	18

## c) Electricity Taskforce involvement in the electricity debate

Electricity Taskforce members became involved in the electricity debate in recent years after our members were experiencing the impact of sustained annual electricity price rises which have typically more than doubled prices over the last six years. Taskforce members have been involved at many levels, through federal and state governments, in the regulatory processes under the Australian Energy Regulator (AER) and Australian Energy Market Commission (AEMC) and in numerous meetings with the utilities.

Despite sustained hard work on regulatory and related issues, Taskforce members are frustrated at the byzantine complexity and bureaucracy of the electricity industry. The myriad of regulation appears out of touch and unaccountable, built on abstract theoretical ideas that are beyond the reality of the industry and its consumers.

There appears to be an entrenched culture of institutional and governmental blame shifting; one institution or government will refer us to another who will then refer us to a second who will then refer us back to the first. Governance and regulation of the industry appears to be split between many bodies, with prescriptive rules and processes impeding any change. While the institutions, governments and industry profess that they have the long term interests of consumers at heart, the Taskforce has not seen this in practice. In fact the evidence of industry profit and prices supports our own observations that shareholders are doing very well out of this industry, at the expense of electricity consumers.









We are seeking fundamental reform and have little confidence that incremental changes to the current arrangements will address our concerns. Most critically, independent and credible advice must be sought from those that do not have a vested interest in protecting the current institutions or arrangements. There is urgent need for fresh ideas, candour and imagination. It is hoped that this Senate Inquiry will establish the right mechanisms to deliver the fundamental changes that are urgently needed.

## 2. Response to Inquiry Questions

# a) The manner in which electricity network companies have presented information to the Australian Energy Regulator (AER)

The way information is presented to the AER is critically important in being able to set appropriate regulatory allowances. The arrangement adopted in the National Electricity Market (NEM) is known as the 'propose-respond' model; in other words the network businesses propose and the regulator responds to the businesses' proposals. The regulator may wish to accept the proposals or if it decides to reject them, the onus is on the regulator to explain why. This model was advocated by the network businesses and was adopted by the AEMC and formalised in the National Electricity Rules ("the rules"). Prior to these rules, in the economic regulation performed by the ACCC (for transmission networks) and state regulators (for distribution networks), the regulators determined the information requirements and businesses responded to the regulator's requests. While the networks also submitted their intentions and proposals, there was no obligation on the regulators to respond to these proposals. This arrangement mirrored those in Britain where there is not (and never has been) a formal obligation on the regulator to respond to the network businesses' proposals.

This 'propose-respond' arrangement creates massive advantage for network businesses relative to the regulator. It effectively places the onus of proof on the regulator to demonstrate that the businesses' proposals are wrong. While the AER is free to ask questions during the reviews and to seek information, it is not free to set the agenda – this has been established through the businesses' proposals and the regulator is therefore constrained to respond to those proposals and conduct its reviews accordingly.

This 'propose-respond' model provides an opportunity for the network business to effectively inundate the regulator through the weight of material that it provides. This is a well recognised 'regulatory strategy'. The Taskforce has analysed the quantity of information provided in the six electricity distributor revenue determinations currently under way. This is summarised in Table 2 below.









Table 2. Analysis of distributor regulatory submissions

Network service provider	Size of submission (Mega Bytes)	Number of documents and spreadsheets	Number of consultancy reports	Number of pages of revenue proposal (excluding spreadsheets)
Networks New	270 MB	41	29	AusGrid – 22,600
South Wales				Endeavour – 6,580
				Essential 15, 209
Energex	232 MB	101	At least 16	2,697
Ergon	949 MB	560	At least 18	8,549
SA Power	1000 MB	542	34	16,807
Networks				

The network businesses defend such massive submissions on the basis that this provides evidence to justify their proposals. But much larger and far more complex business transactions occur with regularity in competitive markets, without the need to resort to such large numbers of documents and spreadsheets. We contend that such large applications are not about evidence but about jeopardising the regulator's ability to respond. Inundating the regulator with material – that the regulator is required to refute - is an obvious regulatory strategy.

A consequence of this approach is that it also undermines consumer participation or critique, as we believe the network businesses intend. While the network businesses argue that they are customer focussed and seek to take account of consumer views, 1000 Mega Byte proposals with 500+ documents and spreadsheets and 20+ consultancy reports, suggests exactly the opposite.

That economic regulation has come to this, we believe, reflects a serious breakdown in trust and regulatory authority. In competitive markets, sellers attempt to convince buyers of their respective positions and reach mutually beneficial deals. Regulatory processes are meant to deliver the pressures provided by competition. We believe that the evidence around the way information is presented, which originates in the 'propose-respond' model and the preposterous proposals that it has spawned, speaks of the failure of regulatory processes to deliver the disciplines provided by competitive markets. The solution here is to apply the standard procedures in public administration: leave it to the regulator to ask the questions and get the businesses to respond to the regulator's questions. The subtle but critically important change of process, has major implications in correctly placing the onus of proof on the network to respond to the regulator's questions, not on the regulator to refute the network's proposals.

