

Chapter 4

Regulation of the electricity market

Regulatory framework

4.1 As discussed in Chapters 2 and 3, regulation and oversight of the electricity industry in Australia is complex. Electricity markets are overseen by governments and operated and regulated by independent bodies funded from a mix of government and industry investment. Independent regulators are required to oversee the operation of the wholesale market, generators, network businesses and retailers.

4.2 The overarching responsibility for energy policy in Australia rests with the Standing Council for Energy and Resources (SCER). SCER is responsible to the Council of Australian Governments (COAG) and sets the general principles relating to national energy regulation.

4.3 Under the Australian Energy Market Agreement (AEMA) signed by the Commonwealth, state and territory governments in 2004, SCER also has general policy oversight of some relevant national energy legislative arrangements including the National Electricity Laws and Rules.¹

4.4 The National Electricity Law (NEL) is the foundation for the National Electricity Market (NEM) and establishes that all significant electricity industry participants in each relevant jurisdiction are required to participate in the single electricity market.² The law also sets out the National Electricity Objective (NEO) and revenue and pricing principles.

4.5 The National Electricity Rules (NER) govern the operation of the NEM. The rules have the force of law and are created by the NEL. The rules provide for the economic regulation of electricity distribution in relevant jurisdictions.

Economic regulation of electricity networks³

4.6 Electricity networks transport power from generators to customers. Transmission networks transport power over long distances, linking generators with load centres. Distribution networks transport electricity from points along the

1 Department of Resources, Energy and Tourism (DRET), *Australian Energy Market Agreement*, June 2004, available: www.ret.gov.au/Documents/mce/documents/IGA_FINAL_%2830JUNE2004%292004071310032320041112162849.pdf (accessed 12 October 2012), p. 6.

2 The National Electricity Law is a schedule of the *National Electricity (South Australia) Act 1996*. It is also applied, by virtue of jurisdictional Application Acts, as a law in each of the jurisdictions that participate in the National Electricity Market (NEM).

3 Information in this section has been drawn from Australian Energy Regulator (AER), *State of the energy market: 2011*, Australian Competition and Consumer Commission (ACCC), Canberra, 2011, pp 53–63.

transmission network, and criss-cross urban and regional areas to provide electricity to customers.

4.7 Energy networks are capital intensive and incur declining average costs as output increases or increasing average costs as output decreases. This means network services in a particular geographic area can be most efficiently served by a single supplier, leading to a natural monopoly industry structure.

4.8 It is for this reason that electricity networks are subject to economic regulation: the Australian Energy Regulator (AER) has responsibility for monitoring and regulating networks in the NEM while the Economic Regulation Authority (ERA) regulates networks in Western Australia (see Chapter 2).

4.9 The NEM has 13 major electricity distribution networks. Queensland, New South Wales (NSW) and Victoria having multiple networks that are monopoly providers within designated areas. The Australian Capital Territory (ACT), South Australia and Tasmania each have one major network. Western Australia has three major networks.

4.10 The transmission networks in Victoria and South Australia, and the three direct current network interconnectors between these two states are privately owned. Victoria's five distribution networks are privately owned, while the South Australian network is leased to private interests. The ACT distribution network has joint government and private ownership. All networks in Queensland, NSW and Tasmania are government controlled. The network in south west Western Australia is government owned and two networks in the north west of the state are privately owned.

4.11 The NEL lays the foundation for the regulatory framework governing electricity networks. The law establishes revenue and pricing principles, including that network businesses should have a reasonable opportunity to recover 'at least efficient costs'.⁴

4.12 In the NEM, regulated electricity network businesses must periodically apply to the AER to assess their revenue requirements (typically every five years). Chapters 6 and 6A of the NER lay out the framework that the AER must apply when assessing the revenue of distribution and transmission businesses.⁵

4.13 While the regulatory frameworks for transmission and distribution are similar, there are differences. In transmission, the AER must determine a cap on the maximum revenue that a network can earn during a regulatory period. The range of mechanisms is wider in distribution, but generally involves setting a ceiling on the revenues or prices that a network can earn or charge during a period.

4.14 The available methods to regulate revenue include:

4 National Electricity Law (NEL), section 7A.

5 Australian Energy Market Commission (AEMC), *National Electricity Rules: Version 51*, available: www.aemc.gov.au/Electricity/National-Electricity-Rules/Current-Rules.html (accessed 16 October 2012), pp 591–780.

- weighted average pricing caps—these allow flexibility in individual tariffs within an overall ceiling (used in the NSW, Victorian and South Australian networks); and
- average or maximum revenue caps—these set a ceiling on revenue that may be recovered during a regulatory period (used in Queensland, the ACT and Tasmanian networks).⁶

4.15 For either method, the AER must forecast the revenue requirement of a business to cover its efficient costs and provide a commercial return. The AER uses a building block model that accounts for a network's efficient operating and maintenance expenditure, capital expenditure, asset depreciation costs and taxation liabilities, as well as commercial return on capital.

