7 Electricity

Background

In the early 1990s, governments embarked on a program of reform of the electricity sector. Traditionally, each State and Territory operated vertically integrated utilities with little interconnection between electricity grids in different jurisdictions. This structure led to inefficiencies and to higher prices for some users.

The Council of Australian Governments (CoAG) agreed to reforms to create a fully competitive national electricity market (NEM), featuring a national wholesale electricity market and an interconnected national electricity grid. To support this objective, governments agreed to a range of reforms aimed at breaking down barriers to interstate and intrastate competition, including dismantling State-owned monopolies and implementing a system of third party access to transmission and distribution.

The benefits of electricity sector reform include electricity prices that are now competitive with those in other Organisation for Economic Cooperation and Development (OECD) countries, the improvement of market signals to induce appropriate generation investment, and a substantial improvement in the participation of consumers in the market through having a choice of retailer. The Australian Bureau of Agricultural and Resource Economics estimated that Australia's gross domestic product by 2010 will be 0.26 per cent (A$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 A$15.8 billion (in 2001 prices) (Short et al. 2001, p. 84).

The reform program, however, is not complete — the original CoAG vision of a fully competitive NEM has yet to be realised. Both the CoAG Energy Market Review (2002) (known as the Parer Review) and a CoAG communiqué (CoAG 2001) identified significant deficiencies in the operation of the NEM. As recognised in the Parer Review, not only will failure to address these market deficiencies result in the electricity sector falling short of reaching its full potential, it may also result in the loss of benefits achieved over the past decade.

NCP and electricity agreement commitments

State and Territory governments' electricity commitments under the National Competition Policy (NCP) 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 CPA commitments relating to structural reform and legislation review are relevant to all jurisdictions, while the electricity agreements apply specifically to jurisdictions that are part of the NEM: New South Wales, Victoria, Queensland, South Australia and the ACT. The commitments are also relevant to Tasmania, which intends to enter the NEM in May 2005.

The cornerstone of the agreed reforms under the electricity agreements was a commitment to establish a fully competitive NEM. CoAG communiqués set out specific reform commitments intended to achieve this original vision. The reform commitments included:

- implementing necessary structural changes to allow for the operation of a competitive NEM;
- allowing customers to choose the supplier (including generators, retailers and traders) with which they will trade;
- establishing an interstate transmission network and nondiscriminatory access to the interconnected transmission and distribution network;
- ensuring there are no discriminatory legislative or regulatory barriers to entry for new participants in generation or retail supply, and to interstate and/or intrastate trade;
- implementing cost-reflective pricing for transmission services with greater scope for averaging for distribution network services, and transparency and interjurisdictional consistency of network pricing and access charges; and
- facilitating interjurisdictional merit-order dispatch of generation and the interstate sourcing of generation where it is cost-effective.

A key component was the enactment of the National Electricity Law, which gave effect to the National Electricity Code in each NEM-participating jurisdiction. The National Electricity Market Management Company (NEMMCO) and the National Electricity Code Administrator (NECA) were established as the market operator and the code administrator respectively. These arrangements formed the basic framework for the NEM, which commenced operation in December 1998.

In its June 2001 meeting, CoAG reaffirmed its existing commitment to electricity reform. It also established a Ministerial Council on Energy — to provide policy direction for further energy sector reform — and a NEM Ministers' Forum (comprising Ministers from NEM-participating jurisdictions, the Commonwealth Government and Tasmania) with specific policy responsibilities in relation to the NEM. CoAG required the NEM Ministers Forum to urgently attend to:

- impediments to investment in interconnection;

- transmission pricing;
- regulatory overlap;
- market behaviour;
- the effectiveness of regulatory arrangements in promoting efficient market outcomes;
- regional boundaries; and
- demand side participation.

In addition, CoAG established the Parer Review, with terms of reference that reflected these priority areas.

Parer Review findings

The Parer Review released its final report in December 2002. The review identified significant deficiencies in Australian electricity and gas markets, and made recommendations to address these deficiencies.

All of the Parer Review's findings on the electricity sector relate to the general NCP commitment to establish a fully competitive NEM. In addition, findings can be grouped into broad categories, each of which relate to electricity agreement commitments. The following sections are a summary of the findings as they relate to specific electricity commitments and the Council's previous NCP assessments.

Governance arrangements

The Parer Review concluded that the energy sector governance arrangements are confused, that there is excessive regulation and that there are perceptions of conflict of interest where governments are asset owners. The review identified seven specific problems in this area, including problems with the Code change process, too many regulators, overlaps in regulatory responsibility, the absence of clear government policy direction, barriers to embedded generation and distorted signals from network regulation.

In its 2001 NCP assessment, the Council noted that the institutional framework may have weaknesses and thus required jurisdictions to examine the framework, particularly in relation to market operations and regulation. The Council also noted weaknesses in the interconnect approval processes. In its 2002 NCP assessment, the Council noted that the NEM framework did not enable effective NEM policy to be developed and implemented.

Governments broadly acknowledged the need to streamline and reform the electricity sector's governance arrangements.

Market structure

The Parer Review concluded that the gross pool design of the NEM is appropriate but needs to be improved to lessen the potential for generator market power, excessive pool price volatility and market gaming. It considered that schemes such as the Electricity Tariff Equalisation Fund (ETEF) in New South Wales and the Benchmark Pricing Agreement in Queensland (discussed later in the chapter) contribute significantly to the price volatility problem.

