Submission No 17

INQUIRY INTO THE SUPPLY AND COST OF GAS AND LIQUID FUELS IN NEW SOUTH WALES

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The Director
Select Committee on the Supply and Cost of Gas and Liquid Fuels in New South Wales
Legislative Council, Parliament House
Macquarie Street
Sydney NSW 2000

By email: gasinquiry@parliament.nsw.gov.au

Dear Sir/Madam

Inquiry into the supply and cost of gas and liquid fuels in New South Wales

AGL Energy (AGL) welcomes the opportunity to make a submission to the New South Wales (NSW) Legislative Council's Gas and liquid fuels supply committee inquiry into the supply and cost of gas and liquid fuels in NSW.

As one of the largest energy retailers in Australia and a leading investor in many types of energy production, AGL is well placed to comment on the gas supply and demand issues that will impact industry participants now and into the future. AGL operates across the supply chain and has investments in coal-fired, gas-fired, and renewable electricity generation and upstream gas exploration and production projects. AGL is Australia's largest private owner, operator and developer of renewable generation in Australia. AGL is also a significant retailer of energy with over 3.8 million electricity and gas customers in Victoria, New South Wales, South Australia and Queensland.

Eastern Australia's natural gas markets are undergoing rapid and unprecedented change. Large discoveries of coal seam gas reserves (CSG) have underpinned over $60 billion of investment in Liquefied Natural Gas (LNG) infrastructure in Queensland, enabling the export for the first time of natural gas from 2015. This export capability will see a tripling of demand for gas in Eastern Australian gas markets. Historically, these markets have been characterised by stable, long-term supply contracts at well below international benchmark prices. Going forward, the market is likely to have a much tighter supply and demand balance, and significantly higher prices as a result. At the same time, government policies have placed restrictions on upstream development opportunities, disrupting the efficient entry of new gas production.

In this context, AGL's detailed comments on the issues of gas supply competition, price transparency and alternative transport fuels follow.

Gas supply and demand in New South Wales

NSW will be particularly impacted by the transformation of Eastern Australian gas markets, as it relies on interstate imports to supply around 95 percent of its natural gas. Over the next few years, long-term supply contracts for NSW from Victoria and South Australia will expire and much of the conventional gas production that previously supplied NSW will be contracted to supply export projects in Queensland. The timely development of new sources of supply is imperative to ensure that demand for natural gas in NSW homes and businesses can be served. There are adequate gas reserves (in the form of CSG) in the ground in NSW, however, regulatory restrictions which impact CSG developments are exacerbating potential gas supply shortages in the State.

AGL's 2014 Applied Economic and Policy Research Working Paper *Solving for 'x' – the New South Wales Gas Supply Cliff*[1] quantifies the extent of the potential gas supply shortfall and models when it may impact NSW. A copy of the paper is attached to this submission. The analysis shows that without further supply or infrastructure development, NSW could face unmet gas demand from 2016. The paper also investigates options to address the supply shortfall, including the expansion of pipelines (expanding the Eastern Gas Pipeline and increasing the Culcairn Interconnect) and completing the construction of the Newcastle Gas Storage Facility, which were found to reduce the frequency of shortages. However, even with these developments, NSW may face 21 days of unmet demand in winter 2016. Such an outcome may be better or worse depending upon weather and other variables.

There are significant negative consequences associated with gas supply outages. If system security is threatened due to insufficient supply being available to meet the total maximum daily quantity of all users, then emergency powers may need to be utilised with the NSW Government required to direct network operators to curtail gas supply to some users on the basis of a specified order of customer categories. This order of curtailment would likely see industrial and commercial customers curtailed ahead of emergency facilities and households. Such emergency powers have been exercised in the past – for example during the winter of 2007 network operators curtailed some industrial and commercial customers due to inadequate contracted gas supplies.

Most gas market analysts state that additional supplies for NSW are required to restore energy security in the region. AGL's analysis shows that the Gloucester and Narrabri CSG projects in NSW can make up an anticipated supply shortfall from 2017, albeit with little margin for error. This is consistent with the latest forecasts from the Australian Energy Market Operator (AEMO)[2] which found that the development of the Narrabri project (in addition to the Gloucester project) would almost eliminate peak demand shortages in NSW (although small shortfalls are still predicted for four days in 2020). This compares to modelling released by AEMO in 2013 which found that in the absence of the Narrabri project (but with the Gloucester project), NSW would face significant peak demand gas shortages from 2018[3]. Going forward, additional NSW gas projects would enhance NSW's gas supply security while providing further benefits such as regional employment in appropriate areas such as the Hunter coal-mining region. If the CSG industry is permitted to safely develop in appropriate areas, then it is likely there will be enough natural gas in NSW to supply current levels of consumption for many decades.

