



**Northern Territory Major Energy Users:**

**A New Legislative Framework For The Northern Territory  
Electricity Industry**

**Comments On Draft Policy Paper**

May 2008

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## **EXECUTIVE SUMMARY**

The Northern Territory Major Energy Users (NTMEU) welcomes the opportunity to provide comments on the draft policy paper. The NTMEU would also wish to participate and contribute to the further assessments that are suggested in this submission.

The NTMEU strongly supports the development of a more competitive policy and regulatory framework for the governance and operation of the Territory's electricity supply industry. The key objective is, rightly, to promote economic efficiency with respect to the provision of electricity services, with consumers being the beneficiaries of that promotion of efficiency.

As detailed in this submission, much more needs to be done regarding this matter as the existing policy and regulatory arrangements have not provided the competition in the industry to drive efficient outcomes.

Care needs to be taken in considering the adoption of the NEM institutional framework. There is a clear need for a cost benefit assessment to provide unambiguous conclusion of the merits of doing so. The current high level, conceptual and partial analysis is not sufficient.

Care is also needed in considering adopting the NEM wholesale electricity trading system in the absence of any competition in generation and retail in the Territory at the moment and in the foreseeable future. The risks of causing great economic damage on the Territory and on consumers in adopting such arrangements in the light of a dominant vertically integrated Power and Water Corporation (PWC) are real and substantial.

Government intervention and the extension of economic regulation would be necessary to engender a more 'competitive' environment and deliver more efficient outcomes for consumers. It also holds out a prospect for creating a nascent competitive environment in the foreseeable future.

The NTMEU considers that a transition phase is necessary before the Territory moves into a NEM or WEM legislative and regulatory regime, and has suggested a transitioning framework for consideration, discussion and debate.

The NT government has an opportunity to deliver a major benefit to electricity consumers in the Territory by converting the non-competitive current arrangements for the supply of electricity into a more vibrant competitive market. This change could utilise proven approaches trialled in other jurisdictions, but most importantly, underpinned by the supply of relatively low cost gas near to the main demand centre in the Territory.

The NTMEU has a very substantial stake in the direction of the Territory's future energy policy and regulatory framework, and reiterates its offer to participate and contribute to further dialogue and assessments.

The NTMEU has a major concern that this round of consultation, based as it is on conjecture and concept but without any cost benefit analyses, will be the only opportunity available to consumers to provide input into what is one of the most radical and far reaching decisions being made in the Territory. Because of this, it is imperative that there be another round of public consultation and discussion prior to Treasury refining its options to Government.

## **1. The Northern Territory Major Energy Users**

The Northern Territory Major Energy Users (NTMEU) welcomes the opportunity to provide comments on the Treasury's consultation draft policy paper 'A New Legislative Framework for the Northern Territory Electricity Industry'.

This is a very significant policy review and the Northern Territory Government's decisions will have major and long-lasting impact on the viability of major energy using entities, and consequently on their existing investments and potential investment plans, as well as on their ability to create further employment opportunities in the Territory.

The NTMEU comprises the larger end users of electricity in the Northern Territory and includes representation of the energy interests of the following companies: Northern Cement Limited, Parmalat Australia, NT Airports, Darwin Central Hotel, Intercontinental Hotel Group, Darwin Private Hospital, Natural Fuels, Compass Resources NL, and Yeperenye Pty Ltd.

The NTMEU has been established by the larger businesses operating in the Northern Territory to provide informed comment on the Territory's evolving energy policy and regulatory processes. NTMEU members cover a wide range of industries: from manufacturing to tourism, resources and healthcare. Member companies have identified that there are potentially more commercial options for providing essential services of electricity (and gas) than currently apply in the Territory, and are prepared to work with the Government to improve the current and future energy supply arrangements in the Territory.

The NTMEU recognises the unique nature of the Territory – its relatively low population and population density, its large area and its remoteness from

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other Australian markets – but it sees that large amounts of gas reserves nearby, and the proximity of northern (overseas) markets can provide a competitive edge for Northern Territory businesses, which in turn drive additional downstream investments and expand employment opportunities in the Territory. The key critical factor in achieving these potential outcomes is access to a competitive and sustainable energy sector in the Territory.

Accordingly, NTMEU member companies' main objective on energy is to promote access to long-term, sustainable and competitively-priced energy (electricity and gas) supplies. We have identified a key interest in the competitive **cost** of energy supplies (commodity, network services and transaction costs) as this represents a significant cost element in each member's business operations.

Electricity (and gas) is an essential source of energy required by each member company in order to maintain operations, and a failure in the supply of this energy source will cause energy businesses affected to cease production and/or suffer loss. Thus the **reliable supply** of electricity (and gas) is an essential requirement of each member's business operations.

With the use of highly sensitive equipment necessary to maintain operations at the highest level of productivity, the **quality** of energy supplies has become increasingly more important, with the need for a focus on improved service performance of the distribution networks. Variation of electricity voltage, especially voltage sags, momentary interruptions and transients (and also of gas pressure) by even small amounts, now has the ability to shut down critical elements of many production and/or service processes.

Each of the businesses represented in the NTMEU has invested considerable capital in establishing their operations and in order that they can recover the capital costs invested, long-term **sustainability** of energy

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supplies is paramount. If sustainable supplies of energy are not available into the future, investments made by energy users quickly lose their value.

Accordingly, the NTMEU has a keen interest in addressing issues that impact on the **cost, reliability, quality** and the long-term **sustainability** of member companies' electricity (and gas) supplies.

The NTMEU also recognises that electricity supplies (and to a lesser extent, gas supplies) are an essential service. There is no element of today's modern society that does not rely on electricity, whether it is for motive power or for lighting. The alternatives to using electricity for these needs are universally environmentally unacceptable, less safe, or commercially less viable. The NTMEU does not accept the contention made by some that there are alternatives to using electricity to manage the demand for electricity supplies. This means that, by and large, the electricity supply has to match the needs of consumers, rather than consumers modifying their power usage requirements for the benefit of the electricity supply arrangements, although where modifications in electricity consumption can provide assistance in achieving the goals of consumers (in terms of cost, reliability, quality and sustainability) fair value must be given to those consumers who can, and do, modify their usage to provide the benefit.

The NTMEU has identified that compared to equivalent operations in the rest of Australia, the cost of energy in the Territory is significantly higher and this creates an impediment to the entry of new downstream investments (and also to the expansion of existing investments), especially for manufacturing activities. This minimises the potential for NT-based industry to export to other parts of the country or overseas, or to develop competitive import-replacement opportunities, as the comparative energy prices clearly favour importation to domestic manufacture.

Equally, the NT has the potential to be a destination for increased tourism, but the high comparative energy prices are a deterrence, as they represent a significant proportion of input costs.

**The NTMEU takes the view that many of the issues surrounding energy supplies in the Northern Territory are not unique and have been successfully addressed by other Australian governments and in overseas jurisdictions. Useful lessons can, and should, be learnt from experience in other jurisdictions where implementation of energy reforms have been considerably more advanced. An over-riding requirement, however, is the creation of a competitive electricity market beginning with the establishment of a pro-competitive electricity industry market structure, and where it is not economical or feasible to engender new entrants, the implementation of a policy and regulatory regime to drive economically efficient outcomes.**

**Other key requirements are**

- **to foster increased transparency;**
- **to provide for fair, cost-reflective and non-discriminatory treatment of participants (including consumers);**
- **effective regulation and compliance; and**
- **the removal of all technical and other impediments used by the incumbent business to limit or prevent the achievement of competitive and efficient outcomes.**

## **2. A Competitive Electricity Industry Structure**

The NTMEU's vision for the Northern Territory's electricity industry is for the creation of a competitive electricity industry structure in the Territory, as competition is considered to be the best driver in achieving economically efficient outcomes. These, in turn, will provide the basic under-pinning for the stronger development of the Territory's economy by enhancing more downstream investments and employment.

The NTMEU considers that although economies of scale can lead to lower energy prices, the current policy of having a vertically-integrated (generation, network services and retail) monopoly providing energy supplies has been shown to be less economically efficient than having some competition introduced into the contestable sectors of generation and retail, with a regulatory regime to oversee natural monopoly networks providing for a surrogate form of competitive pressure. Experience from the Australian National Electricity Market and other energy markets overseas has shown that even corporatising assets in generation, **supported by the introduction of a degree of competition**, can lead to improved supply availability, more efficient plant operation and more competitive prices: where such a mix includes privately-owned generation, the improvements are even greater, as prices decline and service performance improves. A viable and economically efficient industry also results in the sustainability of the industry (by encouraging investments in the industry) and provides for adequate future capacity.

