6 Electricity

Background

In the early 1990s governments embarked on a program of reform of the electricity sector. Traditionally, the sector had been fragmented; each State and Territory operated vertically integrated utilities and there was little interconnection between electricity grids. This structure led to inefficient allocation and use of resources and to higher prices for some users. The Australian Bureau of Agricultural and Resource Economics recently estimated that Australia's gross domestic product by 2010 will be 0.26 per cent ($2.4 billion in 2001 prices) higher than in the absence of reform, with the net present value of benefits of reform between 1995 and 2010 totalling $15.8 billion in 2001 prices (Short et al. 2001, p. 84).

Reforms agreed to by the Council of Australian Governments (CoAG) revolved around creating a fully competitive national electricity market (NEM), featuring a national wholesale electricity market and an interconnected national electricity grid. In support of this objective, governments agreed to a range of structural reforms aimed at breaking down barriers to interstate and intrastate competition. These reforms included dismantling State-owned monopolies and implementing a system of third-party access to natural monopoly infrastructure (that is, transmission and distribution systems). In its 1995 Agreement to Implement the National Competition Policy and Related Reforms, CoAG agreed to tie NCP payments to the implementation of agreed reforms in the electricity sector.

NCP commitments

State and Territory governments' electricity NCP obligations arise from the Agreement to Implement the National Competition Policy and Related Reforms, the Competition Principles Agreement (CPA) and other agreements on related reforms for the electricity sector (electricity agreements). The obligations relating to structural reform and legislation review under the CPA are relevant to all jurisdictions, while the electricity agreements specifically apply to jurisdictions that are, or are intending to become, part of the NEM.

Structural reform

All State and Territory governments have structural reform commitments arising from clause 4 of the CPA. Clause 4 requires governments to take certain steps before introducing competition into a market traditionally supplied by a public monopoly and before privatising a public monopoly. They are obliged to remove any responsibilities for industry regulation from the public monopoly and to conduct a review of structural and competitive arrangements in the industry (often referred to as a clause 4 review).

In addition to the general structural reform obligations under the CPA, NEM-participating jurisdictions have additional NCP commitments arising from the electricity agreements. The electricity agreements commit jurisdictions, before their participation in the NEM, to have structurally separated generation from transmission and to have ring-fenced the retail and distribution businesses.

Legislation review

All jurisdictions have legislation review commitments arising from clause 5 of the CPA. Clause 5 requires governments to review and, where appropriate, reform all laws that restrict competition, and to ensure any new restrictions provide a net community benefit. Jurisdictions have identified a range of electricity-related legislation for review, covering areas such as the operation and structure of the market, licensing and safety issues. Jurisdictions' progress in reviewing and reforming their electricity-related legislation is outlined in Table 6.2. Legislation dealing with electrical workers is discussed in chapter 24.

Electricity agreements

Under the Agreement to Implement the National Competition Policy and Related Reforms, NEM-participating jurisdictions were also required to have implemented reforms related to establishing the NEM by 1 July 1999. In 1994 CoAG identified the objectives for a fully competitive NEM as being:

- the ability for customers to choose the supplier (including generators, retailers and traders) with which they will trade;
- nondiscriminatory access to the interconnected transmission and distribution network;
- no discriminatory legislative or regulatory barriers to entry for new participants in generation or retail supply; and
- no discriminatory legislative or regulatory barriers to interstate and/or intrastate trade.

Subsequently, on 10 December 1996 the Prime Minister sought the endorsement of all jurisdictions for a revised implementation timetable for reform. That timetable required NEM-participating jurisdictions to:

- have the National Electricity Code, which sets out the rules for the operation of the NEM, authorised by the Australian Competition and Consumer Commission (ACCC) and accepted as an industry access code; and
- fully implement the market arrangements specified in the National Electricity Code by early 1998, requiring:
  - each jurisdiction to have promulgated and applied the National Electricity Law;
  - the National Electricity Market Management Company (NEMMCO) to have successfully installed and tested the information technology systems; and
  - NEMMCO and the National Electricity Code Administrator (NECA) to have assumed full operational responsibilities for the NEM.

Assessment issues

The Council's approach in the 2001 NCP assessment has been to assess jurisdictions' progress against the NCP commitments relevant to their status as NEM participants or nonparticipants. This progress is discussed later in the chapter. This section provides an overview of the main issues arising in the 2001 assessment in relation to both the NEM arrangements and more general electricity reform commitments. In brief, the Council considers that:

- progress against commitments related to the establishment of the NEM has generally been good;
- progress against commitments related to structural reform has been good for NEM participating jurisdictions, but is less advanced for non-participating jurisdictions; and
- some aspects of the current market arrangements may be acting to limit competition in the NEM and thus require consideration by NEM-participating jurisdictions.

Establishment of the NEM

The NEM commenced operation in December 1998. Participating jurisdictional NEM members are New South Wales, Victoria, Queensland,

South Australia and the ACT. Western Australia, Tasmania and the Northern Territory are not participants in the NEM, but Tasmania is to join on completion of the Basslink Interconnector with Victoria in 2003. The Commonwealth is also a party to the CoAG agreements setting up the NEM.

The Council noted in the second tranche NCP assessment that the commencement of the NEM satisfied the Agreement to Implement the National Competition Policy and Related Reforms requirement that each participating State and Territory implement the required reforms to enable the establishment of a competitive NEM by 1 July 1999. NEM-participating jurisdictions have met the conditions set out in the Prime Minister's letter of 10 December 1996. In particular:

- jurisdictions promulgated and applied the National Electricity Law;
- jurisdictions had the National Electricity Code authorised by the ACCC in December 1997, albeit with significant conditions attached to authorisation. The authorisation also allowed significant derogations by the jurisdictions as transitional measures;
- jurisdictions fully implemented the market arrangements; and
- NECA and NEMMCO assumed full operational responsibility.

These conditions were not met within the timetable set out in the letter; the market started in December 1998, rather than early 1998. The Council does not intend to qualify its assessment of progress as a consequence of these delays. The Council is satisfied that jurisdictions have adhered to the implementation of these arrangements.

Review of National Electricity Code provisions

The National Electricity Code required a large number of reviews of code provisions. The ACCC's authorisation of both the code and subsequent amendments to it required further reviews. Reviews have been completed in some areas, including transmission and distribution pricing, capacity mechanisms (including the reserve trader provisions), the value of lost load and ancillary services. Reviews are underway for generator technical standards, the scope for integrating the energy market and network services (including principles for determination of regions), the financial impact of distribution losses, dispute resolution procedures and market information provisions. NECA is to commence a review of the operation of the National Electricity Code in 2001-02. Regarding other code reviews required by the ACCC, the Council understands that reviews of power system directions (including generator compensation) and end-user advocacy have been completed.

The Council considers that generally good progress has been made in reviewing code provisions, despite some substantial delays against original

deadlines. In the 2002 assessment, the Council will consider jurisdictions' continued compliance with review commitments, including for those reviews that are yet to be progressed.

Structural reform

Jurisdictions are at different stages in the structural reform process. All NEM-participating jurisdictions introduced vertical separation of generation, transmission and distribution, and ring-fenced distribution and retail businesses. NEM-participating jurisdictions also introduced horizontal separation in generation, producing a number of competing generators. Nonparticipating jurisdictions are generally less advanced in implementing reform.

The Council considers that NEM-participating jurisdictions have met their NCP commitments regarding structural reform. The progress of each nonparticipating jurisdictions in implementing structural reform is discussed later in this chapter.

Market arrangements

The Council noted in the second tranche NCP assessment that improvements to the existing market arrangements are an ongoing requirement to facilitate a satisfactory set of arrangements for the NEM. Similarly, as part of the national energy policy framework adopted at its June 2001 meeting, CoAG agreed to improve continuously Australia's national energy markets.

In order for CoAG's original agreements to be implemented fully, the Council considers that the NEM must display the characteristics of a market. In the Council's view, the concept of a 'market' signifies the existence of competition. For a national electricity market, that competition would exist in the generation and retail sectors, and would occur both within and between regions. Sustained large inter-regional differences in electricity prices are inconsistent with the notion of a competitive national market, although some differences in price can always be expected due to differences in generation costs between regions and transportation costs (taking into account transmission losses and capital costs).

For the NEM fully to reflect these objectives, the Council considers that it must:

- provide for strong inter-regional competition, including by facilitating adequate interconnection, embracing national consistency and allowing for market entry and growth in the number of market participants;
- extend the benefits of competition to all electricity consumers;

- be governed by means of an independent and efficient institutional framework; and

- adopt transparent, market-based solutions to addressing market failure and other problems.

Recent developments in the NEM have focused attention on the efficacy of existing market arrangements. In particular, rising wholesale prices and apparent supply and demand imbalances within and between regions have raised questions about whether the arrangements underpinning the NEM adequately promote development of the market. While the Council recognises that some price variation may simply be the result of the market working efficiently, it considers that aspects of the current market arrangements could be impeding competition in the NEM. It is concerned that such impediments may exist, or emerge, in areas such as the transitional and institutional arrangements, the structure of the generation market, the framework underpinning interconnector developments and the implementation of full retail competition.

