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Australian Competition and Consumer Commission

Submission via email: gas.inquiry@acc.gov.au

**Subject: Shell Australia Submission to the Australian Competition and Consumer Commission (ACCC)
East Coast Gas Inquiry**

Shell Australia welcomes the opportunity to provide a submission to the ACCC Inquiry into East Coast Gas.

Shell Australia would be pleased to discuss the contents of this submission further at a private hearing, should the ACCC wish to pursue any matters contained within further.

For further information or to arrange a discussion on the detail of this submission please contact Nilofar Morgan, Senior Policy and Economics Adviser on (02) 6262 8893 or nilofar.morgan@shell.com.

Sincerely

A handwritten signature in cursive script that reads "Andrew Smith".

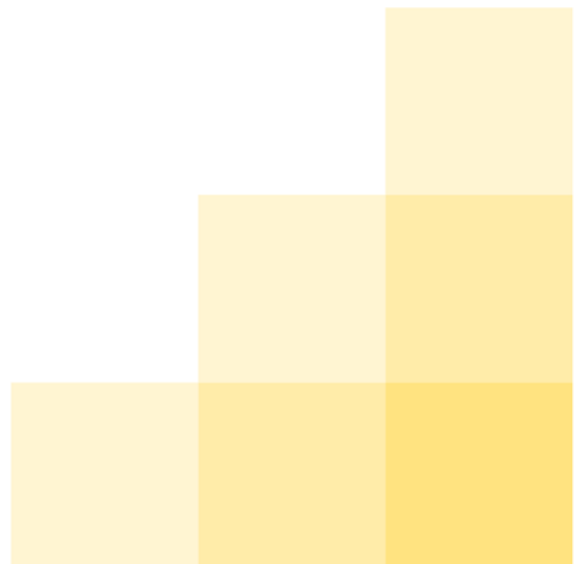
Andrew Smith
Shell Australia Country Chair



SHELL AUSTRALIA

SUBMISSION TO THE AUSTRALIAN COMPETITION AND
CONSUMER COMMISSION INQUIRY INTO EAST COAST
GAS MARKETS

JULY 2015



Introduction

Shell Australia (Shell) welcomes the opportunity to provide input to the Australian Competition Consumer Commission (ACCC) Inquiry into the East Coast Gas market.

As well as providing the information contained in this submission, Shell has also contributed to the preparation of submissions by the Australian Petroleum Production and Exploration Association, and the Business Council of Australia.

Background

Shell has been in Australia since 1901 and Australia forms a core part of Shell's global natural gas business.

Historically, Shell's significant investment in Australia spanned across both the downstream and upstream sectors. However following sale of the downstream operations to Vitol in 2014, the business is now focused largely in the upstream sector. Shell also continues to supply aviation fuels and lubricants in Australia.

Shell's major investments in key Australian LNG projects include: the Prelude Floating LNG project, which Shell operates and hold a 67.5% share in; the Gorgon Joint Venture (25% share); the North West Shelf Venture (16.67% share) and the Browse Joint Venture (27% share), and the Sunrise Joint Venture (26.6% share). Shell has been supplying domestic gas in Australia from the North West Shelf Venture since 1984 and will increase its share of domestic gas supply in Western Australian when production commences from the Gorgon Joint Venture.

In 2010 Shell and PetroChina jointly acquired Arrow Energy Limited (Arrow), a Queensland coal seam gas (CSG) company with resources in the Queensland Surat and Bowen basins. Shell and PetroChina each hold 50% of Arrow. Arrow has been supplying domestic gas into the east coast market for over 10 years. Arrow will make a separate submission to the Inquiry.

In April 2014, the Boards of Royal Dutch Shell plc and BG Group plc (BG) agreed the terms of a combination of their global businesses. The parties are targeting completion of the transaction around early 2016 and are seeking regulatory approvals in a number of jurisdictions, including from the Foreign Investment Review Board and the ACCC in Australia.

Australia's east coast gas market – supply, demand and pricing

Significant investment in exploration, infrastructure and development of unconventional gas resources has underpinned growth of the CSG to LNG industry on Australia's East Coast. The projects in Queensland in particular are providing Australia with a backbone of critical new gas infrastructure to support a more diverse and mature gas market.

This investment has created a large number of jobs and will create large revenue flows to federal and state governments through export revenue, resource payments and other taxes, which are maximised by large scale field development for LNG. The investments have also provided substantial flow-on benefits to local businesses and the community, and will help to position Australia as the world's largest LNG exporter within the next decade.

Numerous government reports (by Geoscience Australia¹, the Productivity Commission², the Bureau of Resource and Energy Economics³, the Gas Statement of Opportunities⁴) have documented

¹ Geoscience Australia, *Australian Energy Resource Assessment*, 2nd Edition, GA, Canberra 2014.