# b) Whether electricity network companies have misled the AER in relation to their weighted average costs of capital

The Electricity Taskforce contends that the network companies have misled the AER in relation to their weighted average cost of capital (WACC). The issues are complex and









regulatory design is the underlying reason for such failures. The remainder of our answer to this question explains this.

The determination of the WACC – an issue largely but not completely within the AER's discretion – is based on what the AER calculates to be the WACC of a 'benchmark efficient network service provider'. This calculation is, by design, meant to be abstracted from the actual cost of capital of the regulated firms.

In promoting their interests on the calculation of the WACC, network businesses therefore propose what they argue to be the WACC of the benchmark efficient network service provider. It is in these proposals that we consider the network companies have intentionally misled the AER. We focus on three aspects:

- the calculation of the cost of debt
- debt and equity raising costs and finally,
- income taxes.

Income taxes, debt and equity raising costs are compensated through cash allowances whereas the compensation for the cost of debt is determined as a percentage allowance to be applied to the regulated asset base.

In respect of debt costs, networks argue that their debt is high risk (they typically suggest BBB ratings). They also argue that the credit rating of their debt determines their borrowing costs. However the evidence from the actual yields on network bonds and the price paid for bank debt shows that network businesses' actual borrowing costs are much lower than implied by their credit ratings. This is because lenders recognise that networks are monopolies and hence that even though credit rating agencies may, for example, assess the credit rating of a network business to be, say, BBB. Its status as a monopoly means that actual credit risks are lower, and hence lenders are willing to lend money at much lower rates than implied by their credit ratings. We refer the Committee to the evidence submitted by the Energy Users Rule Change Committee to the AEMC in 2011, on actual network borrowing costs even during the peak of the Global Financial Crisis. We also refer the Committee to the advice to the AER by Associate Professor Lally and Chairmont Consulting<sup>1</sup>

With respect to income taxes, again a 'normative' model is applied (i.e. the specific circumstances are not examined) and the focus of argument on taxation allowances has been on the treatment of imputation credits. Network businesses have argued for much more favourable parameters, including successfully in the Australian Competition Tribunal, in applications for the review of the merits of the AER's decisions.

However the networks' arguments do not reflect the reality of the taxation that they incur. For example, the Queensland distributors, Energex and Ergon, were parties to an application

<sup>&</sup>lt;sup>1</sup> Chairmont Consulting 2012. DEBT RISK PREMIUM EXPERT REPORT









to the Australian Competition Tribunal (ACT) in 2010 to challenge the AER's decision on the imputation of dividends. But the full income tax of these government-owned distributors is paid directly to the Queensland Government. The imputation of their dividends is completely irrelevant. Although the distributors' argument prevailed in the ACT, the Queensland Government, to its credit, did not allow the Queensland distributors to raise their revenues by \$490m to increase tax charges to consumers. However in their latest revenue proposals to the AER (currently under review), these businesses have again sought tax arrangements that do not reflect their own circumstances (i.e. that dividend imputation is entirely irrelevant to them since the taxation is paid directly to their state government owners).

Whether the taxation allowances for the privately owned distributors properly represents their actual tax costs, is also not clear. For example for the coming regulatory period, SA Power Networks has proposed that electricity consumers be charged a little under \$450m. However their published financial statements in the current regulatory period shows that for the three years for each year data is currently available, SAPN received a tax *credit* of around \$4m. This may be due to the specific structure of SAPN and that taxes are being paid at some other level of the organisation. Taxation concerns also apply to the privately owned Victorian distributors where we understand the Australian Taxation Office is investigating several issues. This is a complex area, but relevant to electricity prices and we refer the Inquiry to it.

In respect of debt and equity raising allowances, which are worth often several hundred million over the course of a regulatory period, the AER again applies a 'benchmark' model. But again there is no evidence that the businesses, (particularly the government-owned networks), incur anywhere near the allowances they seek (and which the AER approves). In particular, the government-owned networks do not incur equity raising costs (they are owned by governments) and their debt is arranged by state treasuries which do not incur many of the costs that the networks seeks to recover from their customers (which are based on the false assumption that they are privately owned).

While the focus of our answer to this question has been on the network companies misleading the AER, we note that the AER supports the 'benchmark efficient' approach to the calculation of the cost of debt and equity and in respect of debt and equity raising costs. The AER has accepted many of the network businesses' claims despite compelling evidence that they are not supported by the evidence of their actual costs, and the AER has not acted on the advice of its advisors Professor Lally and Chairmont Consulting<sup>2</sup> Under the current regime, the networks are not required to disclose their actual borrowing costs. This must change.

