

Chapter 2

The context of this inquiry

2.1 Some of the reasons for this inquiry are readily apparent. Over the past several years, there has been ongoing and widespread concern in the community about rising electricity prices and the actions of electricity network businesses that have contributed to these increases. The attention given to this issue has resulted in terms like 'gold plating'—that is, excessive expenditure on 'poles and wires'—emerging into common parlance.

2.2 This is certainly not the first inquiry to examine high electricity prices. Indeed, as some of the industry stakeholders were quick to point out, this inquiry follows at least 17 other inquiries and reviews since 2010.¹ These inquiries resulted in various changes to the rules underpinning the regulation of networks; with the upcoming revenue determinations these new rules are being tested for the first time.

2.3 This inquiry, however, differs from the others in several key ways. First, it follows specific allegations by a whistle-blower that Energex, a Queensland distribution network service provider, sought to mislead the regulator. Other concerning and inefficient practices at Energex were also highlighted by the whistle-blower. Second, as this inquiry has taken place after the flurry of regulatory and other changes made since 2012, and as the first revenue determinations since these changes are being finalised, the committee can, to some extent, examine these changes. Of particular interest to the committee is how network businesses and the regulator have responded to both the rule amendments and changes to market conditions. It is also evident that concern about high electricity prices and their effect on consumers and economic activity has not gone away. In fact, the latest regulatory proposals have been an additional source of frustration in some quarters.

2.4 Finally, this inquiry is considering electricity network regulation in the context of innovation and disruptive technologies, such as the rise of photovoltaic panels and the potential for cost-effective battery storage. State-wide networks with centralised generation and linkages between states that create an almost national network have, overall, served Australia well. However, there is no guarantee that this will be the most-effective model in the future. An expensive but under-utilised network could mean that stranded assets will be the next thorny issue in energy policy.

1 Energy Networks Association, *Submission 31*, p. 2. These inquiries and reviews include several reviews undertaken by the Australian Energy Market Commission into specific issues, a Senate Select Committee inquiry and a comprehensive review undertaken by the Productivity Commission (PC) between January 2012 and April 2013. The PC report, *Electricity network regulatory frameworks*, is referenced throughout this report.

2.5 In summary, this inquiry builds on previous reviews by seeking to uncover whether there are fundamental problems with the system of electricity regulation in Australia. This chapter provides an overview of principal issues, which will inform the discussion in the remaining chapters of the report.

High electricity prices and 'gold plating'

2.6 While the other components of electricity supply, namely generation and retail, contribute to the prices end users pay for the electricity they use, the concern about electricity prices in recent years has been linked to a noticeable increase in the proportion of an electricity bill that is attributed to network costs.² For example, the Energy Users Association of Australia (EUAA) stated that residential network prices in Queensland and New South Wales have more than doubled, in real terms, between 2007 and 2013. Large industrial consumers have faced even greater increases: the EUAA advised that some of its members have seen their network tariffs increase by over 200 per cent during that same period.³ Cotton Australia compared the increases in electricity prices to the increases in the prices of other goods and services; it noted that electricity prices have significantly outstripped inflation during the past 15 years, with electricity prices increasing by approximately 350 per cent since 2000, compared to inflation of 45 to 50 per cent.⁴

Network cost trends, demand forecasts and international comparisons

2.7 Network costs now represent between 30 per cent and 60 per cent of a consumer's electricity bill.⁵ Figure 2.1 shows how the network costs differ between states.