4.16 Under the NEL, network businesses can apply to the Australian Competition Tribunal for review of an AER determination (a limited merits review). The mechanism was introduced on 1 January 2008 and its purpose is to provide parties affected by the decisions of the energy regulator—primarily transmission and distribution network businesses—with appropriate recourse to a review mechanism. There are limits placed on this mechanism, aimed at avoiding revisiting decisions which have been reached after extensive consultative processes, and minimising uncertainty.⁷

4.17 Of 72 matters that have been taken to the Tribunal by network service providers since 2008, network businesses were successful in 58 per cent of matters raised. In approximately 26 per cent of matters, the original decision was affirmed. The Tribunal's decision to remit matters to the regulator for re-determination affected approximately 10 per cent of matters raised.⁸

Criticisms of the current regulatory system

4.18 As detailed in Chapter 3, a large portion of recent electricity price increases have been attributed to rising costs in network services. A widely held view amongst submitters and witnesses was that regulatory failings have allowed network costs to increase and to be passed on to consumers.⁹

6 AER, *State of the energy market: 2011*, ACCC, Canberra, 2011, p. 57.

7 SCER, *Limited Merits Review*, available: www.scer.gov.au/workstreams/energy-market-reform/limited-merits-review/ (accessed 16 October 2012).

8 Electricity Networks Association (ENA), *Submission to the Limited Merits Review*, <http://www.scer.gov.au/files/2012/06/ENA-Supplementary-Letter-and-Submission-Tribunal-Review-Summary-22-June-2012.pdf> (accessed 29 October 2012).

9 For example see Independent Pricing and Regulatory Tribunal (IPART) NSW, *Submission 28*, p. 4; Origin, *Submission 47*, p. 3; Alinta Energy, *Submission 49*, p. 1; EnerNOC, *Submission 50*, p. 1; and Energy Users Association of Australia (EUAA), *Submission 56*, p. 1; and Mr Andrew Reeves, Chairman, AER, *Proof Committee Hansard*, 27 September 2012, p. 1.

4.19 For example, the NSW Independent Pricing and Regulatory Tribunal (IPART), which is responsible for regulating electricity retail prices for small consumers in NSW, informed the committee that it:

...consider[s] that recent network cost increases, which are responsible for most of the recent retail price increases, may be higher than necessary due to aspects of the regulatory framework which are contributing to inefficient outcomes.¹⁰

4.20 Similarly, the Consumer Action Law Centre (CALC) submitted that 'the regulation of monopoly infrastructure and the limited ability of the regulatory framework to limit ongoing prices' is one of the drivers for the ongoing price rises.¹¹

4.21 Professor Ross Garnaut stressed that:

The big increases in Australian electricity prices began in 2006 with the establishment of a new price regulatory system. This new regulatory system was the culmination of a structural change in the Australian electricity market in which generation, high-voltage transmission, distribution to users and retail sales to small users were placed under separate ownership and institutional arrangements.¹²

4.22 The AER informed the committee that 'weaknesses in the regulatory framework—that is, the rules that set out how the AER must regulate prices—have led to price increases beyond what has been necessary for a safe and reliable supply'.¹³

4.23 Perceived failures in the regulation of the NEM were a recurring theme throughout the inquiry. In particular, incentives to over-invest in network infrastructure, a lack of resources on behalf of the AER and the intent of the National Electricity Objective (NEO) were key concerns. These are discussed below.

Incentives to over-invest in network infrastructure

4.24 The committee received lots of evidence that the current regulatory framework creates incentives to over-invest in network infrastructure ("gold-plate")¹⁴ (see also Chapter 3). Two major incentives to over-invest raised during the course of the inquiry were the rates of return permitted for network service providers (NSPs) and reliability standards.

10 IPART, *Submission 35*, p. 4.

11 Consumer Action Law Centre (CALC), *Submission 24*, pp 1–2.

12 Professor Ross Garnaut, *Proof Committee Hansard*, 9 October 2012, p. 1.

13 Mr Andrew Reeves, Chairman, AER, *Proof Committee Hansard*, 27 September 2012, p. 1.

14 For example see Professor Ross Garnaut, *Proof Committee Hansard*, 9 October 2012, p. 1; AEMO, *Submission 39*, p. 3; Mr Andrew Reeves, Chairman, AER, *Proof Committee Hansard*, 27 September 2012, p. 1; Mr Robert Murray-Leach, Chief Executive Officer, Energy Efficiency Council (EEC), *Proof Committee Hansard*, 27 September 2012, pp 60–61; and Mr Bruce Mountain, *Submission 38*, p. 4.

Rates of return

4.25 Professor Garnaut identified what many considered to be a core problem:

Where we went wrong is: we adopted a rate-of-return regulation of price, and the rate of return was set too high. A lot of work has been done in economics dating back to a famous paper in the *American Economic Review* in 1951 by Averch and Johnson, warning about rate-of-return regulation and noting that if you set the rate of return too high you will get wasteful overinvestment and a ratcheting-up of prices. It is that classic problem that is at the core of the Australian electricity price increases of the past half-dozen years.¹⁵

4.26 Professor Garnaut continued:

It is basically a riskless rate of return; there is not even exposure to the market, so that if demand falls, price is increased to make sure that companies get their guaranteed rate of return. So, as the demand price has fallen, prices have had to be increased even more than the otherwise would have been. Of course, if price then goes up in response to demand falls, then demand falls even more. A completely unsustainable situation can emerge and I think that we are in that unsustainable situation now.¹⁶

