May 2017

AEMC Review of the DWGM

APA Group submission

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Contents

1 Introduction

The March 2017 *AEMC Assessment of Alternative Market Designs* paper drew upon the prior DWGM Review consultation to identify a number of key "problems" with the current Declared Wholesale Gas Market:[1]

- There is limited ability for DWGM market participants to effectively manage price and volume risk. There is no active financial derivatives market due to the complexity of the DWGM.
- Longer term pricing signals are opaque because the DWGM is a daily market, and gas supply agreements are negotiated bilaterally (with confidential terms and prices).
- There is little incentive for participants to underwrite investment in the Victorian declared transmission system (DTS), as the DWGM market carriage arrangements would mean that other participants could access the capacity ('free riding').
- There are currently three gas market designs across the east coast (the DWGM, short term trading market and the gas supply hub).

Following a relatively undersubscribed consultation process in 2015, the AEMC proposed a model (the "Southern Hub model") to address these "problems". This Southern Hub model featured a virtual trading hub that covered the entire physical footprint of the Victorian Transmission System (VTS), coupled with a system of tradable entry and exit rights to access pipeline capacity. Continuous balancing also featured in this proposal.

The AEMC's Southern Hub model met with limited industry support, with many of the existing DWGM participants supporting incremental market reform options that would retain key aspects of the DWGM. Consequently, the AEMC engaged in a further examination of the various options put forward by participants. That consultation is the subject of the current *Assessment of Alternative Market Designs* consultation paper.

APA appreciates the complexity of the various proposed changes to the DWGM, and agrees with the AEMC that no single reform initiative, in

[1] AEMC 2017, *Review of the Victorian DWGM, Assessment of alternative market designs*, 30 March 2017, Sydney, pp i-ii.

isolation, will address all of the "problems" identified above. However, APA is disappointed that the AEMC's presentation of the various reform proposals expresses them in a piecemeal fashion, rather than identifying the packages of reform initiatives that fit together to form a cogent market model. In this respect, the AEMC's consultation paper makes it difficult for participants to appreciate the interplay between various reform proposals.

However, the AEMC did not adopt this disaggregation presentation approach for its proposed Southern Hub model. This approach creates the impression that the Southern Hub model is the only complete package proposed. This is not the case.

The Southern Hub model has limited stakeholder support. APA is concerned that a consultation process which requires stakeholders to individually construct their own packages is likely to "divide the market", providing the AEMC's entry-exit model with a false patina of acceptance.

APA, through discussions with the AEMC in the preparation of its consultation paper, presented a cogent package of DWGM reforms. Surprisingly, this package has been disaggregated in the consultation paper, making it less accessible for participants to comment on. It is also not clear whether other participants had similarly proposed cogent packages for consultation.

In this submission, APA reviews the objectives of the DWGM reform process, and proposes a package of reforms that, in APA's view, will address those reform objectives.

As always, APA would be pleased to discuss this submission with the AEMC or other market participants. Please contact Scott Young on (02) 9275 0031 or scott.young@apa.com.au.

1.2 Objectives

APA has considered the key CoAG policy objectives in guiding its proposal:[2]

1. Establishment of a liquid wholesale gas market and, consequently, an efficient and transparent reference price for gas that provides market signals for investment and supply.
2. A supportive regulatory framework for infrastructure investment that facilitates responses to these market signals.
3. Market arrangements that allow participants to readily trade gas between hub locations and support a national approach to gas trading.

1.3 Performance of the DWGM against these objectives

The key feature of the DWGM is that access to the pipeline network is stapled to the purchase of gas through the mandatory gross pool. This structure leads to a number of other features in the DWGM, notably the lack of firm transportation rights, which leads to difficulties with underpinning investment in pipeline capacity.

The mandatory gross pool market also provides for exaggerated volumes of gas appearing to be traded through the market, when indeed a large proportion of these volumes are "within-participant" trades (bid into and out of the DWGM at the relevant market limits), and accordingly do not provide any useful information regarding the price at which gas can genuinely be traded.

The DWGM Gross Pool approach is a different market structure than applies at other market hubs (notably the Wallumbilla Gas Supply Hub), leading to difficulties in trading gas between hubs.

