



ICRC

independent competition and regulatory commission

Draft report

**Review of contestable electricity
infrastructure works**

December 2003

The Independent Competition and Regulatory Commission (the commission) was established by the *Independent Competition and Regulatory Commission Act 1997* to determine prices for regulated industries, advise government about industry matters, advise on access to infrastructure and determine access disputes. The commission also has responsibilities under the Act for determining competitive neutrality complaints and providing advice about other government-regulated activities.

The commission has three commissioners:

Paul Baxter, Senior Commissioner
Robin Creyke, Commissioner
Peter McGhie, Commissioner.

Submissions, correspondence or other enquiries may be directed to the commission at the addresses below:

The Independent Competition and Regulatory Commission
PO Box 975
CIVIC SQUARE ACT 2608

Level 7 Eclipse House
197 London Circuit
CIVIC ACT

The secretariat may be contacted at the above addresses, by telephone on 6205 0799, or by fax on 6207 5887. The commission's website is at www.icrc.act.gov.au and its email address is icrc@act.gov.au or ian.primrose@act.gov.au.

For further information on this investigation or any other matters of concern to the commission please contact Ian Primrose, Chief Executive Officer, on 6205 0779.

Foreword

The commission is undertaking this review at the direction of the Treasurer, who has issued a reference to investigate and provide advice on the public benefit of maintaining or removing restrictions on the contestability of work on selected areas of the electricity infrastructure in the Australian Capital Territory (ACT).

Currently, the ACT's electricity distributor, ActewAGL Distribution (ActewAGL), is the sole supplier of services associated with the development and expansion of the electricity distribution infrastructure within the ACT. This inquiry considers whether there are overall economic and public welfare benefits from making contestable certain services currently provided solely by ActewAGL. The services under consideration can be broadly defined as those that are provided by ActewAGL to third parties and for which a third party must pay a capital contribution.

Elsewhere in Australia parties other than the network operator also provide these types of services, giving customers a choice of service providers. In the ACT, however, the development of a contestable market is restricted by regulatory protection. Whether the market for these services should remain uncontestable is the question on which this review seeks to provide advice. Specifically, the review seeks to shed light on the costs and benefits of retaining these restrictions on competition. The existence of a contestable market for these services would avoid the possible need for more regulatory oversight of these services. However, there may be a number of legal, economic, social and technical reasons for not opening this part of the market to competition. The commission is seeking to provide advice to government on what action, if any, it needs to take to ensure that the ACT economy improves economic efficiency consistent with benefits to the community as a whole.

The commission seeks to provide every opportunity to the community to be informed, and to comment, on the review and is seeking views from as wide a range of people and groups as possible. This draft report is the second step in consideration of this matter. It follows the publication of an Issues Paper that was released on 10 October 2003 and submissions that have been received on the Issues Paper. The commission encourages submissions and

community views on this draft report by 23 January 2004, prior to the production of the final report to be released in February 2004.

Those intending to make a submission should be aware that the commission publishes all submissions made to its inquiries, unless there is a specific claim for information to be treated as confidential and the commission agrees with that claim. Submissions are published on the commission's website and are available for scrutiny at the commission's office.

For further information about making a submission or about the investigation in general, please contact the Chief Executive Officer of the commission, Ian Primrose, on 6205 0779 or by fax on 6207 5887.

Paul Baxter
Senior Commissioner
23 December 2003

Contents

Foreword	iii
1 Introduction	1
1.1 The commission’s review process	1
1.2 Timetable for the review	2
2 Assessment framework	5
2.1 National Competition Policy and the public benefit test for exemption	5
2.2 Constraints on competition for electricity infrastructure	6
2.3 Possible outcomes of this inquiry	7
2.4 Contestable market features	7
2.5 Assessment framework	8
3 Costs and benefits	11
3.1 Network safety, reliability and quality of service	11
3.2 Economic benefits	13
3.3 Costs	16
3.4 Assessment of costs and benefits	23
3.5 Impact on stakeholders of removing restrictions	26
4 Other matters for consideration	29
4.1 What works could be made contestable?	29
4.2 Viability of competition	32
4.3 Competition payments	34
4.4 Adequacy of current regulatory arrangements	35
5 Conclusions and recommendations	37
5.1 Conclusions	37
5.2 Draft recommendations	38

Appendix A	Reference issued by the ACT Treasurer	41
Appendix B	ICRC Act competition policy considerations	42
Appendix C	Submissions on the Issues Paper	45
Appendix D	Details of the commission’s analysis	47
	Glossary and abbreviations	50
	Index	51

1 Introduction

The commission is conducting an investigation into whether there would be a public benefit in making selected areas of work on electricity infrastructure contestable, under a reference issued by the Treasurer of 1 July 2003. The investigation is being conducted subject to section 15 of the *Independent Competition and Regulatory Commission Act 1997* (ICRC Act).

1.1 The commission's review process

The commission is a statutory body established under the ICRC Act with a range of functions, including regulating prices and access to infrastructure, licensing utility services and ensuring compliance with licence conditions, investigating competitive neutrality complaints and government-regulated activities, and other matters pertaining to regulated industries in the ACT.

1.1.1 Matters to be considered

The Treasurer's reference (see Appendix A) sought the commission's advice on whether there is a net benefit to the community as a whole in introducing contestable electricity infrastructure works in the electricity distribution network. In considering the infrastructure works undertaken by ActewAGL, the reference required the commission to consider:

- changes required to the existing network undertaken exclusively by the ACT electricity distribution network operator (ActewAGL)
- augmentation of the ACT distribution network by works associated with new subdivision development and greenfield sites.

In addition to these terms of reference, the commission is required to consider the requirements placed on it by the *Utilities Act 2000* (Utilities Act) and the ICRC Act. The objectives of particular relevance to this review are:

- to encourage the provision of safe, reliable, efficient and high quality utility services at reasonable prices

- to minimise the potential for misuse of monopoly power in the provision of utility services
- to promote effective competition in the interests of consumers
- to facilitate an appropriate balance between efficiency and environmental and social considerations.

In making its assessment, the commission is further required to take into account the competition policy considerations set out in Schedule 1A of the ICRC Act (see Appendix B).

In this investigation, the commission has determined that its inquiries will be confined to infrastructure development, expansion and enhancement services relating to the electricity distribution network for which a third party must pay ActewAGL directly, either in part or in full.

The commission considers that it is inappropriate for this investigation to include maintenance and other works that ActewAGL undertakes on its network on its own behalf and for which third parties do not pay any direct contribution. The commission in its role as price regulator for ActewAGL's overall distribution services oversees ActewAGL's operating and capital works costs to ensure that these services are performed efficiently. Also, ActewAGL already tenders some of these works to competing service providers.

The commission has received a number of submissions on its Issues Paper, released in October 2003. These submissions indicated a range of views as to whether there may be benefits from making potentially contestable works available to contractors other than ActewAGL and its associated entities. These submissions expressed views ranging from calls to open ActewAGL's electricity distribution infrastructure work to full competition to calls for no change to the current arrangements.

1.2 Timetable for the review

The release of this draft report creates another opportunity for interested parties to make submissions on the contestable electricity infrastructure works under review. Key dates in the consultation process are outlined below:

<i>Event</i>	<i>Date</i>
Draft report	23 December 2003
Submissions on the draft report close	23 January 2004
Release of the final report	16 February 2004

A list of the submissions received by the commission and a summary of matters presented in these submissions is given in Appendix C.

2 Assessment framework

In this chapter the commission sets out its approach to assessing the net benefit of making selected areas of electricity infrastructure works contestable.

2.1 National Competition Policy and the public benefit test for exemption

Federal, State and Territory governments agreed in 1995 on the general principle that all regulation should be reviewed to identify and remove anti-competitive elements. Clause 5 of the Competition Principles Agreement acknowledges that, in general, competition produces efficient outcomes when permitted to operate without constraints. However, it also recognises that in some circumstances competition should or may need to be constrained in the interests of the community as a whole. A restraint on competition should only be retained if it is clearly in the public interest—that is, if there is a clear demonstration that an anti-competitive element will yield a net benefit to the community. The mechanism for making that assessment is the public benefit test.

The aim of the public benefit test is to assess the overall net benefit of maintaining the constraint on competition to the community as a whole. This is achieved by analysing both the negative and positive impacts on the monopoly business and the general public, such as increases or decreases in efficiency and monetary transfers between segments of the community. For example, economic rent or monopoly income lost by the monopoly business may be transferred as an income gain to customers through a fall in the price of a good or service due to increased competition. The gain to customers and the broader community may be negligible in this instance, but the loss to the monopoly business may be significant. In addition to identifying the ‘winners’ and ‘losers’ of competition, the public benefit test must also identify the magnitude, duration and probability of occurrence of any social issues and potential social impacts.

It is important to keep in mind that the preference in clause 5 of the Competition Principles Agreement is to allow competition to drive market efficiency. Thus, if there is no clear net benefit to maintaining the restriction, the decision defaults to removing the restriction and permits the market to become contestable.

2.2 Constraints on competition for electricity infrastructure

To assess the impact of a competitive constraint it is necessary to first understand the nature of the restraint. Table 2.1 identifies some key constraints on competition for electricity infrastructure in the ACT.

