

Minister for Energy, Environment and Climate Change Minister for Suburban Development 8 Nicholson Street East Melbourne, Victoria 3002 Telephone: 03 9637 9504 DX210098

Mr John Pierce, AO Chairman Australian Energy Market Commission PO Box A2449 Sydney South NSW 1235

Ref: MBR036822

Dear Mr Pierce

RULE CHANGE PROPOSALS FOR THE DECLARED WHOLESALE GAS MARKET REFORMS

Please find attached a package of proposals to amend the National Gas Rules to lower barriers to entry, streamline trading practices and improve transparency to help support greater competition in the Victorian gas market.

The proposed rule changes follow from the Australian Energy Market Commission's July 2017 report Review of the Victorian declared wholesale gas market, which identifies issues with the Victorian gas market pertaining to the limited risk management options, opaque longer-term pricing, limited market-driven investments and barriers to trading between gas markets. The proposed changes include:

- the introduction of a clean and simple wholesale gas price for the DWGM;
- establishing a forward trading exchange which will make it easier for buyers and sellers to trade gas and lock in a future price; and
- improving the allocation and trading of pipeline capacity rights.

Collectively, these changes aim to promote the trade of gas within Victoria and assist with putting downward pressure on gas prices. A more efficient Victorian gas market is also expected to help improve the reliability of electricity supply in both Victoria and other states, as gas-fired electricity generators will benefit from having better access to available gas supplies.

I would like to thank your organisation and the Australian Energy Market Operator for assistance with the development of these proposed changes.

If you would like to discuss the proposed rule changes, please contact Raif Sarcich, Principal Policy Officer, Energy Sector Reform, DELWP on (03) 9637 8122 or at raif.sarcich@delwp.vic.gov.au.

Thank you once again for your support in this important matter.

Yours sincerely

Hon Lily D'Ambrosio MP

Minister for Energy, Environment and Climate Change

Minister for Suburban Development

29/10/2018



Rule change proposal – Improve AMDQ regime

(Recommendation 3)

Statement of Issues

The east coast Australian gas market is in a period of transition and adjustment. The shipment of Liquefied Natural Gas (LNG) from Gladstone in Queensland has created a connection to export markets that links Victoria to those prices and market dynamics. The export demand for LNG is expected to triple the size of the eastern Australian gas market by the end of 2018.¹

The transition in the gas sector to an export linked market has coincided with the expiry of many domestic long-term gas supply agreements (GSAs). Because of these changes, market participants have now reduced ability in how they manage price risks in the in the Victorian Declared Wholesale Gas Market (DWGM or Victorian gas market).

On 4 March 2015, the Victorian Government requested the Australian Energy Market Commission (AEMC) to undertake, in collaboration with the Australian Energy Market Operator (AEMO), a review of pipeline capacity, investment, planning and risk management mechanisms in the DWGM. A key aim of the review was to examine whether improvements are required given the significant structural changes underway in the eastern Australian gas market.

In June 2017, the *Review of the Victorian Wholesale Gas Market* Final Report by the AEMC identified four issues that impede the effective functioning of the DWGM in the long-term interests of consumers:

- Limited risk management options
- Opaque longer-term pricing
- Limited market-driven investment in the Declared Transmission System
- Barriers to trading between markets.²

The AEMC made three key short-term recommendations to address these issues. The recommendations were endorsed by the Victorian Government and the COAG Energy Council in 2017.

One of the short-term recommendations by the AEMC was to improve the allocation and trading of pipeline capacity rights by:

- i. introducing separate, tradable entry Authorised Maximum Demand Quantity (AMDQ) rights and exit AMDQ rights
- ii. introducing an exchange to improve secondary trading of AMDQ rights (permanent transfer) and benefits (temporary transfer)

The total eastern and south-eastern Australia forecast gas production is expected to be 1,891PJ compared to 642PJ of total domestic gas demand (including residential, commercial, industrial usage). The difference between the two is attributable to LNG export. The LNG export from Gladstone is about twice the eastern Australian domestic gas demand. AEMO, *Update to the gas statement of opportunities*, September 2017.

² AEMC, Review of the Victorian Declared Wholesale Gas Market, Final report, 30 June 2017, pp. v-vi.

iii. making AMDQ available for a range of different tenures.