The DWGM's success story has been the ease with which new entrant retailers can enter the Victorian gas market, leading to Victoria experiencing the highest level of customer choice in the nation.

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[2] AEMC 2017, *Review of the Victorian DWGM, Assessment of alternative market designs*, 30 March 2017, Sydney, pp iv.

Access to commitment-free gas transportation is also attractive to gas-fired power generators, whose loads are so variable that reserved capacity would be unutilised most of the time. Having said that, APA is also conscious of the demands GPG loads can place on the VTS, particularly when that GPG load has not been forecast and planned for.

On balance, APA considers that the DWGM has performed reasonably well in many respects, but there are opportunities to make minor changes that could result in some improvement.

APA is always conscious of the costs of making significant changes to adequately performing regulatory regimes, particularly where it is not immediately obvious that the benefits will outweigh the costs. In the context of the current uncertainty in gas markets more generally, it may not be sensible to make sweeping changes to the DWGM at this time.

Having said that, APA remains of the view, as espoused in its previous submissions and consistent with the views of many market participants, that if major reforms of the DWGM are to be undertaken, the AEMC's proposed virtual Southern Hub, entry-exit and continuous balancing model does not appear to address the needs of the market and the CoAG policy objectives.

APA has proposed an alternate package of reforms which we believe better meets the needs of shippers and policy-makers, as discussed in the next section.

2 APA proposal

APA has reviewed the submissions of participants and their stated objectives at various participant fora:

Retailers

- Value the DWGM's bundling of gas purchase and pipeline capacity
- Do not want to carry the cost of unutilised capacity
    - GPG users also value this feature
- New entrant retailers value the easy entry to the Vic market

Traders

- Struggle with the DWGM's scope for uncontrollable and unpredictable price variations (uplifts)
- Want to be able to trade gas between hubs – different market models between the northern and southern markets make this difficult

Direct-connect customers and "through" shippers

- Have signalled a desire for firm capacity rights
- Are prepared to commit to longer term contracts for capacity expansion

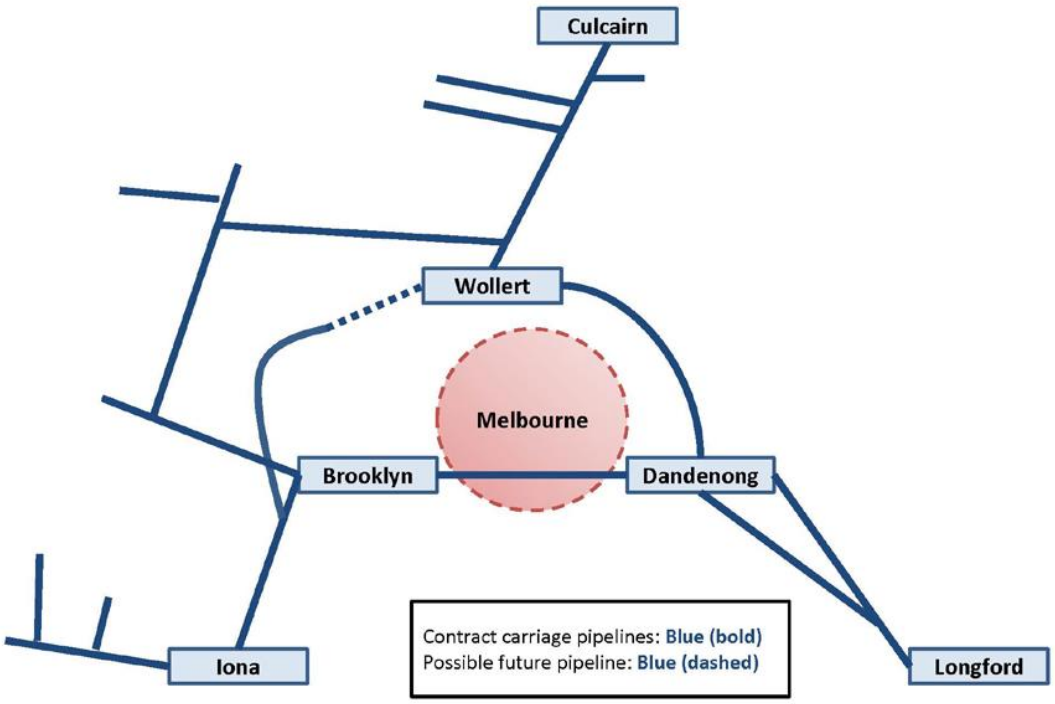
Having regard to the participants' needs and the CoAG reform objectives, APA has developed the following proposal.

