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21 October 2016

Mr Ian Blayney MLA  
Chair  
Legislative Assembly Economics and Industry Standing Committee  
Level 1  
11 Harvest Terrace  
WEST PERTH WA 6005

Dear Mr Blayney

**RE: PROCEEDING – THE COMPILATION OF THE GAS STATEMENT OF OPPORTUNITIES**

The Australian Petroleum Production & Exploration Association (APPEA) is the peak national body representing the oil and gas exploration, development and production industry in Australia. The Association's members account for more than 95 per cent of Australia's petroleum production and the vast majority of exploration. APPEA's membership also includes many companies providing services to the industry.

APPEA welcomes the opportunity to contribute to the Economics and Industry Standing Committee's Proceedings into the *Compilation of the Gas Statement of Opportunities in Western Australia*. This letter supplements a briefing note prepared by APPEA on the state of the WA gas market that has been previously provided to Committee members (attachment 1).

**Gas Market Transparency**

APPEA has been an active participant in the gas market reviews and reforms undertaken by Government which have led to the development of a Gas Bulletin Board (GBB) and Gas Statement of Opportunities (GSOO) for the WA gas market. APPEA was a member of the Western Australian Government's Gas Supply and Emergency Management Committee (GSEMC) and was a strong supporter of the GSEMC's recommendations to give effect to a GBB and GSOO in WA.

APPEA also has extensive experience in national energy market reforms which established a GBB in 1 July 2008 and a GSOO in December 2009. APPEA helped develop both initiatives through its membership of the former Ministerial Council on Energy's Gas Market Leaders Group.

While recognising that Australia's gas market is made up of distinct regions, APPEA has consistently advocated for the benefits of aligning the WA GBB and GSOO with the national GBB and national GSOO operated by the Australian Energy Market Operator (AEMO). As such, we supported<sup>1</sup> the recent move by the Minister for Energy that saw the AEMO assume the role of operator of the WA Gas Services Information regulatory package. APPEA continues to engage with the WA stakeholder forums now facilitated by AEMO, and is keen to ensure that the previous positive contribution of the Independent Market Operator (IMO) and its staff continues under the new arrangements.

<sup>1</sup> See: [www.appea.com.au/media\\_release/appea-welcomes-move-to-national-gas-market-information](http://www.appea.com.au/media_release/appea-welcomes-move-to-national-gas-market-information).

## Recent Developments in the WA Domestic Gas Market

The WA domestic gas market continues to evolve, with new customers, new suppliers and new market mechanisms adding to a maturing market. Some recent developments of note include:

- The commissioning of the 270 kilometre Fortescue River Gas Pipeline that allows FMG to cut costs by converting the power station at its Solomon hub from diesel to gas, saving FMG about US\$20 million (A\$25 million) per year<sup>2</sup>.
- The commissioning of the 293 kilometre Eastern Goldfields Pipeline (EGP) converting the Sunrise Dam and Tropicana mines' power generation infrastructure from liquids to natural gas.
- The development of the WA GBB, providing increased levels of transparency around flows, volumes and capacity both upstream and downstream.
- The development and growth of the gasTrading™ spot market in WA providing increased transparency around price and availability of gas for a small proportion of the domestic market.
- New onshore gas supply facilities coming on stream via the Red Gully and Waitsia developments, providing additional energy security, regional development and royalty income streams for the WA Government.
- The cessation of joint marketing of gas from the North West Shelf Joint Venture (NWSJV), adding to the growing list of domestic gas suppliers operating in WA.
- The recent short-term gas supply deal between Synergy and Woodside, the first contract announced following the cessation of NWSJV joint marketing.
- Chevron's 2016 domestic gas sales agreement with Alinta Energy supplied from the Wheatstone project.

These developments support APPEA's long standing position that government intervention in the gas market through its reservation policy is both unnecessary and counterproductive. The independent WA Economic Regulation Authority Inquiry into Microeconomic Reform reached a similar conclusion in 2014, as did the ACCC in its recent inquiry into the East Coast Gas Market. There is also tangible evidence now emerging of the impact of reservation policy on upstream investment decisions<sup>3</sup>.