Certain sectors and locations will be negatively affected by changing market conditions, such as gas shortages, increases in gas prices and short-term contracting. Gas-intensive industrial users in NSW that have contracts maturing over the next few years will either need to pay a substantially higher price for gas supply, cease trading or reduce production. Under these conditions it is likely that employment in the manufacturing sector will be affected. In NSW, large gas users are concentrated in Greater Western Sydney, the Central Coast and regional areas including Newcastle and Bathurst, and it is therefore these areas that would be most at risk. Deloitte Access Economics[4] has found that while LNG developments on the East Coast will create a new export industry involving significant production, employment and capital investment, there will also be adverse consequences, particularly for the manufacturing sector due to its significant gas usage and its high trade exposure which limits its ability to pass on higher input costs. Australian manufacturing output in 2021 is estimated to be around 4 per cent lower than if LNG export capability was not developed, with an associated drop in employment of over 14,000 full time equivalent jobs.

AGL strongly supports the recommendations recently made by the Commonwealth Department of Industry's Eastern Australian Gas Market Study and Commonwealth Government Energy Green Paper which relate to promoting gas supply competition as a way to address the emerging disequilibrium in the east coast gas market. Increasing supply will place downward pressure on unit prices and therefore help ease some of the transitional disruption to businesses. It would appear that there are significant new national gas resources that are yet to be developed. AGL notes comments by BREE that reference EnergyQuest estimates of around 90,000 PJ of gas supplies available, which is the equivalent of around 45 years of gas demand (including current LNG loads) from 2017.

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[1] Simshauser, P. & Nelson, T., 'Solving for 'x' – the New South Wales Gas Supply Cliff', March 2014. Available via the AGL Blog http://aglblog.com.au/2014/03/working-paper-40-available/

[2] AEMO, 'Gas Statement of Opportunities Update', AEMO Publication, May 2014

[3] AEMO, 'Gas Statement of Opportunities for eastern and south-eastern Australia', AEMO Publication, 2013

[4] Deloitte Access Economics, 'Gas market transformations – Economic Consequences for the manufacturing sector', July 2014

The NSW economy would benefit significantly from the development of greater gas production within NSW to satisfy NSW gas demand. A report prepared by Acil Allen for AGL quantifies the economy-wide value that could be derived from increasing local gas production within NSW[5]. The study found that development of indigenous CSG resources in NSW will lead to significant gains in real economic output, real income and employment in both NSW and wider Australia. The development of AGL's Gloucester Gas Project alone is predicted to increase the net present value (NPV) of NSW's Gross Domestic Product by $968 million to 2035, and to reduce wholesale gas prices in Sydney by 8 per cent in 2025 (and by an average of 3 per cent over the 2018 to 2035 period).

Regulatory frameworks for safe and sustainable CSG development

AGL acknowledges that the implementation of restrictive policies represented an attempt by the NSW Government to respond to community concerns about CSG. AGL supports and invests in community consultation and engagement on issues that have the potential to impact upon local residents, health, services or amenities. AGL also supports measures that ensure the safe and sustainable production of gas, which is balanced with appropriate environmental protections. AGL takes every effort to ensure that genuine community concerns are addressed to the greatest extent possible.

As such, AGL has welcomed the NSW Government's recent Gas Plan as it recognises the need to secure local gas supplies, and acknowledges the benefits that the onshore gas industry will bring for the State, as well as the need for a stable regulatory environment supported by science and information. AGL also supports the adoption of the recommendations from the NSW Chief Scientist and Engineer's recent study into CSG[6]; the final report noted that "CSG extraction and related technologies are mature and Australia is well equipped to manage their application".

Governments at all levels must adopt a long-term approach to policy setting, and make changes only on the basis of robust, verifiable, scientific or other evidence-based information emerging that justifies the change. The New South Wales Government should continue to develop a clear and achievable coal seam gas framework which would facilitate safe and orderly development to continue in order to satisfy NSW gas demand. Clause 20 of the State Environmental Planning Policy (Mining, Petroleum and Extractive Industries) Amendment (Resource Significance) 2013 states that the Minister is to arrange for the policy to be reviewed before the end of September 2015. As such, AGL believes this regulatory process provides a useful opportunity for a long-term approach based upon science and evidence to be agreed, with the long-term goal of alleviating potential gas shortages from 2016. In the context of the regulatory review by the Minister in 2015, AGL believes that there are several ways in which the existing regulatory framework could be improved to enable gas projects in NSW to be carried out in appropriate areas and safely operated with minimal environmental impact.

AGL welcomes the recent bilateral agreement between the NSW and Commonwealth Governments to streamline environmental regulation and develop a 'One Stop Shop' for environmental assessments and approvals. It is imperative that a holistic view be taken of the market in order to identify gas projects that help provide a secure energy supply for households and businesses. Objective and scientific criteria need to be applied to identify projects and then to progress their operation, so as to avoid politicisation of the issues and a prevalence of non-evidence based influences.