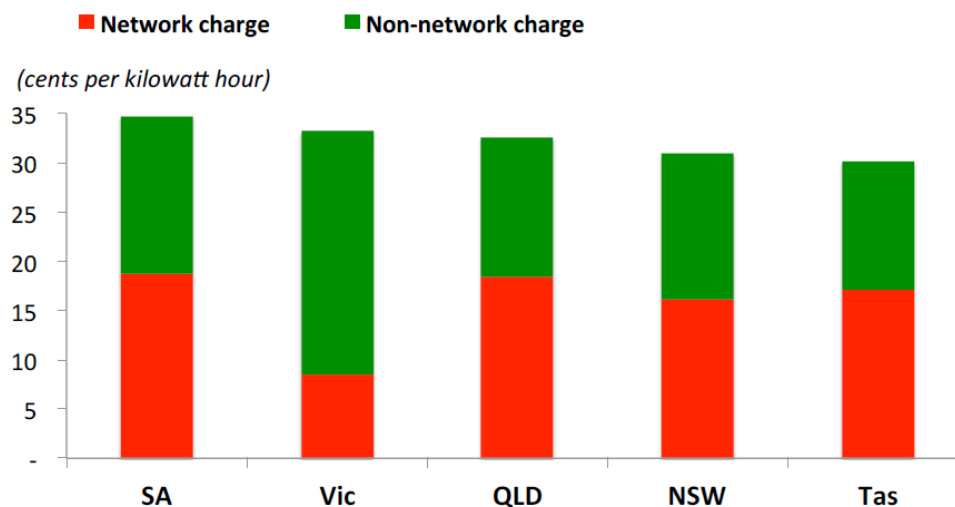
2 Network costs are the costs associated with building, maintaining and operating the transmission and distribution networks that transport electricity from the generator to the consumer. Other components of a typical small consumer's electricity bill include wholesale costs (costs associated with generating electricity), costs associated with retail services (such as billing) and costs linked to government green schemes. An indicative breakdown of the composition of residential electricity bills by state in 2014 can be found in Australian Energy Regulator (AER), *State of the energy market 2014*, p. 131.

3 Energy Users Association of Australia (EUAA), *Submission 17*, p. 5.

4 Mr Michael Murray, Policy Manager, Cotton Australia, *Proof Committee Hansard*, 17 February 2015, p. 20.

5 EUAA, *Submission 17*, p. 10; Mr Bruce Mountain, *Submission 19*, p. 7.

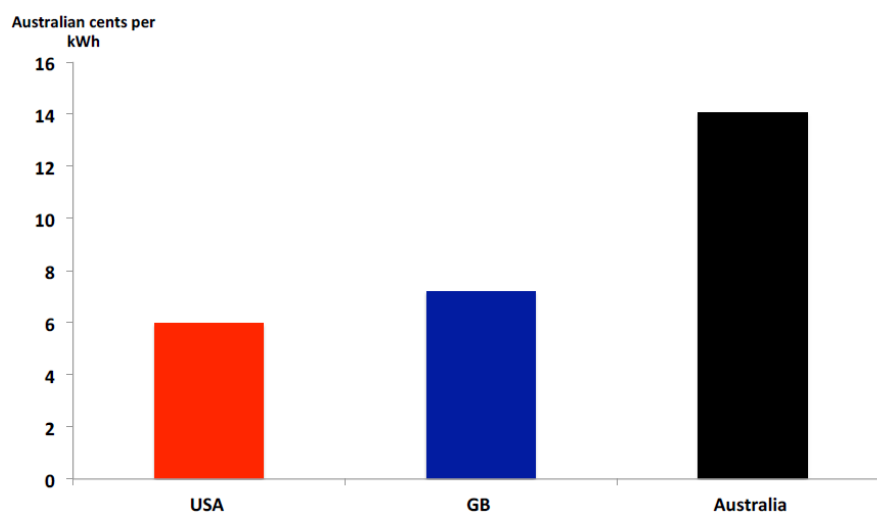
Figure 2.1: Average electricity network and non-network prices by jurisdiction in 2014



Source: Mr Bruce Mountain, *Submission 19*, p. 5.

2.8 The high prices in Australia relative to other countries were noted. Dr Gabrielle Kuiper from the Public Interest Advocacy Centre observed that while the contribution of network costs to electricity prices can vary significantly within Australia—for example, network costs in New South Wales are double those in Victoria—all states have higher network charges than Great Britain, Canada or the United States of America.⁶ Mr Bruce Mountain, the director of Carbon and Energy Markets Australia (CME), an energy economics consultancy, supplied a chart that illustrated this point (Figure 2.2).

Figure 2.2: Network services charges for average usage households in 2013



Note: PPP-adjusted exchange rates, constant currency.

Source: Mr Bruce Mountain, *Submission 19*, p. 6.

6 Dr Gabrielle Kuiper, Senior Policy Officer, Energy and Water Consumers' Advocacy Program, Public Interest Advocacy Centre, *Proof Committee Hansard*, 17 February 2015, p. 15.