Accordingly, the NTMEU sees that a competitive industry structure for the Northern Territory could be considered based on:

- separation of the transmission and distribution networks from the existing generator business, as network services are really a monopoly service, but generation can be contestable;
- separation of the transmission and distribution networks and generation, from the existing retail business by creating a level playing field, thereby allowing new retailers to enter the market on a competitively neutral basis, thereby creating competition;
- ensuring the operation of the electricity supply arrangements are provided by an independent entity and that the system is operated on a non-discriminatory basis, thereby removing all technical and other impediments to the creation of a competitive environment;
- establishing the conditions for competition between the existing generator and retailer with new entrants;
- establishing transparency and the appropriate rules for power purchase and wholesale market transactions suitable for all participants, large and small; and
- establishing a customer market for consumers deemed large enough to be contestable.

Competition is inevitably about choices. For electricity customers (retailer or end user) the most important feature of a competitive electricity market, is to have access to alternative options for electricity procurement for the forecast demand (a mix of base, intermediate and peaking supply) and to be able to trade contracted power supplies to manage the inevitable swings of demand (the “unders” and “overs”) that are an outcome of the actual usage of electricity (and gas).

This is achieved by ensuring that there is:

- the right to own and operate power stations or shares of power stations;
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- the right to have embedded generation;
- the right to have access to an interconnected network with the right to transmit, on a non-discriminatory basis; and
- the right to decide on how this capacity is to be utilised.

Against the above background, the NTMEU notes that the Northern Territory's electricity industry structure provides for the issuing of separate licences, as follows:

- generation: the right to produce and generate electricity
- networks: the right to operate the network system within a specified geographical area
- retail: the right to trade in electricity and sell electricity to final customers.

**However, there is currently only a single vertically integrated company – Power and Water Corporation – which holds the licences to operate the largest generators, to be the network service provider and is the single energy retailer in the Northern Territory. The lack of transparency in pricing and in the rules governing transactions (including technical requirements) are a very significant impediment to competition.**

**In addition, the monopoly network service provider is required to provide negotiated access agreements (consistent with the network access code) with intending new entrant generators or with end users. The network service provider is expected to operate as an “honest broker” with proper rules for third party access to the grid. However, the concept behind the network service provider as a pro-competitive “honest broker” is somewhat negated in the absence of certain modes of behaviour that can only be engendered by structural separation of**

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**these electricity supply businesses in the Territory, including the operation of an effective Ring-fencing code (with effective compliance provisions) which clearly separates the activities of generation, transport and retail functions.**

A Utilities Commission has also been established to:

- license participants in the electricity industry;
- monitor and enforce compliance with the licensing regime.

When introducing the Electricity Reform Bill 1999<sup>1</sup> (which came into effect on 1 April 2000) the objective of the then Government was for all licences issued to require industry participants to:

- comply with certain technical codes, dealing with technical and service delivery requirement (such as those relating to metering, connection to networks, system control and security);
- ring fence their monopoly activities from their “contestable” activities, with requirements for separate accounting and information systems, and precluding cross-subsidisation between monopoly networks;
- pricing orders setting the prices at which electricity is sold to non-contestable customers;
- for contestable commercial customers, maximum permitted year to year movement in average prices are set by government, with tariffs structured in an equitable and cost-reflective manner; and
- the Utilities Commission to approve PAWA’s proposed tariff structures within the revenue caps set by government, (whose pricing orders may establish side-constraints on the extent of tariff re-balancing).

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<sup>1</sup> Electricity Reform Bill 1999 Northern Territory Second Reading Speech

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Furthermore, under the regulatory framework established by the Bill, an access code was to oblige network providers:

- to reasonably accommodate the requirements of those seeking access to the electricity network;
- to provide access on a non-discriminatory basis between various network users and potential users; and
- ring-fencing of PAWA networks from the rest of PAWA, with separate accounts and records.

Regulation of access prices was to involve:

- setting an annual cap or limit on the network provider's total revenue;
- overseeing the network provider's setting of 'reference' (or maximum) tariffs for network use;
- overseeing the network provider's setting of capital contributions; and
- overseeing PAWA generation's setting of prices charged for out of balance energy.

Price regulation was introduced to achieve:

- reasonable certainty and consistency over time;
  - acceptable balancing of the interests of network providers, network users and the public;
  - an environment, which fosters efficient operating and maintenance practices within the network sector, the efficient use of existing infrastructure and an efficient level of investment within the network itself; and
  - promotion of competition in upstream and downstream markets.
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The independent Utilities Commission was established with the powers and functions to:-

- promote competitive and fair market conduct;
- prevent the misuse of monopoly or market power;
- facilitate entry into relevant markets;
- promote economic efficiency;
- ensure customers benefit from competition and efficiency;
- protect the interests of consumers with respect to reliability, quality and safety of services and supply;
- facilitate the maintenance of the financial viability of the industry; and
- ensure an appropriate return on public sector assets.

The NTMEU agrees, in principle, with the above broad market structure and regulatory framework established under the Electricity Reform Act in the Northern Territory, as this structure and framework move in the direction of the NTMEU's vision for the industry and market. However, it is noted that the policy framework has had little real impact in achieving competitive outcomes for electricity consumers in the Northern Territory and the outlook does not appear promising, in the light of current and future developments, especially the continuation of the role of the dominant supplier, Power and Water. The lack of transparency in the NT electricity market is a major impediment, as is the lack of compliance under the existing regulatory regime.

It is worth noting that in general any dominant supplier can frustrate competitive pressure and the entry of new players by adopting anti-competitive conduct or rules for access and pricing. It can also extract economic rents across the whole vertically integrated business. This

“dominant supplier factor” has been ably described by the World Bank<sup>2</sup> which comments that:

*“Of particular concern will be the role of the dominant supplier. In almost all cases, the development of competitive alternatives will take time and new suppliers in the market will be small relative to the existing monopoly. The monopoly, through its **power purchase arrangements and its day to day operations** is usually in a position to determine the commercial success of any potential competitor.....*

*It will be essential for the Government to establish, through the regulatory process, a credible arms-length relationship with this dominant supplier”.*

In this regard the NTMEU would point to the activities of Western Power Corporation, which was the single integrated power provider in WA. The relationship between Western Power Corporation, the WA government and consumers is well documented, but until Western Power Corporation was disaggregated into the separate elements recommended above for Power and Water, despite ring fencing rules, there was a clear outcome that most new generation options either did not proceed due to Western Power Corporation offering better outcomes to proponents or were developed with Western Power Corporation involvement.

There is clearly much that needs to be done at the policy level to create a competitive electricity market in the Northern Territory. Simply adhering to, or joining, the National Electricity Market, or the Western Australia Market legislative framework, might be considered to be an appropriate step but it will be insufficient, as much more specific policy actions (other than

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<sup>2</sup> A.A. Churchill, World Bank, Paper delivered to the Asean Energy Conference, Singapore June 1992

transitional issues) are needed. By way of a major example, the NTMEU points to the critical issue of generation monopoly.

The absence of competition in electricity generation in the Northern Territory will be further exacerbated when the new Black Tip field gas processing plant comes on line in 2009. There is currently an agreement between Power and Water and ENI (operator of the gas field) for the delivery of new gas to augment the generation capacity of Power and Water. It would be expected, *ceteris paribus*, that having a source of lower cost gas compared with the current supply from the south of the Territory (Palm Valley and Mereenie) the cost of electric power should fall. Certainly, if this new gas is blended with regard to price with the last of the southern supply, then for reasons of increasing competition, **there is a sound case for the NT Government to require Power and Water to allocate new gas supplies to a competitor generator rather than to the existing PW Generator.** NTMEU is aware that there is some spare capacity available for gas deliveries in to the NT market, but further work is required to identify if there is sufficient to provide viable competition to PWC generation.

However, if a new entrant is required to source gas in its own right, then they will face negotiating additional gas supplies with Conoco Philips (with its existing onshore LNG export facility) or ENI. This will be from the standpoint of a poor negotiating position and allows PW Generator to retain its role as pre-eminent generator, and potentially reducing new entrant competition.

**The NTMEU considers it essential that the NT Treasury seeks further consultations and dialogue with NT energy users in the near future as this draft policy process proceeds. It is imperative, for example, that Treasury seeks further input and discussion following this current consultation process involving its draft policy paper. The NTMEU would not wish to see Treasury finalise its recommendations to**

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**Government without another round of public consultation and certainly more discussion with us once the issues are made clearer. It is sufficient, for now, to state emphatically that policy and structural changes are needed to create a competitive electricity market in the Northern Territory. The issues raised by the Utilities Commission in recent discussion and in its issues papers are also critical and the NTMEU supports the initiative to discuss and debate these issues. The first order priority is to get the policy, but particularly the market structure, developed in a way that actually promotes competition.**

Nevertheless, the “devil is in the detail” when considering the optimum implementation processes, and the NTMEU proposes to devote its available resources to working with the Government, the Utilities Commission, the electricity supply industry and other participants to ensure that the Northern Territory’s electricity market is consistent with world’s best practice outcomes. Such outcomes will enable NTMEU members to sustain existing operations, make new investments, and by doing so, create additional job opportunities in the Territory.

