



14 October 2015

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

Submitted by email to chantelle.bramley@aemc.gov.au and andrew.truswell@aemc.gov.au

Dear Mr Pierce

RE: Declared Wholesale Gas Market of Victoria - Discussion paper

ERM Power Limited (ERM Power) appreciates the opportunity to provide comments to the AEMC on the Declared Wholesale Gas Market (DWGM) Discussion Paper.

About ERM Power Limited

ERM Power Limited (ERM Power) is an Australian energy company that operates electricity generation and electricity sales businesses. Trading as ERM Business Energy and founded in 1980, we have grown to become the 4th largest electricity retailer in Australia, with operations in every state and the Australian Capital Territory. We are also licensed to sell electricity in several markets in the United States. In addition, in 2015 we commenced retailing gas to industrial and commercial customers in Victoria. We have equity interests in 497 megawatts of low emission, gas-fired peaking power stations in Western Australia and Queensland, both of which we operate.

ERM Power is currently a retail gas market participant in the Declared Wholesale Gas Market (DWGM), the Brisbane Short Term Trading Market (STTM) and the Wallumbilla Gas Supply Hub.

We are pleased to provide the AEMC with our comments on the DWGM Discussion paper as outlined below.

Basic design characteristics

ERM Power agrees that the DWGM has generally been effective at facilitating trading of gas in Victoria and promoting retail competition. However, the DWGM design contains certain elements that are acting as barriers to entry and adversely impacting competition, such as the allocation of unmanageable risks via the ancillary payment/uplift charging mechanism (which we outlined to the AEMC in our submission on the East Coast Gas Markets discussion paper dated 26/3/15). Further, the market is currently undergoing rapid structural change with the commencement of the LNG export industry, with gas consumers facing rising domestic gas prices. In this changing environment it is critical that wholesale market arrangements are set up to facilitate competition, in the interests of gas consumers.

In ERM Power's view, the DWGM trading arrangements should contain the following basic design characteristics -

- Provide an efficient mechanism for participants to trade spot gas, that can complement or act as an alternative to traditional gas supply contracts, to help participants optimise their position and manage their portfolios.
- Ensure that any risks are at a manageable level. This includes appropriate market price cap settings. Risks should also be able to be hedged, and not disproportionately or inequitably allocated.
- Be of minimal complexity. The market design should be easy to understand. This means that risks should be able to be easily quantified and market outcomes explained and reconciled using published market data.
- Be cost effective. Administrative fees, governance fees, transaction fees, operational fees etc. need to be set at an efficient level.

ERM Power has a preference for a simplified and modified version of the AEMC Package B. We believe that our proposed modified Package B aligns with the above principles to a greater extent than the other packages proposed. A summary of our comments on the other proposed packages is provided in Appendix 1.

ERM Power proposes a simplified and revised Package B

ERM Power has a preference for a modified Package B with the following elements –

- **A market that clears with a single price that encompasses all pricing risk and is inclusive of the cost of managing constraints (as per AEMC Package B).** This would reduce complexity, support the development of financial risk management instruments and increase the ability of participants to manage their price risk. We support this change subject to the point below.
- **A review of the DWGM price cap** to ensure that the level of risk is manageable and not excessive, in particular for smaller participants and new entrants.
- **Removal of the ancillary payment/uplift charging regime (as per AEMC Package B).** This would reduce current inequities and unmanageable risks by addressing issues associated with the current uplift/ancillary payments regime.
- **AMDQ/AMDQ CC regime to be retained with such rights being limited to injection/withdrawal tie breaking priority.** We would support the continued role of AMDQ/AMDQ CC in determining scheduling priority in the event of tied bids/offers. However the removal of the uplift/ancillary payment mechanism, under this modified Package B, would mean that AMDQ/AMDQ CC is no longer used as an uplift hedge (a change which we support). In addition, the curtailment protection provided to certain Tariff D sites (and not others) should be reviewed.
- **No further system of transmission rights to be imposed.** We have concerns that any attempt to impose a more sophisticated transmission rights regime on Victoria, is likely to be ineffective, given the nature of the underlying open-access, market carriage arrangements where bid price determines a participant's right to inject or withdraw, rather than firmness of transportation rights. Any transmission rights regime imposed on the current market carriage arrangements is likely to result in significant costs and complexity that will act as barriers to entry. Further, the difficulty in defining

transmission rights increases the risk that the regime creates unintended inequities in cost or risk allocation.