2.9 Mr Mountain claimed that differences in population density between Australia and other countries do not explain the network pricing outcomes. He argued that:

- Australia is one of the most urbanised countries in the world⁷ and although the National Electricity Market⁸ (NEM) covers an extensive geographic area, a large part of each state in the NEM is neither inhabited nor covered by network infrastructure;
- much of the additional length of Australia's networks consists of 'inexpensive single wire earth return or 11 kV [kilovolt] overhead distribution lines', with an additional cost that is 'much less per kilometre than an underground high voltage urban or metropolitan network' (he noted that underground networks 'can typically cost many times more than overhead networks');
- much of the rural network 'has been funded fully or partially from customers' capital contributions'; and
- network density 'does not explain the changes in prices or assets', given that changes in prices and assets occurred for both metropolitan and rural distributors and the density of the networks increased while the expenditure was taking place.⁹

2.10 Before further outlining some of the concerns about electricity pricing, it is instructive to acknowledge that consumers value both low prices and a reliable electricity supply. These two outcomes of an electricity system are related: electricity prices need to fund maintenance and provide incentives for appropriate levels of investment that respond to growth and ensure the supply remains reliable. An example of this tension between price and reliability was given by the Queensland distributor Energex. Energex noted that although its network is now 'very safe and reliable', reliability has been a flashpoint in the past. Mr Terence Effeneey, Energex's chief executive officer, explained:

If you go back just a decade or so, when there were severe storms and high load conditions, our network did struggle to meet customers' requirements. At the time, both government and customers expressed some extreme dissatisfaction, and this led to what was called the Somerville review in those days. We call it the EDSR review as well. That review led to a whole range of mandated inputs which we then had to build and plan our network to. In particular, it mandated security and service standards for our network, and it also mandated maintenance and response programs.¹⁰

7 Mr Mountain added that customer density in Australia's metropolitan areas 'is often comparable to that in other countries with the exception of very dense international capitals such as London, Tokyo or New York. *Submission 19*, p. 13.

8 The NEM is the wholesale electricity market for states and territories in eastern and southern Australia. The NEM is explained in more detail in Chapter 3.

9 Mr Bruce Mountain, *Submission 19*, p. 12–13.

10 Mr Terence Effeneey, Chief Executive Officer, Energex, *Proof Committee Hansard*, 16 February 2015, pp. 1–2.

2.11 Nevertheless, in recent years there has been sustained community and industry displeasure about the level of electricity prices. Further, there has been growing recognition that rising network costs have been a significant contributor to higher final prices. The increase in network costs has led to allegations of excessive investment in the networks, known as 'gold plating'.¹¹

2.12 In the absence of an alternative suitable explanation, the regulatory framework has been identified as the culprit for high electricity prices. Mr Bruce Mountain told the committee:

I do not believe there is any exogenous reason such as demand growth, growth in customer numbers or growth in energy supply or quality of supply that justifies the rather disastrous outcomes that have been observed in these states. In fact, to the contrary, I think the rate of the Australian dollar to the US dollar and other currencies has been very, very useful and in our favour at a time when large capital items have been imported. If anything, I would contend that the expenditure programs should have turned down.¹²

2.13 This over-investment, many have argued, indicates a failure of electricity regulation. It is claimed that the regulatory rules encourage network companies to engage in excessive, and inefficient, expenditure on assets as the current regulatory arrangements provide that this expenditure will be passed through to consumers, helping drive the network company's future revenue and profits. It is also evident that, for state government-owned networks, the dividends from increased profits provide a lucrative revenue stream for their government owners.¹³

2.14 Another aspect of the over-investment submitters were concerned about is that the forecasted increase in demand used to justify the investment was incorrect. Demand has fallen and is forecast to be flat in the NEM in upcoming years (see Figure 2.3). The following assessment of forecasted electricity consumption published by the Australian Energy Market Operator (AEMO) in 2014 highlighted the stagnant nature of demand throughout the country:

Queensland is the only region in the NEM experiencing industrial growth, due to LNG projects. It also has the strongest growth in rooftop

11 The gold plating effect, that is the risk that rate-of-return regulation can lead to inefficient levels of investment and high prices, is also known as the Averch–Johnson effect after Harvey Averch and Leland L. Johnson. The Averch–Johnson effect is outlined in H Averch and L Johnson, 'Behavior of the Firm Under Regulatory Constraint', *The American Economic Review*, vol. 52, no. 5 (December 1962), pp. 1052–69. See also Mr Bruce Mountain, *Submission 19*, p. 20.