Nature and scope of the problem

AMDQ are non-firm capacity rights in the DWGM that collectively refers to authorised MDQ and AMDQ cc. Benefits associated with AMDQ include:

- Tie-breaking rights: when there are equal-priced injection bids, those associated with AMDQ are scheduled first.
- Congestion uplift hedge benefits: market participants can use all or part of their AMDQ as hedges against congestion uplift charges.
- Curtailment rights: when curtailment is necessary, those without AMDQs are curtailed ahead of those with AMDQ.

The existing AMDQ regime is causing the following issues for DWGM participants and potential new entrants:

- 1) The AMDQ regime is complex which makes it difficult for both existing market participants and potential new entrants to understand and use AMDQ:
 - There are two different types of AMDQ: Authorised MDQ, which were allocated to
 consumers and relates to capacity on the Longford to Melbourne pipeline; and AMDQcc,
 which relates to the Victorian Declared Transmission System (DTS) capacity between an
 injection point and the reference hub that has been built since the start of the DWGM
 market.
 - AMDQ provide a number of benefits relating to tie-breaking, congestion uplift hedging and limiting curtailment in case of emergencies. Under what market scenarios these benefits apply and the value they provide to market participants is not always easy to determine.
- 2) There are issues restricting the ability of market participants to trade AMDQ:
 - The benefits of Authorised MDQ at Longford for Tariff V³ customers are dynamically allocated to retailers based on their share of customer numbers. When the retailers do not have gas to inject at Longford (because they are sourcing their gas from another location) they cannot access a congestion uplift hedge without creating an Agency Injection Hedge Nomination (AIHN) with an injecting party which also transfers the tie-breaking benefits associated with the Authorised MDQ. The AIHN process is complex to implement.
 - Search and transaction costs are high. Participants must find each other to trade AMDQ cc,
 Authorised MDQ and AIHN bilaterally. Some customers are limited in their ability to transfer
 Authorised MDQ to other customers or other market participants and there are difficulties
 in locating AIHN partners too. In absence of an organised exchange, participants have to
 manage counter party risks and settlement themselves. This is particularly relevant for Tariff
 D sites with Authorised MDQ, as most are not market participants.
 - The processing time for AMDQ trades is lengthy at around six business days. This is
 preventing shorter term trades. This is particularly problematic when supply and demand
 conditions change at short notice, for example, due to abrupt weather events or due to LNG
 terminal outage, even if these are outside the DTS.

³ Small customers such as households and small businesses that normally consume less than 10 terajoules per year.

- 3) The current AMDQ regime may not support efficient levels of investment into, and efficient utilisation of, pipeline capacity.
 - When AMDQ is created, it is created as a point-to-point right between the injection point and the reference hub (Melbourne), and then the participant can nominate to another withdrawal point. However, nominating AMDQ to a withdrawal point is 'first in best dressed' (unless the participant holds firm capacity at the interconnected facility), so another participant could get in first if spare capacity is available. Therefore, there is no guarantee that a participant underwriting investment in return for AMDQ will be able to nominate their preferred withdrawal point. This issue was somewhat mitigated through the requirement introduced in 2014, after a procedure proposal request submitted by APA, that to nominate to withdrawal points at interconnected facilities (i.e. exports from the DTS), the participant must hold firm capacity at the interconnected facility. The 2014 changes to the procedures have addressed issues at, for example, Culcairn where there is a 1-to-1 mapping between spare capacity and firm capacity at the interconnected facility. Under such circumstances the arrangements have contributed to capacity expansion. At other withdrawal points within the DTS, such as lona, underwriting investments in return for AMDQ remains an issue.
 - A significant portion of the benefits associated with Authorised MDQ is dynamically allocated as a block among retailers in proportion to the number of Tariff V customers each retailer serves. Some retailers may not have injection contracts at Longford (the entry point for all Authorised MDQ) so these benefits are of limited value for these retailers. On the other hand, participants that are not Tariff D customers or retailers of Tariff D or V customers cannot readily obtain tie-breaking rights at Longford other than in a complex AIHN arrangement with market participants that does have Authorised MDQ.
- 4) AMDQ are conservatively calculated for injections in relation to a '1:20 scenario' over a five-year period and thus not all capacity that is available is allocated in the short term⁵
 - AMDQ are created for long periods of time (five years or in perpetuity). To guarantee that
 the system can support the AMDQ under normal operating conditions they are currently
 released to be available over the five-year period at peak load conditions.
 - The current availability, tenure and form of AMDQ may be hindering some shippers' ability to transport gas to storage or to export gas from Victoria via the DTS.