<sup>&</sup>lt;sup>2</sup> Chairmont Consulting 2012. DEBT RISK PREMIUM EXPERT REPORT









# c) whether electricity network companies have misled the AER in relation to the necessity for the infrastructure proposed;

We believe that network companies have misled the AER in relation to the necessity for proposed infrastructure. This extends across many areas of operating and capital expenditure. In some cases, local communities and individuals have become deeply engaged in the details of various proposed investments and through their work have provided evidence to demonstrate inefficient over-investment. In this regard, we refer the Inquiry in particular to:

- Bruce Robertson and the Manning Alliance intervention in 2011 in a proposed transmission line by New South Wales transmission company, TransGrid, in the Manning Valley.
- In Victoria, we refer the Inquiry to work undertaken by shareholder advisor Dean Paatsche and journalist Michael West in respect of their investigations into the proposed terminal station augmentations at Brunswick, Melbourne by AusNet Services in 2012.
- In Queensland we refer the Inquiry to the on-going work of Paul Casbolt and VETO (who has made a submission to the Inquiry) in respect of power lines proposed by Energex in the Logan River valley.

Forensic analyses such as these are beyond the scope of this submission to review and argue, but we believe the Inquiry will benefit greatly in understanding the situation in each of these cases.

For higher level, industry-wide analysis of the evidence of unnecessary investment, we refer the Inquiry to Bruce Mountain's recent paper<sup>3</sup> published in the Utilities Policy journal, and also to the Productivity Commission's 2012 reports on the economic regulation of electricity networks in Australia.

The remainder of this sub-section will focus briefly on evidence that networks have misled the AER, particularly in respect of demand forecasts. We examine the evidence in this regard in respect of Energex and Ergon in Queensland. We believe that the concerns to which we draw attention here, apply to most other network businesses.

Table 3 below is taken from the AER's Final Decision in May 2010 in respect of Energex and Ergon's regulated revenues for the period from 2010 to 2015. It shows that Energex projected peak demand to increase by 3.8% per annum so that by the end of the regulatory period it would be 5,940 MW. The AER accepted this growth rate (it actually suggested an even higher rate of 4% although it expected demand to start from a lower level in 2010).

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<sup>&</sup>lt;sup>3</sup> Mountain, B.R. 2014. "Independent regulation of government-owned monopolies: An oxymoron? The case of electricity distribution in Australia. Utilities Policy 31 (2014) 188-196.







Table 3. Energex's maximum demand forecasts including demand management initiatives (MW)

Table 6.3: Energex's maximum demand forecasts including demand management initiatives (MW)

	2010–11	2011–12	2012–13	2013–14	2014–15	Average annual growth 2010–15 <sup>a</sup>
Energex original forecast	5126	5338	5633	5844	5941	3.8%
Energex revised forecast	5118	5376	5655	5814	5940	3.8%
AER draft decision forecast	4864	5027	5228	5466	5684	4.0%

Source: AER Final Decision, Regulated Revenue for Energy and Ergon, May 2010), page 40.

However, actually simultaneous peak demand in Energex's network has not grown at all. In fact it has declined as shown in Table 4 below, which is taken from Energex's revenue proposal for the period 2015 to 2020.

Table 4. Summer peak demand forecast 2005-06 to 2019-20

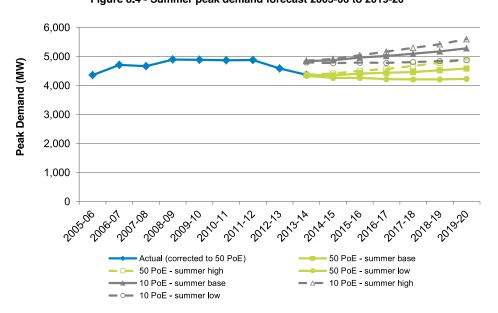


Figure 8.4 - Summer peak demand forecast 2005-06 to 2019-20

Source: Energex 2015-2020 Regulatory Proposal, page 96

Comparing the actual demand over the period 2010 to 2015 with what Energex had proposed shows a huge error. Whereas Energex projected that peak demand would reach 5,940 MW in 2015, the actual outcome is that it will be more like 4,200 MW, about 35% lower. Instead of growing at 3.8% per year as Energex has predicted, it has declined by 4%.



The same problem is evident in examining Ergon's prediction and outcomes. Table 5 shows that Ergon's projected average annual growth in peak demand of 2.9% so that there was a 50% probability it would exceed 3330 MW by 2014/15.