4.27 It was also argued by the CALC that the revenue generated by NSPs is facilitated by the current regulatory framework:

At the network level, which is monopoly regulated, price increases are driven by not only a need for new investment to replace the ageing infrastructure and the well-documented peak demand problem but also the regulatory system itself which has been shown to have a limited ability to limit ongoing cost increases and may actually encourage the building of assets where cheaper options are possible.¹⁷

4.28 Mr Bruce Mountain submitted that the existing regulatory environment is not working and some significant changes are required.¹⁸ Mr Mountain argued that consideration needs to be given to the ownership structure of network businesses and the continued application of five year price controls.¹⁹ He further claimed that:

Institutional arrangements also merit review. Candid consideration of the political economy of economic regulation by a federal agency, of the income and profits of state government owned service providers is needed.²⁰

15 Professor Ross Garnaut, *Proof Committee Hansard*, 9 October 2012, p. 1.

16 Professor Ross Garnaut, *Proof Committee Hansard*, 9 October 2012, p. 2.

17 Ms Catriona Lowe, Co-Chief Executive Officer, CALC, *Proof Committee Hansard*, 27 September 2012, p. 33.

18 Mr Bruce Mountain, *Submission 38*, p. 21.

19 Mr Bruce Mountain, *Submission 38*, pp 22–23.

20 Mr Bruce Mountain, *Submission 38*, p. 23.

4.29 Network businesses strongly refuted claims that their rates of return were inefficient or unreasonable.²¹ They opined that the current regulatory regime does not encourage over-investment and instead rewards efficient and effective investment:²²

...I believe that the regulatory regime at present provides incentives for businesses to defer capital expenditure rather than to over-invest. In fact, the transmission businesses have been actively seeking to defer investments. I give two examples here. Powerlink in Queensland had diverted construction of its first 500kV circuit by a period of four years. That is around \$380 million to \$420 million of expenditure. TransGrid New South Wales has sought to defer projects. A major supply project to the west of Sydney was deferred for a year from 2009. We are currently building a project in Western Sydney which we have pushed back through contracting demand-side support for it, and we have also just recently reviewed two major commission line projects in the far north of the state and on the mid-north coast. We are seeking to defer both of those projects for a number of years. I would suggest that the incentive regime encouraged commercially-focused businesses to not build capital expenditure, and the evidence points to that being a fact.²³

4.30 Grid Australia, the peak body representing the owners of all major electricity transmission networks in the NEM and in Western Australia, argued that the current incentive-based approach to regulation developed over the past 15 years is sound policy.²⁴ According to Grid Australia, the current rules 'largely get the balance right'.²⁵

4.31 Similarly, the Energy Networks Association (ENA), the peak body representing network businesses, argued that the current system does not allow for wasteful investment:

...there is a decision made by the regulator about what is an appropriate level of capital expenditure to make over a five-year regulatory cycle. The capital budget and the operating budgets are approved by the regulator in advance on the basis of forecasts. There is not a capacity to simply invent projects. All the proposals are backed by a solid business case. They are assessed by the regulator and the regulator has on all occasions reduced those bids to what they think is the appropriate level. Sometimes those reductions in the capex budget have been significant; sometimes they have been as high as 30 or 40 per cent on the basis of the regulator's best judgement about what the appropriate capital expenditure is.²⁶

21 For example see Grid Australia, *Submission 51*, p. 6; and Dr Malcolm Roberts, Chief Executive, ENA, *Proof Committee Hansard*, 9 October 2012, p. 23.

22 For example see Dr Malcolm Roberts, Chief Executive, ENA, *Proof Committee Hansard*, 9 October 2012, p. 23.

23 Mr Peter McIntyre, Chairman, Grid Australia, *Proof Committee Hansard*, 25 September 2012, p. 35.

24 Grid Australia, *Submission 51*, p. 6.

25 Grid Australia, *Submission 51*, p. 7.

26 Dr Malcolm Roberts, Chief Executive, ENA, *Proof Committee Hansard*, 9 October 2012, p. 25.

4.32 The ENA also argued that government policy should concentrate on the real causes for higher network costs rather than crudely imposing more regulation on network businesses.²⁷ The ENA argued that changes to the whole electricity industry are needed to stem increasing electricity costs. According to the ENA:

Governments have balked at introducing the retail price reforms essential to curbing the growth of peak demand. Mandatory reliability standards have succeeded in improving service delivery to customers but arguably at a cost which sections of the community now find difficult to absorb. The roll out of smart meters, so important to empowering customers, has stopped at the Victorian border. The regulatory system does not provide the commercial incentives necessary to accelerate demand side participation.²⁸

4.33 Both the Australian Energy Market Commission (AEMC) and AER believed that the current regulatory framework incentivises over-investment because of the relationship between consumption volumes and profits, and the potential for over recovery of revenue. In the *Power of Choice* draft report (PoC report), the AEMC noted that:

[W]hen a network business develops tariffs which are based on consumption volumes, its profits could depend upon the level of actual volumes. Under such a tariff structure, the business would have no incentive to pursue any form of DSP project (or energy efficiency project) which decreases volumes.²⁹

4.34 Analysis by the AER indicates that there is the potential for substantial over recovery of revenue:

In the Victorian 2006–10 regulatory control period, the AER asserted there was over recovery of revenue of \$568 million (in 2010 values) above the adjusted forecast. This represents an over recovery of revenue of 8.28 per cent annually for each distribution business.³⁰

Reliability standards

4.35 Reliability standards were another commonly cited defence for over-investment.³¹ In response to claims that NSPs are the 'villains of the industry' who gold-plate and profiteer, Mr Peter McIntyre, Chairman of Grid Australia, retorted:

27 ENA, *Submission 64*, p. 1.

28 ENA, *Submission 64*, p. 1.

29 Australian Energy Market Commission (AEMC), *Power of Choice – giving consumers option in the way they use electricity draft report*, 6 September 2012, p. 127.

