Northern Territory Government

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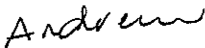


Dear Mr Reeves

RE: PROPOSED ACCESS ARRANGEMENT FOR THE AMADEUS GAS PIPELINE

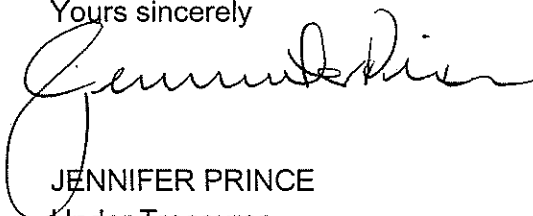
Northern Territory Treasury welcomes the opportunity to provide a submission to the proposed Access Arrangement by N.T. Gas Pty Ltd for the Amadeus Gas Pipeline effective 1 July 2011 - 30 June 2016.

Treasury considers that, as a general principle, the 2011-2016 Access Arrangement should reflect the economically efficient operation of the pipeline whilst providing an opportunity to earn a stream of revenue that recovers an efficient cost of service delivery. Furthermore, the Access Arrangement should provide appropriate incentives for investment in this significant piece of gas infrastructure, ensure the safe and reliable operation of the pipeline, and not distort investment decisions in upstream or downstream industries. Treasury's submission is therefore guided by this principle.

Treasury also emphasises the critical role played by the Amadeus Gas Pipeline in the Northern Territory's energy delivery infrastructure. Any monopoly rent taking (or at least the appearance of it) during the period of the Access Arrangement could present a significant barrier to entry to any party using energy as a major input that is considering setting up operations in the Northern Territory. Consequently, Treasury stresses the need for the Access Arrangement to be set so that it fosters an environment in which business can flourish.

Please do not hesitate to contact Louise Allsopp by telephone on (08) 8999 7034 or louise.allsopp@nt.gov.au if you have any questions regarding the content of this submission.

Yours sincerely



JENNIFER PRINCE
Under Treasurer

21 March 2011

Access Arrangement for the Amadeus Gas Pipeline - Northern Territory Treasury Submission to the AER

Introduction

The Northern Territory Treasury (Treasury) welcomes the opportunity to respond to the N.T. Gas Pty Ltd (NT Gas) proposed new gas Access Arrangement for the Amadeus Gas Pipeline (AGP).

This submission is guided by the requirements of the National Gas Rules 2008, in particular section 72 which outlines the required access arrangement information pertaining to price and revenue regulation, and the national gas objective set out in section 23 of the National Gas Law, i.e.

> *To promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas.*

To fulfil this objective, Treasury considers that, as a general principle, the 2011-2016 access arrangements for the AGP should reflect the economically efficient operation of the pipeline whilst providing an opportunity to earn a stream of revenue that recovers an efficient cost of service delivery. Furthermore, the arrangements should provide appropriate incentives for investment in gas infrastructure, ensure the safe and reliable operation of the pipeline, and not distort investment decisions in upstream or downstream industries. The following submission is considered in this context.

Background

Natural gas is the primary energy source for electricity generation in the Northern Territory. At present, there are few alternatives for other energy sources to be used for baseload electricity generation. While there is some energy produced from renewable sources such as solar and some from diesel fuel generators, these sources comprise a relatively small component of total electricity generation and are mainly confined to remote communities. Moreover, diesel costs two to four times more than gas where gas is available at outlets off existing Northern Territory pipelines.

NT Gas operates the main transmission pipeline (AGP) from the Amadeus Gas Field to the west of Alice Springs to Darwin. The AGP carries almost all[1] of the gas used for public electricity supply in the Northern Territory, and gas comprises about 95 per cent of fuel used for such generation. In addition more than 99 per cent of gas

[1] The only exceptions are gas sourced from ConocoPhillips Darwin LNG plant (DLNG) at Wickham point and used in the nearby Weddell power station, and a limited amount of gas from Palm Valley used in Alice Springs for electricity generation under a contract expiring in January 2012. The DLNG plant is a backup source of gas used only in the event of inadequate supply from the Blacktip field and the Amadeus Basin gas fields.

transported through the AGP in the past five or more years has been used as a fuel for public electricity supply.

NT Gas also operates the Bonaparte Gulf Pipeline (BGP) which transports gas sourced from the offshore Blacktip gas field to connect with the AGP at Ban Ban Springs 130 kilometres south of Darwin.

Notably, the AGP now has a strengthened role as a key component of the energy transport system for the Territory's larger population centres. This has arisen from the development of the BGP and a new long term gas contract for gas from the Blacktip field taking over as the main source of fuel for electricity generation in the Darwin-Katherine, Alice Springs and Tennant Creek power systems.

The AGP's significance is further emphasised by the vast distances and relatively sparse population characteristic of the Northern Territory. Since it has generally proven uneconomic to establish long distance electricity transmission lines[2], the AGP, in conjunction with a pipeline from the Amadeus Basin to Alice Springs, is the key energy transport infrastructure delivering energy to the Territory's major population centres.