12 Mr Bruce Mountain, *Proof Committee Hansard*, 18 February 2015, p. 61.

13 While network companies reject claims of gold-plating, it is noteworthy that these concerns have received a level of acceptance by governments. For example, concerns about gold-plating led then Prime Minister Julia Gillard to pursue a program of reform through the Council of Australian Governments (COAG). See *House of Representatives Hansard*, no. 15 of 2012 (11 October 2012), pp. 12093–94.

[photovoltaic (PV)]...installations, which drives down overall consumption from the grid.

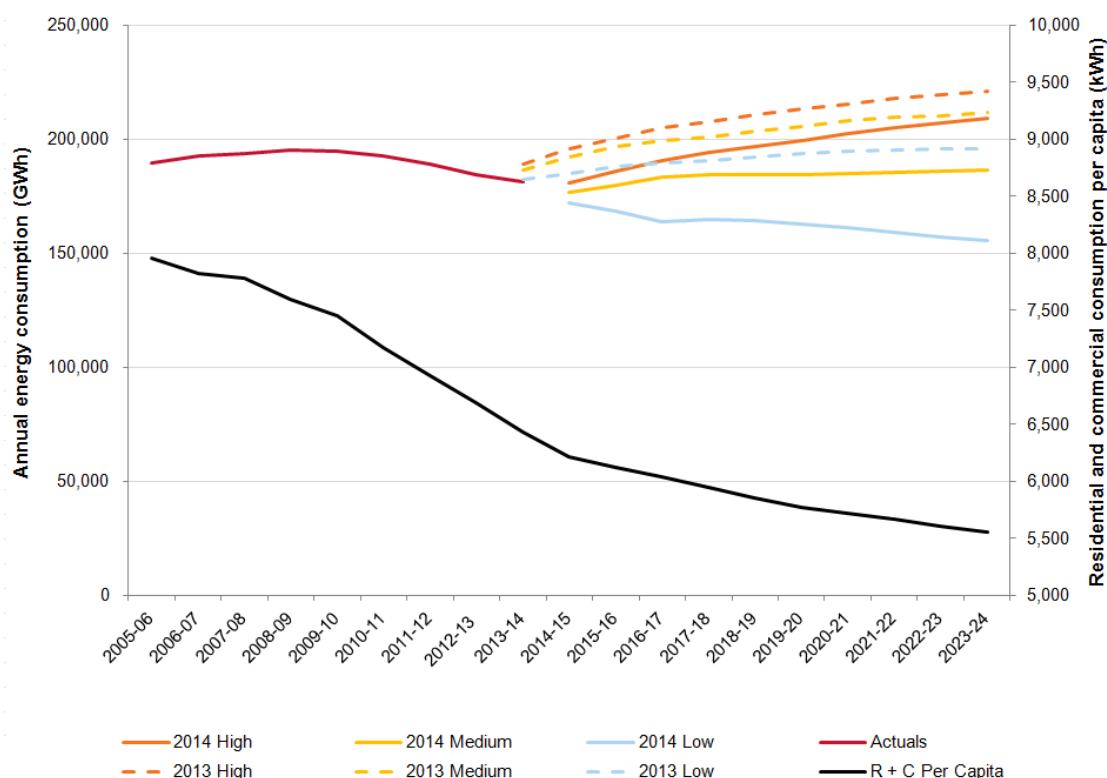
New South Wales experiences a decline in consumption, due to reduced large industrial forecasts.

Victorian consumption is forecast to decline, driven by large industrial and manufacturing plant closures, including the Point Henry aluminium smelter in August 2014.

South Australian consumption is forecast to decline, with the desalination plant reducing consumption due to the completion of operational tests. Decreasing residential and commercial consumption is a result of the highest existing levels of installed rooftop PV per capita across the NEM.