### **3. Objective of a new Legislative Framework**

The NTMEU agrees with the objectives of the current NT legislative framework as stated in the Electricity Reform Act governing the local electricity supply industry, particularly in relation to:

- ensuring the efficient and reliable provision of electricity services;
- facilitating the emergence of competition, improving safety, quality and reliability of supply, ensuring the financial viability of service providers, and protecting the interests of consumers; and
- ensuring fair and efficient market conduct or, in the absence of competition, achieving outcomes that could be expected in a competitive market and preventing the misuse of market power

As the draft policy paper states:

“Inherent in these objectives is that competition in the electricity industry serves as the primary means of achieving efficiency in the production, transport and consumption of electricity for the long term benefit of consumers and the economy” (page 12).

Moreover, the associated market and regulatory arrangements would:

“...translate into lower costs and lower average electricity prices to the benefit of consumers. Competition should also deliver significant benefits over time to Territory taxpayers, and

enhance business competitiveness and employment prospects throughout the Territory” (page 13).

Whilst high level objectives and principles are an essential starting point, the reality is that:

- the Northern territory has **not** created a competitive market structure as there is:-
  - no competition in the generation sector
  - one government-owned vertically-integrated business across the generation, network service and retail sectors
- the prospects for encouraging competition in the generation sector are minimal given the monopoly status of Power and Water’s gas supply arrangements
- there is little or no transparency in the business relationships between the three different sectors of the supply chain within Power and Water, nor is there any effective ring-fencing arrangement
- there are technical and other impediments as well as an inadequate compliance mechanism in the existing legislative and regulatory regime that must be rectified prior to changing the market control mechanism.

Clearly, more effective legislative and regulatory arrangements are necessary with respect to the governance of the electricity supply industry in the Northern Territory (and detailed suggestions are provided later). Associated with these, the NTMEU considers that adoption of the National Electricity Market legislative **objective** is a step in the right direction because, in particular, the National Electricity law sets out the requirement of the national electricity objective as follows:

“...promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to –

- a. price, quality, safety, reliability and security of supply of electricity; and
- b. the reliability, safety and security of the national electricity system.”

**The key elements of the objective are the promotion of economic efficiency with respect to the provision of electricity services, with consumers the beneficiaries of that promotion of efficiency.**

The NTMEU, however, queries the statement in the draft policy paper that:-

“...the ‘long term interests of consumers’ is a legally accepted formulation that recognises that higher prices in the short term are often necessary to stimulate investment in infrastructure to maintain reliability of supply in the long term” (page 15).

The relevant outcome sought is “efficient prices” and **not** “higher prices”. In particular, the National Electricity Law (NEL) provides further elaboration under the relevant provisions containing revenue and pricing principles which guide the regulation of prices of regulated network businesses, emphasising, inter alia, the importance of providing regulated businesses with incentives to operate and **invest efficiently** and to set **efficient prices**.

The NTMEU considers that this important issue must be noted and in any explanatory statement in relation to adoption of the NEL objective, that there must not be any presumption of “higher prices” which may or may not be “efficient”.

<p>Draft finding 1 A competitive market is the most effective way of ensuring the efficient provision of electricity services over time in the Territory.</p>	<p>NTMEU Comments Yes. But P&amp;W Generation is likely to remain the sole generator business in the NT and a form of “competitive” pressure needs to be applied to it. A starting point is for an improved regulatory regime to apply to P and W</p>
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	Generation to ensure that prices are efficient and there is transparency and non-discriminatory treatment available regardless of who requests the information.
The national electricity objective clearly articulates the link between competition and efficiency in energy markets. Any changes to the legislative framework applied in the Territory should be consistent with the national objective.	Yes. Note the NTMEU's concerns regarding "efficient prices" Vs "higher prices". The NTMEU is convinced that competition will not happen simply by adopting a new legislative framework. Competition needs to be fostered by transitional arrangements such as diversion of Black Tip gas to a new entrant generator, transparency in PWC Generation's transfer prices and an improved regime to ensure efficient prices.

#### **4. Challenges**

The draft policy paper makes a number of very important observations, viz:

- 1) “Eight years after the introduction of these arrangement (introduced in 2000), the Territory remains the only jurisdiction in Australia where there is no actual competition in any part of the electricity supply chain. As a result, large industrial and business consumers, despite being contestable in principle, must accept the contract terms offered by PWC, or less often, generate their own electricity” (page 15).
- 2) “large consumers are able to get the Utilities Commission (UC) to review their contract terms to determine if the price and service standards are fair and reasonable. Nonetheless, concerns raised formally and informally with the UC by some large consumers, and more recently through the Northern Territory Major Energy Users Group, suggest there is a perception that processes for negotiating supply contracts could be improved to give greater certainty that the price and other conditions are fair and reasonable. Interestingly, the strongest support for change comes from those consumers with national operations that have experienced choice of supplier in the NEM or WEM” (page 16).
- 3) “All the price data in the Territory is based on generation transfer prices that are negotiated between the retailer and generator on behalf of customers. Accepting these limitations, the following (in comparison with NEM spot market prices) suggests that growth in Territory wholesale supply costs has been greater than that recorded for the NEM” (page 16).
- 4) “...it is noted that average wholesale spot prices, and hence costs, in the NEM have risen slightly over the last decade in nominal terms while falling in real terms. Conversely, average negotiated generation contract

prices in the Territory appear to have increased in both nominal and real terms over the last five years” (page 17).

The draft paper also quantifies the potential significant increases in Gross State Product, Employment and Private Consumption in the Territory if the efficiencies applying in the Western Australian electricity industry are applied to the Territory.

The NTMEU would strongly agree with the above observations. A number of NTMEU members have national and/or Western Australian operations and their experience in operating in the NEM and in WA demonstrates that achieving similar orders of electricity efficiency would reduce their electricity input costs, increase their investment and activities and increase employment opportunities. Some NTMEU members have expansion plans in the Territory contingent upon access to competitively priced energy.

<u>Draft finding 2</u>	<u>NTMEU Comments</u>
<p>Effective measures are necessary to facilitate the competitive provision of electricity services and improve the efficiency of the electricity industry. The measures should:</p> <ul style="list-style-type: none"><li>• provide incentives for the electricity industry to improve efficiency and service levels; and</li><li>• provide consumers with confidence that the market and regulatory arrangements do not prevent the price and standard of electricity services from reflecting competitive outcomes, or at least, from being fair and reasonable.</li></ul>	<p>Agree</p> <p>Transparency is critical. The UC review regime needs improvement, e.g. improved ring-fencing code and compliance provisions. Public process is required to contest PWC and UC reviews. Incentives for improving efficiency are important as are penalties for not meeting performance standards.</p> <p>The UC review regime needs public debate to ensure a more efficient regime. This must be a key part of the NT’s response.</p> <p>The key response, however, is creating a competitive market structure by breaking down the vertically-integrated PWC in a manner that allows transparency between the different activities of PWC. There needs to be a rigorous compliance program in place to ensure that PWC actually meets the goals of this transparency.</p>

#### 4.1. The Territory's Physical Characteristics

The draft policy paper identifies several physical characteristics in the Territory which will constrain any likelihood of competition developing in the generation sector. Moreover, the vertically-integrated PWC and the fact that gas supplies (from known reserves) for electricity generation are for all practical purposes, fully contracted by PWC into the future means little or no scope for generation and retail competition emerging, nor achievement of efficient prices. However, it is feasible to create a competitive generation sector by establishing an integrated network system which would enable the key independent embedded generators owned by private industry, to export surplus energy into the Grid.

It has been noted that there are some generators which export into the grid, but the control of this export volume resides with PWC, effectively preventing competition<sup>3</sup>. The NTMEU also notes that for whatever reason, a number of large power users which could connect to the grid have failed to do so. In particular Cononco Phillips LNG plant with its 20+ MW demand has not been ~~was not~~ connected to the grid, despite its need for power and its ability to self generate and export power. Additionally the 20 MW demand at ERA's Jabiru plant could readily be connected to the grid, as might even the 150 MW demand at the Alcan plant at Gove. The connection of these large demands with their self generation has the potential to bring the size of the NT system quite close to that of Tasmania's system. In fact with the rising cost for the oil that is used at these plants for generation, and the proposals for connecting them to gas, connection of these plants into the grid, becomes that much more viable.

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<sup>3</sup> In this regard, the NTMEU points to the many experiences in WA where the vertically integrated monopoly Western Power actively ensured that new generation had its export controlled by WP as a method for WP to retain market dominance

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The NT MEU sees that ~~these present is was an opportunity~~ is lost to foster competition in electricity supplies for the territory. ~~DH could you expand.~~

For all intents and purposes, until competition in generation or retail can be created, an effective regulatory regime must be established to apply surrogate competitive pressure on PWC Generation and PWC Retail. Such a regime would be along the lines of a Propose and Respond model, whereby PWC Generation and PWC Retail would propose (via applications) to the UC their contract prices for electricity over say, a five year period, with the UC responding to the proposals by way of a public pricing review, similar to the sort of review currently in use of PWC Networks. In point of fact, the current Network pricing review by the UC is considered to be of limited utility, as PWC is able to shift rents across the supply chain to unregulated sectors and maximise rent collection in the unregulated or less regulated sectors. That this might be occurring can not be established as PWC Retails only offers “fully bundled” prices to contestable consumers, and prevents (by contractual means) these consumers from comparing prices and contract conditions that have been offered<sup>4</sup>. Such action by PWC Retail only increases the lack of transparency in the electricity market.