Review of NEM arrangements

At its June 2001 meeting, CoAG made new commitments concerning energy policy, and governments reaffirmed their existing commitments in relation to electricity reform. CoAG agreed to establish a Ministerial Council on Energy and to provide it with a series of priority tasks, including examining the potential for harmonising regulatory arrangements and opportunities for increasing interconnection and system security. CoAG also agreed to an independent review of energy market directions to identify strategic issues for Australian energy markets and the policies required from governments. Among other issues, the review is to: consider impediments to the full realisation of the benefits of energy market reform; identify strategic directions for further energy market reform; and examine regulatory approaches that effectively balance incentives for new supply investment, demand responses and benefits to consumers. The review is to be overseen by the Ministerial Council on Energy.

CoAG also noted the establishment of a NEM Ministers Forum, comprising Ministers from NEM-participating jurisdictions, the Commonwealth and Tasmania. The Forum is to consider issues including impediments to investment in interconnection, transmission pricing, regulatory overlap, market behaviour and the effectiveness of regulatory arrangements in promoting efficient market outcomes. At its first meeting in June 2001, the Forum agreed to a framework for resolving issues affecting the development of the NEM, focussing on addressing interconnection arrangements and early resolution of major reviews of the National Electricity Code.

The Council welcomes governments' recommitment to NEM principles and agreements, and CoAG's commitment to considering impediments to the full realisation of the benefits of energy market reform. The Council raises a

number of issues in this assessment that could usefully be considered in these processes. These include the institutional framework underpinning the NEM, the structure of the generation market and the arrangements relating to interconnectors (see later discussion).

In addition to the CoAG review, several separate review initiatives have been proposed or launched. South Australia has established an electricity taskforce to review the rules and design of the NEM and its impact on South Australia, and to recommend improvements to its operation. NECA is also to undertake a review of the performance and operation of the National Electricity Code since the NEM commenced. The NEM Ministers Forum, at its June 2001 meeting, requested NECA to bring forward to December 2001 the delivery of the major findings of this review.

The Council is strongly supportive of the review of NEM arrangements, but it would be concerned if any of the announced review processes led jurisdictions to adopt less transparent mechanisms or delayed ongoing electricity reform. In particular the Council considers that governments have a clear role in determining the overarching institutional arrangements for the NEM, but that the day-to-day operation of the market should be free of government involvement. Governments should continue to recognise that some electricity wholesale price volatility in the short to medium term is an inevitable, indeed desirable, aspect of the market's operation, to encourage appropriate electricity supply and demand responses. These responses, which include investment in new transmission and generation capacity, are essential to ensuring competitive prices in the long run. Any market refinements should reinforce these incentives, but overly intrusive government action risks defeating them.

Transitional arrangements

Jurisdictions have been permitted derogations from the National Electricity Code to allow the orderly phase-in of the competitive market and, in some cases, to preserve pre-existing contractual or other commitments for a longer period. The aim in allowing for derogations was that they would predominantly be one-off, transitional measures. The National Electricity Code allows a process for considering new derogations, but continual extension of transitional derogations was not expected. A five-year period was set to allow the phase-in of market arrangements, and most derogations were expected to cease by 31 December 2002.

In general, the Council believes there should be no need for transitional derogations beyond this date. A possible exception is the introduction of full retail competition, where there have been some delays to the timetable. While the Council fully accepts that derogations to date have been granted through agreed processes, it considers that any additional or extended derogations need to satisfy a robust public interest case.

Similarly, in the lead-up to full retail competition, jurisdictions have set up vesting contracts between generators and retailers to manage the risks to retailers from buying electricity at market prices while selling to consumers at regulated prices. Vesting contracts are subject to the authorisation provisions of the *Trade Practices Act 1974* (TPA). The main function of vesting contracts has been to reduce the risk to retailers by setting a firm price for their wholesale purchases. The contracts have also been used to influence generator behaviour in newly created spot markets.

All vesting contracts were meant to cease by 31 December 2000. The Council accepts that there may be a case for continued management of the risks to retailers if there are delays in making retail competition effective. However, the Council is concerned that vesting contracts place major constraints on the behaviour of generators and retailers, and thus limit the full application of market arrangements.

The Council considers that the objectives of vesting contracts could be met with less distortion to market arrangements. Therefore, unless there are significant delays in making retail competition effective, the Council considers that there should be no need for the extension of vesting contracts. The Council notes that governments can assist in reducing transition issues by providing certainty on the future retail competition program as soon as possible. This would aid efficient risk management and ultimately could help to lower consumer prices. Transition issues are also likely to be lessened because individual participants have been aware of impending retail competition for a number of years and will have been employing market solutions to manage risk. The Council discusses each jurisdiction's progress in phasing out derogations and vesting contracts later in this chapter.

Institutional framework

The Council notes that jurisdictions are ultimately responsible for NECA and NEMMCO. Experience suggests that there may be some weaknesses in the institutional framework to which these organisations belong. While jurisdictions have examined governance and liability arrangements, the Council considers that they also need to examine broadly the roles and responsibilities in market operations, market development, change to the National Electricity Code and regulation.

The Council notes that both the CoAG energy review and the NEM Ministers Forum are to consider regulatory arrangements in the NEM. In the Council's view, these processes could usefully consider objectives including (1) achieving clear accountabilities for regulation, market performance and market development, regulatory certainty and efficiency, and (2) ensuring appropriate levels of regulatory and compliance costs.

Structure of the generation market

Evidence of high (and increasing) pool prices in some regions of the NEM raises the question of whether the structure of the generation market is ensuring sufficient competition (see figure 6.1). The Council recognises that the efficient operation of the NEM will lead to rising prices as capacity constraints are approached. The movement of prices in response to the changing balance of supply and demand is an important signal for new investment in electricity supply capacity.

High regional pool prices could, however, indicate that the generation market is too thin and that individual generators have market power. A recent study by the Australian Bureau of Agricultural and Resource Economics lends weight to this possibility. It finds that 'in the recent past, in certain months up to half of the price paid for the wholesale supply of electricity in New South Wales, Victoria and South Australia may be attributable to strategic behaviour in the market.' (Short et al. 2001, p. 89.)

While NEM-participating jurisdictions introduced horizontal separation in generation, the Council considers that the unbundling of generation in many jurisdictions has been the minimum necessary for a competitive market. The Council would be highly concerned by any move to reduce the number of generating companies in any jurisdiction. In particular, it would regard any such reduction as undermining structural reform commitments, where generators are in public ownership. The Council would also be concerned by any increase in government intervention in market outcomes, including intervention in the type or level of capacity or in the operation of generating companies.

High regional prices could also signal a bias against additional transmission capacity in the National Electricity Code. While high prices have resulted in increased interest in generation in affected regions, this may reflect problems associated with the approval of additional transmission capacity. It is not yet clear how many of the proposed projects will proceed and when they will become operational. It is also not clear what the profile of investment is likely to be between generation and interconnection, and different types of generation.

The variation in regional prices generally reinforces the Council's desire to see progress in interconnection, where this is economic. The Council understands that the arrangements underpinning interconnectors are to be considered by the Ministerial Council on Energy and the NEM Ministers Forum. The Council welcomes this discussion, and considers that governments' consideration of the matter could usefully address the existence of any bias against additional transmission capacity in the National Electricity Code.

The Council also notes that NECA, in response to market concern with the behaviour of some generators, is reviewing bidding and rebidding strategies and their effect on prices. The review is to consider options for additional

safeguards against potential abuses of market power. At its June 2001 meeting, CoAG agreed to request that NECA give these issues early attention; the NEM Ministers Forum is also to consider the matter. CoAG also agreed to request that NECA review value of lost load.

Regarding the application of competitive neutrality, the Council notes that jurisdictions' commitments should ensure that government businesses in the electricity sector do not gain any net competitive advantage as a result of their public ownership. If any private businesses consider this commitment is not being met, then the Council urges them to raise this issue with the jurisdiction concerned. Each jurisdiction established a mechanism for investigating such allegations. The Council has a remit to ensure these mechanisms work effectively to meet the commitments on competitive neutrality.

Interconnectors

The Council attaches high importance to the development of interconnectors where they are economically justified. Interconnectors can enable a more competitive generation market and, because peaks are not coincident, they can help smooth the costs of meeting peak demand. The importance of interconnection to the development of the NEM is reflected in the objective of the 1994 CoAG electricity agreements and the National Electricity Code that there be no discriminatory legislative or regulatory barriers to interstate or intrastate trade. The Council considers that this objective has not been sufficiently met. In particular, the only application for a new regulated interconnector has been stalled for some years and the framework for unregulated interconnectors is not yet fully developed.

In recognition of the importance of interconnection and its ability to alleviate regional supply and demand imbalances such as those recently experienced in the NEM, the newly established Ministerial Council on Energy and the NEM Ministers Forum are to consider impediments to investment in interconnection. The NEM Ministers Forum, at its June 2001 meeting, agreed to several measures to address interconnection issues, including commissioning an assessment of the costs and benefits of a more integrated national grid, to guide proposals for its future development. In addition, the ACCC and NECA have announced that they will be working together to improve the current arrangements for network investment and pricing. The ACCC is considering a number of proposals for change to the National Electricity Code in this area.

Regulated interconnectors

Regulated interconnectors receive a fixed rate of return which the ACCC determines. The National Electricity Code sets out a process for approving new regulated interconnectors. Currently, NEMMCO and the Inter-Regional Planning Committee (IRPC) must review an application and NEMMCO must

determine under a regulatory test whether the net economic benefits justify the project as a regulated interconnector.

