

DOWNSTREAM GAS SUPPLY AND AVAILABILITY IN NSW

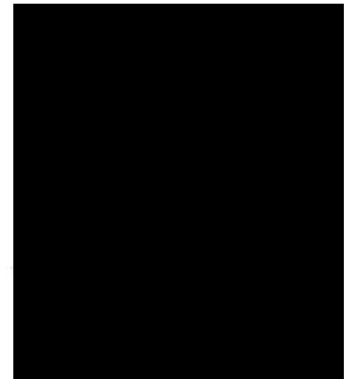
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Date Received: 21/06/2013

21 June 2013



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The Committee Manager
State and Regional Development Committee
Parliament House
Macquarie Street
Sydney NSW 2000



Inquiry into downstream gas supply and availability in NSW

Jemena Gas Networks (NSW) Limited (**JGN**) welcomes the opportunity to respond to the Legislative Assembly State and Regional Development Committee Inquiry into downstream gas supply and availability in NSW (the **Inquiry**).

JGN welcomes the Inquiry and supports the NSW Government objective of developing downstream gas infrastructure in NSW and increasing access to reticulated natural gas. JGN hopes that the feedback obtained from stakeholders will assist the Government in making policy decisions that will remove barriers to the expansion of downstream gas distribution networks. JGN believes this will help ensure the availability of downstream gas to NSW consumers and ultimately the future competitiveness of gas in the NSW energy market.

Jemena is committed to growing the NSW gas distribution network

JGN is a covered pipeline service provider that serves over 1.1 million consumers in Sydney, Newcastle, Central Coast and Wollongong and over 20 regional centres across NSW. Accordingly, JGN has a strong interest in down stream gas and is well placed to respond to this Inquiry.

JGN currently connects approximately 30,000 new consumers to natural gas per year, including 11,000 homes in new estates. While requirements for developers under the NSW Government BASIX legislation have led to a high take up of natural gas hot water in new residential developments, it is more difficult for JGN to justify the reticulation of existing residential areas. This is due to higher costs of construction and restoration, relatively low initial connection rates and less certainty about the choices consumers will make when they need to replace or add energy appliances in their homes.

JGN's marketing of natural gas demonstrates its commitment to the NSW market. JGN has an incentive to market gas to end-use customers in order to increase the utilisation of gas assets and to increase the size of the gas network. This in turn provides a more cost effective service to individual consumers by providing a larger customer base over which fixed costs may be amortised.

JGN has employed a number of strategies to increase its customer base and increase the penetration of gas consuming appliances such as gas water heaters and gas central

heating in NSW. In 2008 JGN implemented a comprehensive strategy for growing the NSW Natural Gas market that focuses on maximising awareness through:

- Promoting the benefits of Natural Gas directly to end consumers through a generic, network driven Natural Gas advertising and marketing program;
- Developing an interactive website that provides consumers with information about Natural Gas, Natural Gas availability, appliances, hot deals or specials that are available. The advertising was designed to drive consumers to the interactive website that provides consumers with detailed information on gas appliances, retailers, installers and any special deals or discounts that are currently available;
- Establishing Alliance Partnerships with organisations who have aligned interest in growing Natural Gas appliance sales and installations;
- Making connecting to the gas network easier and more affordable; and
- Integrating our advertising, marketing and incentive schemes to drive consumer behaviour by creating a desire for natural gas.

The results of this strategy have been very positive for the development of the NSW gas market. The marketing campaign has reversed a significant decline in the number of gas connections to households formerly using electricity alone. Prior to the campaign, there was a decline of 64 per cent from 1999 to 2007 (with a forecast decline of a further 51 per cent by 2012). The promotion of natural gas has resulted in a 51 per cent increase from 2008 to 2012. These results emphasise the critical relationship between a successful natural gas marketing strategy and the long term sustainability of the network.

JGN is subject to economic regulation by the Australian Energy Regulator. Under the national energy regulatory framework, JGN must be able to justify that its investments in extending the network are economically sound by demonstrating that any expenditure has been prudent and efficient. Appendix 1 outlines how JGN evaluates the viability of reticulating new areas. Appendix 2 outlines some of the existing barriers to network expansion that JGN must overcome during its evaluation of network expansion opportunities.