30 AEMC, *Power of Choice – giving consumers option in the way they use electricity draft report*, 6 September 2012, p. 127, from the AER, *Preliminary positions, Framework and Approach Paper for NSW Distribution businesses*, June 2012, p.55.

31 See for example Mr Andrew Reeves, Chairman, AER, *Proof Committee Hansard*, 27 September 2012, p. 4; Mr Nino Ficca, Managing Director, SP AusNet, *Proof Committee Hansard*, 27 September 2012, p. 13; and Dr Malcolm Roberts, Chief Executive, ENA, *Proof Committee Hansard*, 9 October 2012, p. 23.

I would ask on what basis they make that assertion. At a transmission level, our network in this country is built consistent with the standards that apply in almost all First World countries. The reliability you get in Australia is consistent with what you would get and expect in Japan, England, America or any other First World country. I do not regard that as gold-plated at all. In fact, the regulatory regime requires us to demonstrate that each investment is efficient at the time we make it, so in essence I do not agree with that comment at all.³²

4.36 The ENA,³³ SP AusNet,³⁴ Energex,³⁵ and Ergon Energy Corporation³⁶ argued that reliability standards had required network investment and thus had a role in recent electricity price rises.

4.37 Other submitters and witnesses acknowledged the need for reliability while emphasising that reliability standards must be set in the interests of consumers:

What we are really advocating is to also include reference to affordable access in there, because, if we have the most efficient market, one that is reliable, but people cannot afford to access it, we are not sure how that is in the long-term interests of consumers.³⁷

4.38 And:

The reliability standards set out in the network operators' licence conditions reflect judgements made by Government (on the community's behalf) of the level of service (and the associated cost) valued by the community. In determining these standards governments should consult with electricity consumers—both business and residential customers—to understand the different benefits they enjoy from a more reliable supply of electricity and the extent they would be willing to pay for these benefits through higher energy prices.³⁸

4.39 The Department of Resources, Energy and Tourism (DRET) advised the committee that reliability standards are 'currently under examination by the Australian Energy Market Commission' and that this process 'looked specifically first at

32 Mr Peter McIntyre, Chairman, Grid Australia, *Proof Committee Hansard*, 25 September 2012, p. 41.

33 Dr Malcolm Roberts, Chief Executive, ENA, *Proof Committee Hansard*, 9 October 2012, pp 23 and 30.

34 Mr Nino Ficca, Managing Director, SP AusNet, *Proof Committee Hansard*, 27 September 2012, p. 13.

35 Mr Darren Busine, Acting Chief Executive Officer, Energex Ltd, *Proof Committee Hansard*, 3 October 2012, p. 27.

36 Mr Ian McLeod, Chief Executive, Ergon Energy Corporation Ltd, *Proof Committee Hansard*, 3 October 2012, p. 28.

37 Ms Carolyn Hodge, Senior Policy Officer, Energy and Water Consumers' Advocacy Program, PIAC, *Proof Committee Hansard*, 25 September 2012, p. 61.

38 IPART, *Submission 35*, p. 7.

distribution standards within New South Wales, and it is now moving on to consideration of national distribution reliability standards'.³⁹

Removing incentives to over-invest in network infrastructure

4.40 A variety of ways in which incentives to over-invest in network infrastructure could be addressed have been suggested, during this inquiry and elsewhere (such as the *Power of Choice* review and the *Economic Regulation of Network Service Providers* rule change).

4.41 The Australian Energy Market Operator (AEMO) recommended that:

Regulatory arrangements should focus on rewarding businesses for supplying services, focusing on providing returns for valued services and not for the number of assets built. To complement a revenue-setting arrangement that focuses more on rewarding businesses for the services provided, a planning approach which considers the customer's value on the service provided from the network investment would provide a better price-service balance.⁴⁰

4.42 Dr Paul Troughton of EnerNOC advised the committee that "a carrot and stick" approach to regulation is needed, offering rewards where network businesses make savings and creating disincentives when efficient investment does not occur. Dr Troughton stated:

The networks have a strong preference for going out and building infrastructure. Everyone recognises this, and we need some way of fixing this. Basically, I think it means we need to have a more hands-on regulatory approach. It has been very laid-back, "We'll trust that they know what they're doing", a sort of broad-brush approach. It needs to be more hands-on, it needs to have targets and it needs to have sticks and carrots as well. The idea is that it should be self-evident to the network businesses...that it is in their best interests to avoid doing capital works where it is more efficient to do something else.⁴¹

Committee comment

4.43 Whilst acknowledging that electricity network infrastructure is a long-lived capital asset that requires maintenance and upgrading (particularly as it ages), as well as the relationship between reliability standards and network investment, the committee is swayed by the weight of evidence suggesting that the current regulatory framework not only permits but incentivises inefficient over-investment in network infrastructure. The committee considers that the current regulations, particularly in regard to rates of return, have substantially driven electricity prices directly and have effectively "poured petrol" on other smouldering price pressures (see Chapter 3).