Table 2.1 Restrictions on competition for electricity infrastructure in the ACT

Type of restriction	Form of restriction
Restrictions on entry to the market	Infrastructure development and enhancement work that is the matter of this paper is restricted to ActewAGL (or its subcontractors or designers). This principally stems from the <i>Utilities Act</i> , which in ActewAGL's opinion excludes contestability. ¹ ActewAGL sets design standards and accredits service providers. This effectively creates a barrier to others wishing to enter this market.
Design and operating processes	In addition to being able to use its design and overall certification power to limit competition, ActewAGL could also get useful 'pre-bid' intelligence from this process to gain a competitive advantage.
Technical standards and links to ActewAGL's network	ActewAGL is the agency responsible for ensuring the overall operational security of the network and could use its powers to discourage or thwart new entrants.
Safety requirements	ActewAGL is responsible for ensuring the overall safe operation of the network and could use this power to discourage or limit new entrants to the market.
Quality constraints	ActewAGL could use its quality supervisory role to thwart new entrants potentially contesting ActewAGL in the market.

¹ ActewAGL, *Response to the ICRC's Issues Paper – Review of contestable electricity infrastructure works*, 7 November 2003, p. 15, 16.

2.3 Possible outcomes of this inquiry

In the commission's view, there are three possible outcomes from the assessment of the costs and benefits of introducing contestability to electricity infrastructure works, namely:

- a) There is a clear net public benefit to the community as a whole arising from maintaining the restriction on competition. In this case the market would remain a monopoly service. Although a monopoly service provided by ActewAGL, it would still be possible for ActewAGL to use the services of contractors selected by a contestable process. As a monopoly service, infrastructure works may be subject to price regulation by the commission.
- b) There is a net benefit to the community as a whole arising from making these works contestable. The commission would recommend to the government that constraints to competition in the market be removed and the works become contestable.
- c) There is neither a discernible net benefit nor a net cost to the community. In this instance, the commission would also recommend that the works become contestable. Under the National Competition Policy, a constraint on competition may be maintained only if there is a net public benefit to the community as a whole from the restriction and there is no other method of securing its objects.

2.4 Contestable market features

In conducting the public benefit test the commission has set a number of mandatory requirements, namely that:

- there should be no reduction in the quality of electricity distribution services
- electricity network safety and reliability should be maintained
- electricity assets should continue to be vested with the electricity distributor
- current capital contributions arrangements and requirements should not change.

If the works are made contestable, the commission has also set as a minimum requirement the following market features:

- only accredited contractors with the necessary skills and resources would be allowed to work on the infrastructure and compete in the market
- ActewAGL would not be excluded from competing for the work
- design and installation standards would be established and signed off by ActewAGL for all work—the commission considers the technical regulator to have a role in the development of the design and installation standards
- processes and work would be independently audited and monitored
- design, construction and installation work would be made contestable
- network planning work would not be contestable but might be made subject to independent oversight by the technical regulator.

2.5 Assessment framework

In conducting the public benefit test the commission has considered a range of quantifiable and non-quantifiable costs and benefits that may result from introducing contestability, drawing from the submissions made to the Issues Paper, other relevant empirical information, and the experience of other jurisdictions. Specifically, the commission has sought to compare the costs and benefits to the community as a whole of retaining the restriction on competition and of removing the restriction.

The commission proposed a number of issues on which it sought comment in the Issues Paper. The issues raised in the submissions are categorised as follows:

- network operational matters
 - safety, reliability and quality of service
- economic benefits
 - potential for lower construction costs

- more timely service
- transparency
- choice of service provider
- costs
 - social costs, such as job losses
 - reduction in operational efficiency through depletion of resources within ActewAGL
 - costs of implementing and administering a contestable market.

These issues are considered in detail in Chapter 3.

3 Costs and benefits

This chapter assesses the estimated costs and benefits of making electricity infrastructure works contestable in the ACT.

Overall, the costs of competition can be more readily determined than the benefits. The benefits mainly relate to the future effects of competition and, specifically, to competitors' responses to the new competitive environment.

3.1 Network safety, reliability and quality of service

The commission regards maintenance of network safety, reliability and service quality as paramount, whether or not infrastructure works are made contestable. This view was also shared in a number of submissions.

Changing the way in which responsibility for electricity infrastructure construction works is allocated clearly has the potential to affect the operation of the infrastructure in terms of safety and reliability. It is acknowledged that there is a risk that there will be a negative impact on these matters if changes are made to the way the market operates. The assumption is generally that the outcome would be for the worse, but in fact it may be for the better, as the existence of a regulated market is, of itself, no guarantee that there would be automatic compliance with safety requirements. ActewAGL expressed concern that the introduction of contestability could potentially threaten network safety and reliability through, for example, contractors cutting costs by using substandard equipment and not using safe procedures. ActewAGL did not provide evidence to substantiate these concerns. The commission notes that electrical works are already carried out for ActewAGL by other contractors in the ACT as well as for other organisations without negative impacts on safety or reliability. The commission has also considered the situation in other jurisdictions and observed no evidence of reductions in safety or reliability of supply because of the introduction of contestability.

The commission notes that the NSW Government was also concerned about the impact on safety of the introduction of contestability in that state. However, since the introduction of contestability the number of fatalities in the NSW industry has actually fallen. This corresponds with a general

improvement in safety in that state. Safety performance measured by lost-time injury frequency has improved in all sectors of the electricity industry in NSW over the period 2002 to 2003.²

On the issue of reliability, the outcomes across other Australian states that have adopted contestability do not show a decline in reliability. The commission notes, however, that reliability issues may only become apparent over time and that infrastructure works in other states have only been contestable for a relatively short time. However, provided infrastructure works are installed to required standards, there should be no adverse impact on reliability.

The commission is of the view that, if adequate controls and measures are in place, network safety and reliability will not be adversely affected if infrastructure works are made contestable. Some new controls and measures may need to be developed, but many are already in place.

In terms of safety, national standards and codes specify standards for electrical works that contractors must meet. ActewAGL also has safety procedures that it follows and that its current subcontractors must meet. Where necessary the required procedures may need to be formalised and modified to allow them to be applied externally. In addition, mechanisms for accrediting contractors and auditing and inspecting work undertaken by contractors would need to be developed. The commission acknowledges that there may be costs associated with formalising and putting these procedures in place, in addition to ongoing compliance costs. These costs are discussed in greater detail in the next section.

There has been no suggestion that ActewAGL has not been able to deliver reasonable services in the present market environment. However, there has been anecdotal evidence of delays in ActewAGL's delivery of services. The commission is therefore of the view that contestability offers opportunities for improvement in the quality of service. The introduction of contestability will potentially provide customers with choice, and competition will encourage contractors to have customer focus, be more flexible to customers' needs and deliver work to meet customers' timing. While these benefits are difficult to quantify, they are likely to have a significant positive

² Electricity Supply Association of Australia, *Electricity Australia 2003*, p. 25.

impact. The potential for these improvements in quality of service were recognised in many of the submissions received by the commission.

From a safety, reliability and quality of service perspective, contestability has the potential to offer benefits to the Territory's economy without incurring significant additional costs (see discussion below). The experience in other states confirms that there are benefits that can be achieved, and the potential difficulties can be addressed and resolved.

3.2 Economic benefits

3.2.1 Greater efficiency in electricity infrastructure construction

Through competition, the reforms underpinning the Competition Principles Agreement sought to promote greater efficiency, lower prices and greater customer choice, particularly in the energy industry, than would have otherwise occurred. By forcing businesses to produce at least cost, to charge cost-based prices and to be innovative in product and process design and service delivery, competition can play an important role in achieving more efficient use of the community's resources in the production, supply and consumption of goods and services. A business that does not operate efficiently in a competitive market loses sales to competitors who can provide goods and services more efficiently. A monopoly business operating in a non-competitive market can operate efficiently, but there is no in-built incentive for the business to meet this objective.

Competition in electricity infrastructure works should therefore place downward pressure on infrastructure costs and, at a minimum, provide a check against misuse of monopoly power to extract prices higher than can be justified by underlying costs.

In submissions to the inquiry, there was a variety of views about the magnitude of the possible cost savings provided. Country Energy, a NSW distributor, expressed the view that infrastructure costs would fall if infrastructure works were made contestable, but did not suggest by how much. Others have suggested to the commission that there would be savings of up to 30 per cent on infrastructure works if these works were made contestable. ActewAGL has argued that competitive tendering is already applied to much of the capital works program and that cost savings from contestability for customer-funded infrastructure works are therefore likely

to be small. The commission has been provided with some cost information that supports claims of the potential for cost savings, although this is limited and cannot be applied across the board.

To provide some broad parameters for discussion purposes, the commission has made some estimates of its own, based on ActewAGL's capital works program estimates and other information provided in submissions. Simplistically, if savings of (say) 10 per cent were achieved on potential annual capital expenditure for customer-initiated works of some \$13 million, this would deliver an annual saving to the ACT economy of \$1.3 million in 2003 values. These potential savings are provided for purposes of comparison with the estimates provided in some of the submissions received by the commission. They must also be considered in the context of possible costs that will be incurred as a part of any opening of the market to contestability. This is discussed further below.

