



**AN UPDATE ON THE NT'S
ELECTRICITY REFORM PROGRAM**

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This paper addresses the following questions:

1. What is the nature and purpose of the competition reform program in the Territory's electricity supply industry ?
2. What is the role of the Utilities Commission, especially in facilitating competition ?
3. What has happened since the Territory's electricity market was opened to competition, and how successful has it been ?
4. What challenges lie ahead for new players in the Territory's electricity supply industry ?

As both Barry Chambers and Jeff Hutchison are scheduled to speak at this Conference, I will leave the industry view to them. I will provide a regulator's perspective only.

Competition reform program

Following an extensive review of the performance of the publicly-owned monopoly supplier of electricity in the Northern Territory (the Power and Water Authority ('PAWA')) in 1998, the Government decided to progressively open up the electricity generation and retail markets to competition.

The key objective of the Government's program of reform is to put downward pressure on electricity prices in the Territory.

The reform legislation that was passed six months ago overturned PAWA's effective monopoly in the supply of electricity in the Territory, and provided for the phasing-in of competition among generators and retailers:

- by allowing certain customers to choose their power supplier;
- by licensing new suppliers to enter the market; and
- by facilitating access to PAWA's transmission and distribution networks – involving the poles and wires used to transport electricity from generators to final customers – which will remain a monopoly function.

The Government did not however go so far as breaking PAWA up into separate corporations as has been done in some of the larger States. Instead, the Government decided to pursue its competition reforms while maintaining:

- PAWA as a single business under common management to achieve available economies of scope, albeit operating in future as ring-fenced generation, networks and retail business units; and
- PAWA Generation as a single business unit, not divesting or separating any of the existing generating units.

Contestable customer arrangements

The largest commercial customers (annual consumption of 4 gigawatt-hours (GWh) or more at a single site) became contestable on 1 April 2000. Customer contestability is being progressively extended in accordance with the following timetable:

date for introduction of further contestability	minimum annual load level at a single site
1 October 2000	3 GWh
1 April 2001	2 GWh
1 April 2002	750 MWh

The minimum customer load requirement is satisfied where:

- a customer's actual total power consumption at a single site during a consecutive 12 month period since 1 July 1998 is more than the set level (e.g. 4 GWh in respect of the 1 April 2000 eligibility date for contestability); or
- a customer's expected total consumption at that site during a consecutive 12 month period beginning on or after 1 April 2000 is likely to be more than the set level if the customer either:
 - did not consume electricity at that site before 1 July 1998, or
 - the customer's business or premises at that site were expanded after 1 July 1998 and the expansion causes the estimate to be more than the set level.

Besides the above timetable, the other limits which the Government has put on the phasing-in of competition are as follows:

- the aggregation of a customer's sites is not permitted for the purpose of determining the contestability of those sites; and
- if, or when, contestability might be extended below the 750 megawatt-hours (MWh) per annum level is not known.

Together, these features limit the number of contestable customers across the Territory to around 185 customers. Together, these customers account for around 45% of the total electricity market previously supplied exclusively by PAWA.

Being 'contestable' means that the customer is free to choose their supplier, whether PAWA or third-party retailers licensed to sell electricity to contestable customers. There are two qualifications here:

- for up to two years from their eligibility date, contestable customers who prefer to opt for price certainty may remain on their existing supply arrangements and tariff schedule with PAWA; and
- contracts entered into between PAWA and certain large customers prior to announcement of the Government's contestability schedule are allowed to run their course.

Third-party generators and retailers

New entrants are able to undertake the two contestable activities involved in the supply of electricity, namely:

- retail: purchasing electricity from generators and selling it to end-use customers; and
- generation: producing electricity, for sale either to retailers or to other licensed generators.

