



Australian Energy Market Commission

RULE DETERMINATION

National Gas Amendment (Portfolio Rights Trading) Rule 2014

Rule Proponent

Australian Energy Market Operator

27 November 2014

**RULE
CHANGE**

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About the AEMC

The AEMC reports to the Council of Australian Governments (COAG) through the COAG Energy Council. We have two functions. We make and amend the national electricity, gas and energy retail rules and conduct independent reviews for the COAG Energy Council.

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Summary

On 13 November 2013, the Australian Energy Market Operator (AEMO) submitted a rule change request to the Australian Energy Market Commission (Commission) in relation to the introduction of portfolio rights trading (PRT) in the Victorian declared wholesale gas market.

In light of AEMO's recent revisions to the costs and timeframe to implement PRT that were notified to the Commission following its draft rule determination, the Commission has determined not to make the proposed rule.

AEMO's rule change request

The Victorian declared transmission system (DTS) is the only pipeline operating under a market carriage model in Australia. Under this model, market participants utilising the DTS cannot reserve firm capacity on the pipeline. However, they may hold authorised MDQ (AMDQ) or AMDQ credit certificates (AMDQ cc) which provide certain financial and market benefits, and some limited physical benefits. The financial and market benefits include priority in scheduled injections (injection tie-breaking rights) and reduced uplift payments (uplift hedge protection).

AEMO identified a number of barriers which it considered limit the ability of market participants to acquire AMDQ and AMDQ cc to meet their injection tie-breaking and uplift hedge needs. To address this problem, AEMO proposed a number of amendments to Part 19 of the National Gas Rules to facilitate the introduction of PRT in the Victorian declared wholesale gas market.

The PRT mechanism was proposed to allow market participants to more readily carry out short term trades of the benefits attached to AMDQ and AMDQ cc, without changing the physical ownership of AMDQ and AMDQ cc or any curtailment rights associated with them. AEMO considered that the introduction of PRT would encourage more efficient utilisation of the Victorian DTS. It considered that market participants able to more readily access the benefits of AMDQ and AMDQ cc may be more willing to utilise existing pipelines.

To support PRT, trades would need to be given effect in AEMO's scheduling and settlement processes. This would require changes to be made to AEMO's existing market systems, including the development of a new IT interface for registering and confirming bilateral trades between market participants. Importantly, the introduction of PRT would not address matters related to contract terms and payments, including the financial transactions, related to PRT. These would be set out in bilateral contracts between trading parties.

The Commission's final determination

As outlined in the Commission's draft rule determination, there are potential benefits associated with implementing the proposed rule submitted by AEMO. Overall, the proposed PRT mechanism has the potential to promote more efficient utilisation of

transmission pipeline capacity by providing participants with an efficient, flexible and timely mechanism to help them better manage their short term risk exposure and optimise their portfolios. This could, in turn, defer the need for new pipeline investment in the Victorian DTS.

However, in light of a number of matters which have arisen since its draft rule determination, the Commission is unable to conclude with certainty that AEMO's proposed rule will contribute to the achievement of the national gas objective. This conclusion has been driven by the following factors:

- *Revised cost of implementing PRT.* Following the publication of the draft rule determination, AEMO advised that the cost of implementing the proposed PRT mechanism had increased by 37 per cent from \$500,400 to \$687,500;
- *Revised estimate of the timeframe for implementing PRT.* Following the publication of the draft rule determination, AEMO advised that the earliest possible date for the IT implementation of the proposed PRT mechanism would be April 2016. With this substantially different timeframe, it is difficult to determine with any certainty whether sufficient quantities of AMDQ and AMDQ cc will be traded (that is, made available and sought) to render the costs of implementing PRT worthwhile; and
- *Victorian gas market review.* The forthcoming Victorian gas market review that has been initiated by the Victorian Government has created uncertainty and a change in market conditions. The outcomes of this AEMC review may also impact on the operation of PRT, particularly its duration. This has implications for the PRT cost-benefit assessment. In this uncertain environment, market participants appear reluctant to commit to using PRT to the extent initially anticipated.

