Public Submission

ACCC East Coast Gas Inquiry

BHP Billiton welcomes the opportunity to make a submission into the Australian Competition & Consumer Commission's (ACCC) Inquiry into the East Coast gas industry.

BHP Billiton is a leading diversified resources company. We have a global footprint with a core portfolio of 19 assets in eight countries across three continents. We are among the world's top producers of major commodities including coal, copper, iron ore, nickel and uranium, and we have substantial interests in oil and gas. Our operations supply and meet the resources demands of developed and emerging economies around the world.

BHP Billiton holds significant investments in Australian oil and natural gas in Victoria and Western Australia. In Victoria this includes:

- A 50 per cent interest in the Gippsland Basin Joint Venture (GBJV) operated by Esso Australia Resources Pty Ltd (Esso Australia) which supplies crude oil, butane, propane and ethane to local and export markets. Natural gas is piped onshore to the joint venture Longford processing facility from which natural gas is jointly marketed to domestic buyers. The GBJV has reliably supplied Eastern Australia with natural gas for more than 45 years.
- A 32.5 per cent interest in the Kipper unitisation Joint Venture, which is located in the Gippsland Basin and operated by Esso Australia, from which BHP Billiton's share of natural gas will be jointly marketed with Esso Australia.
- A 90 per cent operating interest in the Minerva offshore gas venture located in the Otway Basin from which BHP Billiton separately markets its share of natural gas to domestic buyers.

As the largest producer of gas for Australian domestic buyers, and as a major energy user, we have expressed our support for the gas market energy reforms that create a framework for robust competition and greater transparency that allows supply to flow into the market where there is demonstrated demand. BHP Billiton supports free markets where price is set by the supply of and demand for gas.

This submission responds to selected topics listed in the ACCC's Issues Paper by outlining our views on:

- changes affecting the East Coast domestic gas industry;
- industry aspects including supply, pricing and terms, market development, and joint marketing; and
- gas market infrastructure, including pipeline services and storage.

Changes affecting the East Coast domestic gas industry

The gas industry in Eastern Australia is undergoing a fundamental change largely due to the emerging Coal Seam Gas (CSG) and export Liquefied Natural Gas (LNG) industry.

Three new LNG projects in Queensland (Qld) are either producing or under construction and are expected to ramp up production in the 2015-17 period leading to a three-fold increase in the size of the gas industry in Eastern Australia as noted in the Issues Paper. It is also linking the East Coast domestic market to the Asia Pacific LNG market for the first time.

The East Coast domestic gas market is increasingly interconnected by pipelines, so the advent of the LNG projects and the resulting increase in supply and demand is influencing domestic gas market prices across the whole East Coast gas market including those prices seen by Victorian producers in Bass Strait.

BHP Billiton supports free markets for all its commodities where prices are set by supply and demand fundamentals. It is this market mechanism that will ensure the long-term requirements of the consumers are met most efficiently. Domestic gas prices are a result of supply and demand fundamentals and the fact that the Eastern Australian gas market is functioning effectively is evidenced by the number of gas transactions announced recently (see section *Negotiation of new gas supply agreements)*. BHP Billiton submits there is no demonstrated Eastern Australia gas market failure. A fundamental premise of energy market reform and comprehensive energy policy development is that, in the absence of clear market failure, markets should be allowed to work.

The East Coast gas industry is maturing and BHP Billiton supports the ongoing energy reform process.

Negotiation of new gas supply agreements

In the last two years BHP Billiton and Esso Australia have concluded multiple gas sale agreements for supply to the East Coast domestic gas market from the GBJV. These agreements have been both short and long term, to different market sectors (retail, industrial, power generation), large and small gas quantities and for gas sales both into Victoria and NSW.

This is evidenced by transactions executed with AGL in April 2015, Orica in November 2013, Origin Energy in September 2013 and Lumo Energy in May 2013. Other gas sale contracts have been concluded but not publicly announced.

The GBJV continues to be actively engaging with customers for the sale of new supply, marketing gas to new and existing customers on competitive commercial terms.

In competing for new business, we have also seen other gas supply opportunities captured by our competitors, demonstrating a healthy market in which buyers have had multiple options in securing gas supply.

These transactions demonstrate that significant quantities of natural gas continue to be made available and contracted in the East Coast domestic gas market and that parties have been able to agree mutually acceptable terms including price.

Rising domestic gas prices

The price of domestic gas is an outcome of supply and demand. Should these market dynamics provide a trigger for new investment, supply will respond accordingly.

With increasing connectivity between Australian domestic gas and LNG markets, both the price to induce new supply and the impact of export gas prices, will influence domestic gas prices. The level of influence will be driven by a variety of supply and demand factors, both in local and LNG markets, together with any constraints in the gas pipeline system.

