

An Update on Energy Policy and Regulation in the Northern Territory¹

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² The Utilities Commission is the Northern Territory's independent industry regulator with jurisdiction in the electricity, water and sewerage service industries. It commenced operations in March 2000.

Introduction

The Territory has a population of around 200,000 people occupying one sixth of Australia's land mass. Its economy represents just $1\frac{1}{4}\%$ of national GDP.

Over the past 10 years, the Territory's economic growth on average has been about 1 to $1\frac{1}{2}$ percentage points higher than the rest of Australia. The Territory is a net exporter due to its abundance of mineral and energy resources.

However, in traditional economic terms, the Territory has:

- an unbalanced economy, with several strong sectors but under-development on the broader front exposing the Territory to a boom/bust cycle in the economy;
- o low capital formation and an immature capital market;
- $\circ~$ a thin domestic economy unable to generate sufficient demand to support critical mass businesses easily impacted by externalities; and
- $\circ\;$ large demands for primary infrastructure due to the vast and underpopulated nature of the land.

Against this background, energy policy in its broadest sense plays an important role, for two reasons I'd like to focus on:

- electricity costs are high, with policies aimed at lowering such costs a high priority for government; and
- securing access to new sources of gas, both for direct use in industry and as a fuel for electricity generation.

In this paper, I want to review recent developments in both regards, touching where appropriate on the associated regulatory challenges.

Developments in the NT's Electricity Supply Industry

Recent developments

The Territory's electricity supply industry was opened to competition on 1 April 2000, in the expectation that deregulation would reduce the costs of supply of the incumbent supplier (Power and Water Corporation, formerly PAWA), generally lower average electricity prices to non-residential consumers (through price competition as well as via reductions in costs), and increase the choice of services available to customers.

In reality, things have turned out a little differently.

In the generation sector, competition lasted little more than a year. Since 1 July 2001, Power and Water has once again been supplying all of the wholesale electricity requirements of the Territory's regulated power systems.

At the retail level, competition lasted only just over a year longer (to end-August 2002). During that time, only two (albeit large) customers opted to shift to the alternative retailer on the opening up of competition, and one subsequently reverted back to Power and Water.

There have been no new entrants in either the generation or retail sectors since 1 April 2000 – and little, if any, interest in doing so.

Power and Water's costs of supply have not been driven down as hoped by the introduction of competition. In fact, there are reasons to believe that costs may have increased as a result of deregulation:

- o risk and uncertainty has increased the cost of capital;
- system economies have been foregone as a result of increased excess capacity and higher costs in system coordination and planning;
- o certain retail costs are also higher (additional systems, marketing, etc); and
- o compliance costs have arisen as a result of residual regulatory intervention.

While power prices fell initially for the largest customers, prices for more recently contestable customers if anything, are on the rise. Even earlier contestable customers renewing their supply contracts are reporting price rises well in excess of average price movements elsewhere in the economy.

In summary:

- efficiency and competition in the industry has changed little following the introduction of contestability;
- both licensed participants in the contestable generation and retail sectors have struggled financially following the introduction of contestability, although Power and Water's financial performance is likely to have recovered since it resumed as the sole generator and as initial retail contracts are renegotiated; and
- apart from customers in the first contestable tranche, consumers have gained little price relief and the quality of service is largely unchanged.

The main reason why deregulation in currently contestable sectors of the Territory's electricity supply industry has not delivered the outcomes initially expected is that significant barriers to entry continue to face new entrants in both the generation and retail markets. These barriers include:

- the lack of excess gas reserves necessary to supply gas to potential new entrants, on account of the limited life of the Amadeus Basin gas fields;
- $\circ\;$ the risks represented by the potential for offshore gas to become a new, cheaper source of fuel; and
- perhaps most significantly, the substantial diseconomies of scale and scope that go with more than one supplier in the small Territory electricity market.

There are also some barriers to entry which the Government could potentially address such as perceptions of the on-going financial and operational advantages that Power and Water may derive from both its long-term gas purchase and transportation contracts and its role as sole provider in non-contestable segments of the market. While the actual advantages may be arguable, it is the perceptions of potential entrants that in fact are important.