39 Mr Brendan Morling, Head, Energy Division, Department of Resources, Energy and Tourism (DRET), *Proof Committee Hansard*, 9 October 2012, p. 70.

40 AEMO, *Submission 39*, p. 3.

41 Dr Paul Troughton, Manager of Regulatory Affairs, EnerNOC, *Proof Committee Hansard*, 27 September 2012, p. 68.

4.44 The committee is convinced that significant changes are required in setting rates of return for network businesses. The committee therefore recommends that the process for determining rates of return must be more robust and based on guidelines developed and reviewed every three years in consultation with stakeholders. The guidelines should include appropriate frameworks for total expenditure (totex), capital expenditure (capex) and operational expenditure (opex). The guidelines should also ensure that frameworks for determining return on debt and equity are appropriate in the post-GFC context. Further, the framework should permit the AER to have regard to the effects of inefficiently delaying or bringing forward capital expenditure.

4.45 On this basis, the committee supports the proposed changes in the AEMC *Economic Regulation of Network Service Providers* rule change that seek to amend the ways in which return on capital, return on debt, opex and capex are estimated or forecast for NSPs. It is the committee's understanding, however, that the rule change does not propose to include a requirement for totex to be estimated and considered by the AER: it is the committee's view that totex should be considered by the AER when making network determinations.

Recommendation 3

4.46 **The committee recommends that:**

- **rates of return for network service providers are estimated using a robust process based on guidelines developed and reviewed every three years in consultation with stakeholders;**
- **the proposed amendments in the AEMC *Economic Regulation of Network Service Providers* rule change regarding methods for forecasting return on capital, return on debt, opex and capex are implemented as part of that rule change process;**
- **the AER should also be required to consider forecast totex when making network determinations; and**
- **SCER direct the AEMC to examine arrangements for AEMO to be the single planning agency for the NEM with responsibility for forecasting, network planning, national reliability standards and operating tenders for integrated assessment of network and non-network options.**

4.47 With respect to the relationship between network businesses' profits and electricity consumption, the committee notes the recommendation in the PoC report that 'the pricing principles in Chapter 6 of the NER [dealing with Economic Regulation of Distribution Services] need to be amended to provide greater guidance on how network businesses should set their tariffs to reflect the costs' in an attempt to decouple network profits from consumption volumes.⁴² The committee supports attempts to decouple network revenues from energy volumes and therefore recommends that the AEMC implement an appropriate rule change.

42 AEMC, *Power of Choice – giving consumers option in the way they use electricity draft report*, 6 September 2012, p. 127.

Recommendation 4

4.48 **The committee recommends that:**

- **the AEMC implement the rule change proposed in the *Power of Choice* draft report to amend the pricing principles of Chapter 6 of the NER so that greater guidance is provided on how network businesses should set their tariffs to reflect costs; and**
- **the AER implement measures to decouple network revenues and energy volumes.**

4.49 The committee acknowledges the need for reliability standards and is aware that consumers broadly do not understand the relationship between reliability, network infrastructure and electricity price rises. The committee supports the ongoing use of reliability standards but also supports the calls from some stakeholders for these to be set in a way that upholds the long term interests of consumers.

4.50 The committee welcomes the AEMC's examination of reliability standards in NSW and its consideration of national distribution reliability standards. As part of this process, the committee believes that the AEMC should independently set national reliability standards which take into account consumers' perceived value of reliability. This would ensure that the interests of consumers are central to reliability standards, and would bring greater transparency to and confidence in these standards.

4.51 Further, the committee believes that national reliability standards should be set independently of those businesses that derive income from network infrastructure investment (that is NSPs) to address any perceived or actual conflict of interest.

Recommendation 5

4.52 **The committee recommends that the AEMC set and AEMO implement national reliability standards that take into account consumers' perceived value of reliability and in a way that is independent of businesses that derive income from network infrastructure.**

Ex post scrutiny powers

4.53 During the course of the inquiry, the committee was informed that the Economic Regulation Authority (ERA) (Western Australia) has scrutiny powers that enable it to conduct ex post reviews of capex by network businesses in the market it regulates:

...the ERA's powers under the Electricity Networks Access Code allow it to exclude capital expenditure from Western Power's [the Western Australian electricity network provider] regulatory asset base that it considers inefficient. This power, which extends to forecast investment (ex ante), *and to actual investment* (ex post), has helped to ensure that capital expenditure is efficient. By way of example, \$261 million (\$ as at 30 June 2009) of

incurred capital expenditure from the first access arrangement was disallowed in the second access arrangement decision.⁴³

4.54 It was subsequently recommended to the committee that similar powers be given to the AER to allow it to scrutinise actual network expenditure against that forecast.⁴⁴ For example, Professor Garnaut stated:

...there should be closer interrogation of proposals for investment, and ex post review of what actually happened in implementation of those proposals is appropriate.⁴⁵

4.55 In direct response to the question as to whether the AER should be given ex post scrutiny powers, the AER told the committee:

When it redesigned the regulatory framework in 2006, the AEMC decided against the use of ex-post reviews of capex efficiency on grounds that they are intrusive and undermine regulatory certainty. Instead, the AEMC preferred to rely on ex ante measures to create incentives for efficient expenditure.