Taking these factors together, the Commission is not satisfied that the proposed rule will, or is likely to, contribute to the achievement of the national gas objective. The Commission has therefore determined not to make the proposed rule.

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1 AEMO's rule change request

1.1 The rule change request

On 14 November 2013, the Australian Energy Market Operator (AEMO) submitted a rule change request to the Australian Energy Market Commission (AEMC or Commission) to introduce portfolio rights trading (PRT) in the Victorian declared wholesale gas market (DWGM). Under the proposal, PRT would be a new market mechanism to facilitate the transfer of the market benefits of authorised MDQ (AMDQ) and AMDQ credit certificates (AMDQ cc) allocated to close proximity points between market participants.

1.2 Relevant background

The Victorian declared transmission system (DTS) is the only pipeline operating under a market carriage model in Australia.¹ Under the market carriage model, market participants utilising the DTS cannot reserve firm capacity on a pipeline.² While users do not have firm capacity, they may hold AMDQ or AMDQ cc which provides certain market rights and benefits and some limited physical benefits.

AMDQ is a right recognised by the National Gas Rules (NGR) and is normally held by a customer. AMDQ cc is a right created by contract and is normally held by a market participant (but can also be acquired directly by a customer).³

Broadly, there are two different types of right (or benefits) that are created by holding AMDQ and AMDQ cc:

- Limited physical access rights: The underlying AMDQ and the physical rights associated with AMDQ cc give a customer some protection against curtailment in the event of an emergency. These physical rights are owned by the customer.
- Financial rights: The market benefits associated with AMDQ and AMDQ cc are held by market participants and include:
 - Priority in scheduled injections (injection tie-breaking rights (ITR)): When there are equal-priced injection bids, those bids associated with AMDQ or AMDQ cc are scheduled first;

¹ The types of transportation contracts and services available to a shipper will depend on whether the pipeline operates under a market or a contract carriage capacity management model.

² In contrast, transportation services provided under a contract carriage model are supplied under bilateral contracts between the pipeline owner and the shipper of gas. These contracts specify a certain amount of firm capacity that will be provided to the shipper.

³ In this context, customer refers to an end-user and market participant refers to the person who is financially responsible for a customer. That is, a retailer.

- Reduced uplift payments (uplift hedge (UH) protection): Market participants can use part or all of their AMDQ or AMDQ credits to hedge against congestion uplift charges up to their Authorised Maximum Interval Quantity (AMIQ).

The entitlements to the 'portfolio' of financial rights (that is, to the market benefits associated with AMDQ and AMDQ cc) held by a market participant are the 'rights' that are proposed to be traded under PRT. The underlying AMDQ and AMDQ cc and the curtailment protection associated with it would remain with the customer or market participant who owns them.

There are a number of ways that market participants can acquire AMDQ and AMDQ cc. They can:

- enter into an agreement with existing holders of AMDQ to transfer an agreed quantity from one site to another or to the reference hub;⁴
- enter into an agreement with existing holders of AMDQ cc to transfer an agreed quantity at the reference hub;
- tender for AMDQ cc when new DTS capacity is created;
- fund an expansion of the DTS (although this has not happened to date);
- tender for existing AMDQ cc from the DTS owner when the current term of the AMDQ cc expires; and
- bid for spare AMDQ at an AEMO run auction.

Appendix C provides some background to, and data on, the current allocation of AMDQ and AMDQ cc in the DWGM.

1.3 Rationale for the rule change request

Section 3 of AEMO's rule change request includes a statement of issues. In summary, AEMO has identified a number of barriers which it considers limit market participants' ability to acquire AMDQ and AMDQ cc to meet their injection tie-breaking and uplift hedge needs. These barriers are explored further in Chapter 3 of this final rule determination. They relate to the following matters:

- AMDQ allocation is unrelated to market participants' injection capacity at Longford;
- the market in AMDQ and AMDQ cc created by the transfer process is not liquid;

⁴ The reference hub is a notional site within the DTS established for the purpose of valuing AMDQ and AMDQ cc. When a market participant does not nominate its entire AMDQ to actual sites, it has to nominate its residual AMDQ somewhere.