Description of the proposed rule

To address the issues related to the AMDQ regime in the DWGM, the following changes are proposed which are based the AEMC's recommendation in its Final report of the DWGM Review:

- (a) introducing separate, tradable entry AMDQ rights and exit AMDQ rights
- (b) introducing an exchange to improve secondary trading of AMDQ rights (permanent transfer) and benefits (temporary transfer)

⁴ AEMO, Notice to participant of AEMO's decision on making the Wholesale Market AMDQ Procedures (Victoria), 10 June 2014.

More precisely, the Victorian Gas Planning Report (VGPR) defines the 1-in-20 peak day demand projection (for severe weather conditions) as one that has a 5% probability of exceedance (POE) in a given year. This is expected, on average, to be exceeded once in 20 years. The total AMDQ available must be within these limits during the period of validity of AMDQ.

(c) making AMDQ available for a range of different tenures.

These are further detailed below.

Separate entry and exit AMDQ rights

Under this recommendation the rights attached to AMDQ would be separated into entry AMDQ and exit AMDQ. They would no longer be point-to-point rights, but entry rights that refer to a specific physical injection point to the virtual hub (the DTS), and exit rights that refer to a specific physical withdrawal point from the virtual hub (the DTS).

The entry AMDQ and exit AMDQ that would result from the separation would not be firm rights with respect to scheduling. The DWGM would remain as market carriage and access to the DTS would be determined through the DWGM scheduling process.

Injection tie-breaking rights would continue to be associated with entry AMDQ whereas withdrawal tie-breaking and curtailment rights would be associated with exit AMDQ.⁶

The rule change request does not propose to make amendments to the process of the creation and allocation of AMDQ. That is, entry AMDQ and exit AMDQ could be created in the same way that AMDQ cc can currently be created:

- through the regulatory process where an investment in the DTS is part of the regulatory process; and
- through market led investment if a participant underwrites investment in the DTS outside the regulatory led investment process.

Existing AMDQ holders would now hold separate entry AMDQ and exit AMDQ.⁷

Retaining the existing ownership arrangements for Authorised MDQ and AMDQ cc drives the following outcomes:

Tariff V customers: Exit AMDQ associated with Tariff V customers would continue to be
dynamically allocated to the financially responsible market participant (retailers) based on
the diversified Tariff V block allocation of Authorised MDQ and customer numbers. Exit
AMDQ are allocated on the same basis but withdrawal tie-breaking rights are not relevant
for these uncontrollable withdrawal points.

However, it is not necessarily efficient that entry AMDQ from Longford is dynamically allocated between retailers in proportion to the number of customers each retailer serves, as they may not have a contract for gas at Longford (the entry point for all Authorised MDQ). One option is to continue to dynamically allocate entry AMDQ to retailers, but then allow the retailer to trade this benefit (noting that the quantity of benefits depends on customer number and may change over time). Alternatively, the entry AMDQ associated with Tariff V

The Victorian Government submitted a separate rule change proposal that seeks to address issues associated with congestion uplift in the Victorian gas market. If the proposed rule is adopted, congestion uplift hedge would no longer be associated with AMDQ.

In the event of a transmission constraint (as defined in NGR part 19), Tariff D customers without AMDQ are curtailed before Tariff D customers with AMDQ. However, the curtailment right does not supersede the existing curtailment rights of uncontrollable withdrawals (Tariff V customers). See AEMO, General procedure - Gas load curtailment and gas rationing and recovery guidelines, 13 May 2010, available https://www.aemo.com.au/-/media/Files/PDF/0990-0005-pdf

customers could be made available to all market participants (that is, be separated from Tariff V customers). That way any market participant, including retailers, could secure the entry AMDQ from Longford. The treatment of entry AMDQ for Tariff V customers should be considered further in the rule change process.