In its 2001 NCP assessment, the Council noted that high and volatile pool prices raised the question of whether there is adequate competition in generation. It also noted that large interregional differences in electricity prices are inconsistent with the notion of a competitive national market. In its 2002 NCP assessment, the Council noted that generation and dispatch trading arrangements needed to be improved. Both the 2001 and 2002 NCP assessments contained concerns about ETEF.

The Parer Review findings on deficiencies in market structure can be linked to the specific electricity commitments of nondiscriminatory access to generation and retail supply, and facilitating merit-order dispatch and cost-effective generation.

Transmission and interconnection

The Parer Review identified transmission concerns as one of the most significant problems facing the NEM. The review noted that inadequate interconnection and poor transmission arrangements effectively regionalise the NEM and remove most of the benefits envisaged for a national market. The review identified five particular problems:

1. poor incentives for regulated transmission;

2. the lack of locational price signals;

3. the inability to buy firm financial transmission rights;

4. the absence of cost-reflective network pricing; and

5. the state-based (rather than energy needs-based) delineation of trading regions.

The review's findings accord with the Council's 1999, 2001 and 2002 analysis of deficiencies in transmission and interconnection arrangements. In particular, the Council expressed concern in the three NCP assessments about the transmission/interconnection planning and approval processes.

The transmission and interconnection concerns raised by the review relate to specific electricity commitments, including those to facilitate network access

and interstate/intrastate trade, implement cost-reflective transmission pricing and facilitate interjurisdictional merit-order dispatch.

Financial contract market issues

The Parer Review found that the energy financial contracts market is illiquid and that this is a significant problem in the NEM's gross pool system. The review considered that problems arise from schemes such as the ETEF and the Benchmark Pricing Agreement, transmission problems that inhibit interstate contracting, generator market power that increases contract risk, regulatory uncertainty and credit quality concerns. The Council discussed issues in relation to ETEF, generator strategic bidding and transmission/interconnection in both its 2001 and 2002 NCP assessments.

Demand-side participation issues

The Parer Review discussed the importance of demand-side participation to the effective operation of the NEM. The review noted the low extent of demand-side involvement in the NEM, attributing it to demand inelasticity and consumers not facing cost-reflective retail prices. The review recommended the implementation of full retail contestability, the removal of price caps, a mandated interval meter roll-out and the introduction of pay-as-bid mechanisms to reduce demand.

The Council considers the introduction of full retail contestability to be an essential component of the electricity reforms. It expressed this view in all previous NCP assessments of jurisdictions' compliance with the specific electricity commitments. Further, the Council noted that regulatory oversight of retail tariffs should be only a transitional arrangement and should cease when retail markets develop sufficiently. Regulatory oversight of retail tariffs and programs for phasing out such arrangements, including price caps, will be of particular significance in the Council's future NCP assessments and will need to be addressed by all jurisdictions.

Government responses to the Parer Review findings

The Council asked all jurisdictions to report on their responses to the Parer Review findings that have NCP implications. All NEM jurisdictions, the Commonwealth Government and Tasmania noted that they are developing a reform response as part of the NEM Ministers Forum. All NEM jurisdictions also noted their full participation in the Ministerial Council on Energy.

At its July 2002 meeting, the NEM Ministers Forum agreed to initiate a process to review the framework for transmission development and pricing. NEM Ministers are expected to consider the findings of this review in late-2003.

In June 2003, the Ministerial Council on Energy met to consider the strategy for future energy reform in Australia. It agreed that it would report to CoAG that further reform is needed to:

- strengthen the quality, timeliness and national character of governance of the energy markets, to improve the climate for investment;
- streamline and improve the quality of economic regulation across energy markets, to lower the cost and complexity of regulation facing investors, enhance regulatory certainty and lower barriers to competition;
- improve the planning and development of electricity transmission networks, to create a stable framework for efficient investment in new (including distributed) generation and transmission capacity;
- enhance the participation of energy users in the markets, including through demand side management and the further introduction of retail competition, to increase the value of energy services to households and business; and
- further increase the penetration of natural gas, to lower energy costs and improve energy services, particularly in regional Australia, and reduce greenhouse emissions. (Ministerial Council on Energy 2003a, p. 2)

The Ministerial Council on Energy has agreed a number of reform initiatives, with timelines, to address the concerns about governance and economic regulation in the Australian energy markets. CoAG will consider these reform recommendations. (Ministerial Council on Energy 2003a, 2003b)

The Council considers that many of the deficiencies in the electricity market identified by the Parer review relate to existing reform commitments. A coordinated approach by governments is required to most effectively address these market deficiencies. Governments need some time to formulate and coordinate a future reform program. For this reason, in this 2003 NCP assessment, the Council did not focus on jurisdictions' response to addressing market deficiencies identified in the Parer Review. Rather, the Council will consider coordinated government reform initiatives through CoAG, the Ministerial Council on Energy and the NEM Ministers Forum in the context of its 2004 NCP assessment. However, there are a number of commitments that clearly predate the Parer Review and progress to meeting these is subject to assessment now.