2.1 A contract carriage model with opt-in DWGM overlay

2.1.1 Contract carriage component

Under APA's proposed model, the VTS would be subject to a contract carriage arrangement, under which shippers could contract for firm access to pipeline capacity.

Figure 2-1: APA proposed contract carriage pipelines



Source: AEMC, 2017, *Review of the Victorian DWGM, Assessment of alternative market designs*, 30 March 2017, Sydney, p88.

The VTS would remain subject to full regulation, and an AER-approved Access Arrangement would remain in effect. While flexibility remains in tariff design, the current VTS tariff zones could continue to apply. Specific cost reflective tariffs could be developed for those shippers transporting large volumes of gas between particular points (for example, from Longford to Culcairn).

2.1.2 *The opt-in DWGM overlay component*

Some shippers, new entrant retailers and GPG users in particular, value the DWGM's "on the day" nature of purchasing pipeline transport. In order to address these needs, APA proposes that AEMO would purchase "bulk"

capacity[3] on the VTS, and on-sell this capacity through the existing DWGM mechanism. The amount of capacity that AEMO would reserve to operate the DWGM would be driven by the forecast load electing to remain in the DWGM, as measured by AEMO's current (1-in-20 year) security of supply requirements.

In this model, AEMO would be on-selling its reserved firm capacity, rather than requiring DWGM-traded gas to recover the full costs of operating the VTS. For example, if 25% of the current market chose to remain in the DWGM, it might be expected to only carry approximately 25% of the costs of operating the VTS.

Under this model, the decision to remain in the DWGM would be made by individual shippers based on their expectations of load and demand capacity requirements, rather than on the nature of the shipper. That is, a retailer could alternately choose to remain in the DWGM, or to contract adequate VTS capacity to the various city gates to serve its retail load. An industrial shipper with a stable load profile may choose to contract for gas supply and pipeline capacity to provide certainty in the longer term.

As discussed above, APA anticipates that the other pipeline access reforms currently under consideration would also apply to the VTS. In particular, either AEMO or any other shipper purchasing firm capacity could sell any unutilised capacity on the secondary market, using the proposed trading platforms. If the VTS were considered to be contractually congested, then the day-ahead auction of Reserved but Unutilised capacity would apply equally to the VTS as to other pipelines.

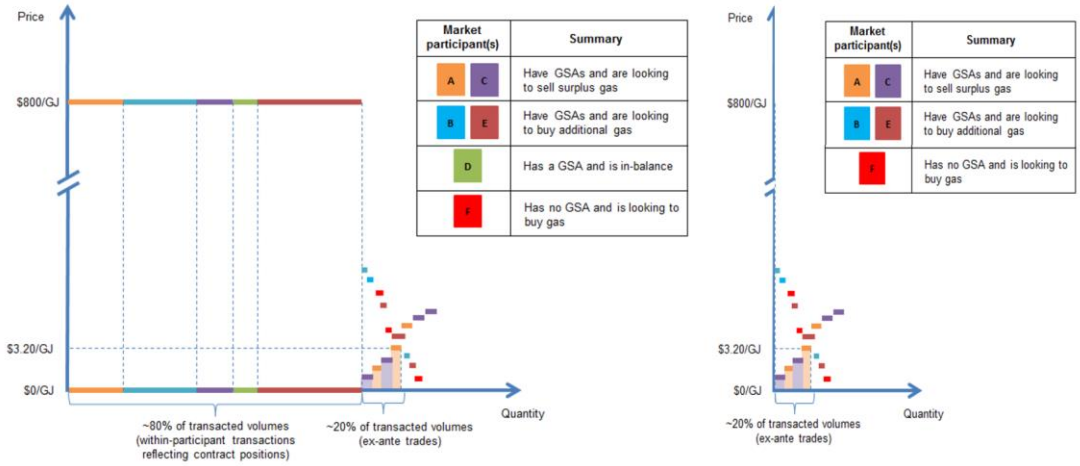
2.1.3 A physical gas trading market

One of the acknowledged "problems" with the DWGM is that the gross pool includes a large proportion of "within-participant" trades, as discussed in the AEMC *East Coast Wholesale Gas Market and Pipeline Frameworks Review, Stage 1 Final Report*.