From the supply perspective, the increasing role of LNG markets in commercialising Australia's natural gas resource endowment will drive the development of incrementally higher cost resources to meet new market demand. For mature projects additional supply can be higher cost as the remaining undeveloped fields can be leaner, deeper, smaller and have higher impurities. It is imperative that markets are allowed to operate transparently to facilitate the most efficient development of potential new gas supply sources. Restraints on resource access and development will result in escalating costs and prices.

On the demand side, in addition to the gas demand increase due to LNG export projects, the price of gas is also influenced by the presence of gas-on-gas competition and buyers' alternative fuel and energy options. This includes the number of alternative supply sources, the ability to substitute gas with other fuels and the infrastructure costs associated with the delivery of different forms of energy. Other factors such as population growth, economic activity, power generation (including government sponsored schemes such as the RET), weather/seasonal demand and access to gas transmission systems will also influence pricing.

Given the significant variability in the factors that impact supply and demand conditions within and across gas markets, it is important to understand that there will be volatility in regional gas price formation over time and that this in itself is a reflection of a well-functioning market.

In the last few years, many public announcements for new gas sale contracts (such as some of those noted earlier) have stated that pricing is linked to international crude oil prices. With the start-up of three LNG projects in Qld and the Eastern Australian domestic gas market being increasingly interconnected by pipelines, the industry is now linked to world energy markets and it is inevitable that pricing structures will be influenced by that linkage. As global markets evolve and mature towards liquid indexes, we would expect, and encourage, domestic price structures to move in line with these changes.

Changes in non-price terms and conditions of gas supply agreement

While BHP Billiton has historically contracted gas on both short (< 1 year) and long (> 1 year) term basis, as markets evolve and mature, contract terms are shortening as both buyers and sellers prefer the flexibility of contracting on a shorter term basis rather than locking themselves into long term positions. As a result, we have seen both buyers and sellers seek to move away from the historic practice of long term contracts with regular price reviews which may not adequately reflect gas market conditions over time. BHP Billiton has witnessed this change in other commodity markets.

Historic gas sales contracts, which included significant flexibility for the buyer, have locked-in significant amounts of plant capacity that cannot be used to bring additional supplies of gas to the market. Recent contracting has seen a reduction in the amount of volume flexibility potentially allowing additional supply to be available to the market from existing facilities.

Availability of information and trading liquidity

The Australian energy market is less liquid and mature than the significantly larger energy markets in the United Kingdom (UK) and United States (US), where transparency and liquidity have taken over 20 years to develop. Whilst signs in Australia are encouraging, particularly in Eastern Australia, there are significant hurdles to the development of a domestic liquid spot market, such as the small size of the market; the limited number of participants compared to international markets; and the lack of suitable trading platforms.

The focus of Australian government policy should be on creating a framework for robust competition and greater transparency that allows supply to flow into the market where there is demonstrated demand. BHP Billiton supports the promotion of increased market transparency and liquidity that in turn supports the optimised allocation of capital investment.

In this regard, BHP Billiton supports the market reform initiatives that are being progressed across Australian gas markets including the:

- Gas Statement of Opportunities (and the Electricity Statement of Opportunities);
- Gas Bulletin Board;

- Development of wholesale trading hubs (such as Wallumbilla); and
- Development of Short Term Trading Markets (STTM) in Eastern Australia.

These initiatives should be harmonised (by leveraging the processes, systems and implementation experience of the Australian Energy Market Operator) across all States so common processes and standards can be developed by industry participants. This will further support the transition to more liquid markets over time.

Spot market development

BHP Billiton supports the development of spot markets across global commodity markets and is active in promoting market transparency, development of standard contracts and short-term sales in Australia.

While the STTM and Victorian Declared Wholesale Gas Market (DWGM) daily imbalance markets are often compared with international spot markets, we agree with the point raised in the Issues Paper that these comparisons are not valid. Whilst these short-term market mechanisms set a clearing price for the daily imbalances, they have few features of a vibrant spot market, including daily, day ahead, monthly and seasonal prices and parallel financial markets.

BHP Billiton supports the concept of transitioning or complementing the STTM and the Victoria spot market with a common supply hub model to promote development of market liquidity. At the same time there is a need to ensure that the regulatory environment in which those markets operate does not inhibit market entry.

Joint Marketing

BHP Billiton gas joint ventures across Australia have been meeting the needs of international and domestic consumers in a competitive way for more than 45 years. Our marketing consists of both separate and joint venture arrangements developed as a result of both market and project driven factors.

Joint marketing has been adopted and maintained by BHP Billiton for the GBJV project as it ensures alignment of sales and production activities with investment and expansion decisions. It ensures gas plant capacity is utilised efficiently and production is maximised. It has been the most effective method of commercialising natural gas taking into account the substantial capital costs and significant complexity and risks inherent in such a large scale offshore oil and gas project encompassing multiple oil and gas accumulations. These costs are ongoing; investment in recent years by the GBJV for the Kipper Tuna Turrum development alone has totaled over A$5 billion in field development and gas processing facilities.