Assessment issues

The Council's approach to the 2003 NCP assessment was to focus on the outstanding reform commitments highlighted in the 2002 NCP assessment. Progress in relation to these matters was required and the Parer Review and

associated processes provide no rationale for delay. The areas of focus identified are:

- structural reform in Western Australia;
- legislation review and reform activity;
- full retail contestability in Queensland, South Australia and the ACT;
- the ETEF in New South Wales and the Benchmark Pricing Agreement in Queensland;
- inconsistent intra-NEM interconnect approval arrangements; and
- derogations to the National Electricity Code.

Structural reform

All jurisdictions, other than Western Australia, undertook structural reform of their electricity sectors consistent with the framework set out in clause 4 of the CPA. The Western Australian Government established an independent Electricity Reform Task Force in August 2001 to develop recommendations on the structural reform of the State's electricity sector and the incumbent service provider, Western Power Corporation.

The task force issued its final report in October 2002. The Government endorsed all the report recommendations including the indicative reform timetable. The key elements of the Government's electricity reform program are:

- the vertical disaggregation of Western Power into generation, networks (transmission and distribution) and retail entities, and the establishment of a fourth entity, the Regional Power Corporation, with responsibility for electricity supply in the north west interconnected system and Western Power's noninterconnected system;
- the establishment of a bilateral contracts market with an associated residual trading market;
- the mitigation of Western Power's generation market power through the auctioning of its capacity, a requirement that it participate in the residual trading market and restrictions on its ability to invest in new or replacement fossil-fuelled generation plant;
- the retention of uniform tariffs and retail price caps;
- the implementation of retail contestability for all customers above 50 megawatt hours per year from 1 January 2005, then full implementation once the other reforms have been completed; and

- the development of an Electricity Access Code (to be administered by an independent regulator) by 1 January 2004 and the operation of the new access framework and licensing regime by 1 January 2005.

The Electricity Reform Implementation Steering Committee was convened in January 2003 to implement the Government's electricity reform agenda. The *Electricity Act 1945* and the *Electricity Corporation Act 1994* are being amended as part of the Government's electricity industry reform agenda.

An independent Economic Regulation Authority with economic regulatory functions across gas, rail, water and electricity will be established. It will be responsible for administering and determining terms of access under the Electricity Access Code. The Economic Regulation Authority Bill 2002 was introduced to Parliament on 4 December 2002.

The Parer Review expressed concerns about the Electricity Reform Task Force's recommendations on market mechanisms and structural issues. While aware of these concerns, the Council noted that Western Australia's obligation under the CPA clause 4 commitment is to undertake an independent, rigorous review and to appropriately deal with any reform recommendations, rather than to adopt a particular industry structure model.

The Western Australian Government recently re-affirmed its commitment to electricity reform, with Cabinet agreeing to the budget and costs associated with the implementation program. The Cabinet agreed to:

- pushing back the establishment of the wholesale electricity market by one year (until July 2006) to allow sufficient time for the development of market arrangements and industry consultation;

- dividing Western Power into four separate Government corporations as planned on 1 July 2004; and

- introducing legislation in the 2003 spring session of Parliament to create the four corporations, wholesale market arrangements, consumer protection and the electricity licensing regime.

According to the Western Australian Government, independent analysis recently suggested that the benefits of reform would be an average 8.5 per cent cut in electricity prices, an increase in gross State product of up to A$300 million per year by 2010, and the creation of 2900 new jobs.

The Council recognises that this is a significant reform program and thus it is satisfied with Western Australia's progress in meeting its CPA clause 4 obligations in relation to structural reform in the electricity sector. As part of the 2004 NCP assessment, the Council will consider the Government's enactment of necessary legislation and continued progress in implementing structural reform.

Legislation review and reform activity

Table 7.1 details jurisdictions' progress in reviewing and reforming their electricity-related legislation in compliance with CPA clause 5 commitments. In the 2002 NCP assessment, the Council stated that it would finalise its assessment of governments' compliance with clause 5 in the 2003 assessment.

Jurisdictions other than Western Australia, the Northern Territory and the ACT met their clause 5 CPA obligations in this area. As noted above, Western Australia is involved in implementing significant electricity sector structural reform, so it will conduct its clause 5 review and reform of electricity-related legislation as part of its broader structural reform program. The Council will consider Western Australia's compliance in this area as part of its assessment of Western Australia's overall electricity reform program in 2004.

The Northern Territory satisfied its clause 5 obligations in relation to all electricity-related provisions other than the provision that exempts Government-owned corporations from local government rates (s. 19, *Power and Water Corporations Act 2002*). These corporations have, however, been paying local government rate equivalents since 1 July 2001.

The ACT satisfied its clause 5 obligations in relation to all electricity-related provisions other than provisions relating to licensing and business conduct requirements for electricians. Draft legislation giving effect to review recommendations will be presented to the ACT Legislative Assembly in the 2003 spring session (see chapter 10, volume 2).

Full retail contestability

Full retail contestability is a key reform commitment set out in the electricity agreements. Governments must implement reforms to enable customers to choose the supplier, including generators, retailers and traders, with which they will trade.

The benefits of full retail contestability include the potential for lower energy prices, enhanced consumer choice, improved product and service offerings, and greater efficiency in electricity investment infrastructure through more accurate investment price signals. Such benefits were noted by the Parer Review, which recommended the introduction of full retail contestability into all markets.

