

MINUTE



Royalties and Advisory Services Unit
PO Box 344, Maitland HRMC NSW 2310

Subject Santos Narrabri Gas Project: Strategic Energy Project

Summary

Santos NSW (Eastern) Pty Ltd (Santos) has sought approval to develop the Narrabri Gas Project (the Project) within the Pilliga region of NSW. The Project involves the development of a commercial coal seam gas field and processing facility to supply up to around 70 petajoules (PJ) of natural gas into the market each year.

The Australian energy industry currently faces a number of uncertainties including aging production assets and structural changes. These issues are interrelated, and their importance is recognised by the current government priorities and industry operators' desire to provide security of supply, reliability and consumer affordability to the market. Resolution of these issues will require an industry-wide, consolidated approach geared toward providing security and reliability.

Should the Project receive approval for development as sought, the resultant increase in NSW domestic gas supply would significantly contribute to the NSW Government's (the Government) priorities of energy security reliability and affordability, placing continued downward pressure on household energy prices in the medium term and insulating domestic users from price shocks as a result of undersupply, whilst the transition to sustainable renewable energy sources continues over the longer term.

Background

The Commonwealth Government (the Commonwealth) has identified that the national gas market requires greater domestic supply¹ from existing east coast producers, and has recently sought commitments that production would be made available for the domestic market and flagged the potential for further intervention in the form of export controls. The Australian gas market is complex and dynamic. Combined with a lack of transparency on commercial arrangements between producers and wholesale customers, this creates difficulty in providing comprehensive analysis.

The gas market in Australia must be viewed in parallel with the national electricity market, as there is a strong inter-relationship between gas supply as feedstock for industry and electricity generation.

The Australia Energy Market Operator (AEMO) has identified that gas shortfalls are the result of under supply² to the domestic market, as current production capacity is substantively matched to committed contract export sales. AEMO has predicted that without an increase in the supply of gas to the market, a number of adverse situations may arise, without timely intervention.

Firstly, declining production within established fields may result in a shortfall of supply to meet gas powered generation (GPG) in coming summers. While some jurisdictions have recently released new areas for gas exploration, the time required to discover, develop and

¹ Budget 2017-18

² Gas Statement of Opportunities

deliver commercial product to market, means that any potential projects within these areas are not able to contribute to the alleviation of immediate supply shortfalls.

Secondly, should under supply situations present, the national market may respond in such by encouraging electricity generation from less efficient sources to meet demand. These more expensive generation forms will place upward pressure on price, as the increased generation and transmission costs are incurred as a result. Further, any potential shift in the short term may significantly impact reliability depending on generation capacity at the time the shift occurs.

Finally, the continued upward trend in combined energy prices is expected to place pressure on the financial viability of commercial and industrial companies. As the major (combined) user of gas within the market, behind GPG, it is feasible to expect that the effects of changes to reliability and security will be experienced most within this sector. Whilst growth in electricity demand is forecast to remain flat³ due to the transition of the economic base to less energy intensive sectors and improved energy efficiency and technology uptake, any shift will require effective management.

Timely increases in gas supply to the market are essential to insulate customers from market shocks and effectively manage the impacts to consumers during these transition periods. The Project potentially represents new supply to market, providing an opportunity for uncommitted resources to be directed appropriately in order to address these potential issues.

National market

Australia remains a net energy exporter⁴ at a rate of around 2:1 to domestic consumption, with domestic consumption comprising oil (38 per cent), coal (32 per cent) natural gas (24 per cent) and renewables (six per cent.)

The Chief Economist has identified⁵ that following two consecutive years of decline in total energy consumption, in 2014-15 energy use rose by one per cent. This overall rise was distributed across the energy mix, with rises in coal (three per cent), renewables (two per cent) and gas (one per cent) which is predominantly attributed to an increase in electricity generation from increased demand in the market⁶.

Almost half of Australian natural gas production occurs within the eastern market and coal seam gas (CSG) accounts for 18 per cent of national production. In 2014-15, gas production rose by five per cent, due to increased CSG production from QLD as major projects reached full capacity. Over the same period gas consumption rose one per cent which has been attributed to the increased reliance on GPG within QLD.

Despite this increased demand from QLD, electricity generation from gas fell by four per cent nationally in 2015 as closures reduced generating capacity and increased prices drove down demand. GPG remains a significant contributor to electricity generation contributing 21 per cent of total capacity.

This reduction in GPG was offset by increased coal-fired generation from Victoria, South Australia⁷ and Queensland.

The Commonwealth⁸ has proposed a cautious approach in forming predictions of what future energy challenges may arise, citing the importance of consultation and policy robustness to protect against uncertainties and adapt to changing conditions.

