Mr John Pierce
Australian Energy Market Commission
Level 6, 201 Elizabeth Street
Sydney NSW 2000

Lodged via www.aemc.gov.au

Tuesday, 6 December 2016

Dear Mr Pierce,

RE: Review of the Victorian Declared Wholesale Gas Market (Ref GPR0002)

ENGIE appreciates the opportunity to comment on the Australian Energy Market Commission (AEMC) Victorian Declared Wholesale Gas Market Draft Final Paper (draft final paper).

The east coast gas market dynamics are undergoing a significant period of change due to a range of factors including development of substantial liquid natural gas (LNG) export terminals in Queensland, increased on-shore gas production, development of an interconnected network of pipelines linking market hubs, and increased emphasis on the importance of gas as a transitional fuel to supporting the evolution of electricity generation to more renewable sources.

In light of the above changes, in December 2014 the Council of Australian Governments (COAG) Energy Council established a set of principles, which it referred to as its Vision for Australia's future gas market. The Vision is centred on the establishment of a liquid wholesale gas market, with a key outcome of this being an efficient and transparent reference price for gas. ENGIE supports this vision and believes that more work needs to be done in order to achieve these desired outcomes.

The review of the Victorian Declared Wholesale Gas Market (DWGM) was initiated by the COAG Energy Council, at the request of the Victorian Government. As noted in the review terms of reference[1], the purpose of the review has been 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

[1] DWGM Review Terms of Reference available at http://www.aemc.gov.au/getattachment/2f8734f1-4286-4672-b72e-aabab078d6fa/Terms-of-Reference.aspx

Australia
Level 33, Rialto South Tower,
525 Collins Street Melbourne, Victoria 3000, Australia
Tel. +61 (0)3 9617 8400 Fax +61 (0)3 9617 8401 engie.com.au

- facilitates the efficient trade of gas to and from adjacent markets.

The review process commenced in September 2015 when the AEMC published a discussion paper which identified gaps in the existing DWGM design, and identified five potential packages of reform. The draft report in December 2015 proposed a Southern Hub where trading would occur on a voluntary, continuous basis with a system of entry and exit rights for capacity allocation. A second discussion paper in March 2016 focused on key design issues, following which an industry working group was convened to assist the AEMC in its deliberations.

DWGM observations

In its draft final paper, the AEMC has concluded that the DWGM does not meet the objectives outlined in the Victorian Government's terms of reference, and therefore will not facilitate the achievement of the Energy Council's Vision for Australia's future gas market.

In support of its conclusion, the AEMC have made the following observations:

Limited risk management options

The DWGM does not enable market participants to buy or sell gas ahead of the gas day in order to hedge spot price volatility risk. Market participants generally manage price risk in the DWGM by entering into gas supply agreements outside of the market and bidding this gas into and out of the market in such a way as to ensure that their scheduled injections and withdrawals match. At a time when managing risk is becoming significantly more important for market participants, this approach appears insufficient.

Opaque longer-term pricing

While the DWGM spot price reflects immediate conditions, it is not representative of supply and demand over the longer term. Long term trades are negotiated bilaterally, with the terms and price confidential.

Limited market-driven investment in the Declared Transmission System

Market participants have limited incentives to underwrite investments in the declared transmission system (DTS) due to the "free-rider" problem. This means that other market participants would also benefit from a capacity expansion without having contributed to its costs.

Inhibitions on trading between markets

It is likely that the disjointed nature of the three different market designs in eastern Australia is inhibiting trading across the east coast, increasing complexity and transaction costs.

The AEMC further note that these limitations are due to intrinsic DWGM design features, and conclude that incremental changes appear unlikely to address these shortcomings.

ENGIE agrees with the AEMC observations and descriptions of the DWGM shortcomings. In addition, ENGIE makes the following observations regarding the deficiencies of the current DWGM arrangements:

- Smaller market participants find it difficult to manage their price risks, whereas larger participants manage this by entering into longer term contracts. This places an asymmetrical burden on smaller participants and acts as a barrier to new entry.
- A participant with no rights to Authorised Maximum Daily Quantity (AMDQ) or AMDQ credit certificates (AMDQcc) has no means to hedge against congestion uplift charges. This restricts the ability to effectively manage price risk exposure.
- The DWGM gas commodity price is not "clean" due to additional price components such as uplift and ancillary payments. The lack of a clean price has meant that secondary markets and derivatives have not been established with the result that price risk cannot be directly hedged.
- The lack of a clean commodity price has also meant that a standardised physical product reference price has not emerged, and is unlikely to do so.
- Although uplift payments have been low in recent years, the expected increase in gas flows due to LNG development in Queensland may increase constraints and therefore uplift payments in the coming years.
- Since only 20 percent of trades through the DWGM reflect daily imbalances[2], the DWGM commodity price is unlikely to be a true reflection of the underlying supply – demand balance.
- There are no effective signals for investment in new or enhanced gas infrastructure. The benefit provided by holding AMDQ or AMDQcc only becomes available after the decision to extend or expand capacity has been taken. This does not provide a signal for investment, but an opportunity that is available after investment.
- The ongoing uncertainty over whether AMDQcc will continue to be classified as a reference service further undermines the effectiveness of the AMDQcc as an investment signal.
- The problems identified with the DWGM are material issues now, and are likely to become more limiting as the gas industry becomes more integrated with electricity and international markets.
- The DWGM does not provide effective locational price signals which restricts the efficiency of the scheduling process and impairs investment signals.
- The market clearing engine currently used by AEMO to calculate the DWGM schedules is inadequate. ENGIE understands that the DWGM market clearing engine is unable to optimise gas bids and offers whilst also taking into account constraints imposed by pipelines. This gas scheduling inadequacy is in contrast with the electricity market dispatch engine, which runs every 5 minutes, and has been performing a constrained optimisation since the electricity market commenced in 1998.
- The inadequacies of the DWGM market clearing engine gives rise to the need for AEMO to perform separate pricing and operational schedules. This separation leads to inefficient dispatch and pricing which can result in disorderly bidding – i.e. price determined ex ante absent any consideration of constraints on the system. After the price has been determined by the pricing schedule, AEMO then runs an algorithm to determine the

[2] See AEMC DWGM Stage 1 Report

operational schedule, which includes network constraints. This can mean that gas bids and offers that were economic under the pricing schedule, may be constrained down by the operational schedule, and therefore other more expensive gas will be called upon to replace the constrained gas.