**The NTMEU strongly considers that it is feasible in the medium term to create a competitive wholesale electricity market structure by creating an integrated network system and providing for embedded generation to export into the Grid, such as is used in the NEM and the WEM. However the implementation of a structure such as this without having competition in place before its implementation, will allow the dominant generator (PWC Generation) and the dominant retailer (PWC Retailer) to exercise market power and set prices at whatever level PWC considers it requires. It would then beholden on the NT Government to**

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<sup>4</sup> It is noted that the legislation has removed from it the NEM conditions that the regulator can publish information that the PWC considers is “confidential” despite the views of the UC. Consumers have noted that PWC uses contractual mechanisms to limit transparency

**be active in ensuring PWC did not abuse this market power, and this intervention is not considered to be appropriate in a market where government intervention should apply.**

**Pending achieving adequate competition to PWC, a regulatory regime (that operates as a competition surrogate) needs to be established for the generation and retail sectors of the electricity industry, at least until competition to PWC becomes feasible.**

#### 4.2. Scope for disaggregation

The NTMEU does not agree that there is limited scope for disaggregating the industry (specifically PWC). This position has not been properly established in the draft policy paper. No recent feasibility studies<sup>5</sup> appear to have been undertaken. If scale economies are used as an argument for no disaggregation, then it could also be used as an argument against the likelihood of any new entrant competition appearing. However, as promoting new entrant competition is the key thrust of the draft policy paper (in terms of its vision of the Northern Territory's future electricity supply industry) the argument used in the two contexts must be logically consistent. The NTMEU considers that the following should be implemented:

1. structurally separate PWC generation, networks, retail and systems operation
2. corporatise individual parts of the PWC business by bringing in private sector efficiency drivers, governance and accountability arrangements
3. ensure transparency and fair and non-discriminatory treatment of all customers (consumers and new entrants) and potential customers

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<sup>5</sup> The NTMEU is aware that there was a study carried out in 1999, probably for the purpose of assessing what was the optimum structure for a trade sale of PWC. As such a review had different objectives than apply now, it is extremely doubtful whether the 1999 study has any validity.

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4. ensure cost-reflective and efficient pricing across the supply chain
5. effective regulatory regimes across the supply chain
6. introduce strong anti-competitive penalties
7. implement rules of conduct that limit the exercise of market power (short of abuse of market power, which falls under the Trade Practices Act provisions)

Unless PWC is disaggregated, the scope for fostering a competitive environment will be very limited. Experience in other jurisdictions consistently has demonstrated that this is the essential first step in creating a competitive environment. The essential second step is to create an integrated network linking the independent embedded generators connected to the grid to enable exports.

The NTMEU was advised that the NT government has concerns about the separation of PWC into separate corporate entities, due to the potential costs of doing so. The NTMEU considers that this observation has some validity. But despite this, the NTMEU considers that there are solutions available which deliver nearly the same degree of separation that corporatisation would bring but without the costs associated with such a step.

One of the major concerns that lack of PWC network separation has, is that despite the PWC networks being separately price regulated by the UC and supposedly operating as a standalone supply chain element, the closeness of PWC networks with other elements of PWC creates a climate of concern that the aspirations of elements of PWC (eg PWC generation) will be effectively supported by PWC networks by its approach to new entrants. Whilst NTMEU is not implying that this is occurring, there is a perception that it might occur. Full separation of the monopoly network operations from other PWC activities would eliminate any misconceptions.

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The NTMEU is prepared to assist the government in identifying the optimum solution to create this absolutely essential element of separation of the four core activities undertaken by PWC.

#### 4.3 Technical barriers lessening over the medium term

The NTMEU agrees that in the medium to long term, small scale self-generation might occur, as seen in the NEM and the beginnings of a little nascent competition would emerge, but to achieve this goal requires an environment of transparency and competitive neutrality between new entrants and PWC. However, we believe that it is unlikely in the short term that robust competition will occur in the Territory, with three or more generators actively competing with PWC Generation unless direct action is taken by government.

It is unlikely, in the foreseeable future that, given the scale and limited competition considerations, a wholesale market trading mechanism for electricity along the lines of the NEM is financially feasible let alone desirable. Whilst rhetoric about the effectiveness of the NEM is regularly uttered by self-serving proponents of it, the facts are that:

- the NEM is now considerably concentrated at the generation and retail levels and is not providing the robust competition that was originally envisaged<sup>6</sup>;
- the exercise of market power in the wholesale market is frequent and is causing significant economic damage to consumers;

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<sup>6</sup> For example, the initial disaggregation of the Victorian generation and retail sectors created five retailers and over six significant but separate generation businesses. Since then retail has reduced to three major players, and generation either combined with retail (creating “gentailers”) leaving only two independent generators.

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- the National Electricity Rules and institutions have been demonstrated to be ineffective in protecting consumers;
- the operation of ‘gentailers’ is distorting the market and is a deterrent to new entrants;
- the wholesale market is highly volatile, risky and risk premiums are escalating;
- major users are finding it almost impossible to obtain energy contracts in excess of 3 years, with increasing difficulties in some regions in getting contracts at reasonable prices;
- retailers are experiencing difficulties in obtaining hedging contracts with generators, and
- the NEM is being overlaid with excessive numbers of institutions (e.g. Ministerial Council on Energy, Australian Energy Market Commission, Australian Energy Regulator and National Electricity Market Management Company), with a myriad of reviews for Rule changes and regulatory requirements; transaction costs are escalating and regulatory and review fatigue has become a reality.
- Whilst the NEM objective of “being in the long term interests of consumers” has been generally supported, the fact is that consumers have not fully participated in many of the Rule change reviews and regulatory processes, with the result that consumer interests are often absent from the deliberations.

**The NTMEU urges extreme caution in any moves by the Territory to fully adopt the NEM legislative and institutional framework, and to introduce a NEM-type wholesale market trading mechanism without ensuring there is greater (robust) competition than currently exists, or in prospect.** Unless there is the likelihood of robust competition at the wholesale level (i.e. at least 3 if not more generators of roughly equal size), introducing a NEM-type wholesale model will **not** be in the interest of consumers nor of downstream industries in the Territory.

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The draft policy paper refers to ERIG's report in earlier discussions about efficiency in the NEM. ERIG had much to say also about market power in the NEM and we would draw Treasury's attention to ERIG's discussion. More recently, a sustained period of VOLL and high priced events in South Australia during summer demonstrates the relative ease at which, in the face of an increasingly concentrated electricity industry, the exercise of market power can be engineered within the NEM, with evidence of major economic damage visited on consumers.

ERIG noted that:

“Market power may be a sustained phenomenon, which points to market structure problems manifested in barriers to market entry. Alternatively, it may be a transient problem, occurring only when demand is at or above certain levels. However, even transient market power can impose significant economic harm even though it occurs for a short period of time (Willet 2005. Wolak 2006).”<sup>7</sup>

With PWC as the sole or dominant generator in the territory, it not only has market power, but the means to use that power, to the detriment of **the consumers who are the sole reason the electricity supply arrangements have been made.**

#### 4.3. Retail Competition

Retail competition is only possible if new entrants are able to secure generation capacity and obtain it at price levels which provide them with an adequate retail margin for their retail sales and still be competitive with the dominant retailer.

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<sup>7</sup> Energy Reform *The way forward for Australia: A report to the Council of Australian Governments by the Energy Reform Implementation Group January 2007, p.66.*

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PWC is a vertically-integrated business and also operates as a ‘gentailer’. Left to itself, there will be no incentive to supply generation capacity to potential retail competitors, let alone supply at competitive prices to any potential new entrant. And given that PWC has ‘locked up” available gas supplies into the Territory through existing contracts, it is unlikely that any new generator entrant will be able to access the market and supply any potential new retail entrant.