In summary:

 retail prices offered to customers in the more recent contestability tranches have not fallen – indeed they are more inclined to rise – including because of the lack of real competitive pressure on Power and Water's costs;

- there has been little, if any interest in entry by new competitors because of the substantial barriers to entry which remain in place in the Territory context, most (albeit not all) of which are outside the Government's control; and
- contestable customers have been slow to enter into negotiated contracts as pricing offers particularly for the more recent tranches of contestable customers are increasingly above (not below) their (non-cost reflective) pre-contestability levels.

In September 2002, Power and Water's only competitor (NT Power) ceased carrying on operations in the Territory 's electricity supply industry, in the main due to its inability to secure on-going gas supplies. Associated with this, contestable customers supplied by NT Power reverted to Power and Water.

Following NT Power's withdrawal from the market, the Government acted to defer further roll-out of contestability (which had been due to go down to the 160 MWh pa level on 1 April this year).

NT Power's departure has understandably given rise to concerns on the part of contestable customers. In particular, until another retailer enters the market, these customers are faced with no choice other than Power and Water when it comes to negotiating (or re-negotiating) a contract for the supply of electricity.

Options going forward

Legislative, regulatory and market changes deserve consideration in view of the main factors contributing to less-than-effective retail and generation contestability in the NT.

The three main options facing the Government in addressing the ineffectiveness of deregulation are to:

- $\circ\,$ reinstate sole provider conditions in the Territory's generation and retail markets;
- $\circ~$ remove major remaining barriers to entry where they are in the control of the Government; and/or
- while leaving market structure unchanged, subject Power and Water's contestable pricing to independent prices oversight.

The *reinstating sole provider* option involves turning back the clock. Additional oversight of monopoly conduct would be necessary, resulting in further regulatory and compliance costs. Most fundamentally, however, formally reinstating Power and Water's statutory monopoly would be contrary to the spirit of the Territory's commitment to the Competition Principles Agreement, with attendant difficulties for the Government.

The *removal of remaining barriers to entry* option has a role to play where such barriers are in the control of the Government.

The barriers to entry associated with the gas contracts controlled by Power and Water are currently based on *perceptions* that these contracts confer net advantages on Power and Water. Separating Gasgo (Power and Water's gas purchasing subsidiary) from Power and Water – and permitting Gasgo to offer its gas to the market on full cost recovery, non-discriminatory terms – would be a costly, and perhaps unnecessary, way to address these perceptions. Instead, the broad nature of the actual advantages and disadvantages, and how these might vary between the short term and the long term, need to be made more transparent to potential entrants (and existing competitors).

Likewise, the barriers to entry associated with Power and Water's franchise roles and contracts are currently based on *perceptions* that they confer net advantages on Power and Water. The broad nature of the actual advantages and disadvantages need to be made more transparent to potential entrants (and existing competitors).

Even if, as seems likely, the Government-influenced barriers to entry turn out to be largely illusory, the significance of other barriers to entry which are outside the influence of the Government remain. For this reason, the *independent prices oversight* option also has a role to play, at least while Power and Water is the sole or dominant supplier.

Contestable customers should only be subject to prices negotiated with Power and Water where such prices:

- are based on efficient, forward-looking costs; and
- involve prices at levels which are, on average, no more than would reasonably be expected under competitive conditions.

The Government has moved to implement formal regulatory oversight of the wholesale energy (generation) charges that Power and Water applies to contestable customers. The Commission already regulates Power and Water's network charges. Together, network and generation charges account for up to 95% of Power and Water's retail costs.

The Commission shortly expects to be empowered to monitor the extent to which the wholesale prices being passed on to contestable customers are based on efficient, forward-looking costs and are no more than would reasonably be expected under competitive conditions.

Developments in the NT's Gas Industry

Recent developments regarding existing gas supplies

Natural gas has been the major fuel source for electricity generation in the Territory since the development of the Amadeus Basin gas fields and the construction of the gas pipeline to Darwin in 1986. Over 99% of the Territory's electricity needs in its regulated power systems are generated from natural gas-fuelled plant.

There are two gas fields in the Amadeus Basin: the Palm Valley field operated by Magellan and the Mereenie field operated by Santos. The gas pipelines currently servicing the Northern Territory are shown in Chart 1.

The 164km Palm Valley to Alice Springs pipeline was constructed in 1983 and the 1,513km Amadeus Basin to Darwin pipeline was constructed in 1985-86. The spur line to the McArthur River mine was constructed in 1996-1998.