Full retail contestability involves costs as well as benefits. Nevertheless, all of the jurisdictions that undertook a cost/benefit analysis (except Queensland) determined that the overall benefits outweigh the costs. The electricity agreements do not specifically allow for cost/benefit analysis; nevertheless, in past NCP assessments, the Council considered that a strict reading of the agreements — that is, requiring full retail contestability irrespective of net public benefit — was not appropriate.

Each NEM-participating jurisdiction introduced customer contestability to varying degrees. At the time of the 2002 NCP assessment, all customers in New South Wales and Victoria were contestable. Both South Australia and the ACT re-affirmed their commitment to the introduction of full retail contestability ahead of the 2003 NCP assessment. Queensland, however, refused to proceed with full retail contestability implementation at that time, arguing that the costs of doing so outweighed the benefits. The following sections contain the Council assessment of the progress of South Australia, the ACT and Queensland in this matter.

South Australia

Full retail contestability commenced in South Australia on 1 January 2003, satisfying the State's NCP commitment in this area.

The full retail contestability arrangements in South Australia, to a large extent, mirror arrangements in other States. Retail prices are subject to monitoring by the Essential Services Commission of South Australia, which has the power to cap retail prices through its price determination powers. In addition, an obligation for an electricity retailer to supply all small customers (<160MWh per annum) at justifiable standing offer prices was established, with the incumbent retailer AGL SA having the obligation to provide standing offers in South Australia. Of the 11 current retailers licensed in South Australia, Origin Energy, TXU and AGL SA have met the requirements to make offers to small customers in South Australia.

ACT

Full retail contestability commenced in the ACT on 1 July 2003, satisfying the Territory's NCP commitment in this area.

The ACT was due to implement full retail contestability from 1 March 2003. However, following severe bushfires in January 2003 that significantly damaged the ACT's electricity infrastructure, the ACT announced that it would delay the introduction of full retail contestability to 1 July 2003. The ACT Government explained to the Council that the delay was necessary because the ACT's distribution network operator, ActewAGL Distribution, would focus on rebuilding the bushfire-damaged distribution network rather than on the customer transfer and settlement systems necessary for effective full retail contestability. The Council accepted that a delay of four months was justified in the circumstances.

Queensland

In October 2001, Queensland announced that it would not implement full retail contestability at that time, but that it would:

- review the decision in 2004 once the impact of the introduction of full retail contestability in other jurisdictions was known; and

- consider extending contestability to small business customers consuming less than 200 megawatt hours of electricity per year.

This decision followed a cost–benefit analysis that Queensland argued demonstrated that the costs of implementing full retail contestability outweigh the benefits.

The Council considered the cost–benefit analysis in detail in its 2002 NCP assessment. It concluded that Queensland had failed to demonstrate that the costs of implementing full retail contestability outweigh the benefits because it had failed to account for the dynamic and nonquantifiable benefits. The Council concluded that Queensland's breach of its obligation in this area was serious.

Queensland wrote to NEM jurisdictions seeking their support for its decision not to introduce full retail contestability at this stage. In particular, Queensland sought support for the position that only reforms providing a net community benefit should be implemented — including reforms under the electricity agreements. In its letters to the other Governments, Queensland stated that the Council's position was that the provisions for cost–benefit analysis did not apply to electricity market reforms.

This assertion is not an accurate reflection of the Council's position. The Council considers that while the electricity reform agreements did not provide for further cost-benefit analysis before introducing full retail contestability, it is not inappropriate for such work to be undertaken. In the Council's view it was unnecessary for Queensland to seek the agreement of other jurisdictions for the position that a cost-benefit review was appropriate and allowed by the NCP agreements.

The Council's position, as reflected in the 2002 NCP assessment, is that it is always open to Queensland, as with any other jurisdiction, to seek to have the NCP agreements amended to relieve them of the commitment to introduce a particular reform — in this case full retail contestability.

Queensland's letter to the other jurisdictions did not seek this amendment. The Council considers the responses received by Queensland do not reflect an agreement to either relieve Queensland of the commitment to introduce full retail contestability or require the Council to accept what it considers is an inadequate cost-benefit analysis. In its 2003 NCP annual report, Queensland reiterated its view that it would not implement full retail contestability at this time because the benefits did not outweigh the costs. Queensland relied on the same evidence that it presented to the Council for the 2002 NCP assessment.

Having completed a further cost–benefit analysis, Queensland is determining whether to extend contestability to more than 7100 small business customers representing a further 3 percent of load within the State, with energy

consumption of 100–200 megawatt hours per year (tranche 4A customers). At the time of this assessment, the Deputy Premier wrote to the Council indicating that he would be shortly taking a recommendation to Cabinet that Tranche 4A be introduced.

The Deputy Premier also stated that Cabinet will be considering a proposal to bring forward the cost–benefit analysis of introducing retail contestability for the below 100 megawatt hours per year sector of the market. The review, originally intended for 2004, would commence in 2003. Queensland has agreed to consult with the Council on the terms of reference for the cost–benefit review.