<u>Draft finding 3</u>	<u>NTMEU Comments</u>
<p>There are no compelling commercial or economic arguments to suggest that the disaggregation of PWC into legally or structurally separate generation, networks and retail businesses would deliver a net public benefit, at this stage.</p>	<p>The NTMEU disagrees with this finding. The draft policy paper does not provide any feasibility assessment of the benefits and cost of disaggregation and NTMEU finds it incomprehensible that the draft policy paper could arrive at this view without any testing of the issue. In fact, without structural disaggregation of PWC, there will always be very limited scope for competition in the NT market. The NTMEU would like to see all of the assessments of the issue before arriving at any unambiguous conclusion on disaggregation. But even after disaggregation, there remains a transitional period before competition occurs or that new entrants will enter the market. This means there must be effective regulatory oversight over the supply chain, and effective ring-fencing and compliance provisions.</p>
<p>Although, structural factors pose a major barrier to competition in the generation sector, rising demand for gas which should result in greater supply locally, in conjunction with technical advances, may improve the prospects for competition in the medium to long term.</p>	<p>The prospects for generation competition in the short, medium and long terms are unlikely if not negligible, unless changes are made to improve the potential for new entrants to generation, such as providing the new entrant with access to gas at the same price and conditions that PWC enjoys.</p>
<p>In the retail sector the prospects for competition are more favourable in the short to medium term than for the generation sector, if the market and regulatory arrangements provide an</p>	<p>Disagree. Prospects for retail competition are negligible unless potential new entrants can                      (1) secure wholesale supply contracts                      (2) retain a sufficient retail margin.</p>

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environment conducive to retail entry.	PWC will not, of its own volition, encourage retail competition. As a 'gentailer' PWC can shift rents from retail to the generator sector where it is a monopoly supplier.
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#### 4.4. Deficiencies in the existing regulatory framework

The NTMEU agrees that the existing market and regulatory arrangements are creating barriers to new entrant competition and to the achievement of efficient prices and service performance.

The existing market arrangements are very significant barriers to competition at the generation and retail sectors. With very limited likelihood of obtaining alternative gas supplies (let alone at competitive levels), potential new generator entrants will be deterred. Likewise, given the vertically integrated PWC operates as a 'gentailer', the lack of any new generator entrant to provide alternative/competitive generation capacity, will mean no potential new retail entrant is likely to want to assume what amounts to insurmountable business risks. The fact that large consumers with independent embedded generation (e.g. ERA at Jabiru, Conoco Phillips, ENI at Blacktip), have not connected to the grid (for whatever reason) is a classic example of the ability of PWC to thwart any potential competition.

##### 4.4.1 Investor Risks

The risks to new entrant investors in the NT are very significant. PWC is the dominant, vertically-integrated business, which also operates as a 'gentailer' and has also 'locked up' gas supplies from existing gas fields. A new entrant, be it for generation or retailing, will be at the mercy of PWC operating in such a way that makes the new entrant operations non-commercial. Being vertically integrated, PWC has the ability to transfer costs

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from one activity sector to another, and can use these transfers to subsidise a loss making activity and cause failure of its competitor. Bankers would see this risk as insurmountable and therefore would be unlikely to lend to the potential new entrant.

There is also little transparency in terms of contract information, related party transactions, etc. PWC is also the system planner and operator, and sets reliability and operating standards.

We are not convinced that the development of NEM-type trading arrangements will minimise specific investor risks.<sup>8</sup> In fact, we consider the risks would be accentuated due to the dominance of PWC. What is required is a more effective regulatory regime that provides price regulation and oversight. Given the unique size and geographical spread of the Territory market, it is not sensible to attempt to develop a competitive market within the existing market structure arrangements. This is even more critical as retaining PWC as a vertically-integrated business will raise investor and consumer risks to unacceptable levels.

A related investor risk is that there has been no clear statement of policy regarding the use of other fuels for power generation in the Territory, particularly as the government has allowed PWC to “corner” the gas supply arrangements. Currently there is a major use of gas by PWC for power purposes and the widespread use of oil (diesel heavy fuel oil, etc) by remote generators. A new entrant generator may consider that a coal fired generator might be the most appropriate for new generation, in that coal fired generation is used in base load mode, whereas gas fired CCGT (as at

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<sup>8</sup> It has been stated that new entrants are more likely to enter the NT market if the NEM market structure was implemented, on the basis that “they would have experience of and understand the NEM”. This statement is facile, because if it were true, no entrepreneur would even move from its operating base unless the market to which it desired to enter converted to the market structure operating at its base. That entrepreneurs have moved to markets where the market structure is different, debunks this observation

Channel Island) is base/mid merit generation. Oil fired generation in the current supply climate should be seen as peak generation.

If there is to be a move to a WEM or NEM style electricity market, with a carbon emissions overlay, the government must be prepared to allow the most appropriate commercial option for electricity supply, and not use its environmental political views to otherwise constrain a competitive electricity market from developing.

#### 4.4.2. Consumer Risks

Reflecting the monopoly position of PWC as the sole vertically-integrated business and with gas supply arrangements into the foreseeable future effectively 'locked up' by PWC, consumers are completely exposed to PWC in terms of price, supply, and service performance. Consumers generally, including even the larger end users, have no countervailing power, and this has been well-established. There is also limited scope for self-generation, in light of the gas supply situation and punitive costs for using alternative fuels. The only protection available for consumers is by way of Pricing Orders issued by the Territory Government. Larger end users have access to the UC's contract review procedure, but there is no certainty that inefficient prices have not been prevalent. Certainly, those users which have operations in other jurisdictions would attest to the inefficiently-priced contracts in the NT and the significant lack of transparency. Contestable consumers do not necessarily have any protection from inefficient pricing or service performance, as there is no competition for services available from another generator and/or retailer against which to benchmark PWC performance. There are also considerable doubts about the effectiveness of the current compliance process in the Territory, with respect to conflict resolution.

As a consequence, consumers and investors in the Territory have little confidence in the effectiveness of the Territory's existing legislative framework or with the existing market arrangements. There is simply no competitive pressure applied on PWC (save for the UC's price review of PWC Networks), and, therefore, no means to verify that prices and service performance are at efficient levels.

This lack of confidence in the credibility and effectiveness of the existing legislative and market arrangements can deter efficient use and provision of electricity services, and worse, deter downstream investments and employment creation in the Territory, and thus reduce economic growth.

<u>Draft finding 4</u>	<u>NTMEU Comments</u>
<p>Deficiencies in the existing market and regulatory arrangements pose a barrier to competition by imposing unnecessary costs and risks on potential investors.</p> <p>Currently, consumers have few independent means of verifying that the price and standard of electricity services is fair and reasonable. At the least, this could cause dissatisfaction or diminished confidence in the electricity industry and service standards. At worst, it could lead to inefficient consumption and investment decisions and lower productivity, investment returns and economic growth.</p>	<p>Strongly agree.</p> <p>Strongly agree. The businesses that have national operations are able to verify that the NT electricity industry is relatively inefficient compared to the NEM/WEM electricity services industry. Confidential data supporting this observation can be made available.</p>

#### 4.4. Effective Regulatory Framework

The NTMEU considers that creating competition in the electricity industry in the Territory is the most effective way of achieving efficient and sustainable outcomes for consumers i.e. this is in the long-term interests of consumers.

However, as the draft policy paper correctly opines, because of the difficulty in knowing when investors will be amenable to entering the market, the regulatory environment should seek to minimise entry barriers, costs and risks, and make the market more attractive to potential investors.

In the view of the NTMEU, the framework proposed for making the regulatory environment attractive is generally supported, but there are very significant differences of view with that proposed by the draft policy paper on several issues of detail. These are detailed below.

#### 4.4.1. Strengthening the long term prospects of competition

The NTMEU agrees that a priority action is to minimise the risks faced by consumers and investors. Greater transparency, through improved disclosure of price and service performance information and more transparent power system planning and control processes, is very important, as is an independent dispute resolution process where third parties are able to seek independent arbitration where negotiations with PWC have failed.

The most important actions, however, are as follows:

1. Action is required to ensure new generation entrants are able to source competitive gas supply capacity in order to enter the market, even if this means that gas secured by PWC is offered to putative new generators
2. Action is required to ensure new retail entrants are able to source competitively-priced electricity supply.
3. Action is required to establish a new legislative and regulatory regime to support points 1 and 2 above.
4. Action is required to establish a new legislative and regulatory regime in the short to medium term to have price and service performance

oversight over PWC i.e. extend economic regulation by the UC to cover PWC's generation and retail functions

5. Action is required to ensure greater transparency and compliance as outlined above.

The NTMEU urges caution with respect to creating a NEM-type wholesale trading system. Unless the market structure immediately provides robust competition – i.e. there are many suppliers competing for many customers – a NEM-type wholesale trading system will be worthless and add to transactions costs without providing any benefits. Worse, the NTMEU is not convinced that such an approach will provide competitive and efficient outcomes. The reverse is almost certainly the outcome.

#### 4.4.2. Encouraging New Retailers to Provide Services

For as long as PWC remains the monopoly vertically-integrated business in the Territory, in addition to the special circumstances relating to gas supplies from existing gas reserves, it is unlikely that a new retailer will enter the market. It is difficult to imagine that PWC Generation will provide supply capacity to the new retailer on the same terms as it provides to PWC Retailer for similar loads. Even if it were to do so, it is difficult to imagine that it will be on competitive terms and that the new entrant retailer would accept that such would be the case. This would suggest that Government intervention by way of a new legislative and regulatory regime is necessary to ensure that:

1. supply is made available to the new entrant on competitive terms
2. supply is made available at a level which allows the new retailer a margin sufficient to enable it to compete with PWC Retail. Even then, there may remain a need to have some regulatory oversight to ensure efficient outcomes.