The Northern Territory is isolated from the national gas network with no competing pipelines. Accordingly, this arrangement proves NT Gas with the capacity to exercise market (monopoly) power, the consequences of which are potentially damaging to the Northern Territory economy. When economic rents exceed the efficient costs of production (i.e. they are larger than the marginal or average supply costs that would prevail in a competitive market) this results in an unnecessary transfer from consumers to the pipeline operator. Consequently, costs for major energy users in the Territory would be higher than would prevail in a competitive market. This would act as a disincentive to investment in both upstream and downstream markets in the Northern Territory.

As such, gas access arrangements for the AGP should be considered with regard to the efficient cost of service delivery and limit any undue economic rents on Northern Territory consumers. However, these considerations will need to be balanced against a need to ensure that future investment in pipeline infrastructure remains attractive.

Access Arrangement Information

Rule 72 of the Natural Gas Rules 2008 provides the requirements for content of the access arrangement information for a full access arrangement proposal. This includes information pertaining to capital expenditure, operating expenditure, tariffs, total revenue requirements, and the rate of return, each of which is considered below.

Capital Expenditure

Treasury is concerned that the magnitude of capital expenditure identified by NT Gas is excessive for the period spanning 2010-11 and 2011-12. The figure of $27.7 million

[2] There is a 132kV transmission line between Darwin and Katherine, but this is the only non urban transmission line of note in the Northern Territory.

is substantially higher than capital expenditures in previous years with very little justification provided by NT Gas for such a large increase in investment at this time. This is also raised by Northern Territory Major Energy Users (NTMEU) in their submission. They note that it seems "incongruous" that there is a sudden rush for expenditure as the current period finishes and the new one commences.

Capital expenditure for the following access period is also high, rising to double its current level. Again, NT Gas appears not to have provided sufficient justification for such a large increase. A possibility raised by NTMEU is that NT Gas may have under-run capital spending in the past. A second issue concerns cost escalation and in particular, this brings into question the claims by NT Gas regarding the size of future materials costs. However, as also noted by NTMEU, the challenges faced by NT Gas are not unique and as such, they urge AER to assess whether the degree of cost escalation is warranted.

As such, Treasury urges the AER to scrutinise current and future capital spending, with these factors in mind, to ensure that this level of investment is appropriate.

Operating Expenditure

Operating expenditure is currently around $9 million per annum and, according to NT Gas, is forecast to rise to around $14 million per annum over the proposed new access arrangement. This represents an increase of more than 50 per cent which appears to be largely due to increases in overheads and sales and marketing expenses.

NT Gas has not made a sufficient case to establish that this substantial increase in operating expenses is economically efficient. If it is not, it may lead to the owners of the asset extracting returns that provide an undue windfall in excess of efficient service delivery.

A further issue (raised by NTMEU) concerns the fact that NT Gas has under-run both the ACCC allowance for operating expenditure and its own forecasts for the current access period. This would suggest that its current operating allowance is sufficient to cover its expenditure (an argument also raised by NTMEU). As such, Treasury recommends that the AER review the arguments behind these proposed significant cost increases.

Tariff Setting

As noted from the start of this submission, Treasury emphasises the need for the access arrangement to reflect economically efficient principles. As such, tariffs should be set at a level which reflects an economically efficient cost of service delivery (based on marginal or average cost principles). However, this needs to be balanced against ensuring that revenues provide the owners with a return on capital that supports investment in new infrastructure (where appropriate) and ensures the safe and reliable operation of the asset.

A key consideration is that excessive reference tariffs are likely to act as a disincentive for investors considering establishing gas using ventures in the Northern Territory or for those considering establishing ventures requiring significant amounts of electricity sourced from gas. Given the relative abundance of gas in and near the

Northern Territory including from gas fields connected to the Northern Territory pipeline system, this would be a particularly sub-optimal outcome.

A second issue is whether the reference tariff applies to firm or interruptible supply. With almost all gas to be carried in the proposed access arrangement expected to be from the Blacktip field, there could be significant unutilised capacity in the AGP both to the north to Darwin and to the south to Central Australia. This is because the BGP is expected to be providing gas to the AGP at Ban Ban Springs at the maximum allowable operating pressure. In effect, the BGP pressure will have a similar effect to installing a new compressor station at the Ban Ban springs junction.

In this situation, it is not clear why NT Gas is proposing a reference tariff for interruptible supply alone, since both firm and interruptible bases would seem feasible. Moreover, a prospective user of NT Gas services may have a business need that requires firm supply. Consequently, Treasury suggests that AER give this due consideration.

Total Revenue Requirement

Rule 76 of the National Gas Rules 2008 requires that total revenue be determined for each regulatory year of the access arrangement period using the building block approach in which the building blocks are a return on the regulatory asset value, depreciation of the regulatory base, a forecast of operating costs, a forecast of corporate income tax, and where applicable, increments or decrements resulting from the operation of an incentive mechanism to encourage gains in efficiency.