The Council considers that Queensland has breached its commitment to implement full retail contestability and that this breach is serious. While the undertakings made by the Deputy Premier are positive indications of Queensland's preparedness to undertake further reform, only implementing Tranche 4A, undertaking the immediate cost–benefit review of full retail contestability and implementing review recommendations will meet Queensland's electricity reform commitments in this area.

The ETEF in New South Wales

In its 2002 NCP assessment, the Council noted concerns by market participants that ETEF had an adverse impact on the efficient operation of the NEM. The Parer Review expressed concern that the ETEF motivated State-owned generators to adopt pricing and bidding strategies intended to cause price spikes. The review noted that such conduct potentially creates barriers to new investment and entry by generators seeking to compete with government-owned generators. The review also expressed concern about the ETEF's effect on the contract market and about the barriers to entry for new retailers in New South Wales.

The ETEF mechanism has operated in New South Wales since 1 January 2001. A comprehensive description of the mechanism is available on the New South Wales Treasury web site. (The Council has relied on this description in summarising the key features of the ETEF mechanism.)

The New South Wales Treasurer determines a regulated energy cost for each retailer based on a determination by the Independent Pricing and Regulatory Tribunal (IPART) under s. 43EB of the *Electricity Supply Act 1995*. Under the Act, the Treasurer has the right to require IPART to consider any matters that he considers relevant to a determination.

The regulated energy cost is essentially a wholesale cost; it varies between peak and off-peak periods. A final regulated retail cost is determined, allowing retailers to recoup a margin over their wholesale energy costs. All standard retail suppliers and State owned generators in New South Wales are required to participate in the ETEF and offer a regulated tariff. All contestable customers using less than 160 megawatt hours per year can

choose to be supplied under the regulated tariff. They have the right to switch between market and regulated tariffs as frequently as they like.

The core component of the ETEF is a series of transfers between retailers and the fund. When the pool price is higher than the regulated energy cost, retailers receive a payment; when the reverse is true, they are required to make a payment. The size of the payment is determined by the level of load that each retailer supplies to regulated customers, the difference between the regulated and pool prices, and the relevant transmission loss factor. The relevant transfer is calculated for each 30-minute trading interval, but payment is made only weekly. In the year to June 2002, retailers made payments of A$332.7 million to the fund, and received A$290.2 million — a net contribution from retailers of A$43.9 million.

All State-owned generators in New South Wales are required to contribute to the fund when its resources are insufficient to make the required payments to retailers. The contribution required from each generator is based on its share of the revenue earned by all generators when the pool price exceeds the average regulated energy cost. These contributions are repaid when there are sufficient resources in the fund. In the year to 30 June 2002, generators made no payments to the fund because retailers provided sufficient net revenue. Payments of A$5 million were made from the fund to generators to repay generators' net contribution.

There is significant market concern about the bidding behaviour of New South Wales generators and their apparent ability to affect significant price spikes when demand is not high and no major plants fail (CoAG Energy Market Review 2002, p. 114).

In responding to these concerns, New South Wales argued that State owned generators do not engage in strategic bidding behaviour in response to the ETEF. This argument was evidenced by the strong relationship between pool prices and demand in the State, the tendency for pool prices in other trading regions to follow prices in New South Wales, and retail prices in the State being the lowest in mainland Australia. New South Wales argued that price spikes send clear price signals to market participants, as was the intention of the NEM.

At this time the Council has no evidence that the ETEF exacerbates generators' market power. The Council will, however, continue to monitor the ETEF in this context.

New South Wales also disputed the finding in the Parer Review that the ETEF adversely affects the contract market, reducing liquidity and raising barriers to entry for new retailers in New South Wales. New South Wales argued that the most recent Australian financial markets annual report shows that the volume of financial contracts traded in New South Wales increased by 45 per cent in the period 2000-01 to 2001-02 and that trading of hedges in Victoria decreased by almost 50 per cent. In 2001-02, the ratio of derivative contracts to the physical market was 1.4 in New South Wales and 0.84 in Victoria.

The volume of New South Wales' demand covered by the ETEF fell from 38 per cent in 2001 to 33 per cent in 2003. The proportion of demand covered by the ETEF is still very significant, however — 12 per cent of total NEM demand. In the Council's view, the operation of the ETEF is likely to reduce the liquidity in the financial and physical hedges market. This effect may increase the prices of such financial instruments and increase the costs for other retailers, both in New South Wales, and (to the extent that the market for financial instruments is wider than New South Wales) in the NEM generally. As long term contracts provide a signal for new investment in generation, reduced efficiency in the contract market may also affect investment in the generation sector.

New South Wales argues that ETEF is a transparent mechanism through which the New South Wales government delivers a community service obligation (CSO) to price regulated electricity consumers:

> *The Government needed a mechanism for ensuring these standard retailers could meet their obligation to supply regulated customers without exposing the retailers to unmanageable electricity purchasing risks.*
>
> *These risks derive from the fact that, if the retailer was left with the job of arranging hedging contracts for this load, they may not be able to purchase power cheaper than the regulated selling price (set independently of the market price of these contracts), which would result in a financial loss for the retailer. This is not an issue with a retailers' contestable customer load, since the retailer can determine the price they are willing to sell to customers and they do this in relation to the market price for hedging instruments.*
>
> *The Government considered a number of options for managing the purchase of electricity for regulated customers, including:*
>
> - *Establishing a suite of vesting contracts;*
> - *Relying on standard retailers to buy electricity on behalf of the Government;*
> - *A centralised (market based) process based on either:*
>
> *- a periodic central auction for hedging contracts to underpin the electricity purchasing costs for regulated customers with contracts being allocated to standard retailers in proportion to their regulated load;*
>
> *- an auction of the right to supply the regulated customer load for a fixed price; or*
>
> *- the Government buying electricity from the competitive pool for regulated customers and paying the standard retailers a (small)*

margin for providing billing and other services to regulated customers (the ETEF).