In the context of the GBJV project, BHP Billiton considers that it would increase costs and risks and reduce efficiencies to attempt to introduce gas balancing arrangements to enable separate marketing. In turn, this would potentially result in lower availability of gas for domestic users and less flexible supply terms. This is due to both market and project driven factors:

- The Eastern Australian domestic gas market is characterised by a relatively small number of large customers, generally contracting on an infrequent basis and this means an under-lifting party would face difficulty in securing sales to regain balance in kind under a gas balancing agreement.
- While contract durations have shortened in recent times, domestic spot and short term trading markets remain thin. The market has limited aggregators, brokers or necessary financial products. These issues add to the costs and risks of potential gas balancing agreements.
- Price discovery and price negotiations remain difficult in a domestic market that is still developing. Potential cash balancing arrangements (which are generally not favoured in any event) would be problematic.
- Large seasonal variances in gas demand between summer and winter in south eastern Australia complicate gas balancing. This is compounded by limited storage which is likely to be insufficient to accommodate significant imbalances.

- As a mature project, reserve risks and uncertainties become increasingly significant. Fields will be smaller and more complex and relatively more costly to develop over time. This makes balancing arrangements relatively more difficult and risky.

The GBJV joint marketing of natural gas has occurred for several decades through periods of both lower gas prices and higher gas prices. The GBJV marketing arrangements have not been a cause of changed industry dynamics and increased gas prices, and with the development of Qld gas resources, the GBJV's share of the Eastern Australian domestic gas market is expected to decline.

Gas Transportation and Storage

Pipeline Services

Increasing interconnectivity of gas pipelines and development of gas storage projects is a relatively new development in Australia. For the gas pipeline industry this has led to the emergence of a two tier regulatory framework for 'covered' and 'uncovered' pipelines. As consolidation takes place in the gas pipeline industry – against a backdrop whereby 'covered' and 'uncovered' pipelines can both operate in an interconnected system – there is potential for inefficient transportation market outcomes as pipeline operators preferentially position one regime over the other. We believe there is an opportunity for Australian energy regulators to consider a more uniform approach to gas pipeline regulation in a manner similar to that which applies in other markets such as the UK and the US.

Storage

The role of gas storage facilities in supporting fully functioning gas markets is important, particularly in the context of highly seasonal demand that occurs in south eastern Australia. Typically, early in the development of markets, effectively storage is supplied through additional capacity at upstream facilities. As oil and gas fields and markets mature market pricing mechanisms subsequently develop to recognise seasonal (and even daily) differences in prices and an environment is created to incentivise investments in gas storage facilities over upstream investment.

Storage capacity could effectively maximise the deliverability by injecting during low demand seasons and extracting during high demand (winter) seasons. This can also effectively reduce capital requirements associated with new supply development as it will enable new facilities to produce at constant rates and simultaneously improve security of supply and have significant potential to support market liquidity. Over time these factors can lead to the development of sophisticated gas storage networks, such as in the US and the UK. But storage can be expensive and appropriate market dynamics are required to stimulate development.

The East Coast gas industry is at the early stage of gas storage development – the Western Underground Gas Storage facility in Victoria has been in operation since 2002. Other new storage facilities are being progressed, such as the Newcastle LNG facility, and other facilities are being considered associated with the development of Qld's LNG industry. However, as it stands the Eastern Australian storage capability is small compared with the seasonal swings and other demand variability in the domestic gas market.

The Wallumbilla supply hub may also assist the development of seasonal pricing. BHP Billiton also supports the need for greater price transparency in regards to pipeline capacity trading, line-pack (Park and Loan) services and the cost of storage services.

Conclusion

There are significant changes underway in the East Coast domestic gas market driven by the development of export gas projects and resulting in a three-fold increase in industry demand. While BHP Billiton understands concerns have been raised regarding the impact on domestic gas prices, we believe the market is responding positively and as might be expected to such a large demand increase with new domestic supply contracts being executed by the GBJV and other suppliers.

Pipeline transportation is adapting to the new supply and demand loads and geographical requirements. BHP Billiton believes the market dynamics arising are a natural part of this adaption process and are critical to encouraging efficient and cost effective supply growth necessary to meet the new industry demand.

Government action should be directed at the policy level to facilitate an efficient energy market. Any further intervention should only be in response to demonstrated market failure and informed by cost-benefit analysis. Government moratoria and other unnecessary restrictions on supply lead to distorted market dynamics and reduced incentives for investment. BHP Billiton continues to oppose gas reservation for these reasons.

Though the market is responding to relevant dynamics there is still a long way to go before it begins to approach the liquidity seen in other gas markets such as the US and UK. BHP Billiton supports initiatives to increase liquidity, transparency and market efficiency such as market trading hubs which will assist this development.