Since the commencement of the NEM, there has been one application for a new regulated interconnector (the South Australia–New South Wales Interconnector, or SNI) and, in May 2001, one application for a proposed upgrade to the existing interconnector between the Snowy and Victorian regions. TransGrid and the Electricity Trust of South Australia Transmission Corporation first proposed SNI in December 1997. NEMMCO evaluated the project against the customer benefit test. NEMMCO found that SNI did not satisfy the test, but stated that if the test had assessed broader public benefit it would have been likely to do so. It advised that the test was not robust. A re-evaluation of the project was suspended until the ACCC promulgated a new regulatory test in December 1999. NEMMCO and the IRPC are evaluating the application against the new regulatory test. The NEM Ministers Forum, at its June 2001 meeting, requested that NEMMCO finalise its consideration of the SNI application by September 2001, and of the Snowy-Victoria upgrade application by November 2001.

Recent events in the NEM have focused attention on the general lack of progress on interconnection and, in particular, on delays in the approval of the SNI. Regarding the SNI application, the Council accepts that there was a flaw in the customer benefit test, and that amendments have been made to address it. The Council also notes arguments by NEMMCO and New South Wales that delays have been required by resource constraints caused by: the commissioning of the Queensland–New South Wales Interconnector (QNI); uncertainty surrounding NECA's transmission and distribution pricing review; and the status of the Murraylink unregulated interconnector. In addition, the Council notes that in 2000 South Australia declared the SNI to be a major development and issued a licence exemption to enable TransGrid to prepare an environmental impact statement. The Council understands that New South Wales has also agreed to fast-track approvals for the project.

Notwithstanding these factors, the delays in resolving the SNI application have been considerable. While the Council recognises the importance of ensuring that interconnector approval processes reach appropriate outcomes, it is concerned by the potential opportunity costs imposed by such delays where a proposed regulated interconnector would be economically justified. The Council considers that the delays experienced by the SNI application indicate possible problems with the process for evaluating regulated interconnectors. Further, the delays suggest that the NEM objective of no discriminatory legislative or regulatory barriers to interstate and/or intrastate trade is not being met.

In addition to the examination of interconnection arrangements recently announced by CoAG, NEMMCO has established an Interconnector Working Group to report on potential improvements to the assessment of proposals to establish new interconnectors or augment existing ones. At its June 2001 meeting, the NEM Ministers Forum agreed to establish an inter-jurisdictional working group to respond to the issues identified in this process, and to provide policy options, by the end of 2001. Further, the ACCC

is to conduct a review of the regulatory test. The Council considers that these processes are appropriate and necessary, given that the current arrangements may be failing to ensure a NEM objective is being met.

In the 2002 assessment, the Council will consider jurisdictions' progress in addressing the arrangements that underpin the development of regulated interconnectors. The Council will also consider the progress of the SNI project. The Council expects that the current consideration of the SNI application will be completed by September 2001.

In the 2002 assessment, the Council will also be seeking to ensure that licensing or other requirements imposed by individual jurisdictions do not impose further unwarranted delays on, or hurdles for, the development of new interconnection projects. The Council considers that governments have a 'best endeavours' obligation to facilitate an infrastructure development once it has been approved under the NEM's regulatory processes. In particular, the Council considers that it would be inconsistent with the CoAG agreements for any jurisdiction's scrutiny of a proposed development under licensing or other regulatory arrangements to revisit issues of net benefit, particularly where the focus of that scrutiny is on participants in one region rather than the market as a whole. This issue is discussed further in the context of South Australia's licensing arrangements later in this chapter.

Unregulated interconnectors

Unregulated interconnectors rely on trading in the wholesale market to derive their revenue. The development of unregulated interconnectors involves owners taking risks on investments against expected price differentials between regions. It is possible that the requirements for regulated interconnectors will substantially lessen because investors are willing to accept the commercial risks on interconnector investments. The Council would welcome a reliance on commercial rather than regulatory drivers for new transmission investments. However, it considers that the current provisions for unregulated interconnectors do not yet provide reasonable certainty to investors or balanced regulatory treatment of competing investments. In particular, existing provisions:

- depend on unregulated direct current (DC) transmission links, which may be high cost compared with regulated alternating current (AC) links;

- leave considerable uncertainty about the costs to unregulated interconnectors of interconnection agreements with transmission network service providers in each region, and about the transmission charges to be borne by unregulated interconnectors; and

- do not adequately address how an existing system with open access regulated interconnectors would interlink with a future system where a substantial share of transmission investments is through closed access and controllable links. It is particularly unclear what instruments would

be used as a check on market power within regions if closed links replaced open access networks.

The Council notes that jurisdictions have made some progress in considering these issues. In particular, consideration of interconnection arrangements forms part of the commitments recently agreed by CoAG. NEMMCO's Interconnector Working Group is also considering the arrangements applying to unregulated interconnectors. Further, the ACCC is addressing relevant issues in relation to proposals to change the National Electricity Code. In the 2002 assessment, the Council will consider jurisdictions' progress in resolving problems with the arrangements applying to unregulated interconnectors.

Institutional arrangements

Under current arrangements, the IRPC analyses whether a proposed interconnector should be approved. The Council notes that some jurisdictions are represented on the IRPC by planning authorities and others are represented by providers of transmission services. The Council considers that two changes are desirable: first, that the representation be by planning authorities, which are separate from the transmission provider; and second, given that most large transmission investments have impacts outside one jurisdiction, that a single national body undertake the regulatory role for investments above a certain size.

The Council considers that jurisdictions should take these issues into account when considering the appropriate arrangements to underpin interconnectors. In particular, the Council considers that the institutional arrangements underpinning interconnection could usefully form part of the Ministerial Council on Energy's and NEM Ministers Forum's consideration of interconnection issues.

Full retail competition

The Council considers that the implementation of full retail competition (under which all customers are able to choose their electricity supplier) is an essential component of the electricity reforms. Both the timing of, and the approach to, implementing full retail competition will be essential for meeting the NEM objectives.

All jurisdictions have opened up significant segments of consumer markets to competition. However, CoAG's 1 July 1999 timeframe for introducing full retail competition has slipped as a result of delays in making the national market effective. The Council accepts that the timetable for the introduction of full retail competition proved infeasible. It notes, however, that the commitment to full market contestability still stands and that a revised timetable for its implementation has never been formally agreed.

The Council understands that jurisdictions' most recent position on the phase-in of full retail competition is as outlined in table 6.1. At the June 2001 CoAG meeting, jurisdictions (with the exception of Queensland and South Australia) reaffirmed their commitment to existing timetables, including contestability timetables. Queensland and South Australia, while committing to make their best endeavours, were not prepared to reaffirm their current contestability timetables.

Table 6.1: Customer contestability timetable

Customer size	*New South Wales*	*Victoria*	*Queensland*	*South Australia*	*ACT*
Above 5 MW or 40 GWh per year	October 1996 47 sites	December 1994 47 sites	March 1998 69 sites	Not applicable	December 1997 5 sites
Above 1 MW or 4 GWh per year	April 1997 660 sites	July 1995 330 sites	October 1998 470 sites	December 1998 150 sites	March 1998 40 sites
Above 750 MWh per year	July 1997 3 500 sites	July 1996 1 500 sites	Not classified	July 1999 630 sites	May 1998 250 sites
Above 160 MWh per year	July 1998 10 800 sites	July 1998 5 000 sites	July 1999 7 000 sites	January 2000 2 300 sites	July 1998 1 000 sites
All customers	January 2001 – January 2002 2.7 million sites	January 2001 – January 2002 1.96 million sites	To be determined 1.4 million sites	January 2003 730 000 sites	July 2001 – January 2002 125 000 sites

MW: megawatt; GWh: gigawatt hour; MWh: megawatt hour

The Council considers that most jurisdictions have been moving adequately towards the objective of full retail competition. The Council notes that New South Wales and Victoria anticipate having the necessary arrangements in place to introduce full retail competition at the beginning of 2002. The Council expects other jurisdictions to adopt best endeavours timeframes for implementing full retail competition. Those jurisdictions will have the benefit both of national systems having been put in place and of observing the approaches adopted by the more advanced jurisdictions.

Effectiveness of competition to date

The Council has considered the extent to which the opening up of the market to competition has proved effective. The Council's assessment of individual NEM-participating jurisdictions' progress against NCP commitments (see discussion later in this chapter) draws on available evidence of the ability of customers to realise benefits in market segments opened up to competition.

The Council has looked at two possible indicators of success: price trends and customers' ability to switch retailers. The Council's analysis has been limited by both the availability and quality of data and flaws in the actual measures. In particular, the number of customers who have switched retailer can be an imperfect indicator, as the threat of entry may be equally effective at delivering customer benefits and the test is only valid where the costs of switching are low relative to the benefits. Nevertheless, if only a small proportion of major customers have switched between suppliers then there may be barriers to entry that are making competition ineffective.