The small size of the Territory's electricity market has meant that it has not been feasible to establish a wholesale electricity pool in the Territory such as now operates in the national electricity market in south-eastern Australia. Instead, new entrants into the market (whether they be third-party generators and/or retailers) are obliged to:

- arrange supply directly with contracted (and contestable) end-use customers – termed 'bilateral contracting';
- supply all the power needs of individual contracted customers under normal circumstances (with 'partial contracting' not permitted);
- dispatch only the amount being drawn by their customers as a group from the network at any one time (adjusted for network losses between the generator and its customers), unless the independent generator can negotiate to sell any excess power that it sends out to other generators;
- contract with other generators to provide and sell power ('standby power') whenever the power sent out by the independent generator is insufficient to meet the aggregate needs of their contracted customers in defined circumstances such as the breakdown or scheduled maintenance of the independent's generating unit; and
- arrange for billing of customers.

These requirements are necessary for retail contestability to take place without a wholesale electricity market.

The dispatch and system control ('power system controller') function previously undertaken within PAWA Generation – which is essential to ensuring the power system as a whole (generators and networks together) produces and delivers the quantities of power required by all customers – has been transferred to PAWA Networks (although it operates separately from network control).

Network access arrangements

The provision and operation of the system of poles and wires involved in the transportation of electricity from generators to customers (or 'loads') in a geographical area – the electricity network – remains a monopoly function. Electricity networks are 'natural' monopolies in that they involve facilities which cannot be economically duplicated. For contestable customers located in Darwin, for example, third-party use of PAWA's networks is therefore an essential prerequisite for introducing contestability into the retail end of the Territory's electricity market.

To this end:

- network licences grant the right to operate a network system (irrespective of the voltage involved) within a specified geographical area or zone for the purpose of transporting electricity;
- new players in the retail sector are permitted to use PAWA's wires once they enter into an access agreement and pay the regulated network charges; and
- PAWA Networks is obligated to use all reasonable endeavours to accommodate the requirements of those seeking access to the electricity network, and to provide access on a non-discriminatory basis, in accordance with a formal 'Access Code' modelled on the National Electricity Code.

Role of the Utilities Commission

The Commission was established on 21 March 2000, on the commencement of the *Utilities Commission Act 2000*. It is a separate administrative unit established within the NT Treasury, but has specific statutory powers and undertakes its considerations independently from Treasury.

The Commission's objectives are:

- to facilitate improved price and service quality for consumers through regulation of certain monopoly services; and
- to ensure that competition develops where possible in markets upstream and downstream from these monopoly activities.

To these ends, the Commission is responsible for:

- issuing licences and monitoring compliance with licence conditions;
- regulating prices charged for monopoly services;
- conciliating any disputes over access to infrastructure;
- investigating customer and competitor complaints;
- monitoring and reporting on future supply capacity relative to future demand; and
- establishing and monitoring of standards of service.

These functions can be divided into two main groups:

- those simulating competitive outcomes where competition is not possible/likely; and
- those aimed at making competition work.

The remainder of this paper focuses on the latter (pro-competition) group of functions.

While the Commission is primarily a 'monopoly authority', its charter goes beyond simply ensuring efficient monopoly sectors. This is not to say that the Commission can of itself foster or ensure competition. Rather, its regulation of monopoly (dominance) sectors must ensure that actual competition in contestable sectors has the best chance of evolving efficiently and effectively.

The Commission's main functions with regard to the competitive sectors of the Territory's electricity supply industry are:

- issuing licences to generators and to retailers selling electricity to contestable customers – including setting licence conditions and monitoring compliance with those conditions;
- overseeing 'ring-fencing' of any monopoly activities from the contestable activities undertaken by the same business;
- settling disputes about the contestability status of end-use customers; and
- handling complaints from contestable customers against retailers, and from industry participants about the anti-competitive behaviour of other parties.

State of Play

What has happened since 1 April?

Licensing

With effect on 1 April, the Commission granted licences to:

- PAWA to conduct generation, retail, network and power system control operations; and
- the NT Power Group to conduct generation and retail operations.

Effective from the same date, the Regulatory Minister (the Treasurer) approved the granting of exemptions from the need to hold a licence in relation to the NT Power-owned Darwin-Katherine transmission line and various other minor electricity systems across the Territory.