#### 4.4.3. Creating an Effective Consumer Protection Regime

The NTMEU believes that a new legislative and regulatory regime to apply economic regulation to PWC across its generation, networks, and retail businesses is the only effective consumer protection regime that can be provided in the absence of competition or threat of competition. Such a regime would be a surer way of encouraging new entrants over the medium and long term.

Against the above, the NTMEU notes that the draft policy paper concludes that:

“Irrespective of future developments, there should be nothing that gives away the right of the Territory to impose direct price controls if considered necessary” (page 26).

In this regard, the NTMEU considers that there should be established a new legislative and regulatory regime that extends economic regulation by the UC to PWC’s generation and retail functions.

<u>Draft finding 5</u>	<u>NTMEU Comment</u>
The essential requirements of an effective regulatory framework for the Territory are that it: <ul style="list-style-type: none"><li>• strengthens the long term prospects of competition;</li><li>• encourages new retailers to provide services in the Territory; and</li><li>• creates an effective consumer protection regime.</li></ul>	Strongly agree. But considerable doubts about likelihood of establishing competition in the generation and retail sectors in the medium to long term, given existing market arrangements. Extend economic regulation to PWC’s generation and retail functions. Further it may be necessary to take direct action to ensure that a competitive outcome does occur <sup>9</sup>

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<sup>9</sup> In this regard, note should be made of the direct actions taken by the SA government when establishing the electricity market generation arrangements in SA. The government actually provided

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#### 4.5 Pro Competition Regulation to Address Market Power Concerns and encourage Efficiency Gain

##### 4.5.1 Power System Planning and Control

The NTMEU agrees that the important role of power system planning and control requires confidence that the functions are carried out efficiently and in a competitively neutral manner by a properly resourced and independent expert entity.

Although there are statutory obligations on the System Controller (which is currently undertaken by PWC System Control) there remains possible perceptions of potential conflicts of interest with regard to the commercial interests of PWC, and the NTMEU would agree that a separate, independent body be created from PWC System Control.

**In theory, NEMMCo could undertake this function, but it is queried whether such a move has a net public benefit. With this in mind, there should be undertaken a separate assessment of whether NEMMCo could undertake this role on a marginal cost basis as an adjunct to its current activities, and if so would this be competitive compared to the PWC System Control continuing with this role on a standalone and independent basis.**

##### 4.5.2. The Wholesale Electricity Trading Mechanism

A properly functioning wholesale trading mechanism which delivers electricity at efficient prices requires robust competition between a number

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a new generation entrant with access to land near a major substation, provided a rapid permitting approach and provided rights to gas (previously held by the vertically integrated electricity provider) at prices which were competitive

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of willing sellers. The main prerequisite is that there is no dominant player (or players), able to exercise market power and set the spot price and raising it to unreasonable price levels.

The NEM wholesale trading system (involving a compulsory, energy-only market) contains certain characteristics that make it especially vulnerable to the exercise of market power, even when there are several generators bidding into the market. These are:

- a small number of independently-owned generators and the presence of a few dominant generators in a region
- limited interconnection capacity, often constrained at less than rated capacity
- very high bid cap (200 times the average cost of production and observed average prices)
- limited ability to provide demand-side response
- great freedoms afforded to generator bidding, including multiple rebidding opportunities.

There are many eminent international economists experienced in electricity market who observe that, in the design of the NEM energy-only trading system, generators bidding at Short Run Marginal Cost cannot recover their reasonable costs let alone make a profit. Generators are, therefore, compelled to take actions to use their market power to create a sufficient number of price spikes to raise pool spot prices and associated hedge contract prices – i.e. the exercise of market power to achieve profitable outcomes.

The problem, however, is that where a dominant generator has the market power, there is no effective limit on its ability to spike spot prices as by doing so, the dominant generator can raise pool and hedging contract prices to

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unacceptably high levels, such as in June 2007 in NSW and in summer 2008 in South Australia, where with regard to the latter, the exercise of market power caused the average spot price for a whole quarter to be about 5 times the long term average price.

Vigorous competition between many equals is the only effective way to restrain the use of market power and having too few participants in a market will be a serious cause of concern for consumers.

The problems in the NEM also relate to the ease at which tacit collusion<sup>10</sup> between generators can occur and be sustained, particularly as:

- the NEM pool is highly centralised
- aggregate demand is extremely inelastic
- there is readily available information on all generators' recent bids, daily bidding and demand conditions which are ideal for sustaining tacit collusion because the bidding strategies of each generator are readily interpreted.

#### 4.5.3 Conduct Regulation

The NTMEU agrees that in the absence of a disaggregated electricity supply industry and of robust competition in the generation (and retail) sectors, effective conduct regulation is required.

Because PWC is a vertically-integrated business and is the monopoly provider in both generation and retail, transparency in the commercial dealings between each of PWC's business entities becomes an effective

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<sup>10</sup> Tacit collusion as used in the NEM does not contravene the Trade Practices Act. Tacit collusion is permitted because of the transparency of the processes, every generator can see other generator price and volume offers. With this knowledge, a generator can develop an understanding of the way a competitor generator will act under given circumstances. With this knowledge a generator can implement a strategy which provides the maximum commercial benefit to it

competition neutrality measure. An effective ring fencing regime overseen by a well resourced, independent and expert regulator is essential. The NTMEU will see the following as essential:

- transparency in commercial dealings between PWC's businesses
- a requirement for cost-reflective, non discriminatory treatment of all commercial dealings between PWC's businesses and between these businesses and third parties
- establishment of a dispute resolution framework and arrangements
- extension of price regulation over PWC's generation and retail sectors until there is effective competition
- effective compliance mechanisms

#### 4.5.4 Availability of Market Information

Adequate and sufficient disclosure of information is essential in order to minimise inefficient outcomes from PWC. Such information will include costs, prices, performance standards, reliability indicators and so on. However, simply having such information, whilst essential, is an insufficient condition for competition and efficiency. What is really required is for a regulatory regime that can replicate the competitive pressures that foster efficient outcomes.

#### 4.5.5 Retail Price Control

The NTMEU believes that in the absence of effective retail competition, there must be direct price controls applied and these should also extend to the so-called 'contestable customers'. This price control might not be in the form of reverting to the historic approach of setting all prices for the different

services, but by the UC ensuring that the price elements (generation, transport and retail) for differing customer classes are cost reflective and efficient, and that rent shifting between the different services is prevented. Financial and legal separation between the different PWC functions will provide the basis for this cost reflectivity and efficiency to occur.

The concern held by contestable customers is that in the absence of such demonstrations of cost reflectivity and efficient pricing, they could very well be cross-subsidising the 'non-contestable customers', and this is already a serious concern.

#### 4.5.6 Checklist for the Evaluation of Options

The NTMEU agrees with the four primary criteria for assessing regulatory options for promoting competition and achieving an efficient electricity industry, as outlined in the draft policy paper (page 28). However, the NTMEU does not believe that the existing and foreseeable market arrangements will be amendable to the achievement of competition, and hence, efficient outcomes, under the existing and proposed regulatory arrangements. Whilst we support greater transparency and other stated measures outlined in the draft policy paper, they are considered to be necessary but insufficient conditions.

Accordingly, until new entrants enter the market, the NTMEU reiterates its view that, as a transition, the NT should extend economic regulation over PWC's generation and retail functions in the short term until competition eventuates, as this is the only effective way of enhancing competition pressure on PWC, ensuring that consumers receive efficient outcomes and that new entrant generators and retailers can be comfortable about entering the NT market as PWC would be clearly unable to exercise market power or shift rents.

<p><b>Draft finding 6</b> To promote competition, address market power concerns and encourage efficiency, a new legislative framework should provide market and regulatory arrangements that:</p> <ul style="list-style-type: none"><li>• deliver Market and System Operations that are:<ul style="list-style-type: none"><li>– independent, transparent and free of commercial conflicts of interest;</li><li>– adequately resourced and technically competent;</li><li>– fully functioning and tested; and</li><li>– acceptable to the broadest range of potential investors;</li></ul></li><li>• minimise the opportunity for market participants, including PWC, to exercise market power;</li><li>• provide information to potential investors and current consumers on costs, prices and market opportunities as a counterbalance to incumbency; and</li><li>• preserve the Territory Government’s ability to impose small consumer retail price controls through standard contracts that regulate the maximum retail price and minimum service standards.</li></ul>	<p><b>NTMEU Comments</b> All elements are supported. But, in the interim, extension of economic regulation required over PWC’s generation and retail functions must be an essential element of the new structure and framework.</p> <p>The concept of preservation of small consumer retail price controls is seen as important, but it should be noted that a vertically integrated monopoly provider has market power over large consumers who do not have any countervailing power vis-à-vis the monopoly supplier. Therefore economic regulation must be used to provide ‘competitive pressure’.</p> <p>NTMEU considers that there are actions that the government can take to actively promote generation and retail competition, and these must be part of the restructuring of the electricity market.</p>
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## 5. A New Legislative Framework

The options posed by the draft policy paper are:

- revert to a statutory monopoly framework similar to that in place prior to 2000;
- retain the existing framework
- revise the existing framework
- adopt the legislative framework from one of the two functioning electricity markets in Australia – the NEM and the Western Australian Market (WEM).

