Executive summary

Electricity prices in Australia have increased considerably over the past five years. A key contributor to the price rises has been the significant increases in network costs—that is, the costs associated with building, maintaining and operating the networks that transport electricity from the generator to the consumer. The average household in Australia pays significantly higher network service charges than those imposed on consumers in the electricity markets of other advanced economies, such as Great Britain and the United States of America.

Some of the increases in network costs have been due to past under-investment and a need to meet higher peak demand, particularly with the increased use of air conditioning. However, the sustained increases have led to allegations that network businesses have undertaken excessive investment in the networks, an activity referred to as 'gold plating'. While the regulatory rules are intended to address the risk of economically inefficient outcomes arising from electricity network natural monopolies, many experts identified institutional arrangements and regulatory design as the culprits for over-investment and high network costs.

Over-investment and high prices caused by inadequacies in institutional arrangements and regulatory methods is an even worse outcome if the subsequent network investment is underutilised or, in the future, becomes a stranded asset. In this regard, it is important to note that the increased investment in electricity networks has come at a time when demand for electricity has fallen and is forecast to be flat in upcoming years. A large number of consumers are already involved in their own generation; for example, there are over one million solar power systems on the roofs of homes and businesses in Australia. High network costs may continue to encourage consumers to reduce their energy consumption and/or to generate their own electricity, leaving a smaller customer base available to support expensive, underutilised assets.

The committee acknowledges the numerous reviews of the electricity sector, recent changes to the regulatory rules for determining network revenues and positive signs that the Australian Energy Regulator (AER) intends to reduce the maximum allowed revenue network businesses may recover in the future. However, the committee considers that fundamental problems with the regulatory framework remain. The principal flaw is that network service providers are protected from certain risks that businesses in competitive markets face. In particular, network businesses do not appear to bear the risk of inefficient investments and do not face risks associated with changing demand in a timely manner.

The committee examined many aspects of the regulatory system that is applied to most network businesses in Australia. While there are several areas of the framework that may warrant attention, the committee considers the treatment of the regulatory asset bases (the capital expenditure investments of each network business) is the fundamental cause of high network costs and will continue to be a major driver of revenue for network businesses in the future. Although a recent rule change now enables the AER to review capital expenditure that exceeds the forecast it approves as part of a determination, the AER is unable to challenge past expenditure or expenditure where the forecast is not exceeded. Network businesses are allowed to earn a return on all of these investments.

The committee considers that the AER requires the discretion to review the efficiency of all future investments and the need for their inclusion in the RAB. However, to avoid sovereign risk concerns, the AER's power to review assets should continue to apply only on a prospective basis. The committee considers an expert review charged with considering these issues would be an appropriate starting point for change in this area.

Another feature of the revenue determination process is the use of hypothetical benchmarks, rather than actual costs. For example, when considering the allowed rate of return, the financing costs of individual network businesses are intended to be compared to the efficient financing costs of a benchmark efficient entity with an apparently similar degree of risk. This process may provide incentives for efficiencies; however, many informed stakeholders that participated in this inquiry are concerned about the assumptions and outcomes related to the weighted average cost of capital calculation and the methodology for estimating the cost of corporate income tax. The committee considers that following the AER's latest round of revenue determinations, a performance assessment of the benchmarking process should be undertaken.

This inquiry has also considered evidence that the network businesses have an incentive to inundate the regulator with information and documents during the regulatory process. While information asymmetry is a common problem in regulation, the ability of a regulator with limited resources to assess revenue proposals would be negatively affected if it is overwhelmed by information. Similarly, a mass of supporting documentation is also likely to make it more difficult for businesses, industry associations, consumer groups and other interested parties to understand and provide feedback on the regulatory proposals. The committee considers an improvement can be made by capping the expenditure linked to a regulatory proposal that network businesses can recover from their customers. A cap could rationalise the number of supporting reports and other documents provided to the regulator, while still ensuring the regulator receives all of the information relevant to its decision-making.

While the major focus of this inquiry was the revenue determination process, the committee also considered other matters related to the performance of electricity network businesses and the regulatory framework under which they operate.

Consumer consultation was one such area examined in detail. Fundamentally, the committee considers that, for economic regulation to be effective with outcomes accepted as legitimate by the community, the processes underpinning it need to be transparent and accessible to external stakeholders. In this regard, the interactions network businesses have with both their customers and the regulator are important. The consumer consultation that network businesses engage in about their regulatory proposals and network projects must be meaningful. The recent revenue determination processes provide an opportunity to assess the progress of efforts to enhance consumer input. Consumer engagement in rule-making and regulatory processes may also be assisted if clear, consolidated guidance about electricity regulation was developed and published.

Another area canvassed was the process for making changes to the regulatory rules. The timeliness of the Australian Energy Market Commission (AEMC) in considering proposed changes to the National Electricity Rules is of significant concern to the committee. Even rule change requests lodged by the COAG Energy Council do not appear to be dealt with expeditiously. Accordingly, the committee has recommended that the rule change process is made more responsive.

The committee has also considered evidence about the future requirements for Australia's electricity networks. This country has a large and expensive electricity network built as a result of decades of centralised generation. The evidence taken during this inquiry revealed that stakeholders are increasingly starting to consider whether the current system of networks, and the regulatory rules governing it, can be sustained. In the coming years, this arrangement may no longer effectively deal with how a significant amount of electricity is supplied. Sustained high network costs and improvements in technology, such as more cost-effective battery storage, may result in a market that demands a smaller, more local, network rather than the expansive networks based on centralised generation.

Given the concern that electricity networks are entering a 'death spiral', policymakers and regulators need to closely monitor developments in the electricity market to ensure network businesses do not discriminate against customers who seek to generate their own electricity. The likely changes in the energy market also mean it is important that the regulatory framework is flexible, so it can respond quickly in a way that ensures networks operate in the long-term interests of consumers. It is also important that the customers who continue to be supplied with electricity in the conventional manner, particularly customers who cannot afford to invest in their own electricity generation system, are not forced to pay an increasing share of network costs as a result of other customers going 'off-grid'.

Finally, the committee has noted with concern the allegations about data manipulation and other inefficient practices at a particular network company. The committee will address this issue in its final report, which will be presented by 5 May 2015.

In recent years, there have been some welcome changes to how electricity network businesses are regulated in Australia. However, the committee concludes that more work needs to be done. The committee hopes this report and the evidence collected during this inquiry inform and support efforts to ensure the electricity networks provide services in a way that is in the long-term interests of consumers.