## The Compilation of the WA Gas Statement of Opportunities

There are many variables in economic forecasting, and in WA the uncertainties relating to the extent of government intervention in the market through its reservation policy adds an additional challenge. The challenge for forecasters like the AEMO is to develop robust methodology and defensible assumptions in an impartial way. It is a given that not all parties will agree with the forecasts, the methodology and/or the assumptions used in economic modelling, often not on their merits, but as these may be at odds with their own position and viewpoint. To that end, APPEA supports a commitment to continuous improvement in the compilation of the GSOO ensuring that the processes and tools that AEMO relies upon are in line with best practice.

An example of APPEA's commitment to this approach is a report<sup>4</sup> commissioned from well-respected Australian-based energy advisory firm, EnergyQuest, to review the methodology and

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<sup>2</sup> See: [www.mediastatements.wa.gov.au/Pages/Barnett/2015/05/New-gas-pipeline-to-FMGs-Solomon-mines.aspx](http://www.mediastatements.wa.gov.au/Pages/Barnett/2015/05/New-gas-pipeline-to-FMGs-Solomon-mines.aspx).

<sup>3</sup> See: [www.au.news.yahoo.com/thewest/wa/a/28142607/awe-joins-gas-policy-critics/#page1](http://www.au.news.yahoo.com/thewest/wa/a/28142607/awe-joins-gas-policy-critics/#page1).

<sup>4</sup> See: [www.appea.com.au/wp-content/uploads/2013/11/EnergyQuest\\_IMO-Report\\_Final.pdf](http://www.appea.com.au/wp-content/uploads/2013/11/EnergyQuest_IMO-Report_Final.pdf).

assumptions used in the first GSOO released in July 2013, and to provide recommendations for the IMO to consider when updating the modelling for subsequent reports.

A key recommendation from the EnergyQuest report is the need for greater transparency of assumptions, the rationale behind them and an explanation of the methodology behind the forecasts and commentary explaining the results. It is worth noting then that the IMO, and now the AEMO, has taken steps to continuously improve the methodology and transparency of assumptions in subsequent and future iterations of the GSOO's. These steps are noted in the opening sections of each GSOO.

APPEA welcomes the statements<sup>5</sup> made by the AEMO in its appearance before the Committee of the intent to integrate best practices inherited from the IMO's GSOO team with best practices from AEMO's east coast GSOO team. Developing a consistent national approach to the assessment of Australia's energy markets is a positive step for domestic and foreign investors seeking to understand potential opportunities in upstream supply and downstream demand for natural gas.

### **Independent Analysis**

The clear benefit of an organisation like the AEMO in producing an annual GSOO for Australia's gas markets lies in its independence. The AEMO's governance structure is relatively unique in global energy markets, with its joint government/industry membership model. This independent governance structure, combined with clear and transparent regulatory requirements, means that the AEMO is well placed to produce a balanced assessment of gas demand and supply and highlight the potential opportunities on both sides of the market.

### **Summary**

Gas markets on both sides of the country are in a constant state of evolution. Government and industry have vital roles in ensuring the markets work efficiently and the joint/industry models and forums provided by AEMO are a good basis for continuous improvement and stakeholder engagement. Government should resist self-interested criticism from industries not pleased with the outcomes of these processes and focus its efforts on providing stable regulatory frameworks that encourage, not stifle, investment in energy markets.

APPEA appreciates the opportunity to contribute to the Committee's proceedings. Please contact Mr Adam Welch, Senior Policy Adviser, on 9426 7205 or [awelch@appea.com.au](mailto:awelch@appea.com.au) should you or your staff wish to discuss any aspect of APPEA's comments.

Regards,



**Stedman Ellis**

Chief Operating Officer – Western Australia

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<sup>5</sup> See:

[www.parliament.wa.gov.au/Parliament/commit.nsf/\(Evidence+Lookup+by+Com+ID\)/4118A2EFC3C872F24825802D00096B29/\\$file/14560871.pdf](http://www.parliament.wa.gov.au/Parliament/commit.nsf/(Evidence+Lookup+by+Com+ID)/4118A2EFC3C872F24825802D00096B29/$file/14560871.pdf).