We would be open however, to exploring a possible redesign of transmission tariffs that would aim to provide foundation market participants (who invest in a new system expansion) with a share of transmission revenues, to incentivise investment (concept similar to the AEMC's Targeted Transmission Rights proposal in Package A). If such a concept were to be explored, there should be an objective to minimise complexity.

- **Investigation to be undertaken into ways to promote more efficient and timely investment in infrastructure through enhancements to the regulatory and/or planning process.** The AEMC has identified areas where the current regulatory arrangements could be improved and we agree that these would be worth exploring further. An alternative model that could be worth exploring is where AEMO takes on the role of transmission network planner, guided by a DTS Reliability Standard set by the Victorian Government, and with all planning proposals subject to AER approval.

We elaborate on these points further below.

Move to a pricing regime where price encompasses all price risk and includes the costs of managing constraints

AEMC's proposal under Package B, involving a move away from operational and pricing schedules, merging them into a single schedule and single reference price, would reduce complexity and encourage the emergence of financial hedging instruments.

Further details would need to be developed to clarify how the pricing regime would operate.

A possible approach could involve amending the bid/offer/scheduling process to enable bids and offers to be submitted for each interval and a single price to be applied to quantities of gas injected and withdrawn during that interval (similar to the NEM).¹ This approach would simplify the DWGM design significantly, make risk exposure and market outcomes more transparent and facilitate the use of financial instruments. Market participants could be required to provide forecast bids and offers that AEMO could use to generate a set of forecast schedules for each subsequent interval (similar to NEM Pre-dispatch schedules). Such an approach would support the potential development of a deeper financial market (exchange traded and OTC) for gas derivatives, similar to financial products currently traded in electricity.²

We acknowledge that there are practical and operational issues that would need to be considered, including the extent to which participants are able to flexibly manage their injection quantities over the course of a day (noting that most participants are shippers who have purchased gas from producers) and the fact that contract quantities are generally based on a gas day.

¹ This is in contrast to the current approach where the 6 am price applies to a participant's scheduled imbalance for the day, and prices for schedules from the 10 am schedule onwards are applied to the change in the participant's imbalance relative to the previous schedule, and to deviations in the previous scheduling interval.

² Note that a product traded on the average price of all intervals over a nominated contract term (similar to those currently traded in the electricity financial market), would require trading intervals of equal duration. Therefore under the current Vic market design with four 4-hour intervals, and one 8-hour interval, the 8-hour interval would need to be split into two.

Other considerations include how to handle deviations and incentivise participants to adhere to their schedules. It could be argued that participants who have under injected or over withdrawn in an interval, and who have caused the market price in that trading interval or a subsequent trading interval, to be set by more expensive out of merit order gas, should be made to fund a greater proportion of the resultant costs.

An alternative approach (that minimises changes to the current market design but which we think would result in a more equitable cost allocation) would be to remove the concept of congestion uplift, but continue to apply surprise and common uplift charges. The benefit of this approach would be to remove the current inequities involved in the allocation of congestion uplift (refer to our earlier submission dated 26/03/15 in which we discussed our concerns with congestion uplift), while still attempting to allocate costs to their cause by levying surprise uplift charges on those who have increased their net scheduled withdrawal or reduced their net scheduled injection, in the trading interval, or who have under injected or over withdrawn in the previous interval. This would incentivise accurate forecasting and adherence to schedules. However the disadvantage of this approach is that the costs of managing constraints would not be embedded in a single market price, and hence would be unlikely to promote the development of financial hedging instruments.

In developing potential alternative pricing models, there would need to be analysis and modelling of market outcomes and bidding behaviour.

Review of DWGM Price cap

ERM Power believes that the DWGM price cap should be reviewed to ensure that risks are at a manageable level, and not at a level that deters new entrants and smaller participants. A review of the DWGM price cap is particularly important if the market moves to a pricing methodology that takes into account constraints, as prices will be more volatile. In ERM Power's view, the current maximum market price of \$800/GJ is extreme and imposes excessive risks in particular on small participants and new entrants. It is also double the market price cap of the Brisbane, Adelaide and Sydney STTM. ERM Power believes that the maximum market price should be reviewed, and reduced to a lower level such as \$100/GJ so as to ensure that risks are at a manageable level and not acting as a barrier to entry.