In general, the Council considers that customers have achieved significant benefits from the opening up of markets to competition. The information available to the Council suggests that customers in market segments opened to competition have been able to change supplier. NEMMCO estimates that around 18 000 of the 60 000 contestable customers consuming over 160 megawatt hours per year have elected to change retailer since the start of the NEM (NEMMCO 2001, p. 2). The Productivity Commission has estimated that households and industrial users achieved reductions in real electricity prices in the 1990s averaging around 16 per cent (Banks 2000, p. 5). The Commission has noted that the bulk of reductions have gone to business customers (around 24 per cent in real terms from 1991-92 to 1996-97), with residential customers receiving price reductions of 7 per cent over the same period (Banks 1999, p. 2). Research undertaken by Port Jackson Partners for the Business Council of Australia suggests that price reductions have been spread unevenly between jurisdictions, with customers in New South Wales and Victoria achieving the greatest benefits (Port Jackson Partners 2000, p. 7).

However, the ability of customers to achieve such benefits appears to have begun to diminish. In particular, there is evidence (if sometimes anecdotal) of increased price pressures in the wholesale, contract and regulated markets in some jurisdictions. Figure 6.1, which charts average pool prices since the start of the NEM, indicates that price levels and volatility have tended to rise in all regions except Queensland.

To some extent, increased price pressures can be attributed to the market's natural cycle — that is, as demand for electricity approaches supply, prices will tend to increase until investment is triggered and new capacity shifts the supply–demand balance. The Council considers, however, that structural problems in the NEM may also be contributing to price pressures. Such issues, which include the structure of the generation market (and the resulting ability of participants to exercise market power) and the lack of progress on interconnection, were discussed earlier in this chapter.

For customers to realise the full benefits of competition, jurisdictions must address any structural problems in the NEM that may be limiting the flow of benefits to electricity consumers. The Council considers that the processes established at the June 2001 CoAG meeting provide governments with an opportunity to consider these issues. In the 2002 assessment, the Council will consider jurisdictions' progress in this area.

Figure 6.1: Average spot price by NEM region (3-month moving average)

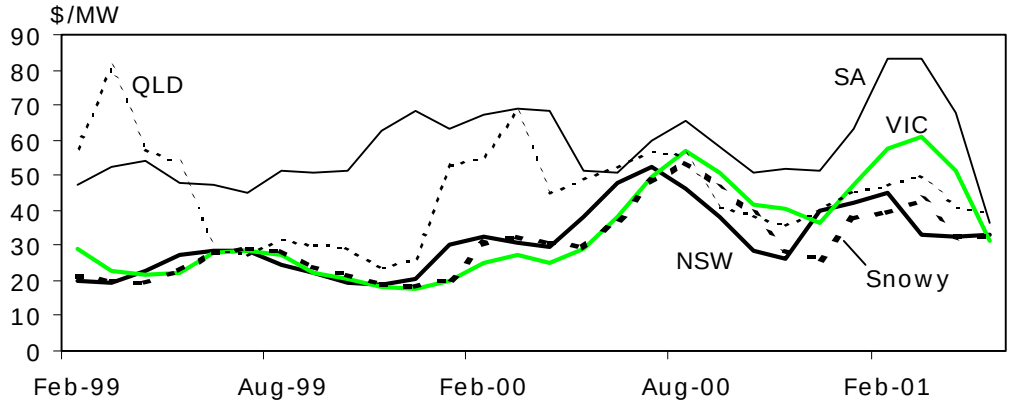
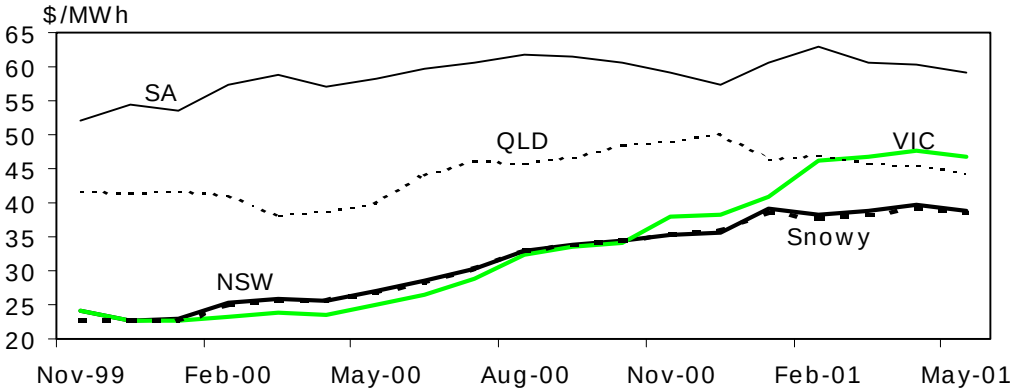


Figure 6.2: Average spot price by NEM region (12-month moving average)



Source: NEMMCO.

Progress in implementing full retail competition

Under its assessment of jurisdictions' progress in implementing NCP, the Council outlines each NEM-participating jurisdiction's project plan for implementing full retail competition. Jurisdictions are at different stages in this process. The Council's approach in this assessment has been to determine a timetable and major milestones against which future progress may be assessed.

The Council recognises that jurisdictions may take varying approaches to implementing full retail competition. However, it considers that any approach adopted should be based on a comparison of costs and benefits, leave room for innovation, promote national consistency and minimise barriers to entry. The Council considers jurisdictions' progress on these issues later in this chapter, and will consider jurisdictions' further progress in the 2002 assessment.

For all NEM-participating jurisdictions, two key areas require resolution before full retail competition may be introduced: metering arrangements and customer transfer procedures.

Metering arrangements

Wholesale spot prices are determined every half-hour in the NEM. Electricity consumption in markets opened up to competition must be able to be reconciled with half-hourly prices to allow for settlement of the wholesale market. The National Electricity Code requires customers who change retailers to install electricity meters capable of reading and electronically communicating data at half-hourly intervals. In April 2001 the ACCC released a draft determination on code changes that would allow for lower-cost metering alternatives. The changes are designed to enable smaller customers to choose their electricity retailer.

Under the proposed code changes, settlement in the wholesale market will be allowed on the basis of three additional metering installation types: type 5 (manually read interval meters), type 6 (household, or accumulation meters) and type 7 (unmetered supplies, including street lighting). It is proposed that a metrology coordinator in each participating jurisdiction must develop and approve metrology procedures for these three metering installation types. The metrology procedure must contain information on the procedures necessary to facilitate the conversion of metering data into a format suitable for wholesale market settlement. Settlement on the basis of these metering installation types cannot occur until a metrology procedure becomes effective under the National Electricity Code.

For type 6 (household) meters, a procedure known as load profiling is necessary to achieve wholesale market settlement. Load profiling involves allocating customers' usage over time to half-hours based on an average load shape for those (non-interval metered) customers. The ACCC's draft determination recognises that load profiling may facilitate customer choice in the short term by providing a low-cost metering alternative, but that it may also stifle competition in the longer term by inhibiting demand-side responsiveness and the development of innovative retail tariffs. The ACCC has required, therefore, that jurisdictional regulators jointly conduct a review of type 5 and type 6 metering installations and the metrology procedures that have been implemented in the participating jurisdictions by 31 December 2003.

In relation to metering arrangements, the Council is sympathetic to approaches which do not impose high costs for the time being, and so minimise barriers to customer switching, but which leave scope for innovation. In the longer term, however, the Council considers that it is important that metering solutions allow price signals to be passed through to consumers, and so promote both product innovation and the development of demand-side response to market developments.

Market transfer arrangements

For full retail competition to be effective, systems will need to be implemented that are capable of allowing the transfer of a large number of customers between retailers. The transfer of customers and the settlements process is currently achieved using the Metering Administration System operated by NEMMCO. To support full retail competition, NEMMCO is replacing this system with the Market Settlement and Transfer Solution, which will allow for the processing of increased volumes, involve a number of new and changed functions, and reduce the cost of processing transfers. The Council understands that the system is to be ready for implementation by January 2002.

Assessing progress: NEM-participating jurisdictions

New South Wales

Derogations

The ACCC's authorisation of the National Electricity Code included a number of derogations for New South Wales. That State sought further derogations in April 1999, amended in June 1999 and December 1999. The ACCC granted conditional authorisation of these derogations in June 2000. New South Wales has since sought no additional or extended derogations, but has indicated that changes may be required to the Power Trader Transmission Pricing Derogation to ensure that it operates as originally intended. It has also indicated that additional derogations may be necessary to support the introduction of full retail competition for the smallest customers.

Vesting contracts

The New South Wales vesting contracts were authorised in September 1999 and limited to 31 December 2000. New South Wales replaced its vesting contracts with the Electricity Tariff Equalisation Fund (see discussion under 'Full retail competition').

Full retail competition

New South Wales introduced contestability for medium-sized businesses using 100–160 megawatt hours (MWh) per year on 1 January 2001. Its annual report noted that small businesses using 40–100 MWh per year were to become contestable on 1 July 2001 and that other small businesses and households are to become contestable on 1 January 2002. The annual report noted that this timetable depends on customer transfer arrangements being operational.

Under the New South Wales arrangements, all customers consuming less than 160 MWh per year have the right to an offer of supply at a tariff determined by the Independent Pricing and Regulatory Tribunal (IPART) and, from 1 January 2002, will have the choice of remaining on, or returning to, a standard regulated contract. New South Wales noted in its annual report that these arrangements do not prevent a retailer from entering a commercially negotiated contract with these customers.