² Productivity Commission, *Examining Barriers to More Efficient Gas Markets*, PC, Melbourne, March 2015.

evidence that Australia has large proven and unproven conventional and unconventional gas resources in place – around 819 trillion cubic feet – sufficient to meet expected export LNG and domestic market demand for many decades; the challenge is to bring the gas economically to demand centres, whilst complying with Australia’s regulatory standards and structurally high costs. The price of the gas brought to market needs to reflect the cost of production and market dynamics. In this regard, rising prices are not a sign of market failure, rather in the medium to long term, increased prices will stimulate new and further investment in exploration and development, thereby increasing supply.

Australia has been fortunate to experience low priced gas for many decades, mostly because gas delivered to the east coast market was largely associated gas⁵. But Eastern Australian gas production no longer enjoys widespread benefits from co-production of liquids, with the historically liquids-rich Gippsland basin in decline for some time.

Australian unconventional gas is amongst the most expensive gas to produce in the world. It requires large scale development, billions of dollars of investment in new infrastructure, and faces considerable risk from increased costs of exploration and development, as well as regulatory compliance costs. Higher gas prices therefore cannot be attributed solely to the transition of the east coast gas market to now include exports.

It must be recognised that industry costs have increased substantially both globally, and in Australia. IHS CERA cites global capital and operational costs as having doubled since 2000. Finding and development costs for new reserves have increased six-fold – from less than US\$5/barrel of oil equivalent (boe) to over US\$25/boe⁶. In Australia, high drilling costs, poor labour productivity and remote location of operations have all contributed significantly to rising gas prices. Australian exploration and development costs were 2.7 times higher in 2010-2013 than 2007-2010. In Queensland alone, costs increased from an average of \$0.83/GJ in 2011 to \$5.37/GJ in 2013, and average exploration costs (both conventional and coal seam gas targets) increased from less than \$1 million per well in 2008 to almost \$3 million in 2013. Similarly in the Cooper Basin, finding and development costs have doubled from \$3 million per well in 2003-04 to \$6 million per well in 2013-14¹. The price of materials to support exploration and development activity has also increased substantially.

Access to export markets which offer both scale and LNG net back prices is therefore necessary to induce investment to bring otherwise uneconomical gas to market. The reality is that the large scale investments that have occurred in Queensland would not have been possible without access to global markets and LNG net back pricing. Importantly, this additional investment has also provided the domestic market with the opportunity to buy gas that otherwise would not have been economically available. While there can be some perceived transition issues in a move to open markets, several other industries have successfully navigated that shift including iron ore, sugar, wheat, cotton, cattle, and dairy.

Market intervention

The LNG market is a globally competitive one, with many players competing for market share. Supply of gas into domestic markets can help to lower overall investment and supply chain risk.

³ Bureau of Resource and Energy Economics, *Eastern Australian Domestic Gas Study*, Canberra, 2014.

⁴ Australian Energy Market Commission, *Gas Statement of Opportunities*, 2015.

⁵ Associated gas is gas found with deposits of petroleum, usually in the form of a gas cap sitting above the oil reservoir. Associated gas was traditionally flared (burned off before producing oil) prior to processing and supplying this gas into the market.

⁶ EnergyQuest 2014, *Oil and Gas Industry Cost Trends*, commissioned by APPEA.

However, this must be done on a competitive basis and recognise that in a globally integrated market, industry competes for capital.

Shielding domestic industries from world energy pricing, through market interventions, will ultimately come at a cost to the Australian economy and lead to lack of supply through reduced investment, and potentially even higher prices due to the investment lag in supply response to market price signals. In the longer term, policies that effectively act to subsidise gas costs simply result in some sectors of the economy having to adjust to market prices later, with all of the disruption and externalities that such transitions involve.

In the short- and long-run any discrepancies in the supply/demand balance being experienced in the east coast gas market cannot be fixed by market interventions such as domestic gas reservation policy. In Shell's view these types of policies have the potential to put additional pressure on the market and will discourage rather than encourage further investment in new capacity, and stifle innovation aimed at reducing costs. Refer Box 1.

BOX 1: Case Study – Domestic Gas Reservation in Egypt

Markets, irrespective of where they are located globally, are the same. In this regard it is important to draw on the experiences of other countries that have used government intervention, such as domestic gas reservation policy, to control supply and price of gas into domestic markets.

Egypt is a case in point, where before 1993 the country had significant gas resources in place. In 1993, the Egyptian government linked gas to oil pricing, which resulted in significant increase in exploration and an increase in the gas reserve base. Then in 2000, the government introduced a 67% gas reservation policy and heavily subsidised gas prices, so that gas users were protected from paying full price.