In NSW urban areas such as metropolitan Sydney, Newcastle, Wollongong and much of coastal NSW, prices for infrastructure work have reportedly fallen in places by as much as 50 per cent since the introduction of contestability.³ The commission was told of an instance where work in southern NSW was priced by Integral Energy at \$120,000 and subsequently repriced at \$40,000 by a competitor after the market was made contestable. The commission notes, however, that this order of magnitude of saving would only be made for discrete projects and would not be generally achieved. For example, in areas of rural NSW where there is little or no competition, prices for infrastructure work have tended to increase.

The Essential Services Consumer Council has argued that making electricity infrastructure works contestable would directly benefit only a small number of customers, namely large non-domestic customers and developers of brownfields and greenfields sites in particular.⁴ The commission agrees that, in the first instance, these customers would be the primary beneficiaries. It may be that developers will retain a proportion of the cost savings themselves. However, some of the savings are expected to be passed through to the end customers and the community as a whole. To the extent that

³ Anecdotal information provided by Country Energy, NSW Ministry of Energy, and a former employee of Energy Australia.

⁴ Essential Services Consumer Council, *ESSCC Response to the ICRC Issues Paper – Review of contestable electricity infrastructure works*, 23 October 200, p. 1.

developers are working in a competitive environment these savings will be passed to the community over time, although the commission notes that there are some government-endorsed restrictions on the development and marketing of land in the ACT and this could limit the flow-on benefit.

Contestable activity is not limited to major developments: there are other potential ways for domestic customers to benefit directly from competition. For example, a customer wanting to relocate a power pole should be able to negotiate a cost-reflective price if there is competition between service providers.

3.2.2 Choice of service provider

The benefit of freedom of choice is that it is expected to lead, through competition, to goods and services being supplied to society at the least social cost. For example, since the NSW electricity infrastructure construction market was opened to competition about 50 per cent of customer-initiated work formerly undertaken by Energy Australia is now undertaken by other contractors. This shift presumably reflects the prospect of improved services or lower costs to customers. The fact that there has been a shift of 50 per cent of the market to other service providers suggests strongly that the market believes that these service improvements and/or lower costs are real and tangible.

In the ACT, recent experience with the deregulation of street lighting also confirms the potential for improvements in customer service through greater choice of service provider. Deregulation of this market has resulted in more choice in the design of street lighting and more flexibility in the installation of street lights by contractors. Costs have also fallen significantly. The potential for similar benefits exists if the electricity infrastructure works are made contestable.

3.2.3 Transparency of costs

A likely benefit of competition in electricity infrastructure construction is greater transparency in the safety and technical compliance of individual projects, and greater transparency in the charging of works. It is clear from submissions to the commission and discussion with interested parties that transparency is highly desirable. Customers expressed considerable frustration over not knowing exactly what they were paying for and whether

they were being charged appropriately. The commission is of the opinion that greater transparency in pricing of works is beneficial and to be commended, whether or not electricity infrastructure works are made contestable.

3.3 Costs

3.3.1 Social costs: job losses

ActewAGL has indicated to the commission that the introduction of contestability to electricity infrastructure works will result in a reduced workload and associated redundancies.⁵ It estimates job losses of up to 40 employees. It foreshadows significant industrial unrest as a result and consequent supply bans and interruptions to work on the network. Furthermore, ActewAGL has argued that, should staff be made redundant, there may be an outflow of skills and labour from the ACT.

The commission notes the potential for redundancies and labour unrest within ActewAGL if infrastructure works are made contestable but believes the actual impact on ActewAGL will not be as severe as that predicted by the company. As a consequence the industrial unrest, if it occurs, will not necessarily be as severe as predicted.

Comparing the volume of ActewAGL's current work relative to the amount of potentially contestable work gives an idea of the impact that making electricity infrastructure works contestable may make on ActewAGL's capital works and maintenance program. Estimates of these figures are as follows:

⁵ ActewAGL, *Response to the ICRC's Issues Paper*, 7 November 2003, p. 12.

Table 3.1 ActewAGL proposed capital and operating costs, 2004–05

	\$'000
ActewAGL's proposed total capital expenditure 2004–05 ⁶	24,705
ActewAGL's projected network operating expenses 2004–05 ⁷	38,472
Total	63,177
Forecast annual capital expenditure on customer-initiated works 2004–05 ⁸	13,250

Assuming ActewAGL does not lose all customer-initiated works but that around 50 per cent⁹ of these works are undertaken by external contractors, the amount of work potentially lost by ActewAGL is equivalent to around 10 per cent of its total capital and operating work (that is, \$6.6 million out of \$63.2 million). Although this will clearly have an impact on ActewAGL's workforce requirements, it would be incorrect to assume that the loss of employment would be as high as 10 per cent of the current workforce as projected by ActewAGL, as these estimated capital works costs also include the cost of equipment, plant and contracted services.

Based on an item-by-item cost breakdown of expenditure for new urban developments for 2004–05 provided by ActewAGL,¹⁰ the loss of work in terms of salary costs could be in the order of \$1.2 million based on the above example. This represents less than 2 per cent of ActewAGL's total salary costs (in 2003 values).¹¹ Assuming a total cost of some \$80,000 per employee including oncosts and overtime, this would result in a loss of about 15 employees. While still representing a social cost to the community, this estimate of the likely impact of competition on employment is more realistic than the estimate used by ActewAGL.

The commission is advised that there is a shortage of skilled electricity linesmen in NSW and the ACT. To the extent that any of ActewAGL's staff

⁶ ICRC, *Draft Decision – Investigation into prices for electricity distribution services in ACT*, Report 15, p. 56, table 9.1.

⁷ ICRC, *Draft Decision – Investigation into prices for electricity distribution services in ACT*, Report 15, p. 83, table 12.1.

⁸ Table D.2, Appendix D.

⁹ Based on Energy Australia's experience in NSW, which appears to be at the upper end of the likely impact.

¹⁰ ActewAGL *Response to the ICRC's Issues Paper – Review of contestable electricity infrastructure works*, commercial-in-confidence submission, 7 November 2003, p. 4.

¹¹ ActewAGL *Annual Report 2002–03*, p. 33.

are made redundant, the indications are that they would have little difficulty in finding work elsewhere. While it is true that ActewAGL's workforce may be affected by the introduction of competition to electricity infrastructure works, the impact is not as severe as presented by ActewAGL and there might be no net loss of those skills in the ACT region. This conclusion is reached even before considering the potential for staff surplus to construction requirements at ActewAGL to find alternative employment elsewhere in the organisation or with other infrastructure works contractors competing for construction work in the ACT.

3.3.2 Reduced operating efficiencies in ActewAGL

In its submission ActewAGL identified reductions in operational efficiency that it expected to incur if infrastructure works were made contestable, in particular:

- possible underutilisation of staff through having to retain a core of employees to fulfil its network obligations under the Utilities Act, despite a likely loss of market share and reduced workload
- reduced ability to respond to emergencies and peak workloads, resulting in delays in the restoration of services, interruptions to critical works and possible legal ramifications
- inefficiencies resulting from the need for further ring fencing of staff and resources
- a loss of flexibility to coordinate different capital work projects or to combine capital projects with customer-initiated works, as currently occurs
- reduced ability to deliver economies of scale in areas such as equipment and staff utilisation, materials purchase and management, staff training and skills development, and resultant increase in unit costs across the whole business

- inefficiencies such as disruption and increased costs resulting from managing inexperienced or unreliable contractors or developers.¹²

The commission notes that network operators in NSW had similar concerns to those expressed by ActewAGL about efficiency losses but that, with the introduction of contestability, these have proved to be largely unfounded. The NSW network operators have responded to the changed market in different ways, with some choosing to actively compete in the market themselves, and others choosing not to compete and instead to focus on their core business activities. According to officers from the NSW Ministry of Energy and Utilities, there have been efficiency gains within the network companies as a result of competition. This has resulted in lowering of costs and greater customer focus both by the network companies and by the external contractors.

The commission understands that ActewAGL has currently subcontracted a portion of its pole replacement work, suggesting that it does not have the resources in house to meet these obligations at this time. Any reduction in the electricity construction workload would therefore potentially free the construction staff concerned to undertake this pole replacement work. If this is so, there may be no need for any loss of staff.

The commission also notes that ActewAGL draws on external resources to assist in emergencies such as the January 2003 bushfires and storms. After the January bushfires ActewAGL drafted approximately 150 additional personnel from neighbouring network operators and private contractors in order to meet the extraordinary repair requirements.¹³ Clearly, in these circumstances ActewAGL would not have sufficient in-house resources to meet the need to restore services. However, the question must be asked: what is the appropriate level of additional resources that ActewAGL should have on stand-by to address these emergencies? Would the extra 15 staff potentially affected by contestability be sufficient to provide the back-up resources ActewAGL claims are provided by non-contestability?