The ACCC made it absolutely clear that it would not authorise another suite of vesting contracts. The Government therefore decided to not further consider this option. In any case the Government wanted to use a less intrusive, more market based mechanism to support the purchasing of electricity for the regulated customer load.

The option of relying on the government owned retailers to purchase electricity on behalf of the Government was discounted for a range of reasons. The key reason is that this would be extremely difficult for the Government to monitor and would provide these retailers with an unfair advantage in the competitive retail market.

The standard retailers would have a strong incentive to allocate their most expensive contracts to regulated customers and make the Government pay for any losses resulting if the costs of these contracts exceed the regulated revenues earned by the retailers.

To the extent the Government retailers had this opportunity, this would put them in a powerful competitive position as they would have a ready source for dumping their uncompetitive contracts, which would effectively allow them to cross subsidise their contestable customers. This would make it very difficult, if not impossible, for new entrant retailers to compete with the Government retailers.

It may be possible for the Government to audit the retailers' full suite of contracts on a regular basis in an attempt to prevent this type of behaviour. However, this is not straightforward as the process would:

- *be highly intrusive;*
- *require the Government to make decisions as to how contracts of various kinds, and spot exposure, should be valued and allocated between customer groups. This process will inevitably raise questions about Government intervention in the retail market, it will weaken the accountability of managers and therefore undermine the proper functioning of the retail market;*
- *provide the retailers with easy opportunities to game and therefore would be likely to be ineffective; and*
- *be very expensive.*

In terms of the market based arrangements:

- *the option of a central, periodic auction for hedging contracts, although having strong market credentials, was not adopted because of the complexity and associated costs of the arrangements,*

particularly as there was another auction (the pool) already available.

- *For similar reasons the option of auctioning the retailer's regulated load was not adopted.*

- *The option of the Government buying electricity from the pool was the Government's preferred option because:*

  – *it provided a transparent, market based price which did not rely on complicated data collection and monitoring systems required by the contract auction alternatives;*

  – *it did not require the Government to intrude into the affairs of the businesses to guard against the standard retailers cross subsidising their contestable customer business; and*

  – *the operation of ETEF is based on matching the net system load profile data with the corresponding pool price for each half hour, which are two pieces of information NEMMCO routinely collects, so ETEF provides a low cost, mechanical, transparent system for allowing standard retailers to purchase electricity, on behalf of the Government without exposing them to any unmanageable market risks.* (R B Wilkins (Director-General of The Cabinet Office, New South Wales), 2003, pers. comm., 28 July)

New South Wales has stated that the ETEF is a transitional arrangement that is due to expire in July 2004, but that before that time, the Government will examine the continued need for such an arrangement in light of retail market developments.

The Council accepted that the ETEF provides New South Wales with an efficient method for delivery of its CSO to franchised customers. The Council, however, was concerned that the method of CSO delivery may provide a barrier to new entrant retailers. While new retailers are free to compete for customers against the standard retailers, only standard retailers are able to supply franchise customers. The ETEF then removes all risk in supplying these customers, giving the standard retailers access to a large, secure customer base. The level of the regulated tariff for franchise customers is also a crucial factor in encouraging new entry in the retail sector. If the level is set too low, it is not possible for new retailers to attract franchise customers away from the regulated tariff. These factors can combine to reduce scale economies for new entrants, increasing their costs and making it more difficult for them to compete.

The Council will monitor the effect of the ETEF on retail competition in New South Wales. However, it is likely that the level of regulated tariffs and the contestability of CSO delivery are at least as important in promoting retail competition. The Council expects that New South Wales, in its consideration of the future of ETEF beyond July 2004, will revisit how the CSO is delivered and the level and means of transition from regulated tariffs. The Council will

consider these matters together with New South Wales' decisions on ETEF in its next assessment.

The Benchmark Pricing Agreement in Queensland

The Parer Review expressed concerns about the Benchmark Pricing Agreement in Queensland. The Council had not specifically considered the agreement in its earlier NCP assessments, so it requested that Queensland provide it with information on the operation of the agreement and in response to the concerns of the Parer Review.

In its 2003 NCP annual report, Queensland argued that the Parer Review's analysis of the Benchmark Pricing Agreement was 'simplistic and disregards the fact that the Queensland arrangements have no adverse impact on, and indeed encourage, a competitive wholesale market in Queensland' (Government of Queensland 2003, p. 65). Queensland also argued that the Parer Review's recommendation to abolish the agreement was inappropriate because it was based on a misunderstanding of the distinction between the agreement and community service obligations (CSOs), and on a lack of understanding of the agreement's design and impacts on market participants.