Third party access to the pipeline is subject to an access arrangement that has been approved by the ACCC under the National Gas Code. The approved access arrangement period is from 1 July 2001 until 1 July 2011. NT Gas, the operator of the pipeline, does not anticipate that revenue will be generated by third-party access during this period as the firm capacity of the pipeline is currently fully committed to users under pre-existing transportation contracts. As a consequence, the approved access arrangement is likely to have limited immediate impact for existing users.



Chart 1 – Amadeus Basin to Darwin Pipeline

However, the reference tariff approved by the ACCC of \$2.88/GJ for 2001-02 has the potential (in the long term) to affect a range of residential and commercial energy users. It is expected to be an important reference point for future negotiations on gas haulage services in the Territory especially in the face of uncertainty concerning delivery of Timor Sea gas to Darwin.

In 1985, Power and Water's subsidiary, Gasgo, contracted to purchase gas totalling 200PJ from the Palm Valley field until 2012 to fuel electricity generation in the Darwin-Katherine region. In the same year, Gasgo also entered into a gas purchase agreement with the operator of the Mereenie field for the supply of 66PJ during the period until 2012.

Chart 2 illustrates the declining production of the Palm Valley field and the increasing reliance upon the Mereenie field over the last 10 years.



Chart 2 – Annual Gas Sales in the Northern Territory, 1991-92 to 2001-02

The Palm Valley field has not met original expectations and, although Gasgo has funded substantial development work as required by the gas purchase agreement, the operator has downgraded the resource (including forecast cumulative production) to approximately 50% of the original reserves figure.

The poor performance of the Palm Valley field and the greater than expected energy demand have resulted in three other gas purchase contracts totalling 113PJ being established with Mereenie.

Outlook for existing gas supplies

The Gasgo contracts for the supply of gas are expected to expire in 2009. Palm Valley has been unable to meet contract requirements since 1996, and gas production could be reduced to very low levels as early as 2007. Mereenie contract volumes are expected to be met through to 2009. Indications are that, after 2009, Mereenie will have gas available although the production rates may fall short of current output.

Gasgo is managing supply under the existing contracts to ensure maximum flexibility in future supply management.

The Commission has undertaken an analysis of potential gas production relative to forecast demand for gas used in electricity generation over the period to 2008-09. Although the Commission has had access to Gasgo's forecasts on a commercial-in-confidence basis, the Commission's own analysis is based on publicly available information and its judgment on the range of possible outcomes for gas supply and demand.

The following assumptions and limitations underlie the Commission's analysis:

- the outlook for gas '*supply*' is based on likely production by existing gas fields only – Mereenie and Palm Valley in Central Australia – with future gas from the Bonaparte/Timor Sea region and other fields within the Territory not being considered; and
- the outlook for gas '**demand**' growth is based on current forecasts of growth rates in electricity consumption with no account being taken of technological advances that may increase plant efficiency.

The gas outlook under alternate scenarios is illustrated in Chart 3.

In Chart 3:

- the **'optimistic'** scenario involves Palm Valley continuing to produce at current levels and Mereenie meeting its contractual commitments through to the maximum level under current contracts and thereafter additional gas purchases are made to maintain production at this maximum level through to 2009; and
- the **'pessimistic'** scenario involves production from the Palm Valley field continuing to decline over the next few years at the same rate as has been evident over the last 3-5 years and Mereenie only meeting its current contractual commitments.



Chart 3 – Gas Supply and Demand Projections

Chart 3 indicates that demand for gas for electricity generation is expected to grow at a 2.3% annual average to 2008-09. Overlaying the Commission's optimistic and pessimistic supply views, and just considering the existing sources of gas (the Mereenie and Palm Valley fields), it is possible that:

- $\circ\;$ there could be a gas fuel supply shortfall as early as 2006 under a pessimistic scenario; and
- $\circ\,$ such a shortfall could be in prospect as late as 2009 under an optimistic scenario.

However, the availability of liquid fuel alternatives means that this potential inadequacy in gas supply does not give rise to concerns regarding electricity supply reliability in the immediate and medium term. Rather, the issue is likely to be more one of the extra cost of liquid fuelled electricity generation to be borne by end-users of electricity in the Territory as a consequence.

Recent developments regarding new gas sources

A number of offshore fields (see Chart 4) have the potential to supply gas for electricity generation and to potential new major industrial users as the supply from the Amadeus basin declines.