Tasmanian consumption is forecast to decline despite increased production at the Norske Skog Boyer paper mill. The decline reflects the lowest population growth in the NEM and high rooftop PV installations.¹⁴

Figure 2.3: Annual energy forecasts for the National Electricity Market (as at December 2014)



Note: R + C is residential and commercial annual energy consumption.

Source: AEMO, *National electricity forecasting report 2014 update*, December 2014, www.aemo.com.au/Electricity/Planning/Forecasting/~/_/media/Files/Other/planning/NEFR/2014/2014%20Updates/2014%20NEFR%20Update%20NEM.ashx (accessed 23 March 2015).

14 Australian Energy Market Operator (AEMO), *National electricity forecasting report 2014*, June 2014, www.aemo.com.au/Electricity/Planning/Forecasting/National-Electricity-Forecasting-Report (accessed 23 March 2015), p. iii.

2.15 The Department of Industry (the department) suggested that, despite falling electricity consumption, new network investment could still be required occasionally. Examples given included 'replacing electrical protection devices and power lines to mitigate bushfire risk, upgrading metering infrastructure to accommodate smart meters, and modifying equipment to deal with power flows from rooftop solar systems'. Further, the department noted that there may be some areas of the network where it is more critical to ensure reliability of supply compared to others.¹⁵

2.16 However, it was argued that network companies have been shielded from the change in demand. EnergyAustralia submitted that generation and retail, the competitive aspects of the electricity sector that EnergyAustralia is involved in, have 'felt the impact of lower demand', while the regulated monopoly transmission and distribution services 'have continued to recover against their regulated asset base at a higher rate per unit sold'.¹⁶ Furthermore, submitters questioned the flexibility of the regulatory system. They noted that expenditure forecasts and the resultant high electricity prices were locked in for five years when demand began to decline. For example, in its submission the Electrical Trades Union of Australia stated:

While it is not possible to accurately predict the future, important data such as demand projections should not be totally wrong, and there needs to be sufficient flexibility in the regulatory process to allow adjustments that protect consumers from having to foot the bill of bad investment decisions via bloated AER determinations.¹⁷

Continued growth in prices and the broader economic impact

2.17 Concerns about high prices have been examined by past inquiries. At a rudimentary level, the concept of network businesses gold-plating their networks appears to be widely acknowledged and understood. Despite this, many submitters to this inquiry considered that little has been done to address this issue. In particular, many submitters grappled with following question: why are prices still increasing given the past investment and declining demand? The following extract from the Central Irrigation Trust's submission is an example of the frustration submitters expressed:

We have endured significant price increases with the promises of upgrading an aged network. We now expect a significant drop in capital expenditure and subsequent network prices. There is no justification for increasing capital expenditure when total demand is decreasing and this trend continuing. Some big energy users such as Holden will close their doors soon and recognition of further demand decreases must occur.

15 Department of Industry, *Submission 34*, p. 14.

16 EnergyAustralia, *Submission 23*, pp. 2–3.

17 Electrical Trades Union of Australia, *Submission 22*, p. 2.

As a customer we find the reliability of the network satisfactory and do not see the need for further upgrades, for changed bushfire prevention activities or hardening of the network against lightning and storms.¹⁸

2.18 Electricity supply activities contribute to an energy sector that comprises a sizable part of Australia's economy. The Energy Supply Association of Australia advised that the 36 electricity and downstream natural gas businesses it represents 'own and operate some \$120 billion in assets, employ more than 51,000 people and contribute \$16.5 billion directly to the nation's gross domestic product'.¹⁹ However, while the energy sector has grown, concern was expressed in various submissions that high electricity prices are affecting the viability of other industries. Submitters noted that network service providers were 'extraordinarily profitable entities'.²⁰ The Central Irrigation Trust, which manages several irrigation districts in South Australia, provided the following evidence of how high electricity prices had affected businesses and economic activity in its region:

...in the 14 businesses that are part of the Riverland association, there are a number of projects where people are looking at significant investments for future developments and they are putting those on hold until we can get some resolution of this...It is a significant issue in our own business. We would love to put more people on, but, in fact, we have had to decrease over time. You could say some of that is power and some of that is the drought and the like. But it is putting on significant pressure and we do have an unemployment issue, as does regional Australia. We also have the capacity to drive productivity and GDP in Australia. We are an export dominated industry. We bring revenue into Australia from those exports and we want to continue to do that. Unfortunately, I cannot give you the exact numbers, but you can see how SA Power Networks are growing. You have got the numbers in their annual report. Most of that growth is coming out of our businesses.²¹