The AEMC has subsequently revised its position. The draft determination on the network regulation rule change proposes the use of ex-post reviews of capex efficiency. If the AER forms the view that the network business has spent in excess of efficient levels, then the AER would be able to preclude inefficiently incurred capex (above the capex allowance) from being rolled into the Regulatory Asset Base (RAB). The AEMC also proposes to require the AER to make a statement on the efficiency of capex going into the RAB in its draft and final determination for each network business.

...

The AEMC's proposed approach to ex-post reviews provides an appropriate balance between providing investment certainty for network businesses and providing incentives to invest efficiently. Network businesses would have flexibility to spend in excess of allowances when necessary while retaining incentives to incur only efficient capex.

...

The use of ex-post reviews is likely to make network businesses more cautious about incurring capex in excess of their regulatory allowances. It removes the risk—which is present under the current regime—that network businesses may be incentivised to spend in excess of allowances.⁴⁶

43 Economic Regulation Authority (ERA) (WA), *Submission 81*, p. 3.

44 See Professor Ross Garnaut, *Proof Committee Hansard*, 9 October 2012, p. 3; and Mr Andrew Reeves, Chairman, AER, *Proof Committee Hansard*, 27 September 2012, pp 1–2.

45 Professor Ross Garnaut, *Proof Committee Hansard*, 9 October 2012, p. 3.

46 AER, *Answer to written question on notice*, pp 3–4.

Committee comment

4.56 It appears that ex post scrutiny powers would strengthen the AER's ability to regulate NSPs and network investment. As noted by the AER itself, such scrutiny powers would also, at least in part, address the current incentives for network businesses to over-invest in network infrastructure. The committee notes that the current AEMC *Economic Regulation of Network Service Providers* rule change proposes to give the AER the ability to conduct 'ex post reviews of capex efficiency' and, in the AER's words, this 'approach to ex-post reviews provides an appropriate balance between providing investment certainty for network businesses and providing incentives to invest efficiently'.⁴⁷

4.57 The committee agrees that the AER should be given ex post scrutiny powers and therefore supports this proposal in the AEMC rule change.

Recommendation 6

4.58 The committee recommends that the proposal in the AEMC *Economic Regulation of Network Service Providers* rule change to give the AER ex post scrutiny powers is implemented as part of that rule change process.

Limited merits review

4.59 Another aspect of the AER's ability to regulate network businesses that was considered deficient was the limited merits review process and network businesses' ability to challenge the regulator's determinations (see also Chapter 3). The committee heard that it was too easy for NSPs to challenge the AER's decisions, that NSPs frequently did so and more often than not were successful in having the AER's decisions overturned.⁴⁸

4.60 Professor Garnaut considered that the regulator would be more effective at controlling excessive price increases if it was able to counter-appeal decisions made by the Australian Competition Tribunal in the limited merits review process.⁴⁹ Professor Garnaut suggested that this 'unusual...imbalance' should be removed:

It [the AER's decision] can be appealed by players in the industry and there is no opportunity for counter appeal by the regulator. So removing that unusual business imbalance, in which those who want higher prices can appeal the regulated outcomes but there cannot be a general counter appeal by the regulator, would make a contribution. If that were removed it might simply be a matter of the regulator applying, more rigorously, commercial and economic principles, because there is no doubt that the rate of return has been set substantially in excess of the supply price of investment to this industry.⁵⁰

47 AER, *Answers to written questions on notice*, pp 3–4.

48 See for example Mr Brian Green, Chairman, EUAA, *Proof Committee Hansard*, 27 September 2012, p. 27; EUAA, *Submission 55*, p. 1; and IPART, *Submission 35*, p. 6.

49 Professor Ross Garnaut, *Proof Committee Hansard*, 9 October 2012, p. 2.

50 Professor Ross Garnaut, *Proof Committee Hansard*, 9 October 2012, p. 2.

4.61 The limited merits review regime was seen by IPART as a beneficial process for allowing network businesses to review decisions made by the national energy regulator.⁵¹ However, IPART also felt that the limited merits review did not allow the Australian Competition Tribunal to properly consider the merits of individual component decisions in the context of the AER's whole determination in respect to the National Electricity Objective.⁵²

4.62 IPART opined that where a network business contests a specific regulatory decision, the review body should be able to consider this decision in the context of the whole determination. According to IPART:

This would give further incentive to the network businesses in considering whether they could end up worse off rather than, as at present, knowing that they will be neutral or better off, as a result of a review.⁵³

4.63 IPART also considered that customers should play a greater role in the merits review process.⁵⁴

4.64 IPART's views appear in part to be in agreement with recommendations in the SCER Expert Panel *Review of the Limited Merits Review Regime Stage Two Report*.⁵⁵ At the direction of SCER, this independent expert panel—comprising Professor George Yarrow, the Hon Michael Egan and Dr John Tamblyn—conducted a review of the limited merits regime from March to October 2012.