Chart 4 – Offshore Fields



Bayu-Undan (3-4 trillion cubic feet ("TCF"))

On 15 June 2003, ConocoPhillips representatives (and co-venturers) announced the final go-ahead for the construction of a LNG plant at Wickham Point near Darwin, along with construction of the 500km pipeline from Bayu-Undan with the project adding up to \$3 billion in capital investment. This followed ratification of the Timor Sea Treaty between the Federal Government and the East Timorese Government on 6 March 2003.

Nearly 100% of the proven reserves of this field are committed to LNG contracts with Japanese utilities. The first LNG cargo is scheduled for delivery to Japanese markets in early 2006. The LNG contract spans a 17-year period.

Greater Sunrise (8 TCF)

In mid 2002, after persistent pressure from the Territory Government, the joint venture in the Sunrise gas field agreed to undertake a review of the viability of the gas onshore proposal. In December 2002, the Sunrise joint venture announced that domestic gas development was uneconomic at present. The same conclusion was reached for the floating liquefied natural gas (FLNG) proposal.

The Sunrise Joint Venture remains divided on potential development options. ConocoPhillips continues to pursue a domestic gas option while Woodside and Shell maintain the floating LNG concept presents the most viable development opportunity.

The Territory Government is on the record as stating that it will continue to support ConocoPhillips in attracting a viable domestic gas market to the Territory and try to align the Sunrise joint venture behind a Sunrise gas onshore development option. Leveraging opportunities from the ConocoPhillips Wickham Point LNG project is central to this strategy.

Blacktip (1 TCF) and Petrel/Tern (1+ TCF)

Woodside is the operator of the Blacktip discovery south west of Darwin in the Joseph Bonaparte Gulf. The offshore Petrel and Tern fields 300km west of Darwin operated by Santos are other potential gas supply sources. These fields and Blacktip seem more likely to be developed in the immediate future now that the floating LNG plant for Sunrise gas as well as the domestic gas case are reported as being no longer viable.

Notably, conversion to gas is integral to Alcan's proposed expansion of its alumina operations on the Gove peninsula in northern Arnhem Land. To this end, on 6 June 2003, Alcan and Woodside (the operators of the Blacktip field in the Bonaparte Gulf) announced the signing of a Heads of Agreement to supply gas from Blacktip to Gove via a 1,000km pipeline. The pipeline could be completed by 2007.

Before this project becomes a reality, however, a number of issues need to be finalised such as the finalisation of the feasibility study, environmental approvals, and negotiations with traditional owners along the pipeline route.

It is perhaps this development that holds out most hope for alternative gas fuel for electricity generation in the Territory. This perhaps would involve Power and Water participating as a foundation customer for the pipeline from Blacktip.

However, to develop a new gas resource, gas producers, gas purchasers and gas pipeliners need to negotiate agreements that collectively establish workable commercial arrangements for the complete supply chain from field production to gas end users. For both commercial and operational reasons, the lead times between commencement of negotiation and the physical supply of new gas could be up to four years or more.

The policy challenges

The Territory Government is actively encouraging gas developments for more than as an alternative source of fuel for electricity generation in the Top End. Indeed, the Territory Government's vision is Darwin as Australia's second international gas hub.

Development of prospective fields in the Timor Sea and Bonaparte Gulf offer significant opportunities for the development of a gas-based industry in northern Australia. The Government therefore believes that the development of the gas deposits will be the catalyst for a step change in the Territory economy.

Revisiting national energy policy

The Territory Government believes that the lack of realisation to date of Sunrise highlights the need to critically examine national energy policy. The argument is that the existing "laissez faire" approach has deficiencies, particularly with regard to the development of large scale (low cost) developments.

The Territory Government considers that many of the existing policy settings, relating to large-scale greenfields developments, require review. An example of this is the area of natural gas development, which is of crucial importance to the Territory, due to its significant new investment potential and ability to leverage value added mineral projects in an environmentally sustainable manner.

In the Government's view, Australia is approaching a crossroads in energy policy. We are facing declining self-sufficiency in oil production and without some firm action, we also face likely depletion of currently known gas reserves in eastern Australia within 20 years. Our reliance on existing sources is inevitably pushing gas prices higher in real terms, and the alternative of reducing gas consumption in favour of increased coal use will not be beneficial to our environmental objectives.