The result was that the domestic market became dependent on cheap gas, rapidly using up the full quantity of reserved gas. The reservation policy also removed incentive for further exploration and investment, and so there was no further expansion of the reserve base. In June this year, Egypt imported LNG from Australia.

Market based approaches generate economically efficient investment, helping to create jobs and economic wealth for both state and federal governments, as well as local communities.

While advocates of Western Australia's domestic gas reservation policy consider it a success, it is necessary to understand that domestic gas reservation policy has been applied by the Government of Western Australia in negotiated outcomes with LNG proponents on a case-by-case basis, and historically at times when, despite the imposition of reservation, Australian LNG projects were still competitive with other potential international LNG investments.

However today, as already discussed, the LNG market is increasingly competitive and the cost of development of Australian resources has increased significantly. Anecdotal evidence suggests that smaller players in Western Australia will not produce gas because of concerns that supply from large projects subject to domestic gas reservation could be brought into the market at any time.

With prices at levels sufficient to induce investment and regulatory approvals processes that support safe, timely and efficient development of unconventional gas projects, we will eventually see more projects coming on line. This means more supply, and an eventual downward pressure on prices. But this will not happen if price or supply is constrained – the market needs to do what it does best, which is to provide the right investment signals to balance demand and supply.

The current experience of the global oil market has been that a substantial increase in global supply has resulted in significant downturn in global oil prices. With regard to the Australian domestic gas market, we are unlikely to see the historically low price levels of earlier decades for the reasons outlined in this submission.

Unfortunately, expectations of certain industrial gas users appear to be anchored in historical price structures that are no longer realistic. Historical domestic gas contracts based on cost and consumer price indexation have not kept pace with industry cost trends. LNG net back pricing better reflects industry cost trends over the longer term, and reduces investment risk to developers. This is an important consideration for projects that require significant upfront capital expenditure, with long lifetimes and long payback periods.

Regulation and access to resources

Rapid growth of the energy sector has resulted in inefficient and often changing over-regulation that imposes significant cost to companies, adding to production costs. Whilst regulation of the sector is critical to ensure best practice in the industry, in Shell's experience through its shareholding in Arrow, current regulatory obligations come at a significant cost to the companies.

Much of the regulation is duplication between state and federal government legislation that adds very little additional safety or environmental benefits. Further streamlining and reduction in red tape would help to reduce development costs and encourage further investment in the industry, although it is recognised that successive Queensland Governments have worked hard to modernise the legislative framework governing the CSG industry and the large onshore footprint that CSG projects represent.

Access to the significant undeveloped gas resources in Australia would help in balancing the supply and demand needs of the east coast gas market. The moratoria on development of unconventional gas resources currently in place in the states of New South Wales and Victoria constrains the ability of the market to respond effectively – despite the price signals.

The large scale nature of unconventional gas developments necessarily requires access to a large geographic spread of reserves. In Shell's experience – again through Arrow – the current tenure process was never designed for application of this kind. This is why a holistic approach to tenure administration is important.

'Use-it or lose-it' policy approaches to retention leases, or reservation of tenure for domestic gas purposes, needs to balance the provision of reasonable timeframes and exploration expenditure requirements against turnover of resources.

Major investments and infrastructure need to be built around large-scale foundation projects with the lowest cost gas being developed first to support new infrastructure, and more marginal gas to be developed later around existing infrastructure. It is important to understand that large-scale foundation projects also facilitate future domestic gas supply opportunities. Without this scale and portfolio approach, the risks associated with investments in infrastructure (pipelines and gas processing facilities) becomes prohibitive.

In the same regard, Shell does not support the claim that vertical integration of domestic gas producers with LNG export projects impacts the incentive to supply gas to domestic users. Large investment is required to develop resources to sufficient maturity to bring to market, including overcoming significant technical challenges to de-risk projects and to meet regulatory compliance costs. It is important to understand that shareholders require a return on the investments made through the development phase of a project.

Opportunities for efficiency in the east coast gas market

Shell recognises that there is room for improvement in the market. We support transparency in the availability of information regarding reserves and well head data, or pipeline capacity, providing this does not compromise commercial in confidence dealings between market participants.

Efficient access to infrastructure can be a positive outcome for the market, but this must occur on commercial terms. Limited government intervention should only apply in the event of demonstrable market failure.

Shell believes that industry collaboration offers the potential to lower development costs and increases the ability of resources to be brought to market. By lowering development costs, more gas resources become economic and can be supplied to the market.

The east coast gas market is complex given the supply, demand and infrastructure balances. Market-based, commercial solutions provide the best opportunity to improve efficiency in the market – not interventionist policy or regulation. Access to relevant information, efficient trading hubs and access to infrastructure, under the conditions described above, all have a role to play in this regard.