Removal of ancillary payments/uplift regime

ERM Power would welcome the removal of the ancillary payment/uplift regime, as proposed in the AEMC Package B, as we believe this would help to address key issues with the current arrangements and reduce barriers to entry. We refer to an earlier submission to the AEMC dated 26/03/15 in which we outlined in detail our key concerns with the AMDQ/ancillary payment/uplift charging regime. Our concerns related to –

- The inequitable allocation of uplift charges and failure to allocate costs to their cause.
- Risks being disproportionately borne by smaller participants and new entrants, due to the fact that smaller players may find it relatively difficult to access the appropriate gas supply and matching AMDQ/AMDQ CC to create an "uplift hedge".
- The complexity of the AMDQ/AMDQ CC/uplift/ancillary payments regime.
- The fact that the AMDQ/AMDQ CC regime fails to achieve one of its purported benefits of encouraging market led investment.

Subject to our other comments on modified Package B, ERM Power believes that most of these concerns would be addressed by the AEMC's Package B's proposed removal of the ancillary payment/uplift regime.

Role of AMDQ & AMDQ CC

We do not have any issue with the retention of AMDQ/AMDQ CC for the purpose of providing its holders with injection or withdrawal scheduling priority.

We agree with the AEMC in its discussion in section 8.1.3 that it would be beneficial to explore how transparency around the allocation process could be increased.

A modified version of the portfolio rights trading mechanism (as the AEMC proposed as part of its Package A) may also be worth investigating further, although our support for this mechanism is subject to the use of AMDQ/AMDQ CC being limited to providing its holder with tie breaking rights.

As the ancillary payment/uplift charging regime would be removed completely (under modified Package B), AMDQ/AMDQ CC would no longer be used for the purpose of creating any uplift hedge.

We suggest that the other current use of AMDQ, in providing curtailment protection, should be reviewed. It seems illogical and inequitable for some Tariff D customers to be higher up on the order of curtailment just because they were not in existence when AMDQ was first allocated back in 1998.

Limited benefits from overlaying a regime of transmission rights on a market carriage model

In each package proposed, the AEMC appears to have attempted to propose a regime of transmission or capacity rights with the objective of encouraging market led investment in the DWGM.

We question the appropriateness of this objective in the context of the market carriage arrangements in the DWGM. ERM Power also notes that unless there is evidence to prove otherwise, we view the DWGM market carriage arrangements to be appropriate given the physical characteristics of the system.

While ERM Power acknowledges that market led investment is regarded to be more efficient and timely compared to centralised investment delivered through a regulatory process, our view is that the imposition of any regime of transmission rights on a market carriage model is likely to be extremely complex and also ineffective at encouraging market led investment. This is due to the very nature of the market carriage regime, where the benefits of the majority of system investments will accrue to all users, and where capacity (bundled with commodity) is allocated based on bid price (rather than the firmness of any transportation right).

This is in contrast to the contract carriage arrangements that lie outside the DTS, where it is the firmness of transportation rights that determines scheduling priority and where benefits of participant funded investment can be enjoyed exclusively by the investors, through allocation of firm rights to associated transportation services or other benefits. We note that this exclusivity of benefit can also manifest in the form of capacity hoarding where these rights act as a barrier to entry for new participants.

Further, as the AEMC has acknowledged, it is difficult to define transmission rights in a market carriage model, and within the meshed transmission network of Victoria, because capacity in one part of the system is influenced by injections and withdrawals occurring in another part of the system.

The current market design offers a lesson. We have seen a system of transmission rights, via the regime of AMDQ and AMDQ CC, that has resulted in significant complexity, inequitable cost allocation, and importantly has not been instrumental in driving any market led investment in the DTS. As the AEMC notes, there have been no market led investments in the DTS, outside of recent investments to expand the export capacity at Culcairn.³ In the case of the Culcairn expansion, this investment was driven by market participants' commercial requirements and their ability to benefit from their investment via their firm rights on the Moomba to Sydney Pipeline to take gas out of Victoria. We acknowledge that shippers at Culcairn utilise AMDQ CC in conjunction with their firm transportation rights on the MSP, to gain scheduling priority in the event of tied bids⁴, however here AMDQ CC plays a supporting role rather than being the driver for investment.

ERM Power believes the focus should be shifted to improving the delivery of investment under the existing regulatory process (which is the process through which the majority of DTS investments have been undertaken to date). For instance, changes could be identified to enhance the capabilities of the asset owner, APA Gas Net, to identify, plan, propose and gain approval for investments. This could involve setting performance standards for the DTS, increasing the involvement of AEMO as asset operator in the planning process, and addressing any issues with the AER process that may be creating risks or barriers to timely and efficient investment. The AEMC has also identified certain areas for improvement in Chapter 5 of its Discussion Paper.

