INFORMATION

Review of the Victorian declared wholesale gas market

Draft final report released for consultation

The AEMC is recommending changes to the Victorian declared wholesale gas market that would integrate it with the broader east coast market. The reforms would give market participants greater ability to manage price and volume risks, provide market signals for pipeline investment, and improve trading across the east coast market.

Why are the reforms necessary?

The declared wholesale gas market (DWGM) is the oldest in Australia. However, recent developments across the wider east coast market are presenting new challenges for market participants and exposing shortcomings with the DWGM design.

Changes facing the east coast gas market

The large and emerging liquefied natural gas (LNG) export industry in Queensland has put upward pressure on domestic prices and increased price volatility because of two factors:

1. LNG exports have significantly increased east coast demand and created a nexus between domestic gas prices and higher, more volatile international prices; and
2. unexpected changes in demand from the LNG industry have the potential to create very large changes in gas flows across the east coast, leading to significant price volatility.

These trends look set to continue and strengthen over time. The changes also come at a time when many long-term gas supply agreements are expiring, with new agreements being offered with more restrictive terms and conditions, in particular reduced volume flexibility or with that flexibility priced more highly.

How is the DWGM affected?

The Victorian gas industry is subject to the same market forces as the rest of the east coast gas market due to the interconnected transmission pipeline network that spans eastern Australia. The DWGM has already experienced higher prices and greater price volatility, and it will be increasingly affected by:

- the transfer of larger volumes of gas from the DWGM into other parts of the east coast gas market, due to additional demand from LNG exports; and
- potential significant flows of gas into the DWGM for sale where LNG export facilities are unable to absorb gas supply for operational reasons.

Managing the emerging price and volume risks presents both opportunities and costs for Victorian market participants.

COAG Energy Council's Vision

Recognising these changes, the COAG Energy Council formulated a Vision for Australia's future gas market. Centred on the establishment of a liquid wholesale gas market, the Vision requires the achievement of key outcomes such as transparency in pricing, market-driven investment and effective trading between hubs.

The Energy Council tasked the AEMC to identify a roadmap to achieve the Vision for the east coast of Australia. The recommendations of the AEMC's *East Coast Wholesale Gas Market and Pipeline Frameworks Review* were considered and agreed to by the Energy Council in August 2016.

Concurrently, the Energy Council, at the request of the Victorian Government, asked the AEMC to undertake a specific, more detailed review of the DWGM. This followed the recommendations of Peter Reith in Victoria's Gas Market Taskforce in October 2013.

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Broadly, the AEMC was asked to consider whether the DWGM allows market participants to effectively manage price and volume risk, provides appropriate signals and incentives for investment in pipeline capacity, and facilitates the efficient trade of gas to and from adjacent markets.

The DWGM will not support achievement of the Vision going forward

A southern hub model would introduce new wholesale trading arrangements and a system of entry and exit capacity rights

Over the course of the review, the AEMC has assessed the current DWGM arrangements against the key outcomes of the Vision and the attributes highlighted in the terms of reference. The commissioners have concluded that the existing DWGM design would not facilitate achievement of the Vision for the following reasons:

- Participants are unable to manage their exposure to certain price and volume risks, which becomes increasingly problematic in a volatile market. A financial derivatives market (to assist with risk management) has not emerged as a side market to the DWGM because of the complexity of the DWGM's design.
- The DWGM is a daily market and only provides a daily (i.e. spot) price for gas. It does not provide meaningful, longer term, market-based reference prices for gas that can be used to inform investment decisions.
- Because the DWGM is a ‘market carriage’ model where access to pipeline capacity is implicitly bundled with DWGM trades, there is little incentive for participants to underwrite investment in pipeline capacity. Instead, investment occurs through a regulatory process with costs and risks borne by consumers.
- The DWGM has significantly different market arrangements and trading platforms to other facilitated gas markets on the east coast, which does not facilitate trading between the markets.

The problems identified are intrinsic to the design of the DWGM and it does not appear that incremental changes could address the shortcomings effectively or durably.

The southern hub would result in substantial benefits

The AEMC is recommending substantial reforms to integrate the DWGM with the wider east coast market, by creating a southern hub for gas trading in Victoria. Broadly, this would include:

- new trading arrangements to give participants greater ability to manage price risk and improve longer-term price signals to facilitate investment decisions; and
- a new system of capacity rights to access the declared transmission system covered by the DWGM, which would enable the market to signal the need for additional investment in pipeline infrastructure.