Table 5. Ergon Energy 50% PoE system maximum demand forecast (MW)

Table 6.4: Ergon Energy 50% PoE system maximum demand forecast (MW)

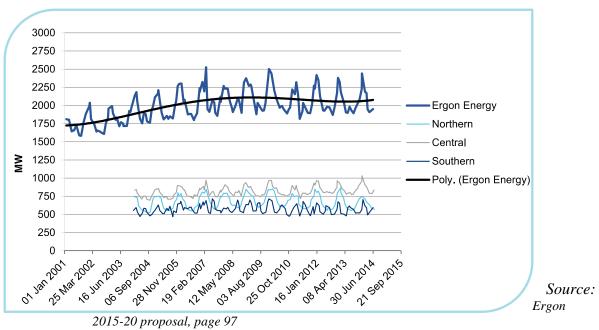
	2010–11	2011–12	2012–13	2013–14	2014–15	Average annual growth 2010–15 <sup>a</sup>
Original forecast	2967	3063	3153	3243	3330	2.9%

Source: AER Final Decision (2010, page 42)

Table 6 below taken from Ergon's proposal shows the actual outcomes. Peak demands reach their highest value in 2007 and are now on a declining trend. In the year to 2014, peak demand was less than 2,500 MW, 30% below the level that Ergon suggested had a 50% probability of being exceeded.

Table 6. Monthly maximum demand

Figure 16: Monthly maximum demand



The errors that Energex and Ergon made in their peak demand predictions were equally bad in respect of their predictions for energy distributed. This is shown in Table 7 below which compares the forecasts that Ergon and Energex produced in 2010, for energy distributed just









three years later (in 2013). It shows that they had over-estimated energy sales by around 20% - and this error is on predictions just 3 three years ahead!

Table 7. Comparison of actual and forecast energy distribution

	Energy distributed in 2013 (GWh)
Ergon forecast (in 2010)	16,874
Ergon actual	13,496
Energex forecast (in 2010)	24,042
Energex actual	21,055
_	

Source: AER 2010 to 2015 Regulatory decision and Energex and Ergon 2015-2020 proposals.

The network businesses, when challenged about their inaccurate demand projections, have typically responded that the future is uncertain and they cannot be blamed for factors beyond their control. We believe that this is an inadequate response. Consumer advocates strenuously argued during the 2010 regulatory decision that demand growth had been significantly over-estimated. Indeed, at the AER's 9 December 2014 regulatory forum in Brisbane, the Chief Executives of both Energex and Ergon stated that they realised soon after the regulatory control had been set in 2010, that demand would not expand as they had told the AER it would. As a result they realised they did not need to incur as much capital expenditure as they had been allowed by the AER to charge consumers.

We are sceptical that it was only after the AER's decision was made that there was a sudden realisation that demands had been over-forecast. Such large errors in demand projection so near into the future are implausible. We reiterate a key point: the regulatory arrangements provide incentives for the networks to invent needs and convince the regulator of those needs. These data seems to show clearly that this is exactly what has occurred.

# d) whether electricity network companies have misled the AER in relation to their regulated asset valuations;

The regulatory asset valuations are determined through a methodology set out in the Rules. There is limited ability for the network businesses to mislead the AER in respect of valuations. However, there may be flaws in the way that the roll-forward calculations are undertaken and this could have potentially significant affected regulatory valuations. While we are not suggesting that such flaws necessarily exist, we cannot be certain because an independent audit of the roll-forward calculations has not been undertaken.

However, whether or not networks have misled the AER on asset valuation, we suggest that the network assets are substantially over-valued not least in view of declining asset utilisation. We return to this in our answer to Question K.









e) whether electricity network companies have misled the AER in relation to actual interest rates claimed against actual borrowing costs;

Please refer to our response provided to question (c).

f) how electricity companies, including state government owned electricity companies such as Energex, have calculated the weighted average cost of capital and how this measure has changed over time;

Please see our response to question (b). An additional issue not covered in our response to (b) is the application by state governments of the 'Competition Principles Agreement'. This was a Commonwealth and jurisdictional government agreement in April 1995 intended to ensure that government owned businesses that compete with privately owned businesses do not crowd out the private sector through preferential access to capital or markets. The Commonwealth does not apply this to its government-owned monopolies (because obviously monopolies do not compete and so they do not crowd out the private sector). However state governments have chosen also to apply the 'competition principles' to their monopoly networks.

This has a very major impact on the prices charged by the networks. Specifically the application of the CPA effectively instructs the AEMC, and hence the AER, to assume that the government owned networks are privately owned and to set their WACC, tax allowances, debt and equity raising allowances as if they are privately owned.