4.65 The *Review of the Limited Merits Review Regime Stage Two Report* made a number of recommendations, including that:

- the aim of the merits review regime should be to promote efficiency in the investment, operation and use of networks;
- there should be a single ground for appeal;
- applications for review should be open to regulated network businesses, energy ministers, consumer representatives and other parties with a material interest in the decision; and
- the appeals function of the Australian Competition Tribunal should be transferred to a new review body that is fully administrative in character.⁵⁶

51 IPART, *Submission 35*, p. 6.

52 IPART, *Submission 35*, p. 6.

53 IPART, *Submission 35*, p. 6.

54 IPART, *Submission 35*, p. 6.

55 Professor G. Yarrow, the Hon. M. Egan and Dr J. Tamblyn, *Review of the Limited Merits Review Regime: Stage Two Report*, 30 September 2012.

56 Professor G. Yarrow, the Hon. M. Egan and Dr J. Tamblyn, *Review of the Limited Merits Review Regime: Stage Two Report*, 30 September 2012, pp 37–56.

Committee comment

4.66 The committee welcomes the independent expert panel's *Review of the Limited Merits Review Regime Stage Two Report* and acknowledges that many of the recommendations therein may address some of the concerns raised about the limited merits review regime as it currently operates. The committee urges SCER to thoroughly consider the applicability of the recommendations in the report, particularly where implementing these may improve regulation of the NEM in the interests of consumers.

Resourcing the AER

4.67 The committee heard criticism about the AER's resourcing, with some submitters and witnesses suggesting that the AER did not have the skills and expertise necessary for it to fulfil its role.

4.68 Grid Australia believed that greater resources for the AER would assist the regulator to interrogate data and information presented to it by NSPs.⁵⁷ The Chairman of Grid Australia, Mr Peter McIntyre, told the committee:

...Grid Australia members would like to see the Australian Energy Regulator strengthened to become a highly credible, independent body, so that it can make well-informed assessments that balance the needs of the sector and consumers. We believe this can be achieved through greater resources being allocated to the AER, better corporate knowledge and skills to ensure competency, and greater credibility within the investment community.⁵⁸

4.69 Grid Australia highlighted that the electricity networks regulated by the AER are worth billions of dollars and therefore the regulator must have the technical skills required to understand the business cases of network operators. According to Mr McIntyre:

The networks [the AER actually regulates], in gas and electricity, are worth about \$65 billion, so I think the industry expects them to have the knowledge of the industry, not only the economic and legal but also the engineering competence, and the ability to engage with businesses in a deep and constructive way to truly understand the businesses' needs and business cases.⁵⁹

4.70 Dr Paul Troughton of EnerNOC suggested that network businesses attempt to overwhelm the AER with detail in order to prevent the regulator from making effective decisions:

57 Grid Australia, *Submission 52*, p. 6.

58 Mr Peter McIntyre, Chairman, Grid Australia, *Proof Committee Hansard*, 25 September 2012, p. 35.

59 Mr Peter McIntyre, Chairman, Grid Australia, *Proof Committee Hansard*, 25 September 2012, p. 39.

If I were a regulated business then my best dollar spent would be in trying to swamp the regulator with information so that they could not make effective decisions.

...

If you look at what is submitted to the AER for each of these regulatory determinations, there is a proposal from each network and a response, and then you get various extra iterations. There are hundreds of thousands of pages, from each network, of argument and backup information. It is an enormous task. It is very depressing to think that all these people are wasting this time doing that. Much of it is not actually dealing with the main issues; it is throwing lots of miscellaneous detail.⁶⁰

4.71 The Total Environment Centre (TEC) emphasised that while it found:

...AER staff to be highly capable and professional...there just are not enough of them and that they do not have enough power. So more resources to the AER would be a good thing.⁶¹

4.72 Energex suggested that while the AER may not have all of the necessary expertise "in house":

...my experience with regulators is that they engage pretty good consultants who do a very thorough job in reviewing our forward plans. So it seems to me that they are quite well resourced to review our forward capital plans, and certainly they also engage the best consultants to review our energy and demand forecast as well. So my observation is that they have certainly brought to bear the best consultants.⁶²

4.73 Professor Garnaut argued that the AER is adequately resourced, but is inhibited by the regulatory framework in which it operates. According to Professor Garnaut:

...there are very good people there who have been hamstrung to a considerable extent by the rules, which allow people in the industry to appeal a decision but do not allow the regulator to make a counter-appeal following proposals for change from people in the industry. Evening up that balance will equip the regulator better. It is unlikely that things would not be improved through better resourcing because it is a complicated question, and a lot of resources will be needed to do it properly. Analysis is the first thing required, and so we would have to make sure we had the right types of analytic capacity. The ACCC is a highly reputed body in Australia and the AER is part of that system. I recommend that the committee make sure

60 Dr Paul Troughton, Manager of Regulatory Affairs, EnerNOC, *Proof Committee Hansard*, 27 September 2012, p. 71.

61 Dr Mark Byrne, Energy Market Advocate, Total Environment Centre (TEC), *Proof Committee Hansard*, 25 September 2012, p. 50.

