



East Coast Gas Review: Stage 2 Final Report 28 July 2016

The AEMC is recommending a roadmap for gas market development on the east coast of Australia. Suggested changes to wholesale market design, transportation capacity trading arrangements and information transparency should deliver on the COAG Energy Council Vision benefiting market participants, large users and residential customers

A Vision for a liquid wholesale gas market

The gas industry on the east coast of Australia is undergoing a structural change. This transformation has been accelerated by the Queensland-based liquefied natural gas (LNG) export industry driving an increase in demand from 694 petajoules (PJ) in 2014 to an expected 1,961 PJ in 2020, with consequential impacts on the level and variability gas flows and wholesale prices. At the same time the pipeline transportation infrastructure has evolved into an interconnected network, supporting a series of increasingly interlinked wholesale gas markets.

Recognising these changes the COAG Energy Council has developed a Vision for Australia's future gas market.

In order to identify a roadmap for achieving the Vision, the Energy Council requested the AEMC review the design, function and roles of facilitated gas markets and gas transportation arrangements on the east coast of Australia.

The AEMC's recommended roadmap to achieve the Vision

The market development package developed by the AEMC in the Final Report is a set of inter-related recommendations relating to **wholesale gas trading markets, pipeline access** and **information provision** that mutually reinforce each other.

There are significant and tangible benefits to the Australian economy from implementing these reforms. PwC was engaged by the AEMC to estimate the potential costs and benefits from implementing the reform package. Their analysis shows that achieving the Energy Council's Vision by implementing the integrated package of reform developed by the AEMC has the potential to increase Australia's Gross Domestic Product by \$8.7 billion in net present value terms by 2040.

Changes to wholesale gas trading markets

The Commission is recommending:

- Concentration of wholesale gas trading at two primary trading hubs - a Northern and Southern hub - that share common trading arrangements and price discovery mechanisms to reduce barriers to participation.
- The Northern Hub to be located at Wallumbilla, with existing physical trading limitations addressed in the first instance through implementation of Optional Hub Services.
- The Southern Hub to be transitioned from the existing DWGM design to continuous exchange-based trading, supported by a system of firm capacity rights.
- Simplification of the Short Term Trading Market (STTM) hubs to balancing mechanisms following the development of the Northern and Southern hubs, and pipeline capacity trading.

Reforms are estimated to result in annual net benefits to the Australian economy of \$500 million to \$3.3 billion by 2040

Consolidating the various existing market designs effectively into a single set of trading rules allows participants to trade the same type of product in either the northern or southern hub. This will allow for the efficient movement of gas across the east coast in response to changing price signals in those markets. The 'clean' wholesale price that will emerge from an exchange will allow for the development of an effective reference price to support the creation of financial risk management tools.

Northern hub

Wholesale commodity trading of gas is already undertaken at Wallumbilla in Queensland through the Gas Supply Hub (GSH) arrangements. Located at the intersection of numerous pipelines connecting a range of producers, users and other facilities (including storage), the Commission considers that Wallumbilla remains the best location for the development of a liquid northern trading hub.

Trading at the Wallumbilla GSH has been hampered to date by physical constraints within the hub. The Australian Energy Market Operator (AEMO) has been undertaking a work program to address the issue and is introducing "Optional Hub Services" arrangements. These aim to promote and facilitate the trading of hub services to allow participants to access a single trading point, thereby creating more gas trading opportunities.

After the implementation of the Optional Hub Services the AEMC is recommending to the Energy Council that additional work to expand the geographic scope of the Wallumbilla GSH be undertaken and progressed through the Gas Reform Group (discussed further below).

Southern hub

The AEMC recommends the Victorian Declared Wholesale Gas Market (DWGM) transition to continuous exchange-based trading, underpinned by a market-based balancing mechanism. A key feature would be the introduction of an exchange similar to that at Wallumbilla, providing a low cost, anonymous and transparent way for participants to trade.

To support this new form of trading, the AEMC also recommends that the market carriage model is replaced with a system of firm rights for capacity allocation. This would allow network users to book firm transportation capacity rights independently at each entry and exit point to the Victorian Declared Transmission System.