Access and competition

On 1 April, 34 customer/sites in the Darwin-Katherine market became contestable, each with annual consumption in excess of 4GWh per annum.

Third-party access to PAWA's networks actually commenced on 15 April when the NT Power Group physically began supplying eight contestable customer sites, or about 20% of energy consumption in the contestable Darwin-Katherine market.

Contracting of newly emergent contestable customers

With regard to the advantages that PAWA possesses because of its knowledge of and involvement with customers before they become contestable, the Commission has put in place certain conduct rules designed to ensure that PAWA does not:

- contract with contestable customers before these customers (and third-party suppliers) receive formal notification of their contestability, or
- negotiate contracts with larger non-contestable customers that would see those customers 'cashing in' early on upcoming contestability, in exchange for pre-committing to PAWA.

In particular, under these rules:

- customers are issued with a 'Certificate of Contestability' not less than 28 days before the contestability date expected on the basis of past consumption levels;
- customers can apply for a Certificate of Contestability – on the basis of either their past consumption levels or their expected consumption levels – not more than 90 days before the date that they believe they will be contestable;
- the Commission will advise all licensed retailers in the Territory electricity market of the names of customers who have been issued with Certificates within five working days of receipt of a copy of the Certificate;
- licensed retailers are not free to execute a contract for the supply of electricity with a contestable customer until at least 14 days after the date of the Commission's notification to all retailers of that customer's contestability; and
- the contract start date may not be a date prior to the customer's date of contestability.

Ring-fencing

The Commission has put in place a ring-fencing code that prohibits PAWA's monopoly businesses – and any of PAWA's businesses which continue to possess substantial market power – from:

- passing on information to a related contestable business which is not generally available to competitors of that contestable business;
- cross-subsidising any of PAWA's contestable business activities; and
- discriminating between customers in an anti-competitive manner, or giving preferential treatment to its related contestable businesses.

The ring-fencing code also specifies the nature of separate financial reports required for each of PAWA's licensed businesses.

PAWA has subsequently proposed the administrative arrangements which it envisages instituting to meet these ring-fencing obligations. Following the Commission's assessment that PAWA's proposals were in some respects inadequate, the Commission is now in the process of developing a more detailed ring-fencing code through a public consultation process. It has issued for public comment a draft replacement code similar to those developed for the electricity supply industry by regulators in other jurisdictions (the ACCC and the Queensland Competition Authority, for example) based on the 'National Gas Code' model.

Scorecard

On the positive side, competition has begun in the Territory's electricity market, defying predictions of the sceptics.

On the disappointing side:

- only two retail (and generation) licences have been issued;
- no independent retailers (or generators) have yet emerged; and

- after almost six months, two-thirds of the first tranche of contestable customers are yet to conclude contracts with the retailer of their choice (including all of the eligible NT government agencies).

The challenges ahead for new participants

Against the (essentially factual) background provided by previous sections of this paper, finally I wish to reflect on some of the challenges ahead, especially those associated with attracting, and retaining, new electricity supply companies to the Territory.

First up, new entrants are faced with:

- a small market, exacerbated by the present limit on the extent of the rollout of contestability (750MWh per annum); and
- the single source of fuel (gas) for power generation in the Territory, compared with the multiple sources in southern markets.

While these impediments are important, they are matters outside the Commission's jurisdiction. However, of themselves, they should not be (and have not been) sufficient to prevent the emergence of competition.

I wish to focus instead on other possible – and more immediate – deterrents to competition, all of which the Commission may be able to influence, albeit to varying degrees.

Market information

Information available to new entrants – and those contemplating entry – on the size of the contestable market and the various tranches must be sufficient to offset the advantages accruing to PAWA Retail. While, normally, new entrants are on their own with regard to market information, PAWA possesses substantial market information because of its prior monopoly position. Relative to its competitors, PAWA has in effect received this information 'for free'.

While the *Electricity Reform Act 2000* requires that the businesses of selling electricity to 'contestable' and 'non-contestable' customers be operated separately, the Commission does not consider that the ring-fencing of information within PAWA Retail would be effective. Instead, other mechanisms need to be relied upon to ensure that there are no informational advantages flowing to PAWA's contestable retail business from its franchise retail business.