[3] APA notes that the AEMC has characterised this proposal as recommending "point-to-point" contract carriage on the VTS. APA is considerably more flexible in this regard than suggested in the AEMC *Assessment Paper*, and notes that the current tariff structure is for delivery points within aggregated zones.

APA considers that these "within-participant" trades, which are bid into the market at zero and out of the market at the maximum price to ensure dispatch, do not add any additional information to the market place to inform the prices at which gas is actually available for trade.

Figure 2-2: Gas trading under mandatory vs opt-in DWGM



Source: (1) AEMC 2015, *East Coast Wholesale Gas Market and Pipeline Frameworks Review, Stage 1 Final Report*, 23 July 2015, Sydney Figure 6.2; (2) APA after (1).

By implementing a physical market for gas trading (as opposed to the DWGM mandatory gross pool), it will no longer be necessary for shippers to "transact" their contracted gas through the market. As all gas offered to the market will indeed be available for trade, a more relevant gas price is likely to develop. APA anticipates that this market will form two functions: first to trade volumes of gas in the first instance, and second to act as a balancing market as required.

Importantly, once this clean gas price has been developed, forward, futures and other derivative markets will be able to develop.

2.2 Assessment framework

APA considers that this proposal addresses a number of objectives, as discussed below.

2.2.1 *Credible reference price*

APA considers that a physical market, operating on the same rules as that currently operating in Wallumbilla, will create a clean reference price for gas commodity trades that will allow a credible reference price to develop.

From this foundation, derivative markets may develop as demand warrants.

Importantly, operating the market on the same rules as that in place in Wallumbilla allows traders to transact between markets, contributing to the creation of a dep and liquid market for gas.

2.2.2 *Timely & efficient investment*

Under the contract carriage model, shippers can enter into contracts with the pipeline owner to develop capacity, to which the shipper would have firm rights.

This model has proven to be effective in ensuring that investment is made as required.

It should be noted that, consistent with other regulated contract carriage pipelines, investments remain subject to scrutiny by the AER. This acts to provide confidence to the market that investments in pipeline capacity are efficient.

2.2.3 *Readily available market information*

APA considers that information on the physical market activity would be reported on the Gas Bulletin Board, as is market information from the Wallumbilla Hub today.

2.2.4 *Ability to manage risk*

APA notes that traders' key concerns with the ability to manage risk relates to the uncontrollable nature of "uplift charges", which are used to assign the cost of out-of-merit-order dispatch to manage pipeline constraints. APA considers that a physical gas market (including a balancing market), coupled with firm transportation right, should provide the necessary tools for traders to manage risks.

For those shippers opting out of the DWGM, there would be no further scope for uplift payments to manage within-day load variability. This will appeal most to those shippers whose load is stable and predictable, who do not tend to drive the requirements for uplift payments.

2.2.5 *Minimise barriers to entry*

As discussed above, the key benefit of the DWGM has been its ease of market entry to new retailers, resulting in Victoria having the highest level of customer choice in the nation.

Under the proposed approach, a new entrant retailer could still access this feature by opting in to the DWGM overlay component.

2.2.6 *Minimise transaction costs*

APA proposes that the physical market in Victoria would be based on the same market rules and procedures as are already in place in Wallumbilla. APA considers that shippers and traders will already have systems in place to interact with the Wallumbilla Gas Supply Hub, and applying these same rules would limit the need for additional investment in systems costs.

Importantly, applying the same rules across the two markets would ease trade between the markets, promoting a deep and liquid market in gas.

In summary, APA considers that its proposed model addresses the objectives of policy makers and meets the needs of market participants.

APA would be pleased to discuss this model with the AEMC or other market participants. Please contact Scott Young on (02) 9275 0031 or scott.young@apa.com.au.