62 Mr Peter Price, Executive General Manager, Network Performance, Energex Ltd, *Proof Committee Hansard*, 3 October 2012, p. 39.

it is well resourced, but I am not making any comment about it being poorly resourced at this stage.⁶³

4.74 In responding to claims about its skills and expertise, the AER informed the committee that it is bringing more skilled workers into the organisation and relying less on consultants. Chairman of the AER, Mr Andrew Reeves, told the committee:

First of all, our practice has been to engage engineering consultants to inform the regulator. We will continue with that but we are also moving on from that to bring more skills in-house. We acknowledge the concerns of the business. One of the positions put to us has been that the regulator is being given more discretion and it is important that the regulator exercise that discretion with the confidence of the community. We are addressing some of those factors that have been raised by bringing some of the additional technical skills in-house.⁶⁴

Committee comment

4.75 The committee shares the concerns raised about the adequacy of the AER's resourcing. The AER's resourcing—as it relates to the regulator's ability to effectively perform its role—should be the subject of ongoing consideration. The committee is also conscious that it, and others, have recommended expanded or additional powers for the regulator and therefore recommends that the AER should be allocated greater funding, expertise and accountability, particularly in light of any additional responsibilities it is given.

Recommendation 7

4.76 **The committee recommends that the AER receive additional funding, expertise and accountability including that in recommendations of the *Limited Merits Review Regime Stage Two Report* in relation to appeals processes.**

Intent of the National Electricity Objective

4.77 The National Electricity Objective (NEO), as set out in the NEL, is:

To promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to –

- (a) price, quality, safety, reliability, and security of supply of electricity; and
- (b) the reliability, safety and security of the national electricity system.⁶⁵

4.78 Some submitters and witnesses were concerned that the NEO does not sufficiently take into account the interests of consumers and on this basis warrants change. Proposed changes to the NEO for the purpose of strengthening consumer protections are discussed in Chapter 6.

⁶³ Professor Ross Garnaut, *Proof Committee Hansard*, 9 October 2012, p. 5.

⁶⁴ Mr Andrew Reeves, Chairman, AER, *Proof Committee Hansard*, 25 September 2012, p. 4.

⁶⁵ NEL, section 7.

4.79 The committee heard from other submitters and witnesses that the NEO should be amended to include an environmental objective.⁶⁶ The TEC claimed:

One of the great deficiencies of the NEM is that it is focused only on delivering the energy with the cheapest short-term marginal cost of production. The NEM is ill-suited to recognise the long term economic as well as environmental benefits of energy storage, local generation, and even energy efficiency.

Further, the NEO does not support climate and renewable energy policies, and struggles when their implementation appears to conflict with the overarching objective of the NEM...Regulators and energy ministers often complain that introducing an environmental criterion to the NEO would make their work difficult, if not impossible. This knee-jerk reaction flies in the face of evidence both from other OECD countries where environmental objectives feature in electricity network regulatory regimes...TEC does not propose anything so radical...we merely ask that in addition to the current 5 criteria, "greenhouse gas emissions and intensity" is added.⁶⁷

4.80 The AEMC offered the following response to suggestions that the NEO should include an environmental objective:

We of course would apply and pursue whatever objective parliament see fit to give to us. This issue is not a new one. The way I think about it is with a football team analogy: everyone on the team has the same objective; it is just that we have different positions and different roles. Apologies to those who do not come from rugby states but, if the bonehead thinks that the five-eighth is not doing a good job, the worst thing he can do is try and do the five-eighth's job for him. Our role in relation to rules that relate to economic efficiency is part of one role in what people expect out of this sector. There are other manifestations of government that obviously deal with environmental issues in a systemic sense, such as climate change and, in a local sense, land use planning and emissions—NOX and SOX and salts and things from the plants. You could make the same comment about suggestions around social objectives. Again, there are other parts of government that address that. I really say that as an explanation. Because these national electricity objectives drive what we do, that is not to say that we do not care about those other aspects; it is just that there are other parts of government that have responsibility and have the roles for those. Just like a football team, it works best when people in different roles coordinate with one another. I think part of our role is to inform those other parts of government what the effect on this efficiency objective is of things they are thinking about and, certainly in relation to social objectives, providing

66 See TEC, *Submission 72*, pp 14–15; Professor Stuart White, Director, Institute for Sustainable Futures, University of Technology Sydney (UTS), *Proof Committee Hansard*, 25 October 2012, p. 26; and Dr Paul Troughton, Manager of Regulatory Affairs, EnerNOC Pty Ltd, *Proof Committee Hansard*, 27 September 2012, pp 70–71.

67 TEC, *Submission 72*, pp 14–15.

advice to governments so that the qualitative or social value judgements are as informed as possible.⁶⁸

Committee comment

4.81 The committee agrees that better alignment between environmental policies, in particular climate change policy, and the NEM to ensure these are not incongruent and working at odds would be beneficial. To this end, the committee recommends that the AEMC consider how the NEO could be amended in a way that would ensure operation and regulation of the electricity market in ways consistent with broader environmental policy objectives.

Recommendation 8

4.82 The committee recommends that the AEMC consider how broader environmental considerations could better align with the operation and regulation of the NEM.

68 Mr John Pierce, Chairman, AEMC, *Proof Committee Hansard*, 25 September 2012, p. 16.