The Commission recognises it has a role to play in disseminating essential market information among industry participants. For example, last month the Commission published a summary of key contestable market statistics as at 30 June 1999, updating information previously provided by the Government.

The information published relating to the Darwin-Katherine market is summarised in the Table below.

total Darwin-Katherine electricity market, 1998-99	number of customer/sites	annual energy consumption (GWh)	market share (%)
contestable customers			
from 1 April 2000 (tranche 1)	27	330.5	25
from 1 October 2000 (tranche 2)	10	33.5	3
from 1 April 2001 (tranche 3)	18	43.7	3
from 1 April 2002 (tranche 4)	92	107.3	8
franchise market (non-contestable customers)	51,607	787.9	60
TOTAL	51,754	1,302.9	100

The Commission will regularly update (and extend) this information.

The Commission is also able to provide some disaggregated information – under conditions of confidentiality – such as the energy purchased by, and maximum demand of, individual customers in the various tranches.

An outstanding issue is whether the release of detailed information on individual customers as late as 28 days prior to such customers becoming contestable is sufficient for new entrants, especially for generation planning and marketing purposes.

Pre-existing contracts

The market effectively available to new entrants is less than that suggested by the above Table on account of long-term supply contracts which some large customers already have with PAWA. These contracts pre-date the Government's reforms and effectively preclude those customers from choosing an independent supplier on their eligibility date.

The magnitude of this problem as it affects the Darwin-Katherine market is summarised below:

pre-April 2000 contracted contestable sites, Darwin-Katherine market	number of customer/sites	annual energy consumption 1998-99 (GWh)
Tranche 1	6	121.3
Tranche 2	-	-
Tranche 3	2	4.4
Tranche 4	n/a	n/a

Together, the pre-contracted tranche 1 customers located in Darwin and Katherine account for 37% of the total Darwin-Katherine tranche 1 market.

The Commission is able to provide the names and details of the customers involved in these contracts to industry participants – under conditions of confidentiality.

Essentially, there are three classes of pre-existing contracts, namely:

- contracts with independent power producers (IPPs) and customers connected to non-regulated networks, without any exit clauses;
- contracts with customers connected to regulated networks with ‘meet the market’ clauses – allowing automatic termination of the contract if PAWA does not meet a bona-fide offer by a competitor; and
- contracts with customers connected to regulated networks without any exit clauses.

The first category of contracts is of little immediate concern. While the second category may ensure the customer is not disadvantaged on becoming contestable, these contracts probably disadvantage new entrants in that ‘meet the market’ clauses encourage a ‘dutch auction’ which PAWA may be best placed to win. The third category is of immediate concern to the Commission, and it would be prepared to assist any customer that felt they were being disadvantaged.

While some hold the view that any contracts that PAWA had in place with customers prior to 1 April should have been overridden by the Government’s decision to introduce contestability, there was no mention of the existence or treatment of pre-existing contracts in the Government’s statements prior to 1 April. There is, however, a provision in section 111 of the *Electricity Reform Act 2000* for regulations to be made allowing for termination of existing contracts with PAWA.

At this stage, the Commission does not have the power to overturn any of these contracts. Nor is it obvious that this would be the most appropriate course of action were it so empowered given the legal and property rights issues that doing so might raise. However, PAWA is on notice that it should not *in future* either:

- enter into any contract with a customer before that customer becomes contestable or which would bind the customer beyond their contestability date (this includes customers consuming less than 750 MWh per annum); or
- renew any of the pre-April 2000 contracts without these customers first being treated in the same manner as newly contestable customers (i.e at least 28 days in advance, the Commission (on PAWA’s advice) is to advise all retailers of the ending of the contract, to be followed by a 14 day no-sign period) so that these customers can exercise the sort of choice of supplier that was not possible when their consumption levels alone qualified them as ‘contestable’.