The Territory Government believes that Australia should move towards a balanced mix of fuel sources with improved levels of self-sufficiency in oil production and abundant supplies of low-cost gas. The reality is that in Australia few, if any, major greenfield gas projects have been able to proceed without some level of government underpinning or support; the North-West Shelf being a prime example.

Looking at future developments, the Government believes it is unlikely that reliance on market mechanisms alone will deliver the required outcomes, particularly if we look at the national interest considerations. The presence of significant externalities associated with major resource developments, as well as issues relating to market power, mean that there will commonly be a misalignment between corporate selfinterest and the national interest. Such circumstances warrant government involvement to achieve optimal outcomes.

Despite the fundamental importance of energy to every aspect of the Australian lifestyle, no overall guiding visional strategy for Australia's energy future has been adopted and the Government firmly believes a national energy policy is needed to fill this void. The development of a national energy policy would also provide an opportunity to more fully take into account the greenhouse implications of future energy directions. The Government believes that the governments of Australia should collectively determine ways to encourage investment in Australian oil and gas exploration and development, and the establishment of gas-based industries, and has been arguing this in the COAG.

A national energy policy must include some key elements. The first is the role of government facilitation. This means encouraging investment in Australian oil and gas exploration and development of gas-fuelled industries based on strategic interests. It recognises the requirements of major greenfield projects to achieve critical market mass, but also recognises the important environmental outcomes of increased use of fuels such as LNG for power generation. The second element is to recognise the role of government in resource management. Any policy should take into account the national interest implications of major development proposals, including the cost and benefits of alternative developments. It should ensure governments have the right to influence the nature and timing of projects to protect the national interest.

Along these lines, the national energy policy is essential to improving environmental outcomes by encouraging the increased use of less carbon intensive fuels including natural gas for power generation.

Any project the size of Sunrise gas involves substantial upfront capital investment that will need to be secured through a portfolio of long-term offtake agreements for substantial quantities of gas and transportation services. From the Territory Government's perspective – and the pipeliners' the ability to secure these customers has been challenging due to (among other things) difficulties within the National Third Party Access Code for Natural Gas Pipeline Systems. Both the Productivity Commission Review of the National Access Regime (released 28 September 2001) and the COAG Energy Market Review (released December 2002) have acknowledged that significant impediments to investment in greenfields gas pipelines exists, yet Commonwealth action continues to be required to overcome this situation.

The Territory Government considers that the presence of significant externalities associated with major resource projects, as well as issues relating to market power, means that there will commonly be a misalignment between corporate self-interest and the national interest. Such circumstances warrant government involvement to achieve optimal outcomes for the owners of the resource - Australians. The potential of such an approach is exemplified by the North West Shelf development and the major industrial growth centred on Western Australia's Burrup Peninsula, where an economic powerhouse has been created.

The Territory believes Australian governments should collectively determine ways to encourage investment in oil and gas exploration and the establishment of gas based industries.

Potential competition impacts (and a possible Gas Trader model)

It is probable that Power and Water and other potential gas purchasers such as Alcan will arrive at gas supply and pipeline agreements that underwrite the development of a new gas field and a new gas pipeline through:

- o long term gas supply and pipeline contracts as foundation customers; and
- o accepting minimum payment or take or pay obligations.

These commercial arrangements are likely to be similar to but probably less onerous than the current Amadeus Basin gas supply and NT gas pipeline contracts.

If Power and Water was to contract with a field such as Blacktip, it is likely to be taking a volume and price risk. Power and Water then has the risk that Timor Sea may be available onshore at more economical prices or that embedded generation associated with Timor Sea gas-related industry will produce and export lower cost power.

The pipeline is likely to be sized at construction to meet the demand growth over the period of the agreement and users such as Power and Water are probably required to contract for a capacity level larger than their initial requirements.

A number of potential competition issues may arise as a result of new Power and Water gas supply and transportation contractual arrangements that may be similar to the existing Amadeus Basin gas supply agreements. These include:

- Power and Water having long term "out of the money" contracts with few ways of alleviating the risk or financial impact (new entrant competitors could have a major commercial advantage);
- new entrants not able to access secure gas supplies or pipeline capacity because of the contractual arrangements of the foundation customers such as Power and Water;
- new entrants viewing the minimum payment or take or pay obligations of Power and Water and other foundation customers as a market entry risk (foundation customer may reduce the negative financial impact by selling part of minimum commitment at a loss eg some revenue from spare pipeline capacity that must be paid for);
- Power and Water is likely to be a competitor to potential new market entrants that may not wish to negotiate for gas supply or pipeline capacity with such a competitor that already has the advantages of incumbency.