The commission does not accept the claim that ActewAGL would be less able to coordinate maintenance works with construction works if its

¹² ActewAGL, *Supplementary Submission – Review of contestable electricity infrastructure works*, commercial-in-confidence, 9 December 2003, p. 7.

¹³ ActewAGL, *Annual Report 2002–03*, p. 24.

construction workload declined. The commission envisages that ActewAGL would continue to have responsibility for network planning and coordination of works if electricity infrastructure works are made contestable.

Maintenance and construction works would continue to be planned ahead of schedule, as would the identification and planning of any opportunities to coordinate works. Similarly, the commission recognises ActewAGL's bulk purchasing power and envisages that it would continue to purchase materials to sell to contractors if electricity infrastructure works are made contestable.

While additional ring fencing may lead to some reduction in ActewAGL's economies of scale, it will not necessarily create inefficiencies. Much will depend on the extent of any additional separations required. The commission is mindful of the need to weigh the benefits inherent in ActewAGL's scale economies against the risk of those benefits being diminished by enforced separations.

As noted above, the commission is of the view that making infrastructure works contestable has the potential to lead to more economically efficient outcomes. A number of submissions pointed to efficiency gains through more efficient work practices and quicker turnaround times.¹⁴ Experience in NSW lends weight to these assessments, in that there has generally been an improvement in the elapsed time required to deliver new infrastructure in those network areas where contestability has been introduced. However, the commission acknowledges that potential loss of scale economies could diminish the net benefits available to the Territory.

3.3.3 Implementation and administrative costs

As noted in Section 3.1, a number of new processes and systems will need to be developed to address the implementation and ongoing management and regulation of a contestable market. Country Energy has provided an indication of the types of processes and controls that network operators were required to develop when contestability was introduced in NSW. These included:

¹⁴ Master Builders Association, *Response to the review of contestable electricity infrastructure works*, November 2003, p. 4; NJ Construction, *Response to the review of contestable electricity infrastructure works*, November 2003; Country Energy, *Response to Issues Paper – Review of contestable electricity infrastructure works*, 7 November 2003, pp 3, 5.

- Accreditation:
 - maintaining a record of accredited contractors
 - authorisation, assessment and reporting of contractor performance
 - establishment of gradings of competency and experience
- Provision of design information to contractors
- Compliance check and sign-off of works
- Development and maintenance of design and construction manuals and procedures for use by network business staff and by contractors.

ActewAGL estimates that its initial implementation costs would be in the order of \$1.3 million. ActewAGL did not provide a breakdown of these costs in its submission but indicated that the costs include the reworking of technical standards for use by contractors, development of administrative and authorisation procedures, IT costs and the cost of redundancies.

Although the commission expects ActewAGL to incur some implementation costs, it does not consider \$1.3 million to be a realistic estimate. For example, based on an estimate of \$25,000 per package for the 40 employees ActewAGL states that it would lose, the redundancy component of the costs would amount to \$1 million. This would imply that the other implementation costs would in total amount to \$300,000.

As noted previously, the commission believes that the level of redundancies suggested by ActewAGL overestimates the likely impact on employment levels at ActewAGL, and has made its own estimate of a possible loss of 15 employment positions (before any possible redeployment of those staff to handle other works that ActewAGL currently cannot staff). Redundancy costs for 15 staff (as a maximum) at \$25,000 per staff member amount to \$375,000 in addition to any other implementation costs. The commission does not expect these other implementation costs to be significant because ActewAGL already performs many of the tasks associated with the management and acceptance of infrastructure works as part of its current capital works program, including administration of subcontractors to these infrastructure projects. However, in the absence of other estimates the commission will adopt the implied costs derived from ActewAGL's estimates amounting to \$300,000. Thus, in total and after allowing for

possible redundancy costs of \$375,000, the commission conservatively estimates implementation costs at \$675,000.

Government agencies would also incur costs through having to amend existing regulatory systems or develop new ones, including:

- development of a scheme to accredit and authorise contractors to perform contestable works
- review of ring fencing guidelines and amendments, as necessary
- review of capital contributions arrangements and amendments, as necessary
- amendment of the Utilities Act to remove current ambiguities over who may operate on ActewAGL's electricity network.

It should be noted that many of these tasks will occur regardless of the outcome of this review. The Utilities Act, for example, is scheduled to be reviewed in 2004 and is likely to be amended as a result. The review of the Utilities Act is a commitment given by the government when the Act was introduced and is independent of this current review of electricity infrastructure works. In the course of this current inquiry the commission has also identified a number of issues relating to the current ring fencing and capital contributions arrangements that need to be addressed. Changes are required in these areas regardless of whether electricity infrastructure works are made contestable.

The only regulatory task specific to contestability is the development of an accreditation scheme. Even here, there is an appropriate scheme in NSW that the ACT could readily adopt, thereby reducing both implementation (and recurrent) costs. The commission estimates the government agencies' implementation costs to be in the order of \$110,000. Perhaps one-third of these costs are specific to contestability and would therefore not otherwise be incurred. Therefore, there is a net addition to the one-off implementation costs of about \$30,000. This brings the estimated implementation costs up to \$1.33 million based on ActewAGL's advice and \$705,000 based on the commission's estimates.

ActewAGL's estimate for its recurrent costs is \$600,000 per annum. These costs include the maintenance of standards and procedures for contractors, training contractors, and the costs associated with the location and operation

of a separate unit to check designs, and inspect and commission contestable works. In NSW the recurrent costs have been estimated to be in the range of 5 to 7 per cent of the value of the customer-initiated works, which is consistent with ActewAGL's estimate. The ActewAGL estimate has therefore been accepted. It should also be noted that, in NSW, network operators' recurrent costs are passed on to those customers requesting tendered capital works through a variety of fees for services such as the provision of design information, certification of designs, design rechecking, inspections and re-inspections, and authorisations. The commission envisages a similar arrangement applying in the ACT, thereby reducing the cost imposed on other ActewAGL customers and effectively applying a 'user pays' principle.

The commission estimates the ongoing administrative and regulatory costs to be incurred by it and the technical regulator to be around \$310,000 per annum based on a requirement for two or three full-time staff to administer the accreditation scheme, and to monitor and investigate the performance of accredited contractors. The commission already incurs a small proportion of these costs for ensuring compliance with ring fencing requirements and other regulatory tasks. This has been conservatively estimated at \$20,000 per annum.

3.4 Assessment of costs and benefits

Table 3.2 provides a summary of the direct financial costs and benefits as estimated by the commission and the estimates provided by ActewAGL. As noted in the discussion above, the costs and benefits that can be quantified and presented in the table do not represent all the costs and benefits likely to occur as a result of contestability. However, the conclusion can be drawn, consistently with the broader view that is emerging, that the benefits of contestability will outweigh the costs of contestability over time.

The commission has undertaken a discounted cash flow analysis using the estimates shown in Appendix D. A summary of the results of this analysis is provided in Table 3.2. This table provides a comparison between cost estimates provided by ActewAGL and the commission's estimates.

The analysis uses a range of potential benefits based on experience in other jurisdictions and discussed earlier in this report. ActewAGL has also given some broad estimates of what it believes to be the potential savings based on

an estimate of 10 per cent of the wage and salary cost component of the customer-initiated capital works budget. The analysis indicates a range of benefits over a 10-year period of between \$4.3 million¹⁵ and \$26 million¹⁶ in 2003 values. The commission has also used a conservative estimate of quantifiable benefits of 10 per cent of the annual value of the customer-initiated capital expenditure program. Over a 10-year period in net present value terms, this generates a total benefit of \$10.7 million in 2003 values.

Table 3.2 Summary of net present value (NPV) costs and benefits

	10-year NPV estimates	
	ActewAGL \$m	Commission \$m
Benefits:		
Efficiency savings:		
Low estimate		5.3
High estimate		26.4
10% on total customer-initiated works		10.7
10% of total wage and salary component	4.3	
Costs:		
Initial and ongoing implementation costs	8.2	7.6
Net benefits:		
Low estimate		(2.3)
High estimate	(3.9)	18.8
10% of total customer-initiated works		3.1

The NPV analysis of the measurable financial benefits and costs identifies the sensitivity of the assessment to the assumptions made concerning benefits that are likely to occur as a result of the introduction of contestability. ActewAGL has estimated that the benefits are minimal and amount to little more than a potential saving of 10 per cent on the wage and

¹⁵ The lowest benefit estimated is derived from ActewAGL's 10 per cent saving on wages and salaries estimate. A low forecast of benefit used by the commission assumes some \$4.5 million of capital work is made contestable per annum and there is a saving of 10 per cent on this work.

¹⁶ A high forecast of benefit assumes that all the capital work shown in Table D.2 is contestable and there is a saving of 25 per cent on this work.

salary component of the works costs. As a result, there is a net cost in NPV terms over a 10-year period of \$3.9 million in 2003 values.

Essentially, ActewAGL is arguing that the construction methods and associated costs and overheads that it incurs in undertaking customer-initiated works are at 'efficient cost' levels and there is no room for greater efficiencies or removal of any element of monopoly profits in these costs. Rather, they are suggesting that the primary cost saving that might be expected is in labour costs, where a 10 per cent reduction is predicted.