³ National Electricity Forecasting report

⁴ Resources and Energy quarterly statistics 2016

⁵ Australian Energy Update 2016

⁶ National Electricity Forecasting Report

⁷ Statistics prior to recent closure of Pt Augusta power station

⁸ National Energy Productivity Plan 2015-2030

The Project will contribute to flexibility within the market, not only by creating a wider base of gas supply for electricity generation, but as the transition toward efficient energy generation continues, the substitution potential, to easily divert supply away from GPG toward feedstock in response to changing demand without creating increased pricing pressure, presents as a sustainable option for the medium to long term.

NSW conditions

NSW is the largest regional energy user in Australia, representing over one quarter of total national consumption. Total energy consumption in NSW has continued to fall in recent years, continuing the trends from 2007-08, primarily driven by the reduction in the consumption of coal and decline in electricity generation. Over the same period, gas use has increased steadily, before declining in 2014-15, which may be indicative of price sensitivity, or a move toward efficiency improvement.

The Government has identified a number of current priorities⁹ within the sector of both energy production and electricity generation, stating a focus on reform of the current market to develop the industry within NSW to secure energy sources for citizens, whilst responsibly managing the transition to alternative energy sources and protecting residents who are vulnerable to energy price rises by continuing to place downward pressure on household prices contributing to the cost of living.

The Government has recognised the significant impact that energy affordability has on both industry and the public within NSW. As forecast gas prices¹⁰ are predicted to increase in the short-term, a safe and sustainable gas supply for NSW is essential to ensure long-term financial stability for the residents of the State.

As the only producing gas operation in the State, the Camden gas project, has been in production for over a decade, and currently supplies slightly less than five per cent of total NSW consumption. Consequently, NSW customers are heavily reliant on imports, incurring direct costs associated with transport and indirect cost as a result of reduced volume of supply within the national market. AGL, the operator of the Camden gas field, has recently announced that current production is in decline, and their intention to cease operation in 2023, which with no new production would make NSW entirely dependent on imported gas.

Increased domestic production is the most effective way to deliver the requirements of the Government, and as such, the Project represents the only current option to ensure reasonably priced, secure supply to NSW residents.

The NSW Gas Plan

The NSW Gas Plan provides a strategy for the regulation and security of NSW gas supplies. The Plan identifies five strategic priorities that aim to define the NSW approach to gas supply and regulation of the industry, of these, Priority five – ‘securing the State’s gas needs’ set out actions to be taken on behalf of industry and government to protect NSW supply.

The Plan recognises that domestic gas production is a crucial component of the strategy and details the development of gas reserves will benefit the NSW consumer.

The Government has identified the significance of the Project in delivering the commitments in the Gas Plan, assigning strategic project status¹¹, to ensure the efficient assessment and determination in obtaining the required approvals. Should the required approvals be forthcoming, in agreeing to be party to the MOU, Santos has committed to develop the Project, with the intent of connecting to the existing gas network to supply to NSW customers, ensuring an economic supply of gas is available and value is shared by the residents of NSW.

⁹ National Press Club Premier’s address

¹⁰ Gas Statement of Opportunities

¹¹ MoU Narrabri Gas Project

Gas Prices

As a net energy exporter competing in a global marketplace, Australian gas prices are moving toward international prices. International gas demand has grown, following the closure of nuclear facilities in Japan and demand from growing economies. This increased demand, and the market's tendency toward satisfying export requirements, has seen a tightening of the east coast gas market and placed upward pressure on domestic prices which may be further exacerbated by the decline in established reserves.

In the Australian market, where market responses decide the direction of supply and retail pricing, NSW customers can experience price shock, due to the position of the State as a net importer of gas. While there are a number of different levers available to deliver on the Government's commitments of energy affordability, including regulation, efficiency and productivity increases, and government contribution (rebate) mechanisms, increasing the supply within the domestic market is seen as the most effective mechanism to balance the desire for low prices and encourage the investment required to achieve the targets set for increased efficiency within the market and overall energy productivity. Increasing supply is a key step to allow the gas market to efficiently respond to the changing conditions within a dynamic environment.

Conclusion

The Project represents the most suitable NSW- based option, within the current market and related framework, to deliver on the Government's priorities for secure, reliable and affordable gas supply to the residents of NSW. The Project can be developed in a manner that provides certainty to wholesale industry users and retail market participants in the short-term by providing insulation from price shocks, and in the mid-to-long-term by establishing a sustainable domestic supply of gas in NSW.

Departmental contact:

Name, Position, Department	Contact Details
Bryan Whitlock, Senior Analyst, Royalties and Advisory Services	E: bryan.whitlock.west@industry.nsw.gov.au T: 02 9842 8575
Zane West, Manager, Royalties and Advisory Services	E: zane.west@industry.nsw.gov.au T: 02 4931 6771

Brief prepared by: [Zane West, Manager Royalties and Advisory Services](#)

Date: [22-May-17](#)