- Tariff D customers: would now hold separate entry AMDQ and exit AMDQ:
 - If Tariff D customers hold Authorised MDQ and the benefits are allocated to their retailer, they would continue to allocate the benefits of diversified Authorised MDQ as an entry AMDQ and benefits of Authorised MDQ as an exit AMDQ to that retailer.⁸
 - If Tariff D customers are a market participant and hold either Authorised MDQ or AMDQ cc, they would now hold the equivalent quantity of separate entry AMDQ (diversified Authorised MDQ and AMDQ cc) and exit AMDQ (Authorised MDQ and AMDQ cc).
- Market customers: would receive entry AMDQ, equivalent to the AMDQ cc and diversified Authorised AMDQ holdings, and exit AMDQ equivalent to existing AMDQ transferred/nominated to controllable System Withdrawal Points and AMDQ cc nominated to Tariff D sites.
- DTS Service Provider and AEMO: would receive entry and exit AMDQ equivalent to their AMDQ cc and diversified Authorised MDQ holdings.⁹

Going forward, new entry AMDQ and exit AMDQ could be created in the same ways AMDQ can currently be created:

- Through the regulatory process: where an investment in the DTS is part of the regulatory
 process and leads to greater capacity in the system, new entry and/or exit AMDQ could be
 created and auctioned to participants. AEMO might also decide that additional entry and/or
 exit AMDQ could be created as a result of having AMDQ for different tenures, to reflect
 seasonal demand (discussed below).
- Through market led investment: if a participant underwrites investment in the DTS outside the regulatory led investment process and this leads to additional capacity in the system, the DTS service provider can allocate entry and/or exit AMDQ to that participant.

In line with current procedures, when a Tariff V or Tariff D customers change their retailers, the benefits associated with the entry and exit AMDQ would be reallocated to the new retailers. Also, an outcome of the separation of entry and exit AMDQ and also the rule change request submitted separately by the Victorian Government, exit AMDQ allocated to Tariff V or Tariff D customers that are not market participants, would serve no purpose in the market other than as curtailment protection for Tariff D customers in event of a transmission constraint that results in a Threat to System Security or Emergency.

APA currently holds 17TJ of Authorised MDQ for withdrawals at Culcairn. Therefore, APA would receive entry AMDQ at Longford and exit AMDQ at Culcairn for their diversified Authorised MDQ holdings to the extent that they have not been transferred to a market participant for a period. Similarly, AEMO holds 3,400GJ of Authorised MDQ reserved for compressors. Therefore, AEMO would receive entry AMDQ at Longford and exit AMDQ at compressor sites.

Improved trading of AMDQ rights and benefits

Under this rule change request, a version of AEMO's 2013 proposed portfolio rights trading rule change proposal would be introduced. The rule change request seeks to improve the ability for participants to trade their rights permanently (for the remaining tenure of the AMDQ) or trade the AMDQ benefits temporarily. It is proposed that there would be a trading platform that would facilitate all aspects of the trade (finding buyers and sellers, matching and executing trades, and automatically updating AEMO's systems). This platform could be similar to that recommended by the AEMC in the east coast review stage 2 final report with regard to the trading of point-to-point capacity outside the DTS and which is currently being implemented by the Gas Market Reform Group (GMRG) and AEMO using Trayport. For example, AMDQ trading could occur through standardised products on Trayport.

The trading of entry and exit AMDQ could occur in the following ways:

• Tariff V customers: as discussed above, entry and exit AMDQ associated with the withdrawal point would be dynamically allocated to retailers, and trading exit AMDQ are not relevant for Tariff V customers. On the other hand, the entry AMDQ benefits would be tradable by their retailers. This would allow retailers to on-sell the entry AMDQ benefits at Longford if they are unable to use it themselves because they are not injecting gas to service their customers' demand from Longford. In each case the Tariff V customers remain the owner of the rights.

• Tariff D customers:

- If the Tariff D customer is not a market participant the benefits of entry and exit AMDQ rights are allocated to a retailer and that retailer could on-sell the entry AMDQ benefits, but not the exit AMDQ benefits. Therefore, the retailer could trade this benefit as an injection tie breaking right for a period, while it remained the retailer of the Tariff D customer. The Tariff D customer remains the owner of the rights.
- If the Tariff D customer is a market participant, it would have the ability to trade its entry
 AMDQ or exit AMDQ permanently or trade the benefits temporarily.