Policy settings that would help drive new reticulation

The NSW Government could consider policy settings that would drive new gas reticulation in NSW. In doing this Government would need to be clear about the incentives and potential outcomes created by its policy decisions. There is a fine balance between providing the right incentives to achieve policy goals and creating outcomes that counter-productively distort markets in ways not originally intended. JGN considers our suggestions would achieve a balance consistent with a government goal to increase connections to reticulated gas throughout NSW.

As mentioned above JGN connection decisions must be economically justifiable. The policy settings suggested below include some which might feature subsidies. It is worth distinguishing here the difference between decisions made by JGN which must be economically driven and Government decisions which may address social policy. The Government may choose to make social policy decisions that influence whether projects

become economic or not, therefore enabling investment that is consistent with the National Gas Objective.

There are several policy initiatives that would increase the number of gas connections in NSW. These are outlined below:

1. Phase out of emission intensive hot water systems

JGN supports mandating the phase out of emission intensive hot water systems as proposed by COAG in December 2010. This decision was made by COAG after a Regulatory Impact Statement (RIS) was prepared to examine the costs and benefits of the proposal. The RIS concluded that the phase out of emission intensive hot water systems would result in a number of benefits, including financial savings for Australian households and a significant reduction in Australia's greenhouse gas emissions. JGN believes there would be merit in the NSW Government reconsidering this policy which was reversed in late 2012.

JGN believes implementation of the COAG phase out for customers with a gas main available would increase the connection rates in existing reticulated areas and increase the proportion of projects that are economically justifiable. While the COAG policy leaves customers free to replace emission intensive hot water storage units with other options such as solar or heat pumps, JGN believes that Natural Gas can compete effectively with these options provided there are no subsidies in place that distort the market. Accordingly with this policy in place, JGN could assume that the majority of customers would connect to gas over time.

2. Government rebate programs for existing unit blocks

In conjunction with the phase out of emission intensive hot water systems, JGN would recommend introducing measures that reduce the substantial financial barriers to individual home unit owners to connect to the gas network. Switching to gas would result in financial benefits for home unit occupants as well as general environmental benefits for the greater community.

The introduction of a rebate program to partially subsidise the initial costs of establishing internal gas infrastructure within unit blocks would provide Body Corporates with an incentive to "gas-ready" the building to reduce the individual change over costs for each unit owner. The rebate would be available to Body Corporate controlled existing multi-dwelling sites on line of main but not connected to the gas network. New multi-dwelling sites would not receive a rebate given the opportunity to cater for natural gas during design and construction.

3. Reducing cost of compliance with authority obligations

The cost JGN incurs in reticulating new and existing areas is partially driven by the cost of compliance with authority obligations and processes, for example those surrounding road opening, pavement restorations and/or rail crossings. JGN believes there would be merit in testing the benefit of new and existing authority requirements against the associated cost of compliance. This would both help to address this barrier to connection and may benefit productivity in NSW more generally.

4. Investment in regional and rural areas

The NSW Government could consider funding regional development by investing in connecting regional and rural areas to reticulated gas. This would improve both the competitiveness and liveability of regional NSW while creating jobs and career

opportunities for regional residents. An example of a similar social policy program is the Energy for the Regions Program being run by the Victorian Government¹.

Given the scope of the Inquiry, the four policy initiatives outlined above have necessarily focused on measures to improve supply and availability in the downstream gas sector. However it is of equal importance that NSW policy-makers also focus strongly on improving upstream gas supplies. Delays in new gas development project approvals, or counter-productive policy interventions that restrict the development of new gas supplies, can potentially limit network expansion to new customers and place upward pressure on consumer prices.

JGN would be pleased to meet with the State and Regional Development Committee to discuss downstream gas supply and availability. If you wish to discuss the submission or organise a meeting please contact Danielle Beinart, Manager Gas Network Development, on (02) 9155 1500. [REDACTED]

Yours sincerely

[REDACTED]

David Musson
General Manager Gas Networks Commercial
Jemena Gas Networks (NSW) Limited

¹ See [REDACTED]

Appendix 1: How JGN evaluates the viability of reticulating new areas

JGN connection decisions must be economically justifiable

Gas is a discretionary fuel in NSW, especially in the warmer coastal regions. Only 62 per cent of NSW households have gas infrastructure available and of those only 70 per cent are connected. The warmer climate in NSW presents a challenge for businesses seeking to promote the uptake of gas by small customers.