Moreover, in pursuing other matters, the Commission will be mindful of any and all advantages that might accrue to PAWA in contestable electricity markets from the existence of these pre-existing contracts.

Non-participation of NT government agencies

I understand that no NT government agency has yet entered into a contract with a retailer – whether PAWA or NT Power – after achieving contestable status. Under the grandfathering arrangements, they continue to be supplied by PAWA.

While this hesitancy continues, the effective market available to new entrants seems more limited than earlier implied. The following Table provides an indication of the importance of the NT government agency segment of the contestable market.

NT government agencies, Darwin-Katherine market	number of customer/sites	annual energy consumption 1998-99 (GWh)
Tranche 1	4	37.9
Tranche 2	3	9.5
Tranche 3	5	12.9
Tranche 4	24	28.7

This delay in participation by NT government agencies is regrettable. I look forward to the Government issuing a statement shortly that might clarify the situation – for the benefit of both agency management and the competing retailers.

On achieving contestability status, all government agencies have an obligation to behave in a ‘competitively neutral’ way. This would involve seeking information from all potential suppliers, and assessing suppliers in a manner that does not take account of the Government’s continuing ownership of one of the suppliers (PAWA). The appropriate criteria should include the capacity of the supplier to meet the agency’s power needs (both current and prospective) and the reliability/quality of service on offer as well as the price.

Refusing to receive, or seek, quotations from alternative suppliers (as I believe to be the case for some government agencies) is not consistent with, and would not *be seen to be* consistent with, these competitive neutrality principles.

While many government agencies may have legitimate reasons for not going with an alternative supplier at this stage, few will be justified in entering into long-term contracts with PAWA. Rather, it will be in their interests to enter into short- to medium-term contracts, to enable these agencies to take advantage of opportunities as the competitive market develops.

Government agencies are therefore well advised to ensure that they follow ‘competitively neutral’ processes in the area of choosing a power supplier once they become contestable. To do otherwise would contravene the spirit of the new arrangements put in place in the Territory’s electricity market, as well as raise questions about whether taxpayers’ money is being well spent.

The delay in NT government agencies actively engaging in the competitive electricity market is evidently the result of consideration being given at the whole-of-government level to the ‘due process’ which should be adopted by agencies in selecting their preferred electricity supplier. I understand that Government endorsement of a selection process is expected shortly.

Cross-subsidisation

New entrants will be deterred if they think PAWA’s retail price offers to contestable customers are in any way underpinned by cross-subsidisation from PAWA’s monopoly businesses.

The Commission believes the prohibition on cross subsidies between PAWA's monopoly and contestable activities to be an essential feature of the ring-fencing obligations on PAWA under the Government's electricity reforms. For this reason, the Commission has sought to satisfy itself about PAWA's pricing practices even in advance of the definition of 'cross subsidy' being settled as part of the Commission's current ring-fencing review.

PAWA has recently provided the Commission with a confidential, detailed briefing on the basis of PAWA Retail's pricing offers to contestable customers after 1 April. In turn, similar briefings have been received from PAWA Generation as to the basis of its pricing of energy sales to PAWA Retail.

The primary task facing the Commission is that of forming a judgment about the appropriateness of the energy price component of the retail prices being offered – given that the network and system control components are regulated and the retail margin is a relatively straightforward matter.

The Commission is using three criteria to assess the price offers made by PAWA Generation:

- Does the price at least cover long-run avoidable cost?
- Where the price is above avoidable cost, is the methodology used by PAWA Generation for determining prices for PAWA Retail broadly similar in concept to that used for price offers to third party or independent retailers?
- Where the price is above avoidable cost but below average cost, is there an acceptable plan in place to recover over time the losses involved?

The Commission expects to be in a position shortly to report to interested parties generally, in qualitative terms, whether there is any *prima facie* evidence of cross-subsidisation and, if so, what remedial action is proposed.

PAWA's 'soft budget constraint'

A further risk confronting new entrants into the Territory's electricity market is that continuing government ownership of PAWA may have the effect of 'softening' the budget constraint facing PAWA.