## BRIEFING NOTE

**DATE:** 23 September 2016

**SUBJECT:** WA Domestic Gas

### KEY POINTS

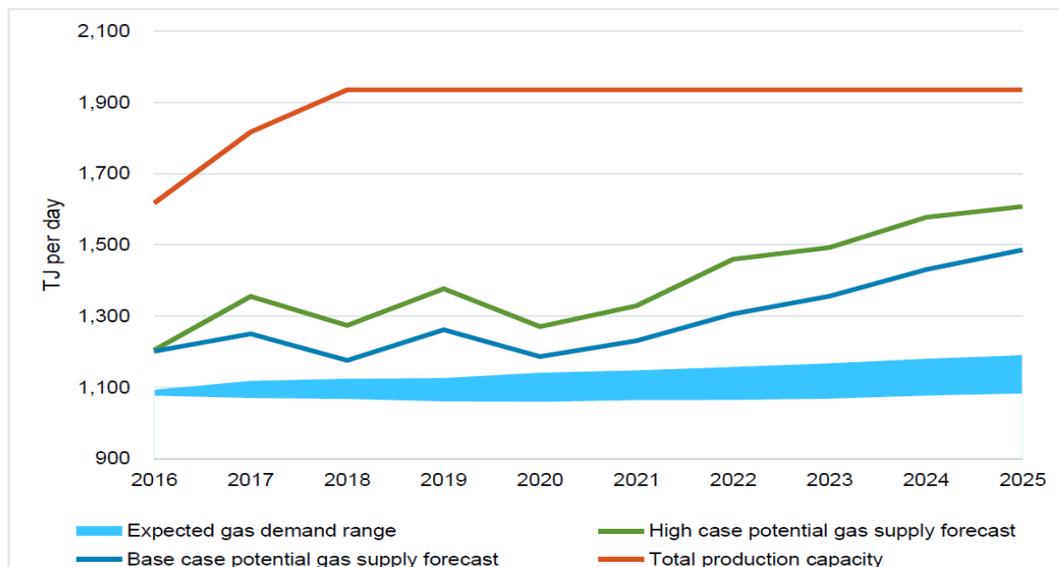
- The WA gas market is facing a period of oversupply and flat-to-weak demand.
- WA gas prices range from \$3.95 (spot) to \$5.97/GJ (new onshore), with a mean of \$4.94. East coast gas prices range from \$5.08 to \$7.55/GJ. FOB LNG exports are \$6.35/GJ.

### WA'S SUPPLY / DEMAND BALANCE

The most recent (Nov 2015) WA Gas Statement of Opportunities (GSOO)<sup>1</sup>, developed by the WA Independent Market Operator (prior to AEMO assuming its role in WA), made a number of key findings:

- **The domestic gas market remains in excess supply**
  - Gas supply is at least 107 TJ per day greater than demand over the next four years.
  - This excess supply is forecast rise to more than 400 TJ per day by 2025 as several large domestic gas production facilities commence operation (Gorgon/Wheatstone).

Figure ES.1: Domestic gas market balance, 2016 to 2025



Source: NIEIR and IMO forecasts, 2015

<sup>1</sup> See: [www.aemo.com.au/Gas/National-planning-and-forecasting/WA-Gas-Statement-of-Opportunities](http://www.aemo.com.au/Gas/National-planning-and-forecasting/WA-Gas-Statement-of-Opportunities)

- **Domestic gas supply has been affected by falling oil prices but is forecast to grow over the forecast period**
  - The recent fall in international oil prices has reduced domestic gas prices and caused uncertainty in the market.
  - Gas producers will be less willing to supply the domestic market in the short-term, until prices increase (or stabilise) or additional production capacity comes online.
- **Domestic gas demand is forecast to grow very slowly**
  - Domestic gas consumption will increase by less than 0.9 per cent per annum over the forecast period (high case), remaining almost flat (0.1 per cent) in the base scenario.
  - The decrease in gas-fired electricity generation in the South West Interconnected System (SWIS) is only partially offset by increases in mining demand.

Table ES.2: Forecast demand (TJ per day), 2016 to 2025

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Ave. growth p.a. (%)
Base	1,077	1,070	1,068	1,061	1,059	1,064	1,065	1,068	1,077	1,083	0.1
High	1,093	1,118	1,124	1,126	1,141	1,148	1,157	1,167	1,180	1,190	0.9

Source: NIEIR forecasts 2016 to 2025

- **The end of joint marketing will bring greater competition to the supply market and may provide Gas Market Participants the opportunity to rebalance their gas requirements**
  - The end of joint marketing authorisation for the NWS and Gorgon JVs will increase the number of individual gas suppliers.
  - Greater competition will provide opportunities for customers to renegotiate their gas requirements, or secure a more competitive price.
- **There is greater opportunity for gas suppliers in the north of WA than in the South West**
  - Several resources projects in regional WA are expected to commence operation or increase gas consumption:
    - Sunrise Dam and Tropicana gold mines;
    - Newman Power Station (electricity supply for Roy Hill);
    - South Hedland Power Station;
    - Pilbara Temporary Power Station; and
    - expansion of Sino Iron magnetite mine.