This is portrayed by the government owned networks as treating private and government owned networks in the same way. This is an anomaly and ignores the fact that the government is the recipient of the income tax and allowances for debt and equity raising costs (which come back to the government via its Treasuries). Effectively this arrangement underwrites a significant tax on electricity consumers; it also has the significant effect of providing excessive incentives for capital expenditure (because this maximises revenues and hence profits). This more than any other factor, explains the big gap in the outcomes delivered by government and privately owned networks.

g) where anomalies are identified in relation to price structuring or allegations of price rorting by electricity companies, such as Energex, are raised, the possibility of these matters being investigated by a national independent body created by the Federal Government with the required powers and reach to investigate and prosecute, where necessary;

The Taskforce is not convinced that establishing a further national independent body will satisfactorily address allegations of price rorting by electricity companies. We have consistently argued against the proliferation of additional regulatory bodies. The existing bodies and the processes involved in regulation and price determinations, have to date been unable to demonstrate their effectiveness. The solution may well lie in a reconfiguration of the roles and responsibilities of existing bodies including the AER, the AEMC, the









Productivity Commission and the ACCC and examination of the role of state governments. The Taskforce supports the proposed COAG Energy Council review of the governance of energy markets (and regulation) and will be eager to participate and contribute to this review. (refer comments under COAG Energy Council Governance Review page 20 herein)

# h) to ascertain whether state-owned network companies have prioritised their focus on future privatisation proceeds above the interests of energy users;

The management of the networks that are expected to be privatised, particularly in NSW, is very focussed on privatisation. While this is not unreasonable our concern is that the shareholding governments are prioritising the sale prior to any reform of the regulatory arrangements and institutions. Evidence of this can be seen in the opposition that the AER is facing, from the NSW Government to its Draft Decision for the NSW distributors.

We are concerned that unless credible regulatory arrangements are established, a government monopoly will be replaced by a private monopoly but with continued inadequate regulation. Regulatory reform in the context of private ownership will be even more difficult since it will raise the prospect of sovereign risk for the new private investors. It is essential that the regulatory challenges are dealt with now as a priority, before privatisation.

# i) whether the arrangements for the regulation of the cost of capital are delivering allowed rates of return above the actual cost of capital;

Please refer to answers to questions (b) and (f). We supplement our answers to those questions in our answer to this question by presenting various evidence that suggests that allowed rates of return are far above the actual cost of capital, and that this is one of the main drivers of excessive industry profits.

The first evidence we refer to is the multiple to the regulated asset base, that private investors value the networks. If private investors are willing to pay more for a network than its regulated asset value, this means that investors think the businesses will deliver greater profits than the regulator thinks it will. The largest single variable affecting network profits is the allowed rate of return. By implication, a market valuation that is a premium to the regulatory asset valuation is strong evidence that the allowed rate of return is above the level that the regulator suggests is appropriate.

There is strong evidence that the market valuations are a substantial premium to regulatory asset valuations. Evidence of this was submitted in advice to the AER from the Consumer Challenge Panel in May 2014, which can be obtained from the AER's website. Other evidence is a presentation by a representative from the Energy Network Association at a forum organised by the Australian Institute of Energy in Sydney on 4 December 2014. At the forum the ENA representative stated that the ENA had calculated that in the last 17 network transactions, regulated networks had been valued by the market at a premium of around 40% to their regulated asset values. This is consistent with the Consumer Challenge Panel's









advice to the AER that investors imputed a much lower cost of capital than the AER had determined.

What has been the impact of excessive WACC? In Table 8 below we show the trend of the pecuniary benefit (after tax profits plus income tax equivalents plus debt guarantee/competitive neutrality fees) to the Qld government from its two distributors.

\$million? (nominal)? | CSOM | Income@ax@quivalents? | Competitive@neutrality@ees? | S1,500M | Profits@after-tax)? | S500M | S600M | S6

Table 8. Pecuniary benefits from electricity distributors in Queensland

Source: Financial statements, CME analysis

Table 9 presents information on pecuniary benefits that the NSW Government derives from its three distributors.

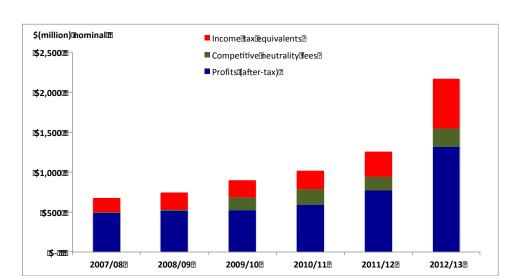


Table 9. Pecuniary benefits from electricity distribution in New South Wales

Source: Financial statements, CME analysis





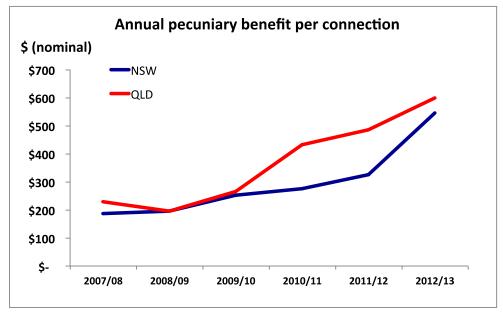




The after tax profits and income tax equivalents in NSW are lower in 2013/14 than they were in 2012/13. We have not shown this because we are no longer able to calculate the competitive neutrality fee income in 2013/14 because the relevant data to enable this calculation is no longer published and the NSW Government, and its distributors, refuse to disclose the competitive neutrality fee income that the distributors are paying to the Government.