However, this does not correspond with the experience reported from NSW, where contestability for these works has resulted in savings of up to 30 per cent of the construction costs offered by the previous incumbent monopoly service provider. Furthermore, a movement of up to 50 per cent of the construction work from the previous incumbent supplier to new entrants has been observed once contestability has been established. If customers are to transfer such a large part of their business from the incumbent to new suppliers while at the same time being required to pay the additional recurrent costs required to tender and supervise the contracted works, logic would suggest that savings far greater than 10 per cent of the wage and salary component of the customer-initiated works would be required.

Therefore, the commission is not convinced that ActewAGL's projection of likely benefits is realistic for purposes of this analysis. The commission's own analysis has used a range of possible outcomes and this has highlighted the fact that if only \$4.5 million per annum in customer-initiated works was 'contestable' and resulted in savings of 10 per cent in this value, the costs would still exceed the benefits in NPV terms over a 10-year period. However, this scenario assumes that there would be no flow-on benefit in terms of cost savings to the remaining component of the customer-initiated works. In effect, up to 60 per cent of these works would not be open to competition.

This estimate effectively assumes that over a 10-year period, cost savings of as little as 3.5 per cent of the total cost of the customer-initiated works program would be achieved. Again, when compared to the experience in NSW, this estimate appears to be unrealistically low.

At the other extreme, a net benefit of \$18.8 million is implied when it is assumed that there is a potential saving of 25 per cent from opening the total customer-initiated works program to competition. This approach

acknowledges that cost savings are potentially available from those projects that remain with the incumbent supplier as well as from projects that are undertaken by new entrants. At an average cost saving of 25 per cent, these benefits are in line with the observed upper-end outcomes in NSW.

However, it seems a little unrealistic to assume that this higher level of cost saving could apply across the total works program; even in NSW this level of saving across the total program has not been observed.

The commission has opted to use a 10 per cent cost saving across the total works program as a sensitivity test of the likely break-even point between benefits and costs. At a 10 per cent cost saving, there is a net benefit of \$3.1 million using the commission's cost estimates. Even allowing for ActewAGL's slightly higher cost estimates, there would still be a net benefit in NPV terms of \$2.5 million over 10 years.

This analysis suggests that at anywhere above approximately 7.5 per cent cost savings across the total works program, there will be a break even between the benefits and costs over a 10-year period. This is well within the parameters demonstrated by the experience in NSW and strongly implies the likelihood of a net benefit to the Territory's economy from the introduction of contestability for customer-initiated works.

3.5 Impact on stakeholders of removing restrictions

As noted in Chapter 2, a public benefits test must also identify 'winners' and 'losers'. Table 3.3 identifies winners and losers and summarises the expected impact on stakeholders as a result of making electricity infrastructure works contestable.

Table 3.3 Impact on stakeholders of removing restrictions to competition for customer-initiated electricity infrastructure works

Impact classification	Stakeholder	Size of impact on stakeholder	Direction of impact	Description of impact
Income transfers				
Loss of market share in contestable infrastructure works	ActewAGL	small – moderate	negative	Reduction in workload and loss of revenue
	ActewAGL construction workers	small	negative	Potential redundancy of 15 workers (ActewAGL estimate 40), though all or most are expected to be absorbed elsewhere in the market or potentially within ActewAGL.
Increase in market share in contestable infrastructure works	Electricity infrastructure contractors	small – moderate	positive	Increase in work opportunities for between 4 and 10 companies; increased revenue for rival firms.
Cost of setting up and administering processes and controls to support contestability	ActewAGL	small – moderate	negative	Initial costs borne by ActewAGL and government agencies would be recovered from the electricity distribution charge and government revenue. Ongoing administration costs recovered on a user pays principle from customers who benefit from the contestable market.
	Electricity customers ACT taxpayers	small	negative	
Efficiency gains				
More efficient delivery of infrastructure works	End customers (eg property developers, purchasers of new houses/units)	small – medium	positive	Efficient work practices, quicker turnaround times and lower costs and prices. Extent of the savings depends on the nature of the work and how much flows through to property buyers.
		small	positive	
Efficiency losses				
Operational efficiencies	ActewAGL	small	negative	Some reduction in operational efficiencies is expected as a result of staff reduction and separation of functions through ring fencing.
	Electricity customers	small	negative	

Table 3.3 demonstrates that there will be both winners and losers if electricity infrastructure works are made contestable.

The biggest single negative impact of introducing contestability to electricity infrastructure works would be to ActewAGL's workforce as a result of any loss of market share. Some construction staff may be surplus to requirements. However, given the reported shortage of skilled linesmen in NSW and the ACT region, the commission expects that any affected staff could be readily absorbed elsewhere in ActewAGL or by rival firms. The net impact on individuals is therefore expected to be negligible, as is the net impact on the skills pool. The commission acknowledges that there may be some reduction in operational efficiencies as a result of any loss of electricity construction workers but does not believe the impact will be as severe as ActewAGL suggests.

There will also be costs in setting up, administering and regulating the new arrangements but the commission estimates these will be outweighed by the benefits to the economy or will be recovered from those customers who directly benefit from contestability.

On the other hand, there should be some cost savings to customers as a result of more efficient work practices, quicker response times and lower construction costs. Savings to individual customers are estimated to be small to moderate, with developers, new home purchasers, and individual households (such as people wanting to move their power pole) being the main beneficiaries.

4 Other matters for consideration

4.1 What works could be made contestable?

In its Issues Paper the commission defined potentially contestable works as services relating to changes to or augmentation of the electricity network for which a third party must pay ActewAGL directly, either in part or in full. These works potentially include augmentations or alterations to the existing network, the installation of new infrastructure in greenfield developments, new connections, and other services requested by another party. The commission excluded from its consideration maintenance and other works that ActewAGL undertakes on its own behalf on the network and for which third parties do not pay any direct contribution. The reasoning behind the commission's position is that if a customer is required to pay directly for infrastructure work, the customer should also have the right to choose who does the work. Most submissions agreed that all works requiring a capital contribution by a customer should be contestable.¹⁷

ActewAGL has argued that it is inappropriate for a customer paying only a small proportion of the costs of infrastructure works (with ActewAGL bearing the majority of the costs) to be able to choose an alternative service provider. The commission acknowledges that the current capital contributions arrangements do not easily lend themselves to making contestable a portion of infrastructure works where both the customer and the network operator contribute to those works.

NSW has addressed this particular problem by making non-contestable those works that would ordinarily require a contribution by both the customer and the network operator. Under this arrangement, any infrastructure works that are shared are funded solely by the network operator and the costs are recovered through network distribution charges and not directly from the customer. Contestability of infrastructure works is restricted in NSW to

¹⁷ NJ Construction, November 2003; Country Energy, 7 November 2003, p. 1; Master Builders Association, November 2003, p. 3.

dedicated assets: that is, assets requested by, and for the use of, individual customers. This is an option for the Territory to consider.

Another option would be for customer-initiated shared works to be made contestable and, should the customer choose to use the services of an alternative contractor, the network operator would reimburse the customer in an amount equivalent to what they would otherwise have contributed. There may also be other options. However, the commission notes that the fact that the infrastructure works are partly or even substantially funded by the network operator is not necessarily sufficient reason not to introduce contestability. The commission notes that if a customer is required to pay for a service, the customer should be able to seek contestable quotes for the work in order to ensure that they are not paying an inflated price.

ActewAGL has argued that a decision over whether a customer could choose another service provider should be based on an assessment of the technical, safety and efficiency risks and associated impacts, the costs to offset these, and implementation issues. ActewAGL is of the view that any processes fundamental to the integrity of the electricity network should not be contestable. It raised particular concerns about augmentation, network planning and system design, specification, selection and procurement of major system elements. These issues are discussed in more detail below.

Augmentation

ActewAGL recommends that augmentation works should not be made contestable for safety reasons and because augmentation work can result in inconvenience to existing customers. However, experience in NSW does not suggest that there is a problem created by augmentation works.

Augmentation, like other work on maintenance and expansion of the network that is periodically undertaken by ActewAGL, will result in some shutdown of parts of the network. Procedures and protocols exist for this form of planned interruption to the network, and any contestable service provider would be required to operate within the requirements of these protocols and safety requirements.

Network planning and design

ActewAGL is concerned to ensure that network integrity and a holistic approach to network planning are maintained. Accordingly, ActewAGL has

proposed that processes need to be in place to assess whether to incorporate spare capacity into new or augmented works to cover future demand growth or expected new developments and thereby minimise overall costs and disruption. A number of submissions agreed that the responsibility for the overall design and planning of the network should remain with the network operator.¹⁸ The commission sees no reason to change this arrangement but considers that it should be made subject to regulatory oversight to prevent this process from becoming a form of barrier to competition.

Submissions did, however, suggest that the design of specific components or parts of the network for which a customer was required to pay should be made contestable. The commission notes that these services are contestable in NSW. Experience in that state demonstrates that by making the design contestable savings are achievable for customers. In these circumstances, designers would need to work within agreed standards and requirements of ActewAGL.