2.19 Another specific instance of businesses suffering under the burden of high electricity prices was provided by Canegrowers Isis, which gave the example of a Queensland canegrower whose electricity costs have increased by 80 per cent in nominal terms over the past five years:

In 2010 his electricity costs for supplying the water to his property and applying it onto the property were \$20,800, or about eight per cent of his gross income. In 2014, five years later, the electricity cost to do roughly the

18 Central Irrigation Trust, *Submission 1*, p. 4.

19 Energy Supply Association of Australia, *Submission 25*, p. 1.

20 Big Picture Tasmania, *Submission 4*, p. 5. See also Mr Phillip Barresi, Chief Executive Officer, EUAA, *Proof Committee Hansard*, 18 February 2015, p. 20.

21 Mr Gavin McMahon, Chief Executive Officer, Central Irrigation Trust, *Proof Committee Hansard*, 19 February 2015, p. 10.

same task was \$37,500, and equated to about 23 per cent of his gross income. That is a significant change, from eight per cent to 23 per cent.²²

2.20 Large energy users also reported significant increases in their electricity network costs. Big Picture Tasmania, which represents large energy intensive companies in Tasmania that are directly connected to the high voltage network, stated that 'since 2008 transmission costs have effectively doubled' for the businesses it represents. Big Picture Tasmania described this as a 'perverse situation' that has 'undermined Tasmania's economic and social security'. It added:

Allowing this perverse situation to continue without significant reform by Federal and State Governments is bordering on neglect.²³

2.21 One submitter observed that energy costs 'are a fundamental building block of any economy', and although Australia 'should have cheap energy', it does not. The submitter presented the following assessment of the effect that high electricity prices are having on Australia's economy:

Electricity and gas prices are globally uncompetitive and have risen so rapidly that they are causing social damage as retail customers simply cannot afford the product. The current explicit high energy price policies being followed by the government are hollowing out the Australian economy. Mineral processing industries are leaving our shores, manufacturing has been decimated and our economy is being reduced to a 'houses and holes' economy, reliant on mining and housing to drive the economy.²⁴

Impact on other reforms

2.22 It was also noted that high electricity prices were undermining other reforms, such as water efficiency efforts. The New South Wales Irrigators' Council (NSWIC) explained that electricity 'has become a major input factor in irrigated agriculture as more irrigators have upgraded their on-farm equipment to conserve water and remain competitive'. This has resulted in productivity gains and water savings, however, irrigators' electricity use and costs have increased. For irrigators that have implemented water efficiency measures, the NSWIC reported that rising electricity prices have presented irrigators with the following dilemma:

The trade-off between water efficiency and energy intensity is extremely difficult to reconcile in irrigation and as a consequence of the escalating electricity costs many irrigators have taken drastic measures (including locking off their pumps or converting back to diesel energy) and reverted back to low energy but water-intensive production methods. The impacts in

22 Mr Robert Mackenzie, Director, Canegrowers Isis, *Proof Committee Hansard*, 16 February 2015, p. 27.

23 Big Picture Tasmania, *Submission 4*, p. 1.

24 Mr Bruce Robertson, *Submission 16*, p. 1.

terms of efficiency and productivity are immense and continuously increasing.²⁵

2.23 Canegrowers Isis similarly noted that efficiency gains quickly diminish when electricity prices increase and, as a result, irrigators are less willing to adopt or further invest in improved technologies.²⁶

An uncertain future: the rise of 'disruptive technologies' and concern about a 'death spiral'

2.24 From 2000 to the start of the global financial crisis in 2007–08, networks were faced with increasing demand and the need for ageing assets to be replaced or upgraded. Mr Terence Effenev, the chief executive officer of Energex, stated that the load on Energex's network increased by about 40 per cent over six years, largely due to the widespread installation of air conditioning. He explained:

Fifteen years ago about 25 per cent of homes in South East Queensland had air conditioning. Now over 75 per cent of homes will have air conditioning. Even with the global financial crisis, which occurred across 2007 and 2008, we were still experiencing record growth, and, in fact, across 2008 and 2009 we were still seeing some of the greatest demands that we had seen, with over 120 additional homes and businesses connecting to our network every day.²⁷