The forecast revenue requirement over the access arrangement period gives a figure of between $32 million and $35 million per year. While this is less than the nominal revenue allowed by the ACCC in its final decision in 2001, it may nevertheless be overstated given the earlier comments in this submission relating to capital and operating expenditure. Treasury recommends that this be reviewed by the AER.

Rate of Return

Rule 87 of the National Gas Rules 2008 requires that the rate of return be commensurate with prevailing conditions in the market for funds and the risks involved in providing reference services. Furthermore, in determining a rate of return on capital:

a) *It will be assumed that the service provider:*
    i. *Meets benchmark levels of efficiency; and*
    ii. *Uses a financing structure that meets benchmark standards as to gearing and other financial parameters for a going concern and reflects in other respects best practice; and*

b) *A well accepted approach that incorporates the cost of equity and debt, such as the Weighted Average Cost of Capital, is to be used; and a well accepted financial model, such as the Capital Asset Pricing Model, is to be used.*

In its proposal NT Gas has calculated the weighted average cost of capital (WACC) in the conventional way. However, Treasury has concerns over the size of the parameters used to derive the post-tax nominal WACC especially when benchmarked against arrangements in other states.

In principle the WACC should reflect the return required to satisfy creditors so that they do not invest elsewhere. As such, it should reflect an appropriate return on risk. However, Treasury is unconvinced that market risks (and other risks such as stranded asset risk) faced by NT Gas are greater than those in other jurisdictions. Indeed, with the Northern Territory Power and Water Corporation (PWC)[3] having been directly or indirectly the dominant user of the AGP since the AGP was commissioned in 1987, and highly likely to continue to play this role for the period of the new access arrangement, it is arguable that market risks may be significantly lower than elsewhere. This is also raised in the Santos and Magellan submission. They argue that there are no characteristics of the AGP and the market for gas transmission that would result in the AGP facing a higher level of risk than other gas transmission pipelines in Australia, or having a different profile of investors.

The proposed WACC of 11.42% is considerable larger than for the current access arrangement for NT Gas. Notably, it also far exceeds that set out in recent AER draft decisions for Queensland and South Australia[4]. Given that NT Gas remains a monopoly operator in the Northern Territory with sunk costs largely recouped under previous access arrangements, it is unlikely that a larger WACC is warranted. Table 1 provides a comparison with recent draft decisions and current arrangements.

Notably, NT Gas is also seeking a debt margin of 5.46% in its WACC calculation. Again, this is in excess of its current arrangements and also recent AER draft decisions relating to access arrangements in South Australia and Queensland. While the AER increased allowable debt margins to reflect constraints in credit markets during the global financial crisis, credit markets have subsequently stabilised and risk spreads are now substantially lower. Accordingly, Treasury recommends that AER reviews this debt margin in light of the prevailing economic climate and recent comparable draft decisions.

Finally, NT Gas also argues that it should have an equity beta that exceeds the AER determined level of 0.8. As noted above, NT Gas may actually face lower operating risks compared with pipeline operators elsewhere. Given this, it is recommended that the AER considers whether a lower equity beta is warranted.

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[3] PWC uses over 99 per cent of the gas carried in the pipeline.

[4] Australian Energy Regulator, *APT Allgas Access arrangement proposal for the Queensland gas network: 1 July 2011- 30 June 2016, Draft Decision*, February 2011.
Australian Energy Regulator, *Envestra Ltd Access arrangement proposal for the Queensland gas network: 1 July 2011- 30 June 2016, Draft Decision*, February 2011.
Australian Energy Regulator, *Envestra Ltd Access arrangement proposal for the South Australian gas network: 1 July 2011- 30 June 2016, Draft Decision*, February 2011.

Table 1: Weighted average cost of capital for current and proposed NT Gas Access Arrangements and recent comparable AER Draft Decisions

Parameter	Current NT Gas Arrangement	AER 2011 Draft Decisions APT Allgas (Qld), Envestra (SA and Qld)	Proposed NT Gas Arrangement
Risk Free Rate	5.52	5.68	5.48
Forecast Inflation	2.19	2.52	2.5
Debt to value	60	60	60
Debt margin	1.54	3.93	5.46
Debt raising costs	(in above)	0.108	0.108
Market risk premium	6.0	6.0	6.5
Equity beta	1	0.8	1
Cost of equity	11.67	10.48	11.98
Cost of debt	7.07	9.61	11.05
Post tax nominal WACC	**7.51**	**9.96**	**11.42**

Conclusion

Consistent with the other submissions, Treasury recommends that AER carefully reviews the access arrangement information provided by NT Gas. Treasury reiterates the importance of setting an appropriate reference tariff that provides an incentive for investment in an essential piece of infrastructure while at the same time providing a signal to businesses that the Northern Territory is an economically viable prospect. Treasury is of the view that the current information does not provide these assurances.

The figures suggest excessive levels of current and future operating and capital expenditure with very little evidence in support. This is noted in other submissions. In addition the WACC parameters proposed by NT Gas are inconsistent with recent draft decisions relating to other regions and represent a significant change from the current NT Gas access arrangement, again with little justification. These discrepancies warrant careful scrutiny from AER.