The Territory Government has a policy of encouraging competition in the electricity generation and retail segments. The replacement of the existing Amadeus Basin gas supply agreements with agreements structured in a similar way raise concerns about some potentially anti-competitive outcomes. The opportunity exists for any new gas supply and transportation arrangements to be structured in a way that:

- o encourages and fosters competition;
- $\circ~$ at the same time, reduces the risks to Power and Water and the Government as shareholder; and
- o provides greater policy and shareholder flexibility to the Government.

Contract arrangements that introduce a Gas Trader between Power and Water and the gas producers and pipeliners may provide improved competitive outcomes and better manage Power and Water and Government risk. Chart 5 outlines a possible structure.



Chart 5 – Possible Gas Trader Structure

It is proposed that the Gas Trader be a government owned corporation that contracts with the gas producers and gas pipeliners and passes through all its obligations to Power and Water. Power and Water would be in no worse position than if it contracted directly with the producers and pipelines.

The Gas Trader would seek to market excess gas and pipeline capacity to other generators, end users and potentially retailers.³ If the Gas Trader enters into a contract with a third party, Power and Water contractual obligations would be reduced to the extent of the contracted arrangements with the third party.

The Gas Trader model offers potential benefits to Government in the policy and shareholder areas. These include:

³ Such an arrangement may be more effective if it also involved mandating that all generators purchase their gas from the Gas Trader in preference to any other gas for a given period, with rationing if demand outstrips the quantities covered by the Gas Trader's contract. The only way in which such a mandatory acquisition arrangement could be effected would be through some legislative mechanism. Any legislation that restricts competition would need to be accompanied by evidence to show that the benefits of the restriction to the community as a whole outweigh the cost and that the objectives of the legislation can only be achieved by restricting competition. In this regard, any such legislation would have the effect of restricting competition in the markets for both gas and electricity. The restrictions in the electricity market would arise because of the uniformity that would apply to the terms and conditions on which gas was supplied to those competing generators. The pivotal issue would be whether, absent the relevant legislative mechanism, there would be any competition at all.

- competition benefits including reduced barriers to entry and a potential gas source for new generators or medium sized manufacturing industry;
- gas contracts separated from the incumbent generator providing the Government with flexibility as to the future investment in new and replacement generation capacity; and
- o increased flexibility regarding the structure of Power and Water.

To Power and Water, the Gas Trader model offers potential benefits in relation to the contractual obligations of any gas supply and gas transportation arrangements. Benefits include:

- a possible way to manage or alleviate gas supply take or pay obligations or minimum payments for gas pipeline capacity;
- reducing the possibility of a new entrant contracting directly with the gas producers or pipeliners in preference to Power and Water which may be viewed as a competitor; and
- allowing the potential gas production and pipeline benefits associated with load diversity to be captured by the Gas Trader and passed to Power and Water.

The current indications are that the gas supply arrangements will not be able to meet all generation requirements post 2006. Commitments for new gas purchases and pipeline capacity will have to be made in the immediate future to ensure new gas supplies are available in 2006.

The current window provides an opportunity for the new gas supply and gas transportation contracts to be established using a different structural arrangement than for the current agreements.

As well as urging a national energy policy, the Government needs to consider the positioning of a Government-owned Gas Trader as the contracting party for new gas supplies and pipeline capacity. This Gas Trader would initially pass through its obligations to Power and Water which would be in no worse position than if it contracted directly. This structural arrangement provides a number of potential benefits to Power and Water and competition, policy and shareholder risk management benefits to the Government including:

- reduced barriers to market entry and a potential gas source for new generators or medium sized manufacturing industry;
- $\circ\,$ flexibility as to the future investment in new and replacement generation capacity;
- \circ increased flexibility as to the structure of Power and Water;
- potential to manage or alleviate Power and Water take or pay gas supply arrangements or minimum payments for gas pipeline capacity; and
- capturing potential gas production and pipeline benefits associated with load diversity to be captured by the Gas Trader and Power and Water.

Overall, the Commission believes that arrangements based on the Gas Trader model would provide greater policy and operational flexibility and improved risk management.