2.25 Indeed, summer peak demand in Queensland increased significantly during the 2000s decade. The peak demand during the summer months of 1999–00 was around 6,300 megawatts (MW); by 2009–10 summer peak demand had increased to around 8,900 MW.²⁸ However, AEMO figures indicate that the growth in maximum demand in Queensland during the 2000s largely occurred during the first half of the decade.²⁹ Although maximum demand was around four per cent higher in the summer of 2006–07 compared to the previous year, it fell sharply in the following year. Between 2005–06 and 2009–10, maximum demand increased by approximately seven per cent, around 1.5 per cent a year on average. Table 2.1 shows the AEMO's maximum demand figures for Queensland between the summers of 2005–06 and 2013–14.

25 New South Wales Irrigators' Council, *Submission 5*, p. 3.

26 Canegrowers Isis, *Submission 39*, p. 1.

27 Mr Terence Effenev, Energex, *Proof Committee Hansard*, 16 February 2015, p. 2.

28 AER, Seasonal peak demand by region, www.aer.gov.au/node/9767 (accessed 16 April 2015).

29 These figures are for the entire Queensland NEM region; Energex only operates in south-east Queensland.

Table 2.1: Queensland maximum demand, summer, various years

Summer	Residential and commercial maximum demand (MW)	Operational maximum demand (MW)
2005–06	6,414	8,280
2006–07	6,774	8,611
2007–08	6,260	8,086
2008–09	6,645	8,707
2009–10	6,803	8,897
2010–11	6,714	8,826
2011–12	6,524	8,714
2012–13	6,260	8,479
2013–14	6,191	8,374

Source: AEMO, *National electricity forecasting report 2014: Final NEM and regional forecasts data – Queensland*, June 2014, www.aemo.com.au/Electricity/Planning/Forecasting/~/_/media/Files/Other/planning/NEFR/2014/2014%20Updates/NEFR_2014_QLD_forecasts_template_values.ashx (accessed 16 April 2015).

2.26 In any case, demand has fallen throughout the NEM and is not predicted to return to its previous growth rate. Consumers are also already increasingly becoming involved in their own electricity generation. The committee was told that in 2008 there were just over 14,000 solar photovoltaic (PV) systems in Australia; as at February 2015 that were over 1.3 million rooftop systems and another 900,000 solar hot water systems.³⁰

2.27 The starting point for a discussion about the future of Australia's electricity networks is the so-called 'death spiral'. The concept of a death spiral follows the line of reasoning that high prices encourage consumers to reduce their energy consumption and/or to generate their own electricity. The EUAA provided the following statement that discussed the concept:

Over the past five years it has become apparent that electricity demand has declined and has significantly decoupled from economic growth. This has been driven in large part by consumers reducing their consumption in response to the dramatic increases in network prices. In addition, consumers are increasingly moving to self-generation as the relative costs of distributed generation are becoming more attractive, thereby further reducing the energy being delivered by the networks. The networks have responded by further increasing their prices to recover their guaranteed revenues over a reduced volume.

As a consequence, network assets are becoming increasingly under-utilised and the industry's productivity is in serious decline.

30 Ms Claire O'Rourke, National Director, Solar Citizens, *Proof Committee Hansard*, 17 February 2015, p. 61.

The natural outcome of the continuation of these trends is the well documented 'death spiral'—i.e. as demand continues to decline and the move towards distributed generation increases, the burden of paying for the networks' costs will be placed on a smaller consumer base until those consumers can no longer afford to stay connected to the network.³¹

2.28 A death spiral suggests that network assets are currently overvalued, with the likely future outcome being stranded assets.³² On this matter, the Bundaberg Regional Irrigators Group suggested that high electricity prices were not only affecting the competitiveness of its members in the sugar industry, but were also 'destroying demand for electricity', 'hastening the change to alternative energy sources' and in turn 'threatening the viability of...network investments and increasing the risk of electricity assets being stranded'.³³