The Benchmark Pricing Agreement is a component of Queensland's broader CSO calculation. The CSO obligation arises because the Queensland Government provides a system of regulated uniform tariffs for domestic and small business customers in Queensland (referred to as franchise customers). The two host retailers, Ergon Energy and ENERGEX, purchase electricity from the wholesale market to supply franchise customers.

The uniform tariff arrangements provide for customers in the same customer class to pay the same per unit charge regardless of the customer's location. Historically, however, uniform tariff revenue has not been sufficient to cover the costs of supplying customers in regional and remote areas of the State, resulting in a net CSO payment from the Government to the retailers. The CSO arrangement between the Queensland Government and the franchise retailers is designed to overcome any revenue shortfall from supplying franchise customers throughout Queensland.

The CSO is calculated as the difference between (1) the revenue received from franchise customers and (2) the retailer's costs of supplying electricity to franchise customers. The Queensland Government receives from the retailers the revenue that they received from the franchise customers; in turn, the Government pays each retailer the costs of supplying franchise customers. These costs include energy purchase costs, network costs (transmission and distribution), ancillary service costs, NEMMCO pool fees, the costs of renewable energy certificates and a retail margin.

The arrangement for the purchase of energy involves a commercial negotiation between the Queensland Government and the retailers, whereby

the Government compensates retailers for efficiently purchased contracts. As part of the commercial negotiation, the Queensland Government conducts a benchmarking process.

Queensland's response to the Council's queries stated:

> *The [Benchmark Pricing Agreement] sits outside the wholesale electricity market and has been put in place to ensure that Ergon Energy and ENERGEX purchase wholesale electricity to supply franchise customers on an efficient basis.*
>
> *Both retailers are responsible for energy purchases on behalf of franchise customers and conduct this purchasing on a commercial basis. This arrangement is competitively neutral in that the retailer is permitted to contract with generators, irrespective of whether they are private or Government-owned. The [Benchmark Pricing Agreement] ensures that the actual purchasing and hedging of energy remains the responsibility of the retailers.*
>
> *As part of the commercial negotiation, the Office of Energy on behalf of the Queensland Government benchmarks contracts purchased by Ergon Energy and ENERGEX against publicly available quotes for contract cover; and contracts purchased on behalf of contestable customers to ensure the retailers' contracts are efficiently priced. The BPA also involves a financial risk sharing arrangement between the Government and the retailers for any residual pool purchases and thereby places incentives on the retailers to efficiently manage pool price outcomes.* (Government of Queensland 2003, p. 18)

The Council is satisfied that the agreement, in the context of the Queensland electricity market, does not significantly reduce the incentives for retailers to engage in the contract market to manage their wholesale market risk.

However, limited retail contestability, the extent of cross-subsidisation between customer types and the level of, and delivery method for, CSOs — which the Benchmark Pricing Agreement supports — are likely to distort or limit competition in the electricity sector in Queensland.

The Council will reconsider the potential effect of the Benchmark Pricing Agreement in the context of full retail contestability, regulated retail tariffs and CSO delivery in Queensland in future assessments.

Licensing arrangements

The Council continues to be concerned about the potential for overlap between the NEM regulatory processes for new interconnects and South Australia's licensing requirements for new transmission companies. This issue arose in the context of the SNI interconnect project, which was approved

through NEM regulatory processes but also subject to a customer benefits test under South Australian licensing arrangements.

The Council notes that the Parer Review identified the need to harmonise governance and regulatory arrangements within the NEM as a priority. As noted above, at its June 2003 meeting, the Ministerial Council on Energy agreed to a proposed program of reform, including the establishment of an Australian Energy Regulator to regulate the transmission and wholesale sectors of the NEM. The Council will consider the proposed reform initiatives together with governments' responses, in the 2004 NCP assessment.

Code derogations

Derogations from the National Electricity Code (the Code), could fragment the NEM, reducing its effectiveness and limiting the scope for competition. The Council considers that derogations are warranted only when necessary to provide a smooth transition to the NEM or when related to unique characteristics within a particular jurisdiction. Transitional derogations should be limited in scope and duration. Many of the original derogations have expired, although more recently jurisdictions have obtained derogations to facilitate the effective implementation of full retail contestability.

The ACCC is required to assess the public benefit of proposed derogations against the likely competitive detriment under the *Trade Practices Act 1974*. While the Council considers that the ACCC's public benefit assessment provides market participants with confidence that the overall impact of particular derogations will be positive, the ACCC process may be unable to consider the policy implications of continued derogations.

The Council will continue to monitor jurisdictions' current derogations. It will seek the timetable for their expiration, along with jurisdictions' explanations of the need for particular ongoing derogations.