A firm faces a 'soft budget constraint' when it is partially or fully insured against the impact of bankruptcy. Under such circumstances, the firm's incentives to minimise costs, shed excess labour, improve services or develop new and innovative products, are dulled.

Importantly, the presence of a 'soft budget constraint' on one firm in an industry will act as a significant deterrent to new entry from competitors who face a 'hard budget constraint' and must earn a competitive rate of return on the capital they employ.

Whenever the Government indicates to one of its enterprises that it wishes that business to place at least some weight on objectives other than profit-maximisation (e.g., to retain labour) and where the costs of those actions are not explicitly identified in advance, then the business has an excuse for no longer earning a competitive rate of return and, as a result, faces a softer budget constraint. A 'soft budget constraint' can also result from a lack of transparency in the costs of 'community service' obligations.

To ensure that introduction of competition is encouraged, it is essential that the commercial incentives facing PAWA are improved (i.e., hardening the budget constraint) and its community service obligations (CSOs) are verified and any associated compensation is provided on a transparent and robust basis.

The commercial incentives on PAWA are a matter for the Government. While a commercial-like Board has recently been established for PAWA, further consideration may need to be given to other means of distancing the business from the Government and empowering management to operate the business in a normal commercial manner.

An important related requirement is there should be a transparent relationship between PAWA Generation and PAWA Retail's business of selling electricity to non-contestable customers (its 'franchise retail business'). Under the Government's CSO policy, the Government is effectively a co-purchaser of energy services and – like other customers – should be well-informed on the consequence of its purchases. To facilitate this transparency, the Commission considers that the sale contract between PAWA Generation and PAWA Retail franchise business should be available for public scrutiny.

As to CSOs, the Commission is participating in a review by NT Treasury of the obligations currently placed on PAWA and an examination of the costs of such obligations.

In doing so, the Commission is mindful that CSOs can be a justification for implicit subsidies and a cause of softening of the budget constraint. Also, it recognises that determining the costs of CSOs is not easy. Such information cannot be found merely by examining PAWA's accounts. The true cost of providing CSOs is the long-run cost of an efficient supplier using the most efficient technology and the efficient level of capital. Moreover, even if separate financial accounts are in place, costs and revenues can be shifted from one business unit to another through internal transfer pricing practices that are not easily detected. In practice, the only reliable method of determining the cost of providing a CSO may be to make the funding for that service contestable, through a tender, auction or franchising process.

Ring-fencing of PAWA Generation from PAWA Retail

New entrants are confronted with an incumbent firm (PAWA Generation) which, if it no longer possesses a statutory monopoly, nevertheless retains substantial market power.

PAWA Generation is the dominant participant in the Northern Territory generation market, exhibiting many of the characteristics of a monopoly in some sub-markets. Of particular issue is PAWA Generation's dominance in the market for standby power to third party generators and for the sale of wholesale electricity to third party retailers. The fact that existing IPPs are tied up in long-term supply arrangements with PAWA Generation, and not able to participate in the competitive market, is also important in this regard.

PAWA Generation could maintain its market dominance for some time.

To limit PAWA Generation's ability to exploit its market dominance to the detriment of competitors to PAWA Retail, the Commission considers it essential that PAWA Generation operate separately from PAWA Retail's business of selling electricity to contestable customers.

Unlike the case of PAWA's monopoly businesses where the *Electricity Reform Act 2000* explicitly states that there must be separation, there is no explicit legislative requirement – in section 25 dealing with conditions on generation licences – that suggests PAWA Generation should be kept separate from PAWA Retail's contestable business.

Despite this, the Commission's ring-fencing code adds PAWA Generation to the list of businesses that should observe certain ring-fencing obligations. The Commission chose to apply section 24(4) of the *Electricity Reform Act 2000*, which states that the Commission may, on granting a licence, make a licence subject to further conditions that are considered appropriate by the Commission. Moreover section 25(2) of the Act provides that the matters specified in section 25(1) '...[do] not limit the matters that may be dealt with by terms or conditions of a licence authorising the generation of electricity.'