The NTMEU will provide commentary below on the discussion of the various options prior to discussing the assessment of options presented in the draft policy paper.

### 5.1 Returning to a Statutory Monopoly Framework

The NTMEU agrees that returning to a statutory monopoly framework is not an acceptable option as it would involve abolishing the third party network access regime. Economic regulation of the network is an essential process to provide for potential upstream and downstream competition, as well as providing for pricing reviews that seek to achieve efficient investments and efficient use of electricity services in the long term interests of consumers.

<p>Draft finding 7 Returning to a statutory monopoly is not an option as it is contrary to the objective of an efficient electricity industry, and exposes PWC and the Territory Government to possible legal and financial risks.</p>	<p>NTMEU Comments Agree. This approach is not in the long term interests of consumers, although it does prevent contestable consumers being placed at the risk of PWC market power as they are currently, and therefore is seen as being better than the current arrangements. The NTMEU does not see that such an option would put PWC at any risk.</p>
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	Such structures have been used in the past in Australia and are commonly used in many overseas jurisdictions.
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## 5.2 Retaining the Existing Framework

The NTMEU agrees that retaining the existing legislative framework is not a credible option, as it has been clearly demonstrated that it does not engender any competition benefits. It would mean that effective competition would never emerge in the Territory, and there would never be any pressure on PWC to operate in the most effective and efficient manner and so deliver more efficient outcomes for consumers.

Draft finding 8 Inaction would mean that competition is unlikely to emerge in the foreseeable future and that consumers would not have the opportunity to gain the available benefits of an efficient electricity industry, such as lower prices or improved services.	NTMEU Comments Agree. Such an approach is not in the long term interests of consumers.
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## 5.3 Revising the Existing Framework

The NTMEU considers that a careful cost-benefit assessment needs to be undertaken to ascertain whether

- the Territory should establish and operate entities equivalent to the AEMC, AER and NEMMCO, or
- to adopt the National or Western Australian legislative framework.

The NTMEU considers that the discussion in the draft policy paper is only at a high level, conceptual basis and is not sufficient to arrive at an unambiguous conclusion. Whilst, for example, the draft policy paper points to what appears to be generous staffing and financial resources provided to the AEMC and AER relative to the UC, it should be noted that:

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- the AEMC and the AER are responsible for the electricity and gas markets involving five other jurisdictions (with each jurisdiction energy demand being significantly larger than the NT) as well as the ACT;
- the AER is responsible for regulatory revenue and pricing resets for transmission and distribution, electricity networks and gas pipelines, as well as retail price caps;
- NEMMCO is responsible for the interconnected NEM systems and operations and for some jurisdictional FRC functions.

Also, the Territory's electricity (and gas) arrangements are likely to be much simpler and more stream-lined than those in the NEM and (perhaps to a lesser extent) the WEM.

NEMMCO is funded through a levy of on consumers related to the volume of electricity purchased. Much of its funding is directed to operating the extensive NEM trading system, something which is unlikely to develop in the NT in the foreseeable future. Despite this, it is essential that the NT government establish whether:

1. NEMMCo would be prepared to operate the NT system, and if such a proposal is technically feasible
2. Whether such a service could be provided at a lesser cost than providing independence of the PWC system operations, and disaggregating these from network operations which PWC Networks would still be required to manage.

We have not seen that the government has undertaken any such cost benefit analysis and therefore we are not convinced that when such a cost-benefit assessment has been undertaken whether it will arrive at an unambiguous conclusion as to whether the existing Territory model should

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be revised and whether to adopt the NEM or WEM legislative framework and institutional arrangements.

The NTMEU considers that such an assessment is essential before any one of the options is adopted. Moreover, there needs to be a realistic assessment, given the existing market arrangements, whether the Territory is likely, in the foreseeable future to have fully fledged competition in the generation and retail sectors, and hence, the need for more complex NEM or WEM-type trading arrangements, let alone similar (more complex and involved) institutional arrangements. The NTMEU would like to assist the Treasury in this assessment.

In addition, the AER has not, at this point in time, any expertise in regulating electricity and gas distribution networks, and is only about to embark on its first such review in 2008. There is also no guarantee that the Territory's current contribution of around \$14,000 a year for the national gas retail functions of the AEMC (and with a total possible contribution of around \$140,000 if it performed electricity-related functions) provides any useful guide as to the likely extent of the Territory's contributions should it move to adopt the national institutional framework.

Whilst all of the attention has been devoted to a NEM style regulatory structure, the NTMEU has a view that the WEM regulatory structure might have applicability to the NT, considering that the WA's SWIS is larger than the NT but the WA NWIS is smaller and less complex. Because of this any cost benefit analysis should also examine the relative merits and demerits of the WEM approach as applied to the NT.

**The NTMEU strongly recommends that a rigorous cost-benefit assessment be undertaken before any decisions are made as to the**

**future arrangements. The NTMEU would be glad to participate and assist in this assessment.**

Additionally, as part of such a review, a more modest approach could be considered. We provide the concept later in this submission, of what might result in a lower cost option but which would provide greater competition and certainty for new entrants.

<p>Draft finding 9 Revising the existing model is unlikely to prove effective in the long term and would not address the fundamental deficiencies with the existing Territory-specific institutional arrangements. Moreover, it is difficult to justify the expense and resources required to establish and maintain a Territory-specific economic regulator, rule-maker, and market and system operator as this approach carries with it the risk of substandard regulatory outcomes and a reduced prospect of competition.</p>	<p>NTMEU Comments The NTMEU is not convinced that there are possible lower cost solutions that could achieve the goals in the short to medium term, and allow later migration to a more radical solution in the medium to long term. As a first step it is essential that a vigorous cost-benefit assessment to arrive at an unambiguous conclusion is required. A high-level, conceptual, and partial canvassing of some issues is not adequate.</p>
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#### 5.4 The Merits of a Functioning Model

Notwithstanding the comments made in the draft policy paper about the merits of the regulatory and market arrangements in place in the NEM jurisdictions and Western Australia, the NTMEU makes the following observations:

1. The NEM legislative and regulatory arrangements are increasingly failing to protect consumer interests as:
  - The industry is increasingly becoming concentrated and dominant players are freely exercising market power

- The creation of 'gentailers' is erecting barriers to new entrants, especially in the retail sector
- The NEM is increasingly more volatile and risky and delivering high price spikes and high contract prices
- Retail contracts in excess of 3 years are almost impossible to negotiate

2. Transactions costs are escalating:

- NEMMCO fees have consistently risen over time, as more functions are added to the scope of activities seen as necessary to overcome the detriments of the NEM structure and framework
- Customers are experiencing regulatory fatigue, faced with myriad reviews by each layer of institution in the NEM, including at the policy level

3. Excessive regulatory intervention is resulting in the inability of customers to participate in many reviews, with the result that the reviews and institutions are increasingly unaccountable as reviews do not have the full participation and oversight of consumers.

The overall result has been increasing scepticism about the benefits of the NEM, notwithstanding the rhetoric from vested interests (which continue to dwell on past benefits rather than more recent outcomes).

The NTMEU sees that the approach by the WA government as it embarked on a competitively based model, deliberately elected **not** to implement a NEM structure. In fact, it moved to a net pool arrangement allowing parties to directly contract for supplies, with a capacity market being implemented

as the basis for ensuring generation was built and to minimise the excessive volatility of prices seen in the NEM<sup>11</sup>.

#### 5.4.1 Overview of National Legislative Framework

The draft policy paper adequately describes the legislative and institutional structures created by the national regime.

#### 5.4.2. Overview of Western Australian Legislative Framework

The WAM legislative framework is adequately described, and of note is the broad similarity to the **principles** underlying the NEM. However, there are important differences between the WAM and the NEM, such as:

- The wholesale market has an energy and a capacity component;
- Retailers (and therefore consumers) are able to enter bilateral contracts with generators
- ‘Overs’ and ‘unders’ are basically what is traded in the wholesale market;
- Generation investment signals in the WEM are linked to a capacity payment rather than spikes in wholesale prices.