In Table 10 we show the pecuniary benefits that the NSW and Qld governments obtain, per connection, from electricity distribution.

Table 10. Pecuniary benefits per connection from electricity distributors in NSW and Queensland



Source: Financial statements, CME analysis

Table 11 below focuses on the pecuniary benefit per connection delivered by the distributors in NSW and Qld by SA Power Networks in South Australia, and UK Power Networks in Britain. SA Power Networks and UK Power Networks have the same majority owner and shareholder — Cheung Kong Infrastructure - which is also the majority owner of several Victorian distributors.

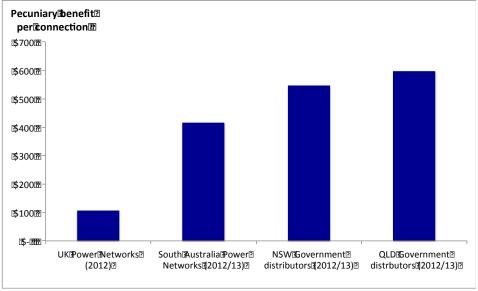
Table 11. Pecuniary benefits per connection for UK Power Networks, SA Power Networks, NSW and QLD distributors in 2012/13











Source: Financial statements, CME analysis

Table 11 shows that the Australian distributors are delivering far higher profits per connection than UK Power Networks. The main reason for this is much higher allowed rates of return in Australia (around 7% (real) in the current regulatory control period, compared to 4.7% (real) in Britain) and the much higher regulatory asset valuation in Australia.

Despite the insistence that new guidelines and reforms will address excessive profitability, we have observed that the share price of the listed networks (APA, CKI and DUET) on the Australian Stock Exchange has increased by around 35% relative to the All Ordinaries Index since the AER's Guidelines were finalised. The AER's Draft Decision for the NSW distributors has not negatively impacted their share prices – in fact they have risen since that decision.

# j) whether the AER has actively pursued lowest cost outcomes for energy consumers;

We consider that the AER has not always actively pursued the lowest cost outcomes for energy consumers. Or, to be more precise, we consider that the AER has not always actively pursued the long-term interest of consumers in the decisions it has made. We believe there are a number of reasons for this:

- 1. The AER has limited authority. The AER does not regulate network planning standards; nor does it have the ability to change the valuation of sunk costs (even if those sunk costs were unnecessary); it has limited influence over tax allowances charged to consumers; it has limited ability to determine the risk free rate of capital and has some, but not complete, control over other aspects of the cost of capital.
- 2. The arrangements for merits review of AER decisions have encouraged a high degree of risk aversion and an over emphasis on process at the expense of content.









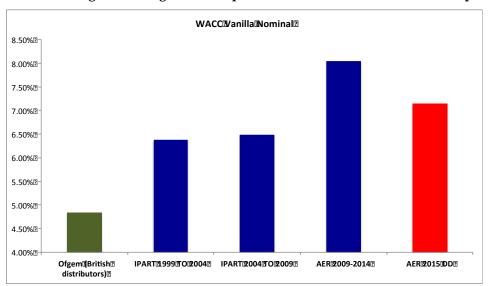
3. As the implementer of regulation designed, fundamentally, by the Australian Energy Markets Commission, the AER has a subservient, constrained role.

The AER's role in the regulation of electricity distribution exists as part of a federal jurisdictional government compromise whereby the jurisdictions would agree to the regulation of their distributors by the AER in return for constraints on the AER including through the creation of the AEMC and written 'rules. We question whether the recent changes to those rules or the minor changes to the arrangement for merits review (substantially rejecting the recommendations of the review panel) have meaningfully strengthened the AER's authority.

Notwithstanding these comments, we commend AER's application of benchmarks in its Draft Decision for the New South Wales distributors. The obligation to have regard to benchmarks in setting expenditure allowances has existed since the creation of the National Electricity Rules in 2006. Energy users have been calling on the AER to apply benchmarks in its decisions since that time.

However, it is clear from the Draft Decision that considerable progress remains to be delivered in other areas that affect electricity prices. For example, in respect of the WACC, the AER's Draft Decision has set a higher WACC than allowed by the NSW Independent Pricing and Administrative Tribunal (IPART) and considerably more than the British distributor has allowed distributors in Britain. This is shown in Table 12; the red bar shows the WACC set in the AER's recent Draft Decision and the Blue Bars shows the WACC set in the AER's last decision, and the two decisions by the previous regulator, IPART; the green bar shows the WACC set by Ofgem in Britain for British distributors.