In November 2013, AEMO submitted a rule change request to the AEMC to introduce portfolio rights trading in the DWGM. The AEMC considered that portfolio rights trading would provide an efficient, flexible and timely mechanism to help participants to better manage their short-term risk exposure. However, costbenefit analysis at the time indicated that the IT cost to implement the required changes would not outweigh the benefits. The IT requirements for AMDQ trading is expected to leverage off the work currently underway by the Gas Market Reform Group to implement pipeline capacity trading across the wider east coast, which will use the Trayport system. In addition, the rule change proposal seeks to improve trading of not just benefits, but of the rights themselves. AEMC, *Portfolio Rights Trading*, Draft Rule Determination, 19 June 2014, pp. 21-22.

See recommendation 7 at AEMC, *East coast wholesale gas markets and pipeline frameworks review*, Stage two final report, 23 May 2016, Sydney. The briefing papers related to the stages of implementation of the pipeline capacity trading reform by the GMRG are available on the project website: http://gmrg.coagenergycouncil.gov.au/publications/industry-reference-group-briefings. Further information can also be found on AEMO's website: https://www.aemo.com.au/Gas/Pipeline-Capacity-Trading

AEMO, Submission to the AEMC, Assessment of alternative market designs, Appendix A, p. 9.

 Market participants: would have the ability to trade their entry AMDQ or exit AMDQ permanently or temporarily.

Making AMDQ available for a range of different tenures

Currently, the total amount of AMDQ cc in the market is consistent with the physical capacity of the system. Under normal operating conditions (that is, other than when there is transmission equipment failure or another significant issue on the network) the physical rights provided by AMDQ can be honoured.

The availability of AMDQ is determined by AEMO and agreed to by the APA Group with the aid of load flow modelling software, taking a probabilistic assessment of whether capacity will be available. The capacity is currently calculated predicated on being available on a year-round basis and the capacity should be available unless system demand exceeds a one day in every twenty years event.

Under the rule change proposal, entry and exit AMDQ would be made available for shorter periods than the current 5 year-period. The total amount of AMDQ available over the DTS access period would be allocated in tranches. ¹³ For example, 50 per cent could be allocated for the 5 year-period while the remainder could be allocated in smaller tenures throughout the access period, such as yearly and quarterly. The specifics would not necessarily need to be determined in the rule change process, but could instead be determined in consultation with industry during implementation through AEMO procedures.

As a result of the rule change request, when new AMDQ is released it would be released in seasonal or monthly tranches. This is likely to lead to additional AMDQ to be released. For example, a one day in twenty-year summer event is likely to have different loadflow characteristics than a one day in twenty-year winter event. Additional summer capacity might therefore be able to be released which would not be consistent with the physical capacity of the system in winter and vice versa. In this way, the AMDQ made available to market participants more closely aligns with the available capacity of the system throughout the year.¹⁴

Careful consideration will need to be given to the choice of tenure range and percentage allocated to them. For example, long term tenures may increase market power as smaller or new market participants would have to then buy from those market participants able to access these longer tenures. However, a higher percentage allocated to shorter tenures may inhibit use of the trading platform. The tenure of AMDQ and the timing of their allocation should allow new or small participants with increasing portfolios to access capacity at regular intervals. The trading platform together with making AMDQ available for different tenure could also be used to make previously unsold AMDQ available to market participants, further increasing the ease of access and trading of AMDQs.

Other considerations

Once the three components of the rule change proposal are agreed on, there may be potential to simplify the market further. For example, areas that the AEMC may wish to consider include:

This would not apply to existing Authorised MDQs which have been allocated in perpetuity.

As a result of a related rule change proposal on entry and exit AMDQ, the seasonal availability of entry and exit AMDQ may differ from each other as well. That is, the available entry AMDQ may be different from the available exit AMDQ.