Procurement

In NSW, accredited contractors may choose to source materials from manufacturers and suppliers that supply to the electricity distribution industry or they may source directly from the distribution businesses themselves.¹⁹ This allows accredited contractors to benefit from the volume discounts that the network operator may be able to achieve. The commission considers that a similar arrangement could apply in the ACT if contestability is introduced and that this arrangement would allow the market to decide who it will procure materials from, while still allowing access to potential savings by way of ActewAGL's bulk purchasing arrangements. Equipment and materials used in new works or augmentations would still need to meet ActewAGL's specifications.

Potentially contestable works: the commission's view

The commission has noted ActewAGL's comments and concerns over what work, if any, should be made contestable. It is relevant to note, however, that

¹⁸ Country Energy, 7 November 2003, p. 1; NJ Construction, November 2003.

¹⁹ Country Energy, 7 November 2003, p. 1.

under any proposal to allow contestability, ActewAGL would not be precluded from bidding for the works concerned. Rather, the opening of the market to competition would also benefit ActewAGL if it means that the costs to complete capital works are kept to a minimum. This would be consistent with ActewAGL's stated desire to ensure that its services are provided at efficient prices. The commission recognises that if a small amount of work is to be made contestable, or if a customer is only to pay a small capital contribution, the costs of administering the tendering processes and managing an external contractor may outweigh any savings and benefits. The commission would propose that a regulated charge to cover the cost of tendering and administration be made on customers who select to have work tendered. This is similar to arrangements in other states and should deter customers from wanting to tender work where the cost of the administration outweighs the potential saving. The commission would require those tendering and administration costs to be fair and reasonable and would propose that these costs be subject to review by the commission in the event of a dispute over the level of charges imposed. With these caveats, the commission believes that ActewAGL's concerns about the potential cost of requiring open tendering when the third party is required to meet only part of the cost would be largely negated.

The potential problems raised by ActewAGL about augmentation and network planning and design would not appear to be of sufficient magnitude to warrant a continuation of the monopoly service provider model currently in use in the ACT. Appropriate administrative arrangements can be put in place to deal with these issues.

4.2 Viability of competition

Though neither a cost nor a benefit, whether the potential for competition exists in a particular market is also a consideration in whether or not to open the market to contestable activity. In NSW the network operators operating in the rural areas of the state have seen less of their infrastructure works opened to competition than their urban counterparts. For example, Inland Energy has not made its works contestable because there are no potential competitors operating in its network region. Elsewhere in NSW there is a viable market, as demonstrated by the experience of Energy Australia. As noted previously, half of that network operator's customer-initiated works are now undertaken by competitor firms.

It is clear from the submissions received that there are a number of qualified contractors in the region who may seek to enter the market if it is made contestable, making competition in the ACT's market for infrastructure works more likely than in some of the rural NSW regions. There is already a competitive market for non-ActewAGL electricity infrastructure works, and participants in this market could compete for the ActewAGL-associated works. The size of this non-ActewAGL electrical infrastructure work market in the ACT is at least \$40 million per annum.²⁰ ActewAGL's potentially contestable work currently amounts to around \$11 million per annum, although it is forecast to rise to around \$20 million in 2006–07 before declining again to around \$11 million per annum. The new work that would be open to competition is therefore potentially 1.3 to 1.5 times more than the existing market. This would be more likely to attract competitors to the ACT market than was the case in rural NSW, where the volume of work has not been sufficient to attract new market entrants.

Table 4.1 identifies a number of potential entrants into the ACT market. Table 4.2 lists other contractors who are accredited in NSW, are operating in the region and who may be interested in competing in the ACT.

Table 4.1 Potential entrants that could undertake the contestable work

Potential entrant	Annual turnover in electrical works	Comments
Country Energy	\$80 million – \$100 million	NSW distribution network service provider and accredited contractor. Regional centre, an office and depot located in Queanbeyan. Several hundred staff at this centre.
NJ Construction	\$5 million	NSW accredited contractor. Located in Queanbeyan with some 60 employees.
Ecowise	\$10 million to \$12 million	NSW accredited contractor.
O'Donnell Griffin	\$11 million	Turnover only in the ACT. Part of the Tyco Group, which is a large international company.

²⁰ This assumes a construction and building market of some \$400 million per annum in ACT with an electrical works component of some 10%.

Table 4.2 Contractors accredited in NSW and active in the region

Service provider	Location
South East Powerlines & Electrical Services	Milton
Goulburn City Electrical Pty Ltd	Goulburn
Tony Pollard Electrics Pty Ltd	Unanderra
Greenfield Electrics Pty Ltd	Wollongong
Sayers Property Group	Hall, ACT

In addition, there are a number of national and international companies that may wish to compete in the ACT. United KG may, for example, be interested in work above 11kV.²¹ There are also about 1500 Level 2 service providers accredited in NSW and there is potential for some of these to be attracted to compete in the ACT for parts of the market.

The inclusion of some of the smaller contractors in this listing of potential competitors highlights the possibility of less financially robust firms attempting to enter the market. As a consequence, the market would have some added risks that it does not currently have by virtue of the restrictions on market entry. There would be risks, for example, associated with default by contractors or from contractual disputes. However, these forms of risk can be mitigated by the use of performance bonds or security deposits made by accredited contractors as a surety against default. This is normal practice in other contracting environments, and there is no reason why it should not be equally effective in this market.

4.3 Competition payments

The commission notes that the ACT may incur a financial penalty under the COAG Agreement for retaining a restriction on competition unless the public benefit test demonstrates a significant net benefit from retaining the restraint. A government's failure to honour its commitment to the Competition Principles Agreement may result in a reduction in Australian Government competition payments to that jurisdiction.

²¹ The United KG Group has an annual turnover of some \$850 million and undertakes about \$30 to \$40 million of power work in NSW, Victoria, the ACT and Tasmania.

The competition payments reflect each jurisdiction's share of the benefits to the national economy arising from the implementation and maintenance of the agreed competition reforms. To the extent that payments to a jurisdiction may be reduced because it has not met its obligations to introduce or maintain the microeconomic reform effort, this would represent a net loss to the Territory. This loss would arise not only from reductions in competition reform payments, but also from the loss of any net benefits that the introduction of contestability would itself provide.

4.4 Adequacy of current regulatory arrangements

The commission noted in its Issues Paper that it is unclear whether, and to what extent, the Utilities Act allows contestability of infrastructure works. The commission observed that, while the Utilities Act allows accredited contractors to connect customers' premises to the network or to vary the capacity of the connection, it expressly excludes augmentation, relocation or other alteration of the network operator's existing network from works associated with a connection or variation. As noted in Table 2.1 of this report, ActewAGL's interpretation of the Utilities Act serves as a restriction to competition on its electricity infrastructure network. Should customer-initiated electricity infrastructure works be made contestable, the Utilities Act would need to be amended to remove the current ambiguities with the legislation.

As noted in Section 3.3.3, amendments would also need to be made to a range of other instruments. For example, the commission's Ring Fencing Guidelines do not specifically address the separation of business units within the distribution business. The guidelines would therefore need to be amended to ensure that the network operator has in place adequate separation to ensure that its contracting arm is not treated more favourably than its competitors. The Contestable Work Accreditation Code requires network operators to develop schemes to allow contractors to be accredited to perform contestable works anticipated by this review. It currently deals only with the accreditation of contractors to perform connection and variation works, not the full range of customer-initiated infrastructure works. Nor does the Electricity Network Capital Contributions Code anticipate a situation whereby electricity infrastructure works could be undertaken by anyone other than the network operator, or where the network operator is

required, for example, to reimburse to a customer the network operator's capital contribution.

Amendments to the Utilities Act and a range of other instruments, such as the Ring Fencing Guidelines and the Electricity Network Capital Contributions Code, are required in order to allow contestability of customer-initiated works to come into effect. However, as noted previously, a number of other issues relating to the current ring fencing and capital contributions also need to be addressed regardless of whether electricity infrastructure works are made contestable, and these additional amendments can be undertaken as part of the wider reviews.

5 Conclusions and recommendations

5.1 Conclusions

The commission's assessment is that contestability will not of itself lead to a reduction in safety, reliability or quality of service of ActewAGL's electricity distribution network. No evidence has been presented to the commission to demonstrate that contestability of certain electricity network capital works will cause any other negative effects or costs to the community that cannot be minimised with the correct procedures in place. Indeed, some of the costs that allegedly need to be incurred are costs that will be required to be met regardless of whether or not contestability is introduced.

The commission does not consider that there is substantial evidence to support ActewAGL's claim that 40 jobs will be lost if the market for these infrastructure works is made contestable. In the commission's view the potential losses are less than half that number and, given the current labour market for those skills in the ACT region, if jobs were to be lost in ActewAGL opportunities would be available with rival firms or in the market generally for those services. The commission considers it likely that surplus staff in infrastructure construction arising from loss of market share could be redeployed to other parts of ActewAGL.

The commission does acknowledge that contestability of certain infrastructure works will cause additional costs in managing and administering the tendering and ring fencing processes and controls, and these will be an additional cost to the community. Some of these costs can be directly borne by those groups that have most to gain from contestability, namely property developers and those who are required to pay for the capital works. Other costs will be shared by all consumers of electricity. However, these costs are not as high as argued by ActewAGL and, again, some are costs that will be incurred regardless of any decision on making customer-initiated infrastructure works contestable.