It would be poor economic practice for JGN to invest in uneconomic mains extensions. Under the current regulatory framework JGN would be unable to justify this as it would not meet the objective in the National Gas Law of promoting efficient investment in, and operation and use of natural gas services for the long term interests of consumers. In particular, it would lead to inefficient price increases for users of natural gas. This is because existing natural gas consumers would be required to pay the difference between the amount of revenue directly generated by the investment and the amount required to fund the investment. That is, existing customers would be required to subsidise the newly connected customers. Not only would this be poor economic practice, but the Australian Energy Regulator would not sanction this as a prudent and efficient investment, leaving JGN unable to recoup its investment.²

As natural gas is not an essential service, decisions about extension to the network are based on economic viability. When a new connection is requested and a suitable gas main is not located directly outside the residence, JGN will assess the feasibility of extending the network. Depending on the outcome of this assessment customers may be asked to make a contribution towards the cost of the gas connection. The cost to extend the network and connect new customers may vary significantly dependant on a number of factors including: terrain, distance from the gas supply, pipe diameter required, gas main design and construction, impact of existing infrastructure already in place (for example, driveways, footpaths and roads), impact on the local environment, subsequent restoration costs and disruption to traffic.

Connecting areas that don't have a natural gas supply, including regional and rural areas, requires major construction and these applications are investigated separately to residential gas connections. In such cases, the amount of gas a town or region is forecasted to consume is critical to the economic feasibility of the construction project and must be assessed over the lifetime of the gas pipeline.

Process for connecting new areas

Enquiring customers are provided with quotes on any up-front contribution required and the number of dwellings that must connect to the network to avoid an up front capital contribution. JGN builds an assumption of future connections into the analysis of all infill projects as this helps to keep the level of up-front contribution to a minimum.

The evaluation of expanding the network upon request to cover regional areas has traditionally been conducted in conjunction with local councils. These initial requests for expansion are seldom viable, however if built upon over time including any changes to key factors such as new large thermal load requirements could make investment possible.

² See rule 70 of the National Gas Rules which sets out the economic test for conforming capital expenditure.

Unfortunately, some areas of Sydney and Regional NSW are not suitable for network expansion (due to geography and/or terrain) and in these cases JGN will advise consumers that gas is not available and suggest that LPG should be considered.

Appendix 2: Existing barriers to network expansion

While JGN strongly supports expansion of its reticulated gas network in NSW it faces some significant barriers. As outlined above it must be economic for JGN to expand its network. This may be hindered by a number of factors including:

High capital costs

The cost to JGN of reticulating new areas is driven by a number of factors including:

- High restoration costs depending on the terrain and impact on existing infrastructure already in place such as driveways, footpaths and roads. This can be particularly costly in some local government areas where councils perform the restoration works themselves, or due to the cost of compliance with authority obligations around traffic control, road opening permits and/or rail crossings;
- Low housing density leading to a higher cost of extending mains per house; and
- Adverse construction conditions such as rock terrain.

Low gas demand

The amount of gas that will be consumed by an area being evaluated for reticulation is critical to the economic feasibility of the construction project and must be assessed over the lifetime of the gas pipeline.

In relation to the reticulation of sites that are geographically located close to mains gas, a key determinant of how much gas a household will use is largely driven by the cost of converting from electricity to gas appliances which can be a significant purchase. While consumers may show significant interest in switching to natural gas, it is JGN's experience that their decision is greatly influenced by the age of their existing energy appliances. In addition, when an electrical appliance, such as a water heater fails, there is only a small window of opportunity to replace it with a gas appliance. In practice, a customer will often decide that it is more convenient to replace like with like in order to minimise the time without the use of the appliance. This is particularly the case where the customer's premises are not already connected to gas given the time required to arrange and complete a new service connection. These factors mean that there are relatively high barriers to converting "electricity" households to gas in NSW. Policy settings that would help to address this barrier to connection are discussed later in this submission and include the phase out of emission intensive hot water systems and rebate schemes.

In relation to regional and rural areas, different criteria apply as gas is usually not already available in the area which means that a pipeline will need to be built to provide the gas necessary for reticulation. Significant demand, such as that required by gas-fired power generation or a new manufacturing facilitating is often required to make connection economically feasible in these circumstances. This type of commitment usually requires coordinated government policy.

Sub-optimum gas supply development

Delays in new gas development project approvals, or counter-productive policy interventions that restrict the development of new natural gas supplies, can potentially limit network expansion. It is important that the NSW government has a strong focus on unlocking new gas supplies to moderate upward pressure on consumer prices.