Table 7.1: Review and reform of electricity-related legislation

Jurisdiction	*Legislation*	*Key restrictions*	*Review activity*	*Reform activity*	*Assessment*
New South Wales	*Electricity (Pacific Power) Act 1950*	Provides for the constitution of Pacific Power and to define its principal objectives, powers, authorities, duties and functions. Amends and repeals certain other Acts.	Not for review, as the Government has established new state-owned corporations from Pacific Power's generation and transmission businesses.	The Act will be retained until 30 June 2003 to allow for the redeployment of the remaining staff who did not transfer to Connell Wagner. It is expected that the Act will be repealed in the Spring Session 2003.	Meets CPA obligations (June 2003)
	Electricity Safety Act 1945	Provides for the development of electricity supply; confers certain powers, authorities, duties and functions on the Energy Corporation of NSW; provides for the regulation of the sale and hiring of electrical apparatus and amends certain Acts.	Review completed in March 2002. The review recommended that: • the legislation be retained; • government intervention regarding consumer electrical articles and installations is warranted and should be retained; and • the provisions applying to the safety of second-hand consumer electrical articles be retained.	The Government approved the review's recommendations in May 2002. There are no NCP-related changes to the legislation.	Meets CPA obligations (June 2003)

(*continued*)

Table 7.1 continued

Jurisdiction	*Legislation*	*Key restrictions*	*Review activity*	*Reform activity*	*Assessment*
New South Wales (continued)	*Electricity Supply Act 1995*	Regulates the supply of electricity in the wholesale and retail markets; sets out the functions of persons engaged in the conveyance and supply of electricity The Act does not contain anti-competitive provisions.	Review will be undertaken after trends in the fully contestable retail market become clear.	Extensive amendments were made to the Act in late 2000 to facilitate the introduction of full retail contestability for all electricity customers in NSW from 1 January 2002.	Meets CPA obligations (June 2003)
	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 (Electricity-related provisions)	Constitution of the Energy Corporation of New South Wales	Review completed.	Licence and approval requirements repealed.	Meets CPA obligations (June 2001)
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 7.1 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)

(*continued*)

Table 7.1 continued

Jurisdiction	*Legislation*	Key restrictions	Review activity	Reform activity	Assessment
Victoria (continued)	*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)
Queensland	*Electricity Act 1994*	Conduct requirements, restrictions on trading activities, Ministerial pricing powers	Review of non-safety provisions completed in April 2002. Review made nine recommendations. Government accepted all recommendations with legislative amendments to be implemented in regard to six of the recommendations, departmental reviews for a further two and ongoing implementation of existing processes in regard to the remaining recommendation.	Legislative amendments to give effect to recommendations relating to non-safety provisions were assented to in May 2003 in the *Electricity and Other Legislation Amendment Act 2003*.	Meets CPA obligations (June 2003)

(*continued*)

Table 7.1 continued

Jurisdiction	*Legislation*	Key restrictions	Review activity	Reform activity	Assessment
Western Australia	*Electricity Act 1945 – Part 1 of 2*	Regulations concerning mandated supply, determination of interconnection prices, restrictions on the sale/hire of non-approved electrical appliances, uniform pricing	Initial review completed in 1998. The review recommendations have been superseded by wider reform of the electricity industry.	The Government is proposing new legislation based on the recommendations of the Electricity Reform Taskforce.	Council to finalise assessment in 2004
	Electricity Corporation Act 1994	Exclusive retail franchise of Western Power, entry restrictions for generation, competitive neutrality restrictions	Initial review completed. Further review being conducted as part of wider electricity sector reform.	The Government has endorsed the recommendations of the Electricity Reform Task Force. Some minor competitive neutrality advantages have been removed by the Statutes (Repeals and Minor Amendments) Act 1998. Any remaining restrictions will be removed within the context of electricity reform implementation.	Council to finalise assessment in 2004
South Australia	*Electricity Act 1996*	Restrictions on market entry and market conduct	Review completed in September 2000. No reforms recommended as Act facilitates regulation of electricity supply in conjunction with other national electricity market reforms	No reform required	Meets CPA obligations (June 2003)

(*continued*)

Table 7.1 continued

Jurisdiction	*Legislation*	Key restrictions	Review activity	Reform activity	Assessment
South Australia (continued)	*Electricity Corporation Act 1994*	Restrictions on market entry and market conduct	Review completed in September 2000. No reforms recommended as Act facilitates establishment of state owned corporations in SA in conjunction with other national electricity market reforms.	No reform required	Meets CPA obligations (June 2003)
	National Electricity (South Australia) Act 1996	Restrictions on market entry and market conduct	Review completed in September 2000. No reforms recommended as sole object is to implement a national electricity market. Review process: consultation with other jurisdictions.	No reform required	Meets CPA obligations (June 2003)
Tasmania	*Electricity Supply Industry Act 1995*	Conduct requirements, exclusive retail provisions, tariff-setting procedures	Review completed in late 2001.	Review recommendations were either enacted or are redundant following passage of legislation enabling Tasmania's entry into the NEM.	Meets CPA obligations (June 2003)
	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)

(*continued*)

Table 7.1 continued

Jurisdiction	*Legislation*	Key restrictions	Review activity	Reform activity	Assessment
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)
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)

(*continued*)

Table 7.1 continued

Jurisdiction	*Legislation*	Key restrictions	Review activity	Reform activity	Assessment
Northern Territory (continued)	*Power and Water Authority Act*		Review completed.	Act was replaced by the Power and Water Corporations Act from 1 July 2002. All electricity-related amendments made except for the removal of GOC's local government rate exemption (s.19). There is no specific timetable for repeal of s.19. GOC to continue to pay local government rate equivalents through the Territory's Tax Equivalent Regime until complexities regarding the existing local government funding arrangements are resolved. GOC began paying local government rate equivalents on 1 July 2001.	Does not meet CPA obligations (June 2003)