Effectiveness of competition

New South Wales' annual report argued that the State has the cheapest electricity prices, on average, across mainland Australia and that Sydney and Melbourne are the NEM cities with the lowest retail prices. It based these claims on data from the Electricity Supply Association of Australia. Further, the report cited estimates by the New South Wales Treasury that electricity customers in the State saved over $1.6 billion (in real terms) between the commencement of reform in May 1995 and December 2000. The annual report stated that these gains have been spread across all groups of customers. The Port Jackson report for the Business Council of Australia found that medium and large industrial and commercial customers in New South Wales had experienced very large reductions in their electricity prices (Port Jackson Partners 2000, p. 6). Figure 6.1 illustrates that, more recently, New South Wales spot prices have tended to rise and become more volatile.

The annual report also cited evidence from two surveys concerning customer transfer rates. The first, a September 1997 survey by the Electricity Supply Association of Australia, found that 47.6 per cent of customers consuming above 4 gigawatt hours (GWh) per year had changed supplier since October 1996. The second, a December 1999 survey by the Australian Industry Group, found that 30 per cent of survey respondents who had negotiated a contract in the previous 12 months had changed supplier.

Progress towards full retail competition

New South Wales enacted the *Electricity Supply Amendment Act 2000* to implement arrangements necessary for introducing full retail competition. The Act establishes a regulatory regime for smaller customers and provides for new market rules, among other provisions. Key arrangements that need to

be operational before the introduction of full retail competition are metering and customer transfer arrangements and the Electricity Tariff Equalisation Fund.

Metering arrangements

New South Wales commenced consultation on a draft metrology procedure for types 5, 6 and 7 metering installations. An interim type 5 metrology procedure has been approved and published. Under the New South Wales arrangements, customers consuming 100–160 MWh per year will require an interval (type 5) meter to change retailer. Prior to the type 5 metrology procedure becoming effective, these customers have been able to change retailer on the basis of a National Electricity Code-compliant meter (likely to be type 4). For smaller customers, New South Wales is implementing a load profiling system.

The annual report noted that the metering arrangements allow any customer (or the customer's retailer) to install an interval meter where the benefits of doing so outweigh the costs. New South Wales argued that as the profile shape better reflects consumption by smaller customers over time, the incentives for customers with more favourable consumption patterns to move to interval meters will increase.

The annual report stated that New South Wales, in developing these arrangements, has tried to achieve national consistency and to weigh costs and benefits. New South Wales pointed to its development of a Memorandum of Understanding to provide a framework for consultation and decision-making on national systems, and its work with Victoria to ensure consistency in full retail competition arrangements. It also noted that the costs and benefits of metering solutions have been analysed in various studies by New South Wales and Victoria. These studies found that roll-out of interval meters is economic at this stage for only a small group of customers using less than 160 MWh per year.

Market transfer arrangements

New South Wales' annual report stated that the Government is working closely with NEMMCO and industry to ensure business systems are in place within the Government's contestability timetable. The annual report also indicated that New South Wales is taking an active role in overseeing the contract for procuring centralised national systems and that implementation of these systems is on schedule.

Electricity Tariff Equalisation Fund

The New South Wales Government established the Electricity Tariff Equalisation Fund to manage the wholesale price risk faced by retailers obliged to supply customers at regulated tariffs. If a retailer's wholesale

electricity costs are lower than the energy cost component of the regulated tariff, then the retailer will be obliged to pay these surplus monies into the Electricity Tariff Equalisation Fund, which will be used to compensate retailers when wholesale prices exceed the energy cost component of the regulated tariff. If the fund has insufficient money, then the Government-owned generators will be required to top it up to the extent that they have benefited from the high wholesale prices that caused the lack of funds.

The fund guarantees standard retail suppliers a fixed margin for supplying small customers at prices determined by IPART, with the margin based on the costs and risks of supplying regulated customers. In addition to the fund's management of wholesale price risk, New South Wales argued that the fund will ensure retailers do not earn windfalls that can be used to subsidise sales to contestable customers.

The annual report stated that New South Wales, to attract new entrants into retailing, has calculated the regulated tariff on the basis of the long-run marginal cost of electricity generation. New South Wales argued that if a retailer can enter a hedging contract with a generator to supply electricity at less, then the retailer should be able to offer incentives for customers to switch away from regulated arrangements.

Assessment

The Council considers that New South Wales has met its 2001 NCP assessment obligations in relation to electricity.

The Council accepts that the introduction of full retail competition may necessitate transitional measures beyond December 2002, but considers that any additional or extended derogations would need to satisfy a robust public interest case. The ACCC's authorisation process, which will be applied to any additional or amended derogations, will account for public interest considerations.

The Council notes that New South Wales committed to introducing full retail competition and that it reaffirmed both that commitment and the current contestability timetable at the June 2001 CoAG meeting. The Council considers that New South Wales' approach to implementing metrology and customer transfer arrangements has been based on a comparison of the costs and benefits and has promoted national consistency.

The Council notes that some market participants have expressed concern that the Electricity Tariff Equalisation Fund may impact on the operation of the NEM, for instance by affecting pricing or hedging arrangements. The Council understands that New South Wales intends both the continuation of regulated tariffs and the fund to be transitional arrangements. The Council will review any impact on the NEM of these arrangements, along with New

South Wales' progress in adopting market-based solutions, in the 2002 assessment.

Victoria

Derogations

The ACCC's authorisation of the National Electricity Code included a number of derogations for Victoria. Some continue to apply, although a number expired on 31 December 2000. In its 2001 NCP annual report, Victoria stated that additional transitional derogations may be sought to implement retail contestability in a timely and effective manner. It noted that transitional derogations would generally be used only as a last resort, where other mechanisms to deliver effective full retail competition had failed.

In March 2001 Victoria applied to the ACCC to amend its derogations. The proposed derogations would delay the introduction of competition in meter provision and metering data services while full retail competition is introduced. Victoria argued that metering competition is not necessary to realise substantial benefits from full retail competition and that introducing metering competition for small customers at the same time as full retail competition would add an extra element of complexity that may inhibit the development of core retail competition. The ACCC granted conditional interim authorisation of the derogations in July 2001.

Vesting contracts

Victoria's vesting contracts expired on 31 December 2000 and the Victorian Government has not sought to extend its vesting contracts.

Full retail competition

In January 2001 Victoria introduced choice of retailer to electricity customers consuming 40–160 MWh per year. Victoria indicated that it plans for remaining noncontestable customers (that is, those using less than 40 MWh per year) to be able to choose their retailer from January 2002.

Effectiveness of competition

Victoria's annual report argued that the introduction of competition into the electricity market has resulted in significant price reductions for contestable customers, despite recent price rises. It cited: a 1998 report by the Australian Chamber of Manufactures, which found that industrial and commercial

businesses achieved an average reduction in electricity costs of 23 per cent between 1994 and 1998; and a 2000 report by NECA, which found that the average wholesale electricity price in Victoria was 16 per cent lower than the average price at market start. The Port Jackson report for the Business Council of Australia found that medium and large industrial and commercial customers in Victoria had experienced very large reductions in their electricity prices (Port Jackson Partners 2000, p. 6). More recently, increased spot prices appear to have fed through to increased price pressures for retail customers.

Victoria also argued that customers have been able to change retailers. The Australian Chamber of Manufactures report noted that around one third of the firms surveyed had changed retailers between 1994 and 1998.

Progress towards full retail competition

Victoria enacted the *Electricity Industry Act 2000*, which provides the framework for the introduction of full retail competition. The Act includes provisions on load measurement, licensing, cross-ownership restrictions and community service agreements. The Act also provides for transparency and independent oversight of price and service offers to smaller customers for a transitional period. Metering arrangements and customer transfer procedures are two key areas that require finalisation before full retail competition is introduced.

Metering arrangements

Victoria finalised a metrology procedure for types 5, 6 and 7 metering installations, and published the metrology procedure for types 5 and 7 metering installations. Victoria will not publish the metrology procedure for type 6 metering installations until changes to the National Electricity Code relating to full retail competition have been granted final authorisation by the ACCC. In its annual report, Victoria indicated that implementation of its metrology procedures by July 2001 was a key milestone for the introduction of full retail competition.

Under Victoria's metering arrangements, customers who use 40–160 MWh per year must install an interval (type 5) meter to change retailer. For customers who consume 0–40 MWh per year and use type 6 meters, net system load profiling will be used to measure market loads. Victoria argued in its annual report that net system load profiling is relatively low cost, which supports innovation and allows customers to switch retailers readily.

The Office of the Regulator Generator commenced a process to determine the viability of a regulated changeover to interval (type 5) meters for household and small business customers, including an analysis of the benefits and costs. It indicated that it would be prepared to facilitate the roll-out of interval meters pursuant to a 'new and replacement' rule by allowing a small smeared surcharge on network tariffs, provided that the benefits justified the

additional cost. The Council understands that the proposed implementation date is October 2001.

While developing Victoria's metering arrangements, Victoria and New South Wales jointly released an issues paper in October 2000 and sought submissions on the issues raised. The Victorian Full Retail Contestability Co-ordination Committee also commissioned Intelligent Energy Systems to evaluate metering strategies in 1999, including a cost–benefit analysis of the options.

Market transfer arrangements

Victoria indicated that a further key milestone for the implementation of full retail competition is the completion of the national transfer and wholesale settlement system, associated business systems and the market participant interfaces by December 2001. Victoria, along with other NEM-participating jurisdictions, entered into arrangements with NEMMCO for it to procure national systems for customer transfer and settlement processes. Victoria reported that it is participating in, and assisting, NEMMCO's procurement and trial of the Market Settlement and Transfer System.