<p>Draft finding 10 The available evidence suggests that the regulatory and market arrangements in place in the NEM jurisdictions and Western Australia are able to facilitate effective competition. Adopting either model would allow the Territory to avoid the costs of market</p>	<p>NTMEU Comments The NTMEU concurs that there is evidence that a better solution to the electricity market is potentially possible and would provide consumers with a better outcome than is presently seen. In particular the NTMEU sees that the WEM (which developed later than the</p>
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<sup>11</sup> In this regard, the WA approach took the advice of eminent international economists that the energy only market had some fundamental flaws, and the excessive price volatility seen in the NEM was a deterrent to bilateral contracting, did not provide the necessary certainty for new generation investment, and resulted in high risk premiums being imposed on consumers to manage the very risky (to retailers and generators) market that the NEM is becoming

<p>design and testing, and make savings through access to already established and effective regulatory and supervisory institutions.</p>	<p>NEM) has a number of operating features that are more attractive in a smaller market such as that in the NT. Regardless, the NTMEU considers that a vigorous cost-benefit assessment is required and must be undertaken of all the options being considered. The NTMEU is prepared to participate in, and contribute to, this assessment.</p>
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#### 5.4.4 Advantages of Using the National Institutions and Regulatory Framework

The NTMEU would support the Territory conferring regulatory functions and powers on the AER, AEMC and NEMMCO, and in parallel adopting the national market and regulatory arrangements, **provided these are the outcomes from the recommended cost-benefit assessment.**

Such a cost benefit analysis should include using these entities on a contract basis rather than as a total transfer of responsibility, as by contracting the service, the non-price benefits could still be provided but at a lower cost.

<p>Draft finding 11 There are clear advantages for the Territory of conferring regulatory functions and powers on the AER, AEMC and NEMMCO, and at the same time adopting the national market and regulatory arrangements.</p>	<p>NTMEU Comments Agree, if supported by a cost-benefit assessment. The NTMEU also notes that these functions could be conferred on a contract-like basis for specific elements such as, for instance,</p> <ul style="list-style-type: none"> <li>• a regulatory review of the network costing and prices.</li> <li>• reviewing matters of complaints about competition between PWC and new entrants, and PWC and consumers.</li> </ul> <p>Such an approach might prove to be more cost effective than blanket coverage</p>
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## 6. Assessment of Options

The NTMEU considers that competition when applied to the electricity industry has demonstrated that it can deliver better outcomes to consumers through encouraging better practices within the elements of the electricity production supply chain.

Equally, NTMEU members have seen that in a competitive environment, when a business in the supply chain has market power, it can create major economic damage to consumers and to the regional economy<sup>12</sup>. It is quite clear that PWC has market power in the NT electricity supply chain, and if allowed to have free rein, it could create commercial havoc for all NT industry.

The NTMEU considers that the current arrangements are not acceptable, and that a reversion to the original approach of a vertically integrated monopoly provider would not deliver the benefits that competition can bring to the electricity supply chain.

The draft policy paper has suggested that moving to a NEM or WEM framework could provide the environment for competition to grow, as well as the disciplines on the supply chain businesses that are essential in such a market. As a matter of principle, the NTMEU does not disagree with this view, but strongly counsels that a rigorous cost benefit study is essential to ensure that the costs that such a transition would bring are less than the benefits that will accrue. At first blush, the NTMEU has doubts that such a cost benefit study will deliver the outcome sought, primarily as there is no competition at all in the NT electricity supply system now, or likely to be in the near future.

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<sup>12</sup> See for instance the Major Energy Users submission to AER regarding the abuse of market power exercised by AGL/TIPS in SA during Q1 of 2008

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It would be a courageous decision to decide that a transition to a NEM or WEM style market must occur when PWC has such a dominant position in the supply chain – in every other transition made into a competitive market, there has been a significant degree of competition already present or created to allow the structure and framework to demonstrate that there is sufficient competition to deliver the outcomes anticipated. Unfortunately, there will be no such competition in the NT at the start of such a market.

The NTMEU considers that the transition must be made on a staged basis, and the following is one suggestion that would allow such a three staged transition to occur.

The **first stage** of the transition would be:-

1. PWC is structurally separated into four independent operations
  - a. PWC generation
  - b. PWC networks (which includes transmission and distribution)
  - c. PWC retail
  - d. PWC system operations (excluding network operation)
2. The regulator (which could be UC or AER) sets cost reflective transfer prices between PWC Generator and PWC Retailer, and includes an appropriate profit margin for PWG generation. These transfer prices would be made public and available to any retailer seeking to enter the NT market<sup>13</sup> (i.e. PWC Generation must be overtly competitively neutral between PWC Retailer and any new retail entrant)

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<sup>13</sup> For example, in Tasmania, Hydro Tasmania is the dominant generator and has little competition in the region. After disaggregation of the vertically integrated HEC, but prior to the connection of Tasmania into the NEM (via Basslink), Hydro Tasmania provided clear market pricing (related to monthly water levels). Separately transmission and distribution prices were set by the regulator, which also set non-contestable retail prices. This was the basis of the transitional phase for the Tasmanian electricity supply arrangements prior to entering the NEM.

3. The regulator sets the prices for network charges on an efficient and cost reflective basis for all consumer classes. These prices would be made public and would be used by all retailers. This is the practice used in other jurisdictions. The regulator would ensure that PWC networks does charge PWC Retailer these costs, and that there is no cross subsidising at PWC group level
4. The government calls tenders for a new entrant generator allocating some of the gas PWC has under contract from ENI Blacktip. The new entrant would be allowed to see the transfer prices set for PWC generation to ensure that the transfer price does allow a commercial return. Additionally the government should discuss with Cononco Phillips LNG plant tying into the grid and exporting power into the NT grid, perhaps on a bilateral basis with contestable consumers
5. After a cost benefit analysis, the government could decide to allocate one or more of the separate power stations (eg at Katherine) to the new generator entrant or to a separate new entrant
6. The government would negotiate with ENI Blacktip for additional supplies of gas for new generation options that might be developed in the future, either as a new entrant or as a demand side respondent keen to provide embedded generation.
7. A cost benefit analysis and study could be undertaken to establish the relative merits between a NEM or WEM style market for the Territory, including an assessment of whether a capacity market would provide greater incentive for new entrant generators than an energy only market , and if bilateral contracting would add value
8. PWC system operator would establish a dispatch engine for receiving and dispatching offers for generation from separate generators. This service could be provided as a contract with NEMMCo or using PWC system operator as an independent

system operator and would be provided on either a net pool basis (WEM model) or a gross pool basis (NEM model) whichever is determined as being better for the NT.

9. The government should examine the viability of, and encourage interconnection with, Queensland's electricity supply arrangements (eg by connection to Mt Isa perhaps linking with large power demands at Gove and Ranger/Jabiru and onto Katherine and Darwin) to provide more competitive pressure on incumbents

The NTMEU envisages that new entrant generators would perforce become retailers for their generation output. Likely new entrants would be existing generator/retailers operating in the NEM and WEM or other businesses in the Territory which already have a core business. We see that the NT market would have to be accommodated on a cost basis "on the margin" to their current activities, as there would be insufficient consumer base to provide sufficient revenue for a stand alone retail operation.

The NTMEU sees that this approach will provide the necessary short term benefits of a competitive market and provide confidence for new entrants that they would be able to operate on a level playing field with PWC. This structure would allow easy transition to a fully competitive market at a time in the future when it is clear that there is sufficient competition to ensure the continuing competitive environment essential to the maintenance of a NEM or WEM approach.

The **second stage** of the transition would be

When competition is considered to be sufficiently strong, PWC Generation and PWC Retail would not be required to publish transfer prices or to have these transfer prices set by the regulator.

The **third stage** would be a transition to a NEM or WEM style market when it is clear that there is adequate competition in the generation and retail functions and a cost benefit study makes it clear that such a transition would provide a net benefit.

## **7. Conclusion**

The NTMEU considers that the current arrangements for electricity supply do not deliver benefits to consumers, and only serve to embed the market power of PWC in the electricity supply chain. A change is essential and long overdue.

The Territory has unique features that make a straight forward and immediate transition to a NEM or WEM style electricity structure and framework totally unworkable from a competition viewpoint, and therefore a “Territory specific” solution is needed. Disaggregation of PWC functions (by corporatisation or some less costly approach) will go some way to alleviating the current lack of competitive pressure on PWC.

Direct action by government to encourage new entrant generation is both necessary and has been used in other jurisdictions as a tool to create competitive pressure on incumbents to drive better outcomes for NT’s electricity consumers.

The NT government has an opportunity to deliver a major benefit to electricity consumers in the Territory by converting the non-competitive current arrangements for the supply of electricity into a more vibrant competitive market. This change could utilise proven approaches trialled in other jurisdictions, but most importantly, underpinned by the supply of relatively low cost gas near to the main demand centre in the Territory.

The NTMEU has a very substantial stake in the direction of the Territory’s future energy policy and regulatory framework, and reiterates its offer to participate and contribute to further dialogue and assessments.

The NTMEU has a major concern that this round of consultation, based as it is on conjecture and concept but without any cost benefit analyses, will be the only opportunity available to consumers to provide input into what is one of the most radical and far reaching decisions being made in the Territory. Because of this, it is imperative that there be another round of public consultation and discussion prior to Treasury refining its options to Government.