Reservation

While AGL has committed that all gas from Gloucester is for NSW and will not be exported, we do not consider that a domestic gas reservation policy would be an effective policy solution to the issue of forecast gas supply shortages in NSW. The costs of LNG developments currently under construction are now sunk and irreversible. Future gas supplies are largely committed under legal contract to LNG export facilities and material sovereign risk would likely result from redirecting LNG gas committed to export markets to domestic markets instead. Further, while gas shortages are likely to emerge in NSW, domestic gas reservation policies are applied at the State level. Assuring supply into New South Wales would require a gas reservation policy to be applied, most likely, in Queensland, which would come at a cost to the State of Queensland, with any potential benefits to

[5] Acil Allen Consulting, 'Future NSW Gas Supply and Usage: Economic benefits of increased coal seam gas development', July 2014

[6] NSW Chief Scientist and Engineer, 'Final Report of the Independent Review of Coal Seam Gas Activities in NSW', September 2014

be extracted by NSW. Accordingly, the only way to address the conditions facing domestic gas users is to increase supply, particularly from within NSW.

Gas price transparency and competition

AGL supports the consideration by State and Commonwealth Governments of how best to facilitate upstream market outcomes that are in the long-term interests of consumers. AGL welcomes the COAG Energy Council's request of the AEMC to report back to the next Council meeting with actions that can be implemented to strengthen the structure and competitiveness of the East Coast gas market. Issues such as joint-venture marketing or other relevant regulatory matters that may be impacting on competition can be explored through this AEMC review. AGL also welcomes the COAG Energy Council's vision for the gas market and the four policy work streams, which include competitive supply; transparency and price discovery; risk management; and removing unnecessary regulatory barriers.

In general, AGL considers that dynamics in the downstream gas market permit sufficient price and volume discovery to take place between market participants. However, AGL supports the close monitoring of the gas trading exchange at Wallumbilla as a possible template for extension to other locations. While downstream facilitated markets will always be required where retail competition exists in order to achieve balancing, there may be scope for some aspects of the Wallumbilla trading exchange model (i.e. voluntary, bilateral contractual arrangements for the sale and purchase of gas) to be extended to other jurisdictions and to replace some of the undue complexities of downstream facilitated markets. This could in turn have the additional benefit of simplifying pricing structures in downstream markets.

One key regulatory area where reform is required is the better regulation of gas transmission network pricing. Even with increasing interconnection, the disparity of bargaining power between pipeline operators and shippers is leading to economically inefficient outcomes and negatively impacting market depth and liquidity. This arises because pipelines remain, practically speaking, monopoly infrastructure (especially since shippers/retailers are generally tied to a pipeline, based on their long-term upstream gas supply decisions). Most pipelines are 'uncovered', and not subject to economic regulation. For liquidity to truly emerge, shippers require greater flexibility in access to pipeline services – such as renomination, redirection, backhaul transportation services, and services in the way of 'in-pipe trading'. In AGL's experience, pipeline operators do offer such services but often at prices that are not cost-reflective or on relatively inflexible terms which do not allow full optimisation by shippers. The prices sought by pipeliners for services other than forward haulage also need to recognise that transactions such as renomination or 'in-pipe' trades are mainly administrative in nature and do not justify a per GJ charge.

Alternative transport

With the closure of local refining capacity and Australia's increasing reliance upon imports of liquid fuels for transport, AGL considers that a greater uptake of alternative transport fuels and vehicles (including gaseous fuels and electric vehicles) could lower costs for consumers, improve energy security, improve air quality, improve Australia's terms of trade and bolster economic resilience in the event of unforseen supply disruptions. AGL supports the investigation and removal of barriers to the uptake of these technologies across the supply chain (vehicle supply, fuel supply, infrastructure and end customers), based on the principles of fuel taxation neutrality and the appropriate consideration of externalities.

Closing remarks

Eastern Australian gas markets are currently undergoing unprecedented change. The development of LNG export facilities will see rapid growth of gas demand in the near future, which may exceed aggregate supply in the short to medium term. NSW will be particularly exposed to the tight supply/demand conditions, with supply shortages possible from 2016, with dire economic and social consequences. Government policies restricting the timely entry of new gas supplies have exacerbated the impact that this market transformation is having on gas users, particularly in the large industrial and manufacturing sectors. NSW has ample resources in the form of CSG that can be safely developed with appropriate environmental protections to restore energy security and to place downward pressure on prices.

Should you have any questions in relation to this submission or if you have any specific questions that you would like us to address, please contact me
or Fiona Orton .

Yours sincerely,

Tim Nelson
Head of Economic Policy and Sustainability