- How the procedures that allow market participants to take advantage of tie-breaking benefits may be simplified. Currently tie-breaking benefits are attached to AMDQ and thus it is inherently linked to the tenure of AMDQ rights which is either in perpetuity (in the case of Authorised MDQ) or the period of access arrangement (in the case of AMDQ cc). Some market participants, for example a gas fired power station, only use the DTS intermittently. These participants highly value tie-breaking rights and require them at short notice. The current arrangements do not facilitate access to tie-breaking rights at a short notice.
- How trades for entry and exit AMDQ could occur and under what circumstances exit AMDQ can be transferred to other points. For example, trades for exit AMDQ could occur at the reference hub, with transfers or nominations to other locations taking place through a separate step. This would maximise liquidity of trades, however there is a risk for the participant that they then cannot transfer the AMDQ to their preferred location. Another option is to limit the trading to similar locations (close proximity points). This may reduce liquidity, but any participant would be free to buy AMDQ rights at one location and transfer it to another location. They would take on the risk by choosing to trade at a different close proximity point. The transfer algorithm could possibly be integrated into the trading platform, depending on the cost and complexity of doing so.
- Whether AMDQ Procedures are required to be updated to cover entry and exit AMDQ, including details of limitations to transfer entry AMDQ between system injection points and exit AMDQ between system withdrawal points.
- How best to maximise the value of the Authorised MDQ associated with the Longford to Melbourne pipeline given that retailers that serve customers along this pipeline may not have a contract for gas at Longford (the entry point for all Authorised MDQ).
- Whether the limited curtailment benefits that are associated with Authorised MDQ and AMDQ cc for uncontrollable Tariff V and D customers are achievable through the current arrangements. Given that these sites are uncontrollable and that there are limitations in enforcing curtailment in a way to differentiate between customers with and without AMDQ, the practical benefits of curtailment protection appear to be limited.
- Whether the introduction of entry and exit AMDQ may change DTS Service Provider liability to share costs when DTS Service Provider does not deliver capacity in accordance with the Service Envelope Agreement.¹⁵
- Consideration could also be given to whether there will be benefits from introducing new
 naming conventions for entry and exit AMDQ. This may assist with articulating the
 difference between the new and existing regime.

Under the Service Envelope Agreement, the pipeline operator provides a single service (the reference service) to AEMO, which is the only user of the pipeline under the NGL definition. Shippers access the reference service through AEMO in accordance with the NGL and NGR, with the only relationship between the pipeline operator and shippers being through the transmission payment deed.

Costs and benefits of the proposed rule

The reforms described above are expected to reduce the complexity of AMDQ regime and make it easier for participants to secure and trade AMDQ rights, as well as being a step towards providing better signals for capacity usage to help to facilitate market-led investment.

Separate entry and exit AMDQ

Introducing separate entry and exit rights is expected to improve the investment signals associated with AMDQ. If demand for AMDQ is high and participants are unable to secure AMDQ from the primary or secondary market, it may provide a signal that more capacity is required. Similarly, the ability to obtain AMDQ on the secondary market may defer inefficient or unnecessary investment which will reduce costs for Victorian gas customers.

Separate entry and exit rights may also encourage trading of gas on the DWGM or through the exchange, rather than through opaque bilateral contracts. ¹⁶ Market participants buying gas on the exchange or through the DWGM do not need entry AMDQ (as they are sourcing the gas on the exchange rather than injecting it themselves) but may desire exit AMDQ; conversely, market participants selling gas on the exchange do not require exit AMDQ but may desire entry AMDQ. The current arrangement may encourage market participants to both inject and withdraw their own gas (because by holding AMDQ they have a right associated with injections and withdrawals) rather than to source their gas from a counterparty.

In addition, participants have greater ability to tailor entry and/or exit AMDQ to their specific transportation needs than with point-to-point AMDQ rights.

Improved trading of AMDQ rights and benefits

Introducing a trading exchange to facilitate the trading of AMDQ rights and benefits is expected to provide for more efficient allocation of AMDQ between market participants. Having better access to AMDQ will better enable participants to manage scheduling (volume) risks from congestion. A trading exchange for AMDQ may improve trading between regions, as participants would have a better ability to obtain AMDQ and have greater certainty of being scheduled in the DWGM, which would support trading decisions.

Improved trading enables market participants to secure AMDQ who were not a market participant at the time of the auction prior to the beginning of the access period. It also reduces search and transaction costs for trading AMDQ, enables market participants to find counterparties, and reduces the complexity of trading for participants. These aspects may help to encourage new entrants into the DWGM. This is expected to enhance opportunities for the trade of gas and this will assist with managing gas system security and put downward pressure on gas prices.