Alternatively, the role of AEMO could be expanded to that of asset planner for the DTS, similar to their current role for the Victorian electricity network, with AEMO required to meet a DTS Reliability Standard set by the Victorian Government. Under such an approach, any asset augmented, or constructed as part of meeting this DTS Reliability Standard could be excluded from the Redundant Assets Provision of the National Gas Rules. Whilst this would transfer some of the investment risk to consumers, the risk of unnecessary or inefficient investment would be minimised by the independence of the Victorian Government in setting the DTS Reliability Standard, AEMO acting as the agent of consumers in planning and meeting the DTS Reliability Standard, with a further requirement for the AER to approve AEMO's expansion plan. The roles of AEMO and the AER should also help to alleviate potential concerns that the asset owner may be incentivised to encourage over-expansions in order to maximise its financial returns.

Notwithstanding our views above, ERM Power would be open to exploring how the AEMC's Targeted Transmission Rights proposal under Package A, could be designed in a way that does provide some incentive for market participant funded investment, and which involves minimal complexity. ERM Power would describe this regime as more of a redesign of transmission tariffs. If this concept were to be pursued, we would recommend that the scope of the mechanism be limited to sharing a component of transmission revenues with market participants who invest in any future expansions. The concept should not aim to provide a basis for allocating constraint costs (which we note, under Package B, should not be an issue since constraints are captured in the market price). Attempting to allocate constraint costs via such a mechanism is likely to

³ AEMC Discussion Paper, page 44, paragraph 3.

⁴ AEMC Discussion Paper, discussion in section 6.2, pages 43-44.

involve undue complexity and lead to costs not being allocated to their cause, giving rise to similar issues faced under the current market design regarding the allocation of congestion uplift.

General comments on the review

ERM Power has some general comments which we outline below.

Importance of tailoring the market design to local conditions

The AEMC states that they will explicitly consider the feasibility of replicating the proposed DWGM designs in a northern market, with the goal of reducing transaction costs, and encouraging greater trading and participation in the east coast markets.⁵ While we agree that consistency in market design across the different regions would reduce transaction costs, ERM Power notes that the Victorian gas market is physically different from other gas markets and market carriage arrangements that suit Victoria will not necessarily be suitable for other regions. Further, factors such as industry structure and number of players need to be taken into account when determining a suitable design for a market. ERM Power's view is that it is appropriate for market designs to be tailored to different local conditions.

In addition, while we agree that in principle aligning the markets may reduce complexity, it is unclear as to whether the difference in market designs actually acts or has acted as a barrier to entry. In fact, most gas retailers in Victoria also participate in the Sydney STTM, despite the different market designs. Similarly, the NEM is different from the gas markets, but this has not prevented participants from operating in both markets. We think that barriers to entry arise more from the nature of trading risks, and level of complexity of an individual market, rather than the fact that one design is different from another.

East coast gas market and DWGM Review and consultation process

ERM Power believes that market participants should be given more of an opportunity to understand the detail and thinking behind each of the proposals, to enable them to provide the AEMC with more informed feedback. For example, workshops would help to ensure that participants are at the same level of understanding and that comments to the AEMC are generally based on a consistent interpretation of the proposals. The AEMC public forum on 30 September 2015, which ERM Power attended, was certainly helpful in this regard. However, this workshop did not focus specifically on the proposals in the DWGM discussion paper. It would also have been helpful for this workshop to have been held much earlier in the process, for instance, at the time the East Coast Gas Market Review wholesale gas markets discussion paper was released in August 2015.

ERM Power has some concerns with, and is unclear about the process by which the AEMC industry advisory group members were determined. Currently the advisory group is under-represented by second tier/smaller retailers. The three dominant retailers in Victoria are members (one or more who are also the dominant retailers in other regions), while there is only one small retailer. This also creates an unequal playing field where member participants have the benefit of greater exposure to the design concepts and stronger ability to influence the direction of the gas market reforms, compared to other participants.

⁵ AEMC DWGM Discussion paper, Executive Summary, page 2, paragraph 3.

Going forward, ERM Power believes that all stakeholders should be given the opportunity to participate in any working/advisory groups. This is similar to the current AEMO/industry working groups, which are open to any interested participant.

ERM requests the AEMC to make publicly available, minutes of the advisory group meetings (and meetings of other future working groups) as well as any other material presented to those groups.