In addition to the above criticisms by the AEMC and ENGIE, it is of interest to note that AEMO have recently expressed the view that the DWGM market design faces a number of challenges and needs to move forward to address issues and maintain relevance for industry[3].

In summary, although some stakeholders that have suggested that the current DWGM is largely meeting the needs of the industry, ENGIE is firmly of the view that the current DWGM design is not suitable to respond to the needs of industry as it strives to meet the current and future challenges of gas and electricity markets.

Proposed new arrangements

The AEMC have recommended new gas market arrangements in Victoria based on an entry-exit model with voluntary, continuous trading on a virtual hub. Gas trading, balancing and capacity allocation would be unbundled and managed separately, unlike the current DWGM market carriage arrangements which effectively package these up into one bundle.

The AEMC have argued that the proposed Southern Hub would provide the following benefits:

Improved risk management

Unbundling the allocation of transmission capacity from the gas commodity would facilitate the trading of gas on a physical basis, over any time period. Participants would be able to trade products of varying durations and delivery dates through a low cost, anonymous exchange.

Transparent and meaningful reference prices

Hub exchange prices and reported bilateral trades across various time periods would reflect both short and long term supply and demand.

Greater market driven DTS investment

The free-rider problem that arises with the DWGM design would be mitigated by issuing and trading physical rights which provide exclusive use of capacity.

Improved trading between hubs

The proposed trading exchange would provide a low cost, anonymous and transparent way for participants to trade.

Reduced barriers to entry

The Southern Hub would provide an alternative to bilateral contracting, which may be particularly difficult for smaller new entrants.

[3] See AEMO presentation to DWGM forum – November 2016: http://www.aemc.gov.au/getattachment/01253a1e-18a0-437d-a4b7-d15f54846cdb/AEMO-presentation.aspx

Improved system security management

Financial incentives on market participants to balance cumulative supply and demand at times when this is important to the security of the overall system will facilitate secure outcomes.

Comments on AEMC Proposed model

Although ENGIE does advocate for change to overcome the deficiencies of the DWGM, ENGIE is unable to provide an endorsement of the AEMC proposed Southern Hub at this point in time. There are a number of design decisions that cause ENGIE to have concerns as outlined below.

Firstly, ENGIE does not support the proposal that the Southern Hub be a voluntary market, as this creates a level of uncertainty about the liquidity of the market. Unless a high level of market liquidity is achieved there are legitimate questions to be asked about the effort, risk and expense of setting the new arrangements.

It is not clear to ENGIE that the proposed Southern Hub would be more attractive than other arrangements outside of the market. For example, gas producers would generally prefer to sell their gas through long term contracts, and would therefore not be attracted to selling gas through the market. A voluntary market would restrict liquidity in the market leaving uncertainty about the viability of the new market into the future.

ENGIE believes that a mandatory market approach is more likely to ensure that gas transactions are visible to the market participants, and a more representative value can be placed on gas supply and demand.

The entry – exit model has raised concerns with many existing market participants who have variable requirements for gas supply (eg gas powered generators). One important concern that has been raised is that such participants may be required under the entry – exit model, to pay for on-going (continuous) pipeline capacity, and therefore be exposed to additional costs beyond what occurs under the DWGM.

Another area of concern is the proposal for continuous balancing, raising whether suitable balancing counter parties will always be available, and if not, how a participant would manage its exposure. There are also questions around whether a continuous balancing regime could create an incentive for third parties to enter into balancing transactions for commercial gain, which could restrict the pool of legitimate balancing counter parties.

ENGIE is also unsure whether the proposal to un-bundle the gas commodity from the pipeline capacity and balancing functions will lead to the efficiencies that the AEMC have claimed, or whether in fact this unbundling will result in increased transaction costs due to the increased complexity. Although it is difficult to be sure in advance whether this is a material issue, ENGIE suggests that there needs to be a more compelling case articulated to persuade participants that this will be a beneficial step.

ENGIE acknowledges that the AEMC have conducted a very thorough review of other gas market designs around the world, and selected design elements that it believes will achieve the COAG Energy Council vision and respond to the Victorian Governments terms of reference. ENGIE accepts that the recommended Southern Hub model proposed by the AEMC has some elements that could result in improvements, however since the scope of changes

being proposed is so dramatic, it is difficult to comprehend how the changes would play out in the context of the Victorian gas industry or the broader east coast of Australia.

ENGIE believes that before any commitment is given to the proposal, a comprehensive market trial should be carried out with industry participation. Such a market trial would provide an opportunity for stakeholders to gain insights into how the proposed new arrangements might play-out, and would provide a level of confidence that the intended improvements might be achieved.

ENGIE trusts that the comments provided in this response are of assistance to the AEMC in its deliberations. Should you wish to discuss any aspects of this submission, please do not hesitate to contact me on, telephone, 03 9617 8331.

Yours sincerely,

Chris Deague
Wholesale Regulations Manager