Assessment

The Council considers that Victoria has met its 2001 NCP assessment obligations in relation to electricity.

The Council accepts that the introduction of full retail competition in Victoria may necessitate transitional measures beyond December 2002. However, it considers that any additional or extended derogations would need to satisfy a robust public interest case. The Council notes that the ACCC has granted interim authorisation to proposed amendments to Victoria's derogations, and that this process has accounted for public interest considerations. The Council welcomes the fact that Victoria has not sought to extend its vesting contracts.

The Council notes that Victoria has committed to introducing full retail competition and that it reaffirmed both that commitment and the current contestability timetable at the June 2001 CoAG meeting. The Council considers that Victoria's progress in implementing the necessary mechanisms to support the introduction of full retail competition meets its 2001 NCP assessment obligations. The Council is satisfied that Victoria's approach has been based on a comparison of the costs and benefits and has promoted national consistency. The Council expects that all Victorian customers will have become contestable by the time of the 2002 assessment. In that assessment, the Council will consider any outstanding issues for the implementation of full retail competition, as well as the extent to which consumers are capturing the benefits of competition.

Queensland

Derogations

The ACCC's authorisation of the National Electricity Code included a number of derogations for Queensland. Queensland sought to amend these derogations on 19 April 2000 and 24 October 2000. The ACCC granted authorisation of the first set of amendments (which primarily related to the operation of the DirectLink Interconnector) in June 2000. The ACCC granted conditional interim authorisation of the second set of amendments in December 2000. Those amendments will, if authorised in the final determination, extend the date of eight derogations from the date of the commissioning of the QNI until 31 December 2002. Queensland's 2001 NCP annual report did not indicate that Queensland intends to seek additional derogations or the extension of existing derogations.

Vesting contracts

Queensland's vesting contracts are due to expire on 31 December 2001. Queensland's annual report noted that the Government is considering appropriate arrangements post-December 2001. It stated that any decisions about future arrangements would be taken against the background of public interest.

Full retail competition

Queensland made contestable all customers consuming over 200 MWh per year. Queensland's annual report indicated that the number of contestable customers totals around 7500, with those on negotiated terms comprising 99 per cent of customers consuming over 40 GWh per year, 59 per cent of customers consuming over 4 GWh per year and 20 per cent of customers consuming over 200 MWh per year.

Queensland stated that it will introduce competition to customers who consume less than 200 MWh per year provided that there is a net public benefit. Queensland advised the Council that it will conduct a cost–benefit review before it commits to introducing competition to such customers. This review will assess the financial and non-financial impacts of full retail competition, including: the expected price benefits to customers; the impact on government, including on community service obligation payments; the impact on the financial position of electricity suppliers; and non-price benefits. The Government expects to announce its decision before the end of 2001, in conjunction with an implementation plan and a target implementation date.

Effectiveness of competition

The Port Jackson report for the Business Council of Australia found that electricity reforms had led to lower electricity prices for customers in Queensland, particularly in the industrial sector. These price reductions were smaller, and had occurred more recently, than in New South Wales and Victoria (Port Jackson Partners 2000, pp. 6–7). Figure 6.1 indicates that Queensland spot prices have tended to become less volatile over time, unlike those in other NEM regions.

Assessment

The Council considers that Queensland has met its 2001 NCP assessment obligations in relation to electricity.

The Council welcomes that Queensland has not indicated that it intends to seek additional derogations or extensions of existing derogations. However, it considers that the objectives of vesting contracts could be met with less distortion to market arrangements. The Council notes that the Queensland Government could help reduce transition issues, and thus the need for vesting contracts, by providing certainty on the future retail competition program. The Council will consider the issue of Queensland's vesting contracts in the 2002 assessment.

The Council notes that Queensland committed to introducing full retail competition in the electricity agreements. Queensland reaffirmed that commitment at the June 2001 CoAG meeting, but was not prepared to reaffirm its contestability timetable. Queensland is less progressed than some other NEM-participating jurisdictions in its approach to implementing full retail competition; the Council will consider Queensland's progress on this matter in the 2002 assessment.

South Australia

Derogations

The ACCC's authorisation of the National Electricity Code included a number of derogations for South Australia. South Australia sought further derogations on 28 October 1999 in relation to the obligations of a network service provider and generator to register as code participants. The ACCC granted authorisation of these derogations on 25 January 2000. South Australia's 2001 NCP annual report did not indicate that South Australia intends to seek additional derogations or extensions of existing derogations.

Vesting contracts

The ACCC made a final determination on the South Australian vesting contracts on 22 December 1999, and on an application for revocation and substitution of the vesting contracts on 20 December 2000. The vesting contracts extend to 31 December 2002, partly because they act as a regulatory mechanism in South Australia preventing significant concentration of market power.

Full retail competition

South Australia introduced competition into its electricity market in December 1998. In January 2000 competition was extended to customers consuming over 160 MWh per year, totalling around 3100 and accounting for around half of the energy consumer each year in the State. Remaining customers are scheduled to become contestable in January 2003, but South Australia was not prepared to reaffirm this timetable at the June 2001 CoAG meeting.

Effectiveness of competition

South Australia is in a transitional phase from a highly concentrated generation market, with insufficient interconnection and generation capacity, to a more competitive arrangement. While the Council would generally expect full retail competition to lead to benefits for consumers, where there is a tight balance between supply and demand the impact on consumers is more problematic. The Council considers it likely that the benefits of full retail competition will flow through to all South Australian customers when a better balance has been achieved between supply and demand of electricity.

The Port Jackson report for the Business Council of Australia found that South Australian customers had not received the price reductions achieved by customers in other jurisdictions, in part due to the fact that prices in the State's wholesale market had not decreased. The report noted that, in South Australia, many industrial customers had elected to stay on existing contracts (Port Jackson Partners 2000, p. 7). In recent months, there has been evidence of substantially increased price pressure in the contract market for customer segments open to competition. This pressure appears to have flowed, at least in part, from rising seasonal spot prices (see figure 6.1).

The Government has instructed the South Australian electricity taskforce to examine the availability of firm contractable capacity in South Australia. The taskforce will report on measures which could be taken to increase contractable capacity, such as developing new supply (generation and interconnection) and improving the reliability or availability of existing generation and interconnection assets. South Australia has indicated to the Council that it has also fast-tracked proposals for extra generating and

contract capacity, for instance by providing Crown Development Status to three proposals for extra generation capacity.

Progress towards full retail competition

South Australia's annual report stated that the Government is actively participating in the national decision-making structure for full retail competition and is progressing jurisdictional issues associated with implementing full retail competition.

South Australia has developed a draft full retail competition project plan, in consultation with industry, identifying the following milestones: finalising a draft full retail competition policy framework by August 2001; developing draft metrology procedures by October 2001; finalising metrology procedures by January 2002; and finalising supporting regulatory arrangements and a consumer awareness strategy by June 2002. The plan also identifies the need for industry to undertake detailed system design and implementation, and for the Government to introduce legislative changes to support a consumer protection framework, if necessary.

Licensing arrangements

South Australia has indicated to the Council that its licensing requirements for potential interconnectors go beyond prudential requirements to issues such as consideration of customer benefit. The Council understands that, for a regulated interconnector such as SNI, the State's licensing arrangements require the prior completion of NEMMCO and development approval processes.

As noted earlier in this chapter, the Council considers that governments have a best endeavours obligation to facilitate an infrastructure development once it has been approved under the NEM's regulatory processes. The Council considers that it would be inconsistent with South Australia's NCP obligations were its licensing arrangements to revisit issues of customer benefit, particularly where that assessment focussed on benefits to the State rather than the market as a whole. In the Council's view, South Australia does not have a role in the economic regulation of matters relating to the NEM as a whole.

Assessment

The Council considers that South Australia has met its 2001 NCP assessment obligations in relation to electricity.

The Council welcomes that South Australia has not indicated that it intends to seek additional derogations or extensions of existing derogations. It considers that generally there should be no need for transitional measures

beyond December 2002. The Council also considers that the objectives of vesting contracts could be met with less distortion to market arrangements. It notes that the South Australian Government could help to reduce transition issues, and thus the need for vesting contracts, by providing certainty on the future retail competition program.

The Council notes that South Australia has committed to introducing full retail competition. South Australia reaffirmed that commitment at the June 2001 CoAG meeting, although not its contestability timetable. South Australia has provided the Council with a project plan for implementing full retail competition on the basis of its existing contestability timetable, and the Council will consider South Australia's progress against that timetable in the 2002 assessment.

The Council will consider South Australia's licensing arrangements for new interconnectors, and their impact on the NEM, in the 2002 assessment.

ACT

Derogations

The ACCC's authorisation of the National Electricity Code included a number of derogations for the ACT. Derogations covering distribution ended in December 2000. The ACT has not sought to add to or extend these original derogations, although it was a party to the cross-jurisdictional extension of the ancillary services derogation in 2000.

Vesting contracts

The ACT did not implement vesting contracts to manage its transition to competition in retail supply.

Full retail competition

In December 2000 the ACT Minister for Urban Services announced that customers who consume 100–160 MWh per year would be able to choose their retailer from 1 July 2001. The Minister also indicated that the current plan was for all remaining customers to become contestable from January 2002, subject to a review by a Legislative Assembly committee into matters such as the readiness of computer systems and community understanding of the issues.