Modelling required to clarify impact of proposed changes

As the review progresses and the reforms are further developed, there should be modelling and analysis undertaken of incentives, risks, market participant behaviour, and market outcomes. This modelling should include an analysis of the impacts, including risks, on different market participant classes (e.g. large retailers, small retailers, generator-retailers, large gas users/direct customers etc). This will help to draw out the strengths and weaknesses of each approach and risks faced by different participant types.

Cost benefit analysis

In respect of any model pursued, there needs to be a cost benefit analysis which clearly demonstrates evidence of net benefits. Without a proper cost benefit analysis, the risk is additional costs being borne by industry and ultimately gas consumers.

Thank you again for the opportunity to provide input into this important review. Please feel free to contact me if you would like to discuss any of the points raised in our submission.

Yours sincerely

A handwritten signature in black ink, appearing to read "SK", with a long horizontal flourish extending to the right.

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APPENDIX 1 Summary of comments on other AEMC proposed packages

ERM Power supports Package B subject to the modifications outlined in the body of our submission. A summary of our comments on the other packages is provided below.

AEMC Package	ERM Power comments
Package A Targeted Measures	<p>This package fails to address issues regarding unmanageable uplift risk and the inequitable allocation of congestion uplift charges.</p> <p>The introduction of portfolio rights trading simply builds upon the current regime of AMDQ/AMDQ CC. We do not support the introduction of any mechanism that would further entrench the current issues associated with the AMDQ/AMDQ CC/uplift charging regime (although we would support the mechanism being explored further under our modified Package B, where AMDQ/AMDQ CC's function is redefined).</p> <p>In retaining the concept of ancillary payments and uplift charges, the ex-ante price will not be the single source of price risk. It is therefore likely that this model will not facilitate the development of financial instruments.</p> <p>In respect of the proposal to introduce Targeted Transmission Rights that would apply to future expansions of the DTS, we believe that this idea could be worth exploring. However we are also concerned about the potential complexity of any such regime.</p>
Package B Simplified DWGM pricing mechanism	ERM Power supports a modified Package B as described in the body of our submission.
Package C – Zone based pricing and capacity rights	<p>Package C is likely to be costly and complex to implement, and is a model with unproven benefits. It would also separate the market and create multiple zonal prices, which is inconsistent with the objective of creating a single southern zone reference price. It would also increase the difficulty faced by participants in being able to reconcile and understand market outcomes using bid stack and other published data.</p> <p>Given the small number of participants at each individual zone, there may be opportunities for participants to utilise market power or to influence pricing outcomes by their bidding behaviour. These issues need to be investigated further.</p> <p>The proposed system of capacity rights seems overly complex with questionable benefits.</p>
Package D – Entry Exit model	At a high level, this approach has its merits. However we expect that it would be very costly to overhaul the existing arrangements to move to an Entry/Exit model which is extremely different. The net benefits of doing so, and the resultant costs on consumers, are also unclear. Critical aspects of this model are also undefined, in particular price setting, which determines the nature of

	<p>the risks that market participants would face and how such risks are allocated. It is also unclear as to how balancing would occur, and if so, who would provide the service, and the risks and costs associated with the regime.</p> <p>In developing the details of the Virtual Hub, there would need to be consideration as to whether participants would still be able to adequately rely on the wholesale market as a source of gas to help manage their portfolio requirements. The relatively small number of players in the east coast gas market increases the risk that liquidity will be low in any facilitated market that is voluntary. If the DWGM gross pool was removed, and replaced with a voluntary market such as the GSH (where there can be no trades on certain days, and/or no orders at commercially reasonable prices), contracts for gas supply would be a pre-requisite for any participant including retailers and commercial and industrial gas users. Removal of the gross pool concept would eliminate one of the key benefits of the current arrangements, that is, a wholesale market that participants can reasonably rely on for managing their portfolio requirements. The result will be increased barriers to entry and reduced competition.</p>
Package E – Hub and Spoke	<p>We do not support this model for several reasons.</p> <p>It involves a significant change to the current regime, with no evidence of any likely benefits. This package also consists of a patchwork of features adopted from the other current markets (e.g. GSH and MOS balancing from the STTM).</p> <p>It removes the concept of facilitated trading market at a demand centre and replaces it with a balancing service, which is likely to be costly, advantage larger players over smaller players (as larger players have more capability to provide balancing services) and would have adverse implications for retail competition in the gas market.</p> <p>It is unclear as to how the hub and spoke model would operate in practice in the DWGM given the meshed nature of the transmission system and the fact that capacity in one part of the network is influenced by injections and withdrawals in another part of the system.</p> <p>Another consideration is whether such a model would be appropriate given the small number of players at each of the supply hubs.</p>