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DOWNSTREAM GAS SUPPLY AND AVAILABILITY IN NSW

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State and Regional Development Committee
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DOWNSTREAM GAS SUPPLY AND AVAILABILITY IN NSW (INQUIRY)

Dear Committee Members

The Australian Pipeline Industry Association (APIA) welcomes the opportunity to provide information to the State and Regional Development Committee relevant to the inquiry on downstream gas supply and availability in NSW.

APIA is the peak body for Australia's gas transmission industry, representing the builders, owners and operators of Australia's gas transmission infrastructure. The two major gas transmission pipelines in NSW are the Moomba to Sydney Pipeline, owned by APA Group, and the Eastern Gas Pipeline, owned by Jemena. These two pipelines transport the majority of NSW's gas supply into NSW, from SA and Victoria respectively, with the remainder either entering into NSW through the Victorian Interconnect or being produced in NSW.

In this submission APIA will seek to highlight some key issues of transmission pipeline investment and expansion rather than focus on more statistical information. It is presumed information such as that contained in the Australian Energy Market Operator's Gas Statement of Opportunities 2012, the Federal Government's Energy in Australia 2012 and other relevant information sources are readily available to the Committee.

There are two terms of references that are relevant to the gas transmission industry that APIA will be addressing in this submission:

(a) the adequacy of transmission pipeline systems and distribution networks for future downstream gas needs and supply challenges; and
(b) barriers to the expansion of downstream gas supply and distribution networks

The adequacy of transmission pipeline systems and distribution networks for future downstream gas needs and supply challenges

There are two main points APIA would like to highlight to the Committee.

Firstly, it is apparent that the current capacity level of transmission pipeline systems is more than adequate to meet the current and future needs of NSW gas demand. The current combined capacity of the three pipelines 'importing' gas into NSW is approximately 800TJ/day. This compares favourably to the current winter peak day demand of around 600TJ/day. Combined with the fact NSW gas demand is forecast to decrease over the next few years due to the closure of some large industrial facility, it is clear there is little need for increased pipeline capacity into NSW.

There remains a question as to whether adequate gas will be available to be transported by these pipeline systems, but that is not strictly relevant to the terms of reference of this inquiry.

Secondly, APIA would like to draw to the Committee's attention the realities of investment practice of the gas transmission industry. This is important because the infrastructure is not built to meet future gas needs, it is built to meet the needs of today. This is practical and effective because the vast majority of gas demand on major pipelines in NSW is driven by large industrial facilities and gas power stations. The loads of these facilities are fairly static and does not increase with time unless the facility expands. If such facility expansions occur, the pipeline will be expanded to meet the new demand.

The needs of residential customers, which account for only 17% of gas demand in Eastern Australia, are generally accepted to grow in line with population growth, currently around 2% in Australia. For gas transmission pipelines, this is almost negligible. A 2% annual growth on 17% of pipeline throughput is 0.34% annual increase in throughput due to population growth. This is easily managed.

A short summary of investment practice is outlined below.

What happens

Gas transmission pipeline infrastructure provides the means to connect gas supply with the gas market, safely, efficiently and reliably. Pipelines represent a significant capital investment and secure, long term supplies of gas and viable markets must be ensured before a commitment to build can be made. Gas users and retailers must first secure a supply of gas from a producer before a pipeline will be built. As it is impractical to move pipelines once they are built and to ensure that

users are provided with the lowest possible cost of supply, a pipeline company prefers to enter into long term (typically greater than 10 year) arrangements with customers. This usually means that the customer must have secured a long term supply of gas.
Once a gas user has secured a gas supply, they can negotiate access with the owner of an existing pipeline, or, if insufficient capacity or no pipeline exists, they can seek to have a pipeline built. Occasionally, a pipeline company will see a need in the market for a new pipeline and approach customers.
In either case, the pipeline company will normally approach its existing customers to see if others are interested in capacity in the new project. Pipeline investments benefit from economies of scale, so the bigger a pipeline project can be, the lower the cost will be for its customers.
Once a pipeline company has secured enough long term commitments for a project, the final investment decision is made and the project is built.

What doesn't happen

Most pipelines are built to a capacity that customers are willing to pay for now. They are not built with large amounts of spare capacity that may or may not get used. Once a pipeline is built, it can be readily expanded to meet future demand growth if potential customers are willing to pay for the expansion.

Advantages of current investment practice

By building pipelines to meet current gas demand, pipeline companies are efficiently using capital, which can help to keep transportation tariffs down. If a pipeline was built and not expected to be fully used for 10 years, some of the capital spent on the project has effectively been 'buried in the ground' for a decade instead of being put to good use somewhere else.
Pipelines are owned and operated by specialist pipeline companies that tend to work under long term arrangements with customers with predictable revenue. As a result, they are considered conservative and safe investments and are able to attract capital on better terms (lower interest rates) than other investment options. These lower costs of capital result in lower transportation costs for all gas users.

As Professor Garnaut noted in his 2008 Final Report of the Garnaut Climate Change Review:
'This is an example of a network infrastructure market working efficiently without government Intervention.'[1]

Barriers to the expansion of downstream gas supply and distribution networks

As the main users of gas transmission capacity are large industrial users and gas power stations, for new gas transmission pipelines to be built is it necessary that new large industrial users or gas power stations are proposed. Gas transmission pipelines do not assess prospective regions to expand into. Proponents of large gas using facilities make their locational decisions on a number of factors, one of which may be the availability of gas supply. If there is a sufficiently large demand, a new pipeline can be built.

[1] P453 Garnaut Climate Change Review Final Report

The loads of residential, commercial and small industrial customers, sometimes referred to as the mass market, are simply not large enough to drive transmission pipeline investment decisions. The construction costs of gas transmission pipelines are to some extent fixed, it does not matter if the pipeline is relatively small or large. For example, a typical easement width for a transmission pipeline is 20m. The land acquisition costs of such an easement are effectively the same whether the pipeline is 20cm in diameter (very small) or 50cm in diameter (reasonably common for major pipelines in Australia). This principle applies to many of the construction costs, to the extent it is simply uneconomic to build small transmission pipelines of sufficient length to supply many towns that do not have access to natural gas.

If the Committee is interested in the development of new gas transmission pipelines to provide natural gas to new regions, it should consider ways to incentivise or promote the development of new large industrial gas users and new gas power stations to identified regions.

APIA is happy to provide further information to the Committee if necessary, please contact me on [redacted] or [redacted] to discuss any matters of interest.

Yours sincerely

[redacted]

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