2.29 The current regulatory proposals before the regulator caused some submitters to suggest that the death spiral was now evident. Referring to Ergon Energy's regulatory proposal, Mr Warren Males from Canegrowers claimed that rather than the proposal realistically reflecting the change in demand, a reading of it revealed the opposite. Mr Males stated:

In other sectors of the economy, if use of your product is falling, generally you put out a sales price to try and encourage an uptake. That does not work in the electricity market. If use is falling, then price goes up so that you can get your revenue cap again. And, if use falls further, then price goes up further. So it is really a bizarre twist in an energy-rich economy.³⁴

2.30 Anecdotal evidence of the death spiral was also supplied to the committee. For example, Mr Tom Chesson, a member of the Agriculture Industries Electricity Taskforce, gave the following account of a business seeking to minimise its reliance on the grid:

Last week I was speaking to a grower down in the Riverina who is 10 metres away from his transmission pole. He has just put in a diesel pump. It is already happening. It used to be that diesel was roughly twice as expensive as electricity. It is the other way around now...[W]e are all looking at renewables. A lot of my members have packing sheds and a lot of the dairy industry already has a 40 per cent uptake of solar panels for their sheds to try to chill the milk and other things. So we are looking at all options now. They are all on the table and a lot of them are starting to look far more attractive, which then will start the death spiral of our electricity

31 EUAA, *Submission 17*, pp. 7–8.

32 EUAA, *Submission 17*, pp. 7–8.

33 Bundaberg Regional Irrigators Group, *Submission 40*, p. 1.

34 Mr Warren Males, Head, Economics, Canegrowers; and Chairman, Sugarcane Gene Technology Group, Australian Sugar Industry Alliance, *Proof Committee Hansard*, 16 February 2015, p. 26.

networks, which in some states we still own. So it is a very odd business model where we are seeing people driven off the network.³⁵

2.31 Submitters expressed concern that billions of dollars in network assets consumers have paid for over many years are at risk. Mr Robert Mackenzie from Canegrowers Isis stated that continued price rises cannot be absorbed. He expected the result will be 'a Rolls-Royce network across the whole industry and no customers'. He continued:

You will not have anybody to buy the power, and you will have a lot of stranded assets. That is ridiculous. Those assets were bought and paid for many, many years ago, to a large extent, and I suggest to you that individuals contributed to the construction of those assets over long periods of time. If it gets to be just a ghost, left to rot, because there is no way we can use it, what is the point of that? There are literally billions of dollars at stake here, both in the irrigation scheme, the on-farm infrastructure and the electricity network.³⁶

2.32 The implications of a death spiral and the rise of emerging technologies are considered further in Chapter 8.

Privatisation

2.33 Finally, it should be noted that this inquiry took place while proposals to privatise state government-owned network assets in Queensland and New South Wales through leasing arrangements were debated and taken by incumbent governments to their respective state elections.

2.34 The terms of reference for this inquiry does not include consideration of the merits of these proposals; however, they are relevant in the context of regulatory arrangements and the performance of network companies. In particular, evidence received by the committee discussed:

- whether public or private ownership affects the prices consumers pay;
- the implications of state governments being involved in setting the policy that underpins electricity regulation while also receiving dividends and other payments from the companies they own; and
- if the regulatory arrangements have resulted in unnecessary and inefficient investment with companies receiving excessive rates of return based on this investment, whether this can be remedied before privatisation.

2.35 These issues are considered in Chapter 5.

35 Mr Tom Chesson, Key Member, Agriculture Industries Electricity Taskforce, *Proof Committee Hansard*, 19 February 2015, p. 12.

36 Mr Robert Mackenzie, Director, Canegrowers Isis, *Proof Committee Hansard*, 16 February 2015, p. 27.

Concluding comment

2.36 Electricity costs are a significant burden on households and businesses. The committee is concerned that the high electricity prices experienced for several years have damaged the economy, particularly the sectors exposed to intense international competition. As electricity is an essential input to business activity, the revenue and profits enjoyed by the electricity network monopolies detract from the profits of businesses operating in the remaining sectors of economy. This outcome is made even worse if the high network costs are a result of perverse incentives in the regulatory rules that encourage significant investment in an electricity network that may not be used to the same extent in the future.

2.37 The next two chapters will commence a detailed study of the regulatory framework by considering how the revenue for a network business is determined.