Evolution of the Short Term Trading Market (STTM) hubs and the Moomba Gas Supply Hub (GSH)

The STTM hubs, located in capital cities remote from producers or users with diverse demand profiles, are unlikely to represent appropriate locations to develop liquid trading markets. Consequently, the Commission envisages that, over the long term, these markets will transition into more simple balancing mechanisms primarily used to support retail competition.

The additional GSH at Moomba being implemented by AEMO is likely to be an appropriate transitional measure to provide trading flexibility until the Northern and Southern hubs, and capacity trading, mature.

Improvements to pipeline capacity frameworks

In order to improve access to transportation capacity, the AEMC recommends the:

- introduction of a day-ahead auction of contracted but un-nominated pipeline capacity;
- standardisation of provisions in capacity agreements to make capacity more fungible;
- development of capacity trading platform(s) to facilitate sales; and
- publication of information on secondary trades.

Reforms to pipeline access arrangements are a key enabler to the development of liquid trading markets with prices that can respond to short-term shifts in supply and demand. The Commission's recommendations will enable pipeline capacity to be traded to those participants that value it most highly.

Improvements in transportation capacity trading therefore improve the liquidity of trading at hubs, the reliability of hub prices, and in turn provide better signals for pipeline investment, and gas consumption and production.

Additional information to support the market

The AEMC's recommended approach to the evolution of gas trading hubs on the east coast is supported by a detailed package of recommendations to enhance the information provided to the market, including expanding the coverage of the existing Bulletin Board.

These recommendations would, among other things, lead to a wider range of information being provided, enhance the presentation of this information and strengthen the compliance framework.

Implementation of the Commission's gas market development package

While the AEMC considers that many of its recommendations should be implemented as soon as possible given the changes currently underway in the market, others will need to be implemented in sequence. The AEMC envisages that the implementation of the complete package will occur over several phases, setting the foundations for the development of the market over the next decade.

A Gas Reform Group should be created to facilitate wholesale market and capacity trading reforms

Direct industry involvement is required to develop the functional details of the wholesale market and capacity trading reforms prior to the rule change process. The reforms are intended to facilitate more efficient commercial transactions, and are broad in scope. Nevertheless, a substantial degree of policy and regulatory involvement is required through the reform process to ensure that the private interests of industry do not supersede the long-term interests of consumers and implementation remains consistent with the Council's Vision.

The AEMC is therefore recommending that the COAG Energy Council creates a Gas Reform Group (GRG). The GRG should be tasked with developing and recommending the package of changes to implement the AEMC's recommended wholesale and capacity market reforms. The GRG should have a high proportion of senior industry and consumer group membership, in addition to senior government officials, providing a balance between industry involvement and policy and regulatory oversight.

Monitoring achievement of the Energy Council's Vision

The AEMC recommends that the Energy Council tasks the Commission with reporting on a biennial basis on the growth in trading liquidity in the wholesale gas and pipeline capacity trading markets, in order to monitor the achievement of the Energy Council's Vision.

The Commission expects the first report in mid-2018 to primarily cover how trading is developing at the Wallumbilla and Moomba GSHs, as well as updating Energy Ministers on how the market is adjusting to the structural changes underway.

Reforming the Gas Bulletin Board

The AEMC has made significant progress in analysing and consulting on the details of reform for the Gas Bulletin Board. Given this, and the relatively low level of complexity of these Gas Bulletin Board reforms compared to the wholesale and capacity market reforms, the AEMC is recommending these reforms be progressed immediately.

The AEMC will monitor the development of trading in the market and progress to the Energy Council's Vision

East Coast Gas Review

This Review has been structured over two stages. In July 2015, the AEMC published the Stage 1 Final Report, which included recommendations that could be progressed in the short term. Stage 2 (this stage) has more fully developed medium and long-term adjustments required to achieve the Vision, including the transition path.

Concurrently to this review, the Energy Council, at the request of the Victorian Government, asked the AEMC to undertake a detailed review of the Victorian Declared Wholesale Gas Market. The Draft Final Report for the DWGM Review will be published in October 2016 after the AEMC has undertaken further detailed market design and consultation with industry.

Further work and consultation will allow the AEMC to more fully develop the DWGM recommendations, and provide stakeholders with a greater opportunity to understand and contribute to the detailed design of the reforms. Accordingly the AEMC has outlined a work plan for additional analysis and consultation, culminating in the publication of the Draft Final Report for the DWGM Review on 14 October 2016.

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