Making AMDQ available for a range of different tenures

Introducing AMDQ of different tenures will facilitate the seasonal or monthly determination of available capacity, and this will maximise the amount of AMDQ that is made available to

A rule change proposal, separately prepared and submitted by the Victorian Government, seeks to establish a forward trading market in the DWGM. This would further enhance the benefits expected from the present rule change proposal.

participants. The quantity and location of demand for gas across the DTS is significantly different across the seasons. For example, in winter, demand peaks because of residential heating requirements. In summer, flows are quite different, with increased demand to withdraw gas to the lona storage facility, for example. The amount of AMDQ is currently set with regard to the likely capacity of the system on a peak winter day. By allocating AMDQ in more granular timescales, the amount of rights released will more closely align with the likely available capacity across the year. Releasing more capacity in the non-winter period should allow market participants to better manage scheduling risk at these times.

Having access to AMDQ of different tenures also gives participants greater flexibility to decide what tenure of AMDQ to buy. For example, a participant would not need to commit to 5 years of AMDQ if they only need it for (for example) 3 months. It allows those that are new to the Victorian gas market to more readily obtain AMDQ when they decide to enter the market (e.g. partway through the access period).

Like introducing the trading exchange, having AMDQ of different tenures also enables market participants to gain access to AMDQ who were unsuccessful at securing AMDQ during the five-year auction, or were not a market participant at the time of the auction.

National Gas Objective

Collectively, these recommendations will progress towards the COAG Energy Council's vision for the eastern Australian gas market and address matters raised by the Victorian government in its terms of reference for the Review of the Victorian Wholesale Gas Market, completed by the AEMC in June 2017.

Products such as Authorised MDQ and AMDQ cc help to manage the allocation of pipeline capacity to different users. The case for reforming the manner in which AMDQs are structured rests on the ability to improve the allocative and dynamic efficiency of the market. Allocative efficiency is one of the ways that economic efficiency – the instrumental logic of the National Gas Objective – is attained.

"efficient allocation of natural gas and transportation services to market participants who value them the most, typically through price signals that reflect underlying costs." ¹⁷

The supporting services of the pipeline system are crucial to the market's ability to deliver an efficient outcome in the interests of consumers. AMDQs signal (to some extent) the value of pipeline capacity. However, the rigidities the AEMC identified in the AMDQ regime through its review impact on the effectiveness of this role.

Improving pipeline capacity rights allocation and improving capacity rights trading should better enable market participants to manage scheduling risk, and allow for the more efficient allocation of capacity rights between market participants. It will also reduce barriers to entry, encouraging new entrants to the market including those in other states, facilitating inter-jurisdictional trade.

It may also assist in signalling when further investment in pipeline infrastructure is needed, should scarcity arise in AMDQ rights and benefits. To the extent that this information can then be

¹⁷ AEMC, Review of the Victorian Wholesale Gas Market Final Report, 2017 p.9.

factored into investment decisions and timings around pipeline augmentation, this may also improve the dynamic efficiency of the Victorian gas sector.

The AEMC also notes that separation of AMDQs into entry and exit products, and establishment of a short-term trading exchange, may remove some practical barriers to trading of gas on the exchange and help to improve the environment for parties which want to buy and sell gas through the DWGM, providing flow on benefits to the broader market for gas in terms of its liquidity and depth.

Finally, the proposed reforms will assist in contributing to the further development of the east coast gas market more broadly, which is guided by the COAG Energy Council's gas market vision statement and the reform "target model" set out by the AEMC in its Review of the Victorian Declared Wholesale Gas Market.

The target pathway proposes a consolidation of wholesale gas trading around two major trading hubs in Queensland (Wallumbilla GSH) and Victoria (a further reformed DWGM with a continuous trading model and entry and exit rights for capacity). This is a longer-term reform project but continues to inform the gas market reform program of the COAG Energy Council.

The AMDQ reforms, as part of the suite of measures proposed by the AEMC in the DWGM Review, are consistent with development of the DWGM toward the target model. That model calls for the establishment of a zonal hub market in Victoria based around the DTS with *firm* entry and exit rights that are bought and sold by participants, which would provide a way of more substantively valuing the capacity of the transmission system. While AMDQs cannot perform this function, the restructuring from point-to-point to exit and entry based forms of AMDQ should assist the market in better understanding how entry and entry capacity can be allocated through market transactions. All three components of the current rule change proposal (improved trading, shorter tenures and separate entry and exit AMDQs) are features of and thus represent a step towards the target model. This is expected to help incumbent DWGM participants adjust to certain aspects of the target model, provide learning opportunities to better inform the implementation of the target model, and reduce the cost, risk and time to transition, should transitional measures be appropriate.