Effectiveness of competition

Until 1 July 2001 around 1000 large customers, or just under half of the ACT electricity market, were contestable. The opening up of the 100–160 MWh market segment from 1 July 2001 was to result in a further 450 customers becoming contestable.

The ACT's 2001 NCP annual report argued that a significant proportion of the non-franchise market appears to have changed retailer since the introduction of competition in 1997. Since that time:

- 17 retailers other than the incumbent have sought and maintained licensing;
- no retailer has lodged a complaint, formal or otherwise, with the Government on difficulties in changing retailers;
- the Government is unaware of any large Australia-wide customers encountering difficulties in implementing their national electricity contracts in the ACT; and
- there is evidence from submissions to Government inquiries that retail margins for larger contestable customers have fallen.

The ACT also noted that it has taken steps to minimise barriers to entry to new retailers, including: adopting a well-known model for declaration of non-franchise customers (based on that used in New South Wales); adopting a simple definition of 'premises' to minimise disputes over whether a customer is contestable; and adopting a simple licensing regime.

Progress towards full retail competition

The ACT sought and received advice from KPMG Consulting in 2000 on the implementation of full retail competition. The KPMG report discussed the potential costs and benefits of full retail competition, as well as options for its implementation. The report outlined the earliest time at which full retail competition would be practicable, given the time required to develop a metrology procedure and to implement national retail transfer and settlement systems. This timetable informed development of the ACT's announced contestability timetable.

The ACT identified the major milestones for successful implementation of full retail competition as (1) Government consideration of the outcome of a Legislative Assembly committee investigation of retail competition and (2) the readiness of the necessary computer systems.

Metering arrangements

The consultants' report on full retail competition addressed the potential costs of principal metering options. The ACT's annual report noted that the ACT sought to establish timeframes for the delivery of a metrology procedure. The ACT informed the Council that it engaged consultants to develop an initial metrology procedure and that a final procedure should be available for publication in September 2001.

Market transfer arrangements

The ACT formally committed in 2000 to the national settlement and transfer systems process. This process involves ACT participation in a formally constituted Jurisdictional Panel and providing part funding.

The ACT's annual report noted that a comparison of costs and benefits has been an important guide for the Territory's transition to full retail competition. The Council notes that the consultancy report commissioned by the ACT considered the costs and benefits of aspects of full retail competition. The ACT also indicated that it remains committed to pursuing national consistency where possible, because it would not be cost-effective to do otherwise.

Legislative Assembly committee investigation

The ACT's annual report noted that the Legislative Assembly committee investigation of retail competition is intended to take place in 2001. The Council understands that the referral and conduct of the proposed investigation is being considered by the Legislative Assembly's Standing Committee on Planning and Urban Services.

Assessment

The Council considers that the ACT has met its 2001 NCP assessment obligations in relation to electricity.

The Council welcomes that the ACT has not indicated that it seeks to add to or extend its derogations, or to adopt vesting contracts. The Council also notes that the ACT committed to introducing full retail competition and that it reaffirmed both that commitment and the current contestability timetable at the June 2001 CoAG meeting. On the basis of the milestones which the ACT has identified, the Council expects that full retail competition will have been introduced by the time of the 2002 assessment. The Council will consider the ACT's continued progress against its commitments at that time. The Council is satisfied that the ACT's approach so far has considered costs and benefits and promoted national consistency.

Assessing progress: proposed NEM participating jurisdictions

Tasmania

Progress towards NEM participation

Tasmania has competitively tendered the construction and operation of Basslink as a high-voltage unregulated interconnector with Victoria. The winning bid was by National Grid International. Basslink will have 480 MW nominal capacity and 600 MW dynamic capacity. It is expected to become operational in 2003. The Council expects that Tasmania will become a NEM-participating jurisdiction when the interconnector becomes operational. The *Electricity – National Scheme Act 1999*, which has been passed but not proclaimed, will make effective the National Electricity Law in Tasmania.

The ACCC is considering applications for authorisation of the Tasmanian vesting contract and derogations. These applications will establish the framework rules for Tasmania's participation in the NEM. Tasmania's 2001 NCP annual report noted that Tasmania is also working with existing NEM-participating jurisdictions to fulfil the NEM membership requirements, particularly accession to the National Electricity Market Legislation Agreement and membership of NEMMCO and NECA.

Structural reform

Tasmania has a generation business (the Hydro Electric Corporation, or HEC), a transmission business (Transend Networks) and a distribution and retail business (Aurora Energy). Given that Tasmania will become a NEM-participating jurisdiction when Basslink is completed, it has an obligation under NCP to conduct a CPA clause 4 review of the HEC. Tasmania has conducted two such reviews: a structural review of the HEC's distribution/retail business and a structural review of the HEC's generation business.

Structural review of the HEC's distribution/retail business

A CPA clause 4 review of the HEC's distribution and retail businesses was completed in December 1997. The review recommended against horizontal separation, given the small size of the market. However, it recommended vertical separation of distribution and retail once competition is introduced into the Tasmanian market. The Tasmanian Government did not accept that

separate companies should conduct distribution and retail functions once competition is introduced. It considered that ring-fencing of the two functions within Aurora should provide sufficient safeguards.

Structural review of the HEC's generation business

A clause 4 review of the HEC's generation and system control functions was completed in May 1999. The review report recommended, *inter alia*, the creation of an independent system operator and three subsidiaries of the HEC to act as generation traders, with the aim of creating a competitive wholesale spot market. The Tasmanian Government accepted the report's recommendation to separate the system control function from the HEC. From July 2000 Transend Networks has had responsibility for system control in Tasmania. The Tasmanian Government did not accept the report's recommendation to break up the HEC's generation assets, arguing that to do so could significantly complicate efforts to establish Basslink and compromise supply security and efficiency of operation.

Assessment

Where a government does not accept any or all of the recommendations of a clause 4 review, the Council requires that it must be able to demonstrate a clear public interest case for that decision. Tasmania provided the Council with a public interest justification for its decision not to accept all of the review recommendations regarding the HEC's retail/distribution and generation businesses.

Tasmania's 2001 NCP annual report noted that generation sector competition, in addition to the opportunities provided by Basslink, will be promoted by the separation of the Bell Bay Power Station from the HEC and its conversion to gas, and by encouragement of competing wind power projects. The Council notes that the ACCC's authorisation process for Tasmania's proposed arrangements will consider the costs and benefits of any anticompetitive aspects of the arrangements.

The Council is satisfied that Tasmania has met its 2001 NCP assessment commitments. In the 2002 assessment, the Council will consider Tasmania's continued progress towards NEM participation.

Assessing progress: non-NEM participating jurisdictions

While geographically excluded from participation in the NEM, both Western Australia and the Northern Territory have committed to introducing electricity reform.

Western Australia

Western Australia's 2001 NCP annual report noted that electricity reform in that State has not kept pace with developments in other jurisdictions and that its electricity prices are higher than necessary.

Structural reform

The State Energy Commission of Western Australia was restructured in 1995 into Western Power, Alinta Gas and the Office of Energy. Western Power was corporatised in 1995. It remains vertically integrated, but its activities have been partly ring-fenced and it has an annual obligation to report on the performance of separate components of the business.

The Western Australian Government has announced a program of further reform for the electricity sector. Proposed measures include: structurally separating Western Power's generation division from its other divisions; establishing a regulator with powers over the electricity industry; and developing an electricity code. To progress these reforms the Government announced that it will establish an Electricity Reform Steering Group to develop detailed recommendations on: the reform timetable; the structure of the electricity market to be established; the extent and phasing of the disaggregation of Western Power; measures to enhance competition in electricity retailing; and arrangements for implementing full retail contestability.

Retail competition

The *Electricity Corporation Act 1994* provides for third-party access to Western Power's transmission and distribution networks. In addition to access to Western Power's transmission network, access to its distribution network has been available since July 1997 to customers with an average load exceeding 10 MW per year; from July 1998 to customers with an average load exceeding 5 MW per year; and from January 2000 to customers with an average load exceeding 1 MW per year. There are lower contestability thresholds for regional and remote systems and for customers on the interconnected networks taking supply from renewable energy sources.

The Western Australian Government's recently announced reform program includes a goal of full retail contestability by 2005. Contestability thresholds are to be progressively lowered from their current level of 1 MW per year in the following steps:

- to customers using 0.23 MW per year or more at a single site from July 2001;
- to customers using 0.034 MW per year or more from January 2003; and
- to all customers by 2005.

The Western Australian annual report stated that the Electricity Reform Steering Group, once established, would develop recommendations on implementing full retail contestability.

Assessment

The Council is satisfied that Western Australia has met its 2001 NCP assessment electricity reform commitments. The Council notes, however, that the introduction of competition into the Western Australian electricity market means that the State has a NCP obligation to carry out a clause 4 review. Western Australia's annual report stated that the Electricity Reform Steering Group would ensure that the State's structural reform and other NCP obligations are met. In the 2002 assessment, the Council will consider the progress of this process against the requirements of clause 4.

As the Council noted in the second tranche NCP assessment, Western Australia's progress in electricity reforms is not as advanced as that in other jurisdictions. The Council intends to continue to monitor progress in, and the impact of, introducing competition in the Western Australian electricity supply industry. In particular, the Council will consider progress on the Government's proposed program of further reform for the Western Australian electricity industry in the 2002 assessment.