Table 12. Weighted average cost of capital for distributors in NSW since corporatisation



Source: Regulatory decision, CME analysis. Note that all Australian decisions rebased to use consistent 2014 Risk Free Rate









#### k) whether network monopolies should have the right to recover historic overspending that has delivered unwanted and unused infrastructure;

The design of regulatory incentives that encourage efficiency is a specialist and complex area of industrial economics. It is impossible to know beforehand which investments will later prove to be useful; similarly it is impossible to know beforehand how much expenditure is needed to achieve a network service providers' various objectives. Even with the benefit of hindsight it can be difficult to be certain about which expenditures were wasted and which parts of the infrastructure are unwanted and unused.

Because of this, inevitably subjectively regulations designed to provide incentives for networks to deliver outcomes are sought. This approach has been pursued in the NEM, though in our opinion the AER and AEMC have been too willing to defer to these incentives and have failed to critical examine their significant failure, particularly in respect of government owned networks.

Regulatory asset valuations amongst distributors in the NEM (particularly those in NSW and QLD) are now extremely high by international standards. Table 13 compares the regulated asset values per connection of Australian government owned distributors (the red bars) with the privately owned distributors in Australia (the blue bars), New Zealand's two largest distributors (the black bars) and the British distributors (the green bars).

Regulated@asset@value@per@tonnection@(\$'000@per@tonnection)@ **\$14.000** \$12,000@ \$10,000 **₫8.000** \$6,000 \$4,000 **₫2.000** Liseartia Miles Bull Aurora Reserva Tride a during the test Ereon treeter

Table 13. Regulated asset value per connection in Great Britain, New Zealand and Australia

Source: regulatory accounts, CME analysis

The significant gap in the regulated asset values of the government and privately owned distributors has occurred following the reforms that led to the current regulatory arrangements. This is shown in Table 14.

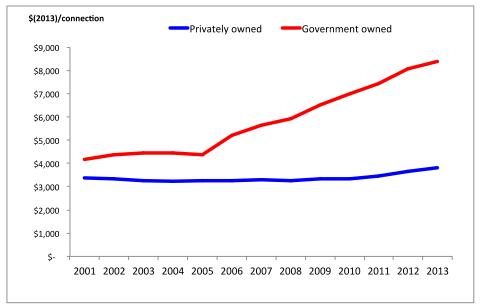
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Table 14. Trend of regulated asset value per connection for privately-owned and government-owned distributors



Source: regulatory accounts, CME analysis

Much of the infrastructure that has been expanded to meet rising demand was not needed and is consequently under used. Substantial reductions in electricity prices will require that the deadweight of this excessive capital stock is addressed. This should mean that asset values are written down to realistic levels, or that networks are not allowed to recover a financial return or charge consumers for the depreciation of assets that are unwanted and unused. This is the "used an useful" approach applied in the regulation of utilities in the United States.

The mechanism for the revaluation of network assets will require careful analysis.

# 1) how the regulatory structure and system could be improved;

It will be obvious from our answers to the previous questions that the Taskforce and its members are dissatisfied with the existing regulatory arrangements. We believe fundamental reform is needed, not the sort of minor 'fine-tuning' that has characterised so much of the regulatory debate to date, despite the clear evidence of very major failures. The Taskforce proposes the Inquiry consider the following reforms:

1. The Competition Principles Agreement should not apply to state government monopoly electricity networks. The application of this agreement to electricity networks is obviously contrary to the legitimate commercial and economic purpose of this agreement for government owned businesses that provide services in competitive markets. No longer subsuming the network monopolies under this agreement will mean that the economic regulation of the government owned monopolies will recognise the state government's ownership, and regulatory allowances for the cost of capital will be established accordingly. This will bring the regulation of government owned networks back into line with the long established









practice in Australia (which prevailed until the Competition Principles Agreement) and will mean that the economic control of government owned network monopolies in Australia will be consistent with the approaches adopted in the economic regulation of government owned networks in other countries including the United States, Germany, Austria and the Scandinavian countries.

- 2. Government owned network monopolies should be economically regulated by the state governments that own them. This is the long established tradition in Australia until the reforms that led to economic regulation initially by state government regulators and subsequently by the AER. The outcomes delivered by these ostensibly independent regulators have, as we have shown, been highly unsatisfactory. Political accountability for the prices charged by state government distributors must rest with the governments that receive their profits and taxes.
- 3. The excessive asset valuation must be addressed through write-down of the networks' assets. This is a complex issue and the appropriate mechanism to achieve this will need to be studied carefully.
- 4. We do not believe that the AEMC should have any role in the economic regulation of networks. The bifurcation of economic regulation between the AER and AEMC is a unique model internationally.
- 5. The form of regulation (specifically periodic price/revenue controls as opposed to other forms of regulatory control) should be reviewed. Such a review would be undertaken anyway if our second recommendation is pursued. This (fifth) recommendation therefore relates primarily to the economic regulation of privately owned distributors by the AER.

We recognise that our recommendation on regulatory design (and even more so institutional responsibilities) is a big change from the 'reforms' that led to the current arrangements around fifteen years ago. However we believe that the evidence justifies such fundamental changes.