An important test of the effectiveness of PAWA's ring-fencing of its generation and contestable retail businesses will be its attitude towards the supply and pricing of power to retailers other than PAWA Retail.

Any refusal by PAWA to enter into negotiations for the supply of power to the third-party retailers (and generators) will be closely examined by the Commission. When deciding whether and on what terms to enter into a power purchase agreement (PPA), PAWA Generation should take no account – and be seen to take no account – of the likely competitive or financial impact on its associated contestable retail business *per se*.

This is not to deny that PAWA Generation must honour its contractual commitments to PAWA Retail. But such commitments need to be set out in arms' length contractual arrangements. Once such arrangements are in place, if a third-party retailer wishes to purchase power for on-sale to unidentified or prospective customers, PAWA Generation has grounds for being cautious so as not to divert generating capacity needed to maintain supply to PAWA Generation's existing (wholesale) customers. [It may turn out, for example, that the customers to be supplied by the third-party retailer with the purchased power are new customers or customers of other independent generators – and so will not result in any surplus capacity on the part of PAWA Generation.]

The only legitimate grounds for PAWA Generation refusing to supply independent retailers are therefore:

- its existing capacity is already contractually committed; or
- while its existing capacity is not yet fully committed, it is faced with the prospect of purchasing an additional generating unit in the short-term, and it is therefore reasonable for it to consider diverting any capacity freed-up by the shift in contestable customers towards supplying the growth requirements under its remaining contractual arrangements, thereby deferring capital expenditure.

Dealing with load following (and the lack of a wholesale pool)

A final challenge facing new entrants into the market (whether they be third-party generators and/or retailers) is that, instead of being able to buy from or sell into a wholesale electricity market or pool, they are expected to participate in a 'bilateral contracting' arrangement involving them:

- arranging supply directly between an independent generator and contestable end-use customers;
- supplying all the power needs of individual contracted customers under normal circumstances;
- matching their transfers of energy into the network to the demand profile of their customers as a group (with mismatches attracting a regulated charge); and
- making adequate standby power arrangements (mainly involving contracting standby with other generators).

It is not always practical or appropriate to achieve the perfect 'load following' that these arrangements imply.

In fact, PAWA Generation – because it is the only party that can do this at present – has been nominated to act as the residual generator in the power system, absorbing any excesses and making up any shortfalls that arise from the operation of bilateral contracting. This is known as the supply of 'out of balance' energy.

The Code sets a tolerance limit to separate relatively minor out-of-balance occurrences from more significant occurrences, and provides for a settlement process to occur between generators on this basis.

There may be a concern that rigid application of the load following principle – and the discouragement of out-of-balance occurrences – runs the risk that:

- the reserve plant margin required across the entire power system may be higher than possible (either presently, or under a pool-like arrangement) – and this is clearly economically inefficient;
- generators may in effect be dispatched irrespective of the underlying 'merit order'; and
- if the power system controller is not involved in reviewing the adequacy of standby arrangements or the contracted energy balances within access agreements, the full weight of fostering zero out-of-balance energy will fall on the price signals arising from the regulated out-of-balance energy charges.

The Commission intends to approach this complex set of issues in a considered and transparent way, and in full consultation with the parties involved. In particular, the Commission – with the involvement of all interested parties – will shortly initiate a review:

- exploring the scope in time for introduction of a 'single buyer' model, possibly including the power system controller – with its system security responsibilities – purchasing energy balancing services from PAWA Generation; and
- considering whether the current $\pm 1\frac{1}{2}$ % tolerance limit is reasonable in the Territory context, including by reference to engineering or efficiency considerations.

Conclusion

New entrants to the Territory's electricity market currently face many obstacles, none of which are insurmountable.

The Commission acknowledges it has an important role to play by doing whatever is within its power to ensure that the arrangements and practices in place within the market – especially those associated with the conduct of the dominant incumbent – neither:

- deter the entry of efficient operators, nor
- result in the success of new entrants being down to anything other than the efficiency and effectiveness of the new entrants as competitors.

September 2000