Northern Territory

The Northern Territory has a series of non-interconnected systems, primarily Darwin–Katherine, Alice Springs and Tennant Creek. The Power and Water Authority (PAWA), a vertically integrated public utility, provides most generation and network services in these areas. However, independent power producers undertake some generation, and a new private-sector supplier recently entered the market.

Structural reform

The Northern Territory Government undertook a review of PAWA in late 1998. In response to the review, the Government developed arrangements to permit competition in the Territory's electricity market, apply economic regulation to the electricity industry and transfer regulatory and policy functions from PAWA. The Government established an independent economic regulator, the Utilities Commission, in March 2000 to license suppliers, administer the Electricity Networks (Third Party Access) Code and regulate network prices and service standards.

Electricity industry regulatory and policy functions previously performed by PAWA were transferred to relevant Government agencies; for example, licensing functions were transferred to the Utilities Commission and electrical inspection and safety functions were transferred to the Department of Industries and Business. In addition, certain powers previously granted to only PAWA were extended to other electricity operators to enable them to operate effectively.

As a result of these reforms, separate licences now exist for each electricity entity within PAWA and compliance with these licences is regulated by the Utilities Commission. An obligation of each electricity licence is that an annual report on the performance of each business be submitted to the Utilities Commission. To achieve this, PAWA restructured its electricity business during the 1999–2000 and 2000–01 financial years. Measures included structurally separating its generation, networks, system control and retail divisions. Ring-fencing was also introduced within business units, for example contestable customers have been ring-fenced within the retail business.

Retail competition

The market for electricity supply in the Northern Territory was opened to competition in April 2000. Under the arrangements, new suppliers are able to use PAWA's networks to deliver electricity to customers. Choice of supplier commenced on 1 April 2000 for customers using at least 4 GWh per year and was extended to customers using at least 3 GWh per year in October 2000. Under current arrangements, contestability will be progressively extended to other customers (down to 750 MWh per year) by 1 April 2002, by which time around 45 per cent of the Northern Territory market (by electricity sales) is expected to be open to competition. All customers are to be contestable from April 2005.

Assessment

The Council noted in the second tranche NCP assessment that the 1998 review of PAWA and the Government's response to it were consistent with

the Northern Territory's NCP commitments. The Council is satisfied that the Northern Territory has met its 2001 NCP assessment electricity reform commitments. As noted in the second tranche assessment, however, the Northern Territory's progress in electricity reforms is not as advanced as that of other jurisdictions. The Council intends to continue to monitor progress in, and the impact of, introducing competition in the Northern Territory electricity supply industry.

Legislation review and reform activity

Table 6.2 summarises jurisdictions' progress in reviewing and reforming their electricity-related legislation under clause 5 of the CPA.

Table 6.2: Review and reform of electricity-related legislation

Jurisdiction	*Legislation*	*Key restrictions*	*Review activity*	*Reform activity*	*Assessment*
New South Wales	*Electricity (Pacific Power) Act 1950*	Constitution of Pacific Power	Not for review, as the Government has established a new state-owned corporation from Pacific Power's generation business.	Act expected to be repealed after a transitional period.	Council to assess progress in 2002.
	Electricity Safety Act 1945	Requirements relating to the authorisation and inspection of electrical products, regulation of the sale and hiring of electrical apparatus	Review underway.		Council to assess progress in 2002.
	Electricity Supply Act 1995	Regulation of electricity supply	Not for review, because major amendments are being made to the Act.		Council to assess progress in 2002.
	Electricity Transmission Authority Act 1994	Constitution of the New South Wales Electricity Transmission Authority		Act repealed.	Meets CPA obligations (June 2001).
	Energy Administration Act 1987	Constitution of the Energy Corporation of New South Wales	Review completed.	Licence and approval requirements repealed.	Meets CPA obligations (June 2001) in relation to electricity-related provisions.
Victoria	*Electricity Industry Act 1993*	Implements electricity industry reform	Review completed.	Act replaced by the Electricity Industry Act 2000. The Electricity Industry (Residual Provisions) Act 1993 contains remaining provisions relevant for historical purposes.	Meets CPA obligations (June 2001).

(*continued*)

Table 6.2 continued

Jurisdiction	*Legislation*	*Key restrictions*	*Review activity*	*Reform activity*	*Assessment*
Victoria (continued)	*Electricity Industry Act 2000*	Implements electricity industry reform	Assessed against NCP principles at introduction. Assessment found the Act's provisions to be consistent with NCP principles, that is they do not restrict competition, but rather underpin existing competition and facilitate its introduction for domestic and small business customers.		Meets CPA obligations (June 2001).
	Electric Light and Power Act 1958			Act repealed and replaced by the Electricity Safety Act 1998.	Meets CPA obligations (June 2001).
	Electricity Safety Act 1998	Safety standards for equipment, licensing of electrical workers	Assessed against NCP principles at introduction. Assessment found the restrictions justified in the public interest on public safety and consumer protection grounds. Act addresses consumers' inability to detect hazardous products and assess the competency of tradespeople.	Restrictive provisions retained.	Meets CPA obligations (June 2001).
	Electricity Safety (Equipment) Regulations 1999	Standard-setting and approval requirements for electrical equipment	Assessed against NCP principles at introduction. Assessment found the restrictions justified in the public interest on public safety and consumer protection grounds. Regulations address consumers' inability to detect hazardous products.	Restrictive provisions retained.	Meets CPA obligations (June 2001).
	Snowy Mountains Hydro-Electric Agreements Act 1958			Act repealed.	Meets CPA obligations (June 2001).
	State Electricity Commission Act 1958		Scoping study has shown that the Act does not restrict competition.		Meets CPA obligations (June 2001).

(*continued*)

Table 6.2 continued

Jurisdiction	*Legislation*	*Key restrictions*	*Review activity*	*Reform activity*	*Assessment*
Queensland	*Electricity Act 1994*	Licensing requirements, conduct requirements, restrictions on trading activities, Ministerial pricing powers	Review underway.		Council to assess progress in 2002.
Western Australia	*Electricity Act 1945*	Regulations concerning mandated supply, determination of interconnection prices, restrictions on the sale/hire of non-approved electrical appliances, uniform pricing	Review completed.	Government accepted review recommendations and is to make legislative amendments. Government has since proposed further pro-competitive reforms.	Council to assess progress in 2002.
	Electricity Corporation Act 1994	Exclusive retail franchise, entry restrictions for generation, competitive neutrality restrictions	Review completed.	Government accepted review recommendations and is to make necessary amendments. Government has since proposed further pro-competitive reforms.	Council to assess progress in 2002.
South Australia	*Electricity Act 1996*	Restrictions on market entry and market conduct	Review completed. No reforms recommended as Act facilitates regulation of electricity supply in conjunction with other national electricity market reforms	Restrictive provisions retained.	Council to assess progress in 2002.
	Electricity Corporation Act 1994	Restrictions on market entry and market conduct	Review completed. No reforms recommended as Act facilitates regulation of electricity supply in conjunction with other national electricity market reforms	Restrictive provisions retained.	Council to assess progress in 2002.

(*continued*)

Table 6.2 continued

Jurisdiction	*Legislation*	*Key restrictions*	*Review activity*	*Reform activity*	*Assessment*
South Australia (continued)	*National Electricity (South Australia) Act 1996*	Restrictions on market entry and market conduct	Review completed. No reforms recommended as Act facilitates regulation of electricity supply in conjunction with other national electricity market reforms	Restrictive provisions retained.	Council to assess progress in 2002.
Tasmania	*Electricity Supply Industry Act 1995*	Licensing requirements, conduct requirements, exclusive retail provisions, tariff-setting procedures	Review underway. Issues paper and regulatory impact statement, containing draft recommendations, released.		Council to assess progress in 2002.
	Electricity Consumption Levy Act 1986			Act repealed.	Meets CPA obligations (June 2001).
	Hydro-Electric Commission Act 1944, Hydro-Electric Commission (Doubts Removal) Act 1972 and *Hydro-Electric Commission (Doubts Removal) Act 1982*			Acts repealed and replaced by the Electricity Supply Industry Act 1995 and the Electricity Supply Industry Restructuring (Savings and Transitional Provisions) Act 1995.	Meets CPA obligations (June 2001).
ACT	*Utilities Act 2000*	Licensing requirements, restrictions on business conduct	The Act's introduction followed public consultation and review of both existing regulatory arrangements and principles for effective regulation.	Restrictive provisions retained. Other Acts amended or repealed include the Electricity Supply Act 1997, the Electricity Act 1971, the Energy and Water Act 1988 and the Essential Services (Continuity of Supply) Act 1992.	Meets CPA obligations (June 2001).

(*continued*)

Table 6.2 continued

Jurisdiction	*Legislation*	*Key restrictions*	*Review activity*	*Reform activity*	*Assessment*
Northern Territory	*Electricity Act*		Act reviewed as part of a broad review of the Power and Water Authority, and under a departmental review.	Act repealed and replaced by the Electricity Reform Act, the Electricity Networks (Third Party Access) Act and the Utilities Commission Act.	Meets CPA obligations (June 2001).
	Power and Water Authority Act		Review completed.	All electricity-related amendments made except for the removal of PAWA's local government rate exemption. This amendment to be made as part of the development of government-owned corporations legislation.	Council to assess progress in 2002.