## WA DOMESTIC GAS PRICES

EnergyQuest's August 2016 quarterly report presents the following realised gas prices for WA (A\$/GJ):

- Woodside - \$4.94
- Empire Oil & Gas - \$5.97
- WA Spot - \$3.95

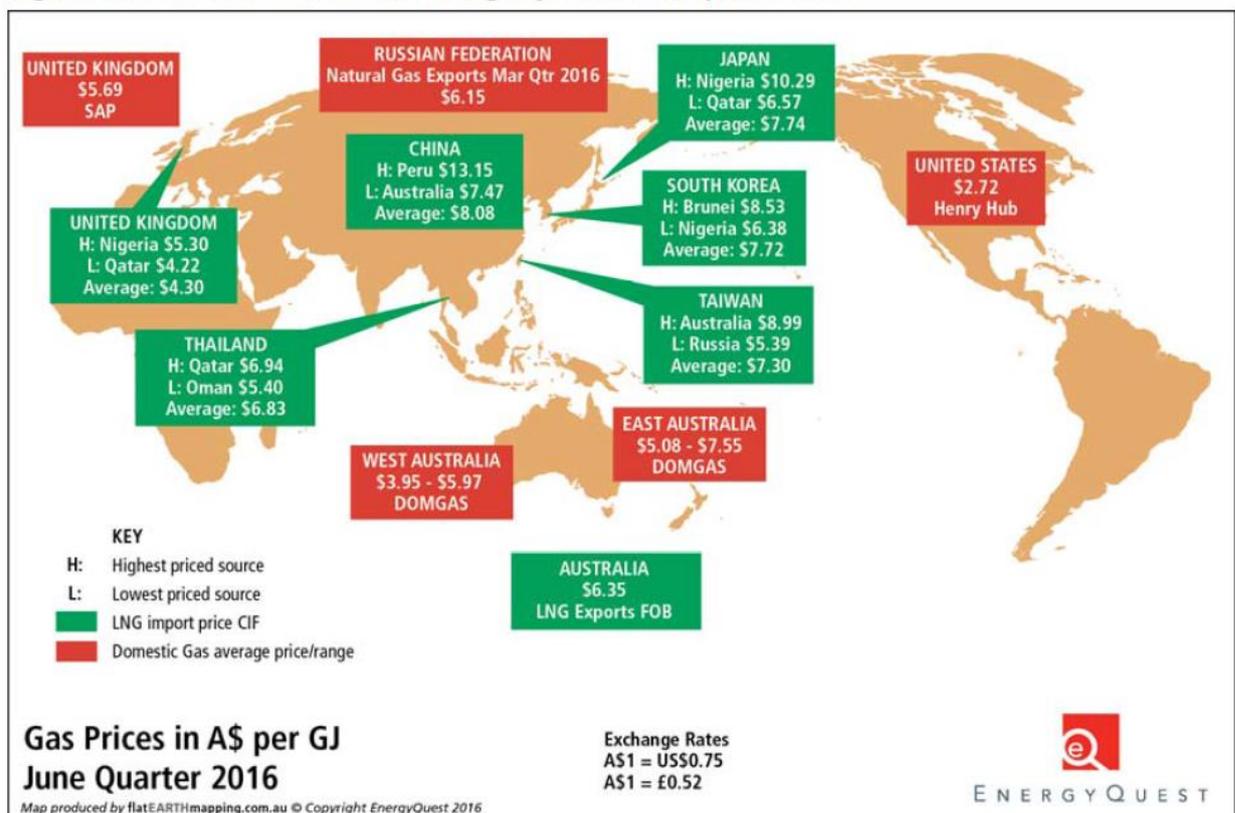
WA's DMP reports a volumetric average domgas price of \$4.89/GJ for calendar year 2015<sup>2</sup>.

Anecdotally, Empire's price is likely to be more reflective of the present contract prices on offer in WA.