The commission is of the view that the benefits of contestability will outweigh any start-up and ongoing regulatory and administrative costs.

Many of these costs would be recovered from the third parties requiring the services. There would be direct cost savings to land developers and indirect savings to new residential property buyers. The provision of choice to consumers and improved customer focus would result in more timely delivery of works and more efficient construction and installation of works. Available evidence of the size of those benefits is inconclusive, but the experience of NSW has seen up to 50 per cent of the previous directly funded capital market works go to competitive infrastructure development tenders and the cost of some infrastructure works reduced by as much as 30 per cent.

The quantitative analysis of the costs and benefits undertaken by the commission, based on a number of assumptions and sensitivity analysis, demonstrates that in all probability there is a net benefit to the community in opening the market to competition. A break-even point between benefits and costs will occur with cost savings as small as 7.5 per cent across the total customer-initiated works budget. The commission is also of the view that there are sufficient skilled and interested firms operating in the ACT region to make competition viable.

The National Competition Policy, in effect, puts the onus on those wishing to retain anti-competitive elements to demonstrate a net public benefit from retaining that restriction on competition. The commission is of the view that this benefit has not been demonstrated. Rather, the contrary view that there are net benefits to the Territory from opening the customer-initiated infrastructure works on the ActewAGL electricity network to contestability has more empirical support.

5.2 Draft recommendations

Subject to review of the arguments and analysis presented in this draft report, the commission intends to recommend to the government that infrastructure works on the ActewAGL electricity network, incorporating development, expansion and enhancement works for which a third party must pay ActewAGL directly either in part or in full, be opened to competition. In support of this draft recommendation, it is to be recommended that:

- the Utilities Act be amended to make it clear that these infrastructure works are contestable

- technical standards and requirements be reviewed in consultation with ActewAGL to ensure that under a contestability regime they are appropriate and independent, and ensure network safety and reliability
- procedures be put in place for accreditation of contractors
- consideration be given to using the existing NSW accreditation scheme as most, if not all, who would operate in the ACT are already accredited in NSW
- those directly benefiting from the tendering of infrastructure works be required to meet the annual ongoing tendering and associated administrative costs required to implement this arrangement (these costs to be fair and reasonable and subject to review by the commission in the case of a dispute).

The commission notes that any decision by the government to adopt contestability for these customer-initiated works would require sufficient time for both ActewAGL and the government to make the necessary regulatory and administrative arrangements to support a contestable market.

Whether or not competition is introduced, the commission intends to recommend that the following reviews be undertaken as a matter of some urgency, as they deal with wider regulatory efficiency and procedural issues:

- electricity network capital contributions arrangements
- ring fencing guidelines.

Appendix A Reference issued by the ACT Treasurer

Independent Competition and Regulatory Commission (Reference for Investigation)

Determination 2003 (No 2): Disallowable instrument DI2003—182 made under the *Independent Competition and Regulatory Commission Act 1997*, s15 (Nature of industry reference) and s16 (Terms of industry references)

Reference for Investigation under s15

Pursuant to subsection 15(1) of the Act, I issue a reference to the Independent Competition and Regulatory Commission (the ‘Commission’) to investigate and provide advice on whether there is a net benefit to the community as a whole in the introduction of contestable electricity infrastructure works in the electricity distribution network.

Reference for requirements in relation to investigation under s16

Pursuant to subsection 16(1) of the Act, I specify the following requirements in relation to the conduct of the investigation:

1. In conducting the review, the Commission is to take into consideration:
 - a. changes required to the existing network undertaken exclusively by the ACT electricity distribution network operator; and
 - b. augmentation of the ACT electricity distribution network by works associated with new subdivision development and greenfield sites.
2. The Commission is to undertake this review and provide the final report by 12 December 2003.

Ted Quinlan
Treasurer
1 July 2003

Appendix B ICRC Act competition policy considerations

Below are extracts from Schedule 1A of the *Independent Competition and Regulatory Commission Act 1997*.

Competition policy considerations

- 1 (3) (d) government legislation and policies relating to ecologically sustainable development;
- (e) social welfare and equity considerations, including community service obligations;
- (f) government legislation and policies relating to matters such as occupational health and safety, industrial relations and access and equity;
- (g) economic and regional development, including employment and investment growth;
- (h) the interests of consumers generally or of a class of consumers;
- (i) the competitiveness of Australian businesses;
- (j) the efficient allocation of resources.

Competitive neutrality principles

- 3 (1) The objective of competitive neutrality policy is the elimination of resource allocation distortions arising out of the public ownership of entities engaged in significant business activities: Government businesses should not enjoy any net competitive advantage simply as a result of their public sector ownership. These principles only apply to the business activities of publicly owned entities, not to the non-business, non-profit activities of these entities.

- (4) Subject to subclause (6), for significant Government business enterprises which are classified as ‘Public Trading Enterprises’ and ‘Public Financial Enterprises’ under the Government Financial Statistics Classification:
- (a) the Parties²² will, where appropriate, adopt a corporatisation model for these Government business enterprises (noting that a possible approach to corporatisation is the model developed by the intergovernmental committee responsible for GTE National Performance Monitoring); and
 - (b) the Parties will impose on the Government business enterprise:
 - (i) full Commonwealth, State and Territory taxes or tax equivalent systems;
 - (ii) debt guarantee fees directed towards offsetting the competitive advantages provided by government guarantees; and
 - (iii) those regulations to which private sector businesses are normally subject, such as those relating to the protection of the environment, and planning and approval processes, on an equivalent basis to private sector competitors.
- (5) Subject to subclause (6), where an agency (other than an agency covered by subclause (4)) undertakes significant business activities as part of a broader range of functions, the Parties will, in respect of the business activities:
- (a) where appropriate, implement the principles outlined in subclause (4); or

²² Party is defined in the agreement (cl 1 (1)) to mean the Commonwealth, a State, the Australian Capital Territory or the Northern Territory of Australia, if the jurisdiction concerned has signed the agreement and has not withdrawn. The Australian Capital Territory has signed the agreement and has not withdrawn from it; thus it is a party.

- (b) ensure that the prices charged for goods and services will take account, where appropriate, of the items listed in subclause (4) (b), and reflect full cost attribution for these activities.
- (6) Subclauses (4) and (5) only require the Parties to implement the principles specified in those subclauses to the extent that the benefits to be realised from implementation outweigh the costs.
- (7) Subclause (4) (b) (iii) shall not be interpreted to require the removal of regulation which applies to a Government business enterprise or agency (but which does not apply to the private sector) where the Party responsible for the regulation considers the regulation to be appropriate.

Legislation review principles

- 5 (1) The guiding principle is that legislation (including Acts, enactments, ordinances or regulations) should not restrict competition unless it can be demonstrated that:
- (a) the benefits of the restriction to the community as a whole outweigh the costs; and
 - (b) the objectives of the legislation can only be achieved by restricting competition.
- ...
- (9) Without limiting the terms of reference of a review, a review should:
- (a) clarify the objectives of the legislation;
 - (b) identify the nature of the restriction on competition;
 - (c) analyse the likely effect of the restriction on competition and on the economy generally;
 - (d) assess and balance the costs and benefits of the restriction; and
 - (e) consider alternative means for achieving the same result including non-legislative approaches.

Appendix C Submissions on the Issues Paper

- ACT Council of Social Services Inc (ACTCOSS): letter dated 5 November 2003
- Country Energy: Response to Issues Paper, 7 November 2003
- Madison Constructions, email dated 11 November 2003
- Essential Services Consumer Council, 23 October 2003
- NJ Construction Pty Ltd: NJ Construction response to the Issues Paper review to contestable electricity infrastructure
- ActewAGL: Response to the ICRC's Issues Paper – review of contestable electricity infrastructure works, 7 November 2003
- Master Builders Association of ACT, 26 November 2003

Table C.1 Summary of matters presented in submissions

Assessment criteria	ACTCOSS	Country Energy	Madison Constructions	Essential Services Consumer Council	NJ Construction	ActewAGL	Master Builders
Safety		★			★	★	★
Reliability and operation of the network	★	★		★	★	★	
Efficiency		★			★	★	
Complexity of processes		★			★	★	
Quality of service	★	★	★	★	★	★	★
Reasonable price		★	★	★		★	★
Viability of competition						★	
Social issues						★	
Time to achieve benefits		★					
Implementation						★	
Other matters							
Ownership	★	★				★	
Processes to be made contestable		★			★	★	★
Procurement		★			★		
Ring fencing		★			★	★	
Other regulatory amendments						★	
Network planning process						★	

Appendix D Details of the commission's analysis

The following analysis attempts to estimate the quantifiable benefits and costs relating to contestability using a net present value (NPV) assessment over a 10-year period, and is based on the parameters as shown in Table D.1. Since these parameters are in some instances only broad estimates, a range of values has been used in the analysis. This analysis attempts to assess the order of magnitude of costs and savings, but does not attempt to assign these costs and benefits to any individual groups (such as developers, customers and the community).