Finally, in the context of possible privatisations in NSW and Qld, the question arises how partially privatised distributors should be regulated. This is a complex issue, but our view is that if 'privatisation' takes the form of minority private shareholder participation, and governments continue to retain majority ownership and control, then the network should be regulated by the government, not by the AER.

m) whether the arrangements for the connection and pricing of network services is discriminating against households and businesses that are involved in their own electricity production;

This is not applicable to our members. We fully support tariffs that reflect costs, and note that for many consumers that operate distributed generation this is likely to be mean lower







network charges, because those distributed resources help to reduce not increase network costs.

# n) whether the current system provides adequate oversight of electricity network companies; and

Please see the answers to our previous questions.

## o) any other related matter.

We draw the Committee's attention to two further issues:

- tariffs and
- the COAG Energy Council's recently announced 'governance' review.

#### i) Tariffs

We observe that network service providers are seeking to increase the proportion of their bills that are recovered through fixed charges. Some have argued for this on the basis that 'fixed costs should be recovered through fixed charges'. We believe they have confused sunk (historic) costs with (current) fixed charges. There is no basis in the theory of electricity pricing for sunk costs to be recovered through fixed charges. Raising fixed charges reduces the ability of our members to reduce their electricity bills by consuming less. It also negatively impacts the economics of distributed generation relative to grid-supplied electricity (which is exactly why the networks are raising fixed charges).

Demand charges are also a major concern for our members. Generally these demand charges are not differentiated by time of day, day of week or month of year. There is therefore little that our members can do to reduce demand charges by moving their peak demands to times that are likely to be more advantageous to the system and hence beneficial for other energy consumers as well. This is completely contrary to the insistence of the networks that they are pursing 'cost reflective' tariffs.x1

We understand that the AEMC intends to make changes to the National Electricity Rules to mandate that tariffs should be 'cost reflective'. We do not know what this will mean in practice, but we are concerned that networks will use 'tariff reform' as an opportunity to undermine the prospects for energy efficiency and distributed generation, both of which are competitive threats to their business. We encourage the Inquiry to also examine network tariff issues.

**Table 15. Impact of Demand Tariffs** 











I	Date	kWh	44	45		46		62	% Night	kWh/day	Days	Current Tariff	62	
1	21/09/2012	3251	\$ 56,280.99	\$ 50,351.69	\$	49,744.51	\$	564.34	87%	37.80	86	Possibl	e Savings	%
2	27/06/2012	39942	\$ 99,336.55	\$ 88,291.08	\$	86,456.90	\$	11,055.18	36%	434.15	92	44 -\$	283,617.57	-67.2%
3	27/03/2012	435954	\$ 150,065.83	\$ 138,505.06	\$	138,592.61	\$	97,041.59	48%	4494.37	97	45 -\$	243,416.11	-63.8%
4	21/12/2011	139010	\$ 116,053.72	\$ 104,387.81	\$	102,438.57	\$	29,458.42	59%	1448.02	96	46 -\$	237,113.06	-63.2%
5	16/09/2011	0	\$	\$	\$		\$		0%	0.00	0			0.0%
8	16/09/2011	0	\$	\$	Ş		S		0%	0.00	0			0.0%
7	16/09/2011	0	\$	\$	\$		5		0%	0.00	0	* Please check t	he tariff conditions	to
8	16/09/2011	0	\$	\$	S		5		0%	0.00	0	ensure that you	understand, accept	
9	16/09/2011	0	\$	\$	\$		\$		0%	0.00	0	and agree to the	se conditions.	
0	16/09/2011	0	\$	\$	Ş		\$		0%	0.00	0			
1	16/09/2011	0	\$	\$	Ş		Ş		0%	0.00	0	Demand kWh		
2	16/09/2011	0	\$	\$	\$		\$		0%	0.00	0	952.00 Max	imum	
	Low Voltage	618157	\$ 421,737.09	\$ 381,535.63	\$	375,232.59	\$	138,119.53	Aver	rage 534.53	371	855.50 Ave	rage	

Tariff 44, 45 and 46 are Demand Based tariffs while 62 is a volume base tariff. Total pricing is for the same amount of electricity used. Actual Tariff comparisons for a river pumping irrigator from St George, Qld.

## ii) COAG Energy Council's Governance Review

At its recent meeting, the COAG Energy Council announced a review of the governance of energy markets (and regulation). The review will commence in February 2015 and will report in September 2015. The Taskforce looks forward to participating in this review, but stress the importance of the review remaining independent of all governments; we also submit that the members of the Review Panel include internationally recognised experts drawn from outside the industry and respected for their independence, rigour and credibility.

## **Attachments**

Attachment 1: Communique, Agricultural Industries Electricity Taskforce
Attachment 2: National Irrigators' Council Electricity Position Statement