In comparison, EnergyQuest reports east coast gas prices ranging from \$5.08 to \$7.55/GJ.

Average Australian LNG export prices are reported as \$6.35/GJ (FOB).

**Figure 18 International and Australian gas prices, June quarter 2016**



Source: EnergyQuest

<sup>2</sup> See: [www.dmp.wa.gov.au/About-Us-Careers/Latest-Statistics-Release-4081.aspx](http://www.dmp.wa.gov.au/About-Us-Careers/Latest-Statistics-Release-4081.aspx)

## WA DOMESTIC GAS RESERVATION OBLIGATIONS

A summary of WA's domestic gas reservation obligations was presented in the first WA GSOO in July 2013<sup>3</sup>:

**Table 33 – Domestic Obligations Applicable to Western Australia LNG Projects, 2013**

Project	Domestic Gas Obligations
North West Shelf JV	State Agreement: 5,064 PJ to be supplied over the life of the project, commitments are due to be met around 2014.*** Provisions are understood to exist in the revised agreement for further supplies to be negotiated.
Gorgon JV	State Agreement: 2,000 PJ supplied over the life of the project. Domestic gas facility with a 300 TJ/day capacity will be constructed onshore. Delivery of 150 TJ/day is expected to commence in 2016 with a further 150 TJ/day to be supplied by 2021. Domestic gas supply is subject to commercial viability provisions.*
Pluto JV	Reservation Policy: 15% of LNG production to be supplied with a commencement date five years after first LNG export (shipments commenced May 2012) or after 30 million tonnes of LNG has been shipped. Mode of domestic gas supply delivery is subject to further negotiations and commercial viability provisions.
Wheatstone JV	Reservation Policy (Domestic Gas Producers Agreement): Proponents are required to construct a domestic gas plant with production capacity equivalent to 15% of total LNG production. Consistent with the domestic gas policy, all producers are required to make available domestic gas to domestic consumers by reserving and marketing gas equivalent to 15% of their share of LNG production.^
Buru Energy and Mitsubishi	State Agreement: Objective to supply 1,500 PJ over the first 25 years of operation.**In the event of LNG export, the JV partners are obliged to make available domestic gas consistent with the domestic gas policy.^ The JV partners are required to submit a proposal for development of domestic gas facility and pipeline by 30 June 2016. Mode of domestic gas supply delivery is subject to further negotiations and proving up sufficient reserves.%

**Source:** EISC (2011), DSD, Chevron Australia, Verve Energy and Buru Energy's corporate websites. \* Most of the first tranche of supply has already been contracted to Verve Energy and Synergy. \*\*This is subject to the JV proving the availability of sufficient reserves, project technical or commercially viability of the project. Buru Energy has the option of seeking an 18 month extension of time to submit a proposal or terminating the State Agreement on or before 31 March 2016. ^Information provided by DSD. \*\*\*According to SKM-MMA (2011) and Grattan Institute, SECWA only contracted 3,023 PJ of the 5,064 PJ, the remainder is reserved for domestic use. Frontier Economics (2010) and DSD report this constraint is no longer binding on the NWS JV. Information provided by DSD indicates the NWS JV will continue to provide over and above this obligation. Information is also on Verve Energy's website, Verve News, 30 Nov 2011, <http://www.verveenergy.com.au/news/201111>, accessed 10 May 2013 and DomGas Alliance (2013) outlines domestic gas supply to Verve is anticipated to end in the 2016 to 2017 period. %This agreement has been passed by the WA Parliament, see Premier's Media Statements (2013).

Subsequent to the publication of the above table, the NWSJV has signed extensions to its state agreement that:

- continues the obligation to market 15% of new gas resources being developed for LNG export; and
- places a 15% reservation obligation on any third party gas processed through the NWS facility.

While the WA governments reservation policy promotes flexibility and good faith marketing efforts in considering if, when, and how much gas supply may enter the domestic market, this uncertainty hinders domestically focused producers such as Santos, Quadrant, Origin and AWE, who find it difficult to have line of sight into future supply opportunities.

<sup>3</sup> See: [www.acmo.com.au/Gas/National-planning-and-forecasting/WA-Gas-Statement-of-Opportunities](http://www.acmo.com.au/Gas/National-planning-and-forecasting/WA-Gas-Statement-of-Opportunities)