Table D.1 Range of values for parameters used in analysis

Parameter	Range of value		Comment
Capital expenditure on customer-initiated works	Forward projections provided by ActewAGL.		See Table D.2 below
Saving if works are made contestable	Commission estimates a minimum of \$450,000 per annum up to a saving of 25% on all customer-initiated works. ActewAGL estimate is 4% of customer-initiated work. ²³		Estimates have also been made assuming a 10% saving on all works, which is in line with experience in other states.
Amount of customer-initiated work that will be made contestable	Up to 100%.		Partially funded customer works would be made contestable, although in practice the recovery of tendering costs from the customer may make these projects less attractive to put out to tender.
Initial costs to set up contestable market			ActewAGL's estimates are at the higher range and reflect high staff redundancy costs.
ActewAGL costs	Commission estimates	ActewAGL estimates	
	\$675,000	\$1,300,000	
• Public administration costs	\$110,000	\$110,000	
• Less costs that would otherwise be incurred	\$80,000	\$80,000	
Total	\$705,000	\$1,330,000	
Annual implementation costs			ActewAGL's estimate is in line with that provided by other sources.
ActewAGL costs	\$600,000		
Public administration costs	\$310,000		
Less costs that would otherwise be incurred	\$20,000		
Total	\$890,000		
Discount rate	7%		Standard rate used for costs and benefits reflecting generally acceptable range of discount rate for this type of analysis.

²³ ActewAGL, commercial-in-confidence submission, page 5.

The forecast annual capital expenditure is shown in Table D.2 below. These estimates have been derived from ActewAGL’s submission to the commission’s price inquiry.²⁴

The commission has adopted a range of values of the potential reduction in the prices for infrastructure work if it is made contestable. Much higher savings for individual projects have been reported; for example, Madison Construction’s submission indicated savings of some 40 per cent. In addition, significant savings (up to 50 per cent) have been reported when the works were made contestable in NSW. Contestability should provide savings not only from those projects that are contracted to competitors of ActewAGL, but also in ActewAGL’s own price bids as it attempts to retain market share.

Table D.2 Forecast annual capital expenditure of customer-initiated works (\$’000 in current value)

Period	03–04	04–05	05–06	06–07	07–08	08–09	09–10	10–11	11–12	12–13
Total	10,350	13,250	17,150	20,850	16,750	10,750	10,550	10,550	10,550	10,550

²⁴ Derived from information provided by ActewAGL to commission’s investigation into prices for electricity distribution services in ACT.

Glossary and abbreviations

ACTCOSS	ACT Council of Social Services Inc
COAG	Council of Australian Governments
commission	Independent Competition and Regulatory Commission
ICRC Act	<i>Independent Competition and Regulatory Commission Act 1997</i>
NPV	net present value

Index

- abbreviations and glossary, 50
- accreditation, contractors, 21, 22, 34, 39
- ActewAGL, iii
 - capital works program estimates, 14, 17
 - operating expenditure estimates, 17
 - safety procedures, 12
- ActewAGL position
 - cost efficiencies, 13–14
 - costs and benefits, 24–26
 - management costs, 21
 - operating efficiencies, 18–19
 - potentially contestable works, 29–32
 - safety and reliability, 11
 - social costs, 16–18
- administrative costs, 20–23, 28, 32, 37, 39
- assessment framework, 5–9
- assets, 7, 30
- augmentation works, 1
 - contestability of, 29, 30, 32
 - coverage of in *Utilities Act 2000*, 35
- bulk purchasing arrangements, 20, 31
- bushfires, response to, 19
- capital contribution arrangements, iii, 8, 22, 39; *see also* Electricity Network Capital Contributions Code; third party capital contributions
- capital works program, costs of, 14, 17
- choice of service provider, 9, 12, 15, 38
- codes
 - Contestable Work Accreditation Code, 35
 - Electricity Network Capital Contributions Code, 35–36
 - safety, 12
- commission’s role, ii, 1
- competition payments, 34–35
- Competition Principles Agreement, 5–6, 13, 34–35
- competition, constraints on, 6
- compliance checks, 21
- conclusions and recommendations, 37–39
- constraints on competition, 6
- construction costs, 8, 25, 28
- contact details, commission’s, ii, iv
- contestable market features, 7–8
- Contestable Work Accreditation Code, 35
- contestable works, 29–32
- contractors, accreditation, 21, 22, 34, 39
- cost issues; *see* administrative costs; operating efficiencies; social costs
- cost transparency, 9, 15–16
- costs and benefits of contestability assessment, 23–26
 - costs, 16–23
 - details, 47–49
 - economic benefits, 13–16
 - impact on stakeholders, 26–28
 - network safety and quality of service, 11–13
 - quantitative analysis, 23–26, 38, 47–49
- Country Energy, 13, 20;
see also submissions received
- customer focus of service, 12–13, 19, 38
- customer-initiated works, 17, 18
 - capital works budget, 24
 - contestability of, 25, 30, 38
 - interstate experience, 23, 32
 - potential savings on, 14, 15, 25, 38, 39

regulatory coverage of, 35, 36
 salaries and wage components of, 25, 26

deregulation, of street lighting, 15
 design, network 8, 21, 22–23, 30–31, 32
 draft recommendations, 38–39

economies of scale, 18, 20
 efficiency considerations, 2, 13–15
see also operating efficiencies
 Electricity Network Capital
 Contributions Code, 35–36
 emergency response, 18, 19
 Energy Australia, 15, 32
 environmental considerations, 2
 Essential Services Consumer
 Council, 14
see also submissions received
 exemption test, 5–6

features of contestable market, 7–8

glossary and abbreviations, 50

implementation costs, 20–23, 28
 incentives, efficiency, 13
Independent Competition and Regulatory Commission Act 1997, 1, 2, 42–45
 industrial unrest, potential for, 16
 information technology costs, 21
 Inland Energy, 32
 Integral Energy, 14
 interstate experiences, iii
 administrative costs, 32
 choice of provider, 15
 contestable works, 29–30, 32
 cost savings, 25
 infrastructure costs, 14
 management issues, 20–21
 operating efficiencies, 19, 20
 reliability, 11–12, 13
 safety, 11–12
 Issues Paper, iii, 2, 8–9, 29, 35
 submissions on, 45–46
 IT costs, 21

job losses, 9, 16–18, 28, 37

Level 2 service providers, 34
 losers of contestability, 11, 26–28

maintenance work, 2, 16, 19–20
 management costs, 20–23, 28, 37, 39
 market risks, 34
 monopoly, 2, 25, 32
 effects on efficiency, 13, 25
 impact on customers, 5, 7

National Competition Policy, 5–6, 7, 38
 national safety standards, 12
 net present value costs and benefits, 23–26, 47–49
 network planning and design, 8, 21, 22–23
 contestability of, 30–31, 32
 network safety, 7, 8, 11–13
 New South Wales; *see* interstate experience
 NSW Ministry of Energies and Utilities, 19
 non-contestable works, 29–30
 NPV analysis, 23–26, 47–49

operating efficiencies, 9, 18–20, 28, 38
 other matters considered, 29–36

planning, network; *see* network planning and design
 pole replacements, 19
 possible outcomes of inquiry, 7
 potential market entrants, 33
 potentially contestable works, 29–32
 price considerations, 1
 procurement issues, 31
 public benefit test, 5–6, 7–9, 26–28
 public submissions; *see* submissions
 purpose of review, iii

quality of services, 7, 8, 11–13, 37

- recommendations, draft, 38–39
- recurrent costs, 22–23, 25
- redundancies, 16, 18, 21
- regulatory arrangements, adequacy of, 35–36, 39
- regulatory costs, 20–23, 28, 37
- reliability, 7, 8, 11–13, 37
- review process, 1
- ring fencing, 18, 20, 37
- Ring Fencing Guidelines, 22, 23, 35, 36, 39
- risks, market, 34

- safety, 7, 8, 11–13, 37
- service provider, choice of, 9, 12, 15, 38
- service quality, 7, 8, 11–13, 37
- social costs, 9, 16–18, 37
- stakeholders, impact on, 26–28
- standards
 - design and installation, 8, 12, 22–23, 31, safety, 12
 - technical, 21, 22–23, 39
- street lighting, deregulation of, 15
- submissions, 2, 33
 - call for, iii–iv
 - cost efficiency, 13
 - cost transparency, 13
 - network design, 31
 - operating efficiencies, 20
 - potentially contestable works, 29–31
 - received, 2, 8–9, 11, 45–46
 - safety, 11
 - service quality and timeliness, 12–13

- technical standards, 21, 22–23, 39
- tendering costs, 32, 37, 39
- terms of reference, 1–2
- third party capital contribution, iii, 2, 29, 32, 38; *see also* capital contribution arrangements
- timeliness of services, 9, 12–13, 28, 39
- timetable for review, 2–3
- transparency of costs, 9, 15–16
- Treasurer’s reference, iii, 1–2, 41

- United KG, 34
- Utilities Act 2000*, 1–2, 22
 - provision for contestability, 35, 36, 38
 - requirements 1–2

- viability of competition, 32–34

- winners, of contestability, 11, 26–28