Importantly, the recommendations are also designed to reinforce those aspects of the DWGM that have been positive to date: the facilitation of retail competition and maintenance of system security.

The southern hub model would unbundle the three roles currently undertaken through the DWGM: gas commodity trading, balancing responsibility and pipeline capacity allocation.

Commodity trading

Gas trading and balancing in the DWGM currently occur on a daily mandatory, operator-led basis. This would transition to the new southern hub model, where trading would occur on a voluntary, continuous basis. Participants could trade bilaterally or through a trading exchange, for a variety of products of different lengths. Like the DWGM, the southern hub would be a virtual hub that covers the entire declared transmission system. Bids and offers could be matched at any location. These arrangements would provide significant benefits:

Improved risk management: Participants would have greater flexibility to trade physical products, either bilaterally, or through a low cost, anonymous trading exchange. This will enable participants to better manage price and volume risks. Liquid physical trading may also facilitate the development of financial derivatives, which would further enable participants to manage their risks.

Transparent and meaningful reference prices: Prices on the southern hub exchange and the reporting of bilateral trades, including any liquid financial derivatives market that might also emerge, would provide market participants with transparent and meaningful reference prices. This would be used across the supply chain to inform investment decisions.

The AEMC has called for submissions on recommendations in this draft final report. Consultation on the proposed reforms will continue until 2 December 2016

Improved trading between hub locations: The southern hub trading exchange would be the same as the Northern Hub exchange (proposed in the east coast review) to support low cost, anonymous and transparent trading for participants. Having similar characteristics should lower transaction costs and complexity for traders operating across both hubs, encouraging greater participation and trade across the wider east coast market.

Balancing responsibility

Each market participant would have financial incentives to balance its supply and demand position under a mandatory, continuous balancing mechanism. Participants would do this by trading either bilaterally or through the exchange and as such create greater liquidity and contribute to the benefits noted above. However, the system operator would remain responsible for ensuring system security and would take action where market participants are not collectively sufficiently in balance.

Incentives to maintain system security: Continuous balancing means that market participants would not be required to exactly balance their positions at any particular point in time. However, if AEMO, as system operator, was required to buy or sell gas to maintain system security, the participants responsible for the imbalance would be allocated a portion of those costs, hence providing incentives not to cause system-wide imbalances.

Pipeline capacity allocation

The existing market carriage model for allocating capacity in the declared transmission system, and associated limited pipeline transportation rights, would be replaced with a system of entry and exit rights. These rights would enable participants to be confident that their nominated injections and withdrawals would be achieved. Entry and exit rights would be made available through a variety of channels, including secondary trading.

Greater market driven investment in the declared transmission system: Unbundling capacity allocation from gas trading would allow for physical rights providing exclusive use of pipeline capacity. Participants could obtain additional entry and exit rights by committing to fund capacity expansions, so improving their incentives to underwrite investments.

Transitioning the DWGM to the southern hub model

In developing its recommendations, the commission has been cognisant of a risk that, on commencement of the southern hub, participants may not actively trade gas and liquidity may not develop. Market trials are recommended to determine requirements for, and design of, any transitional measures that may help stimulate liquidity and mitigate the impacts of changed arrangements for participants. Without pre-judging the outcome of the trials, the transitional measures that may provide the most benefits are:

- financial tolerances, which would provide (particularly, smaller) market participants with protection against costs that could arise as a result of imbalances between supply and demand; and
- financial incentives for a market participant to be in balance on a daily basis, in order to concentrate liquidity into simple daily or balance-of-day products which market participants would require to remain in balance.

Cost benefit analysis

The commission engaged PricewaterhouseCoopers to assess the benefits of southern hub arrangements for the Australian economy. It estimates that implementing the southern hub has the potential to result in an annual incremental contribution in Australia's Gross Domestic Product of between $0.2 billion to $1.7 billion by 2040, even after implementation costs have been considered.

Consultation process

Submissions to the draft final report for the Victorian DWGM review close on Friday **2 December 2016**. Feedback from stakeholders will inform the commission’s final recommendations. A stakeholder forum will be held during the consultation period. Details are available on the AEMC’s website.

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