- opportunities to gain injection tie-breaking rights through means other than holding AMDQ or AMDQ cc are limited;
- currently, AMDQ cc tends to be released in tranches (often five years); and
- future expansion of the Longford-Melbourne pipeline to create new AMDQ cc is unlikely given the pipeline currently has some spare capacity.

AEMO considers that a mechanism which enables underutilised AMDQ and AMDQ cc to become available to market participants who do not have enough to cover their available gas injections will provide for more efficient utilisation of pipeline capacity in the DWGM. This should ultimately defer the requirements for new pipeline capacity.⁵

1.4 Solution proposed in the rule change request

To address the matters identified above, AEMO proposed a number of amendments to Part 19 of the NGR to facilitate the introduction of PRT in the DWGM. The PRT mechanism was intended to allow market participants to more readily carry out short term trades of the benefits attached to AMDQ and AMDQ cc, without changing the physical ownership of AMDQ and AMDQ cc or any curtailment rights associated with them. AEMO considered that the introduction of PRT would encourage more efficient utilisation of the Victorian pipeline system. It considered that market participants able to more readily access the benefits of AMDQ and AMDQ cc may be more willing to utilise existing pipelines.

To support PRT, AEMO proposed to develop a new market systems interface (the PRT nomination WebExchanger (WEX) and Web service) for registering and confirming trades carried out between market participants. It also proposed to develop a new market systems module for updating market participant's AMDQ and AMDQ cc allocation to take account of the traded quantities. This would enable market participants engaged in PRT to receive the relevant market benefits of the trades.

AEMO did not intend for the PRT mechanism to include contract terms and payments. Financial transactions related to PRT would take place through bilateral contracts between the trading parties outside of the NGR. Also, the proposed PRT mechanism did not incorporate a listing service. Market participants interested in participating in PRT would need to search for suitable trading partners also outside the NGR.⁶

The amendments proposed to Part 19 of the NGR included a number of changes to existing definitions and rules as well as the inclusion of a number of new definitions and rules. In summary, the proposed rule sought to:

- create a number of new definitions, for example “Adjusted AMDQ”, “Adjusted AMDQ credits”;

⁵ AEMO, rule change request, p.16.

⁶ This issue is discussed further in Chapter 3.

- amend several existing definitions, for example “AMDQ credit”, “AMIQ”, “AMDQ”;
- amend several existing rules related to AMDQ cc tie-breaking and uplift payments; and
- create a new rule which requires AEMO to make PRT procedures to implement the PRT model.

The proposed rule also clarified the type of rights that would be created by PRT, and the ownership of them.

While not specified in the proposed rule, AEMO indicated that PRT procedures which it would be required to develop under the proposed rule, would contain information related to:

- permitted trades;
- the available quantity of transferrable portfolio rights;
- PRT nominations;
- determination of market participants' adjusted AMDQ and AMDQ cc;
- notification to APA GasNet; and
- restrictions on transfer quantities.

1.5 The rule making process

On 13 March 2014, the Commission published AEMO's rule change request and a consultation paper prepared by AEMC staff identifying specific issues or questions for consultation. Submissions closed on 10 April 2014. The Commission received six submissions.

On 19 June 2014, the Commission published a draft rule determination in relation to the rule change request. The Commission's draft rule determination was to make the rule proposed by AEMO. Submissions closed on 31 July 2014. The Commission received two submissions.

In preparing the final rule determination and final rule, the AEMC sought clarification from AEMO on an appropriate commencement date for the final rule, should it be made by the Commission. AEMO was unable to provide a certain timeframe for implementation, but confirmed that any changes to its IT systems to implement PRT would not be included in its April 2015 IT release as originally proposed. AEMO also informed the Commission that there may be some changes to the estimated costs associated with implementing the proposed rule change request.

On 9 September 2014, the Commission made a decision to extend the period of time for making the final rule determination and final rule to 30 October 2014. This was to provide AEMO sufficient time to determine, and to consult with participants on, the re-estimated costs and implementation timeframes, and to then advise the AEMC.

On 13 October 2014, following its internal review of the cost and timeframe associated with implementing PRT, AEMO notified the Commission in writing of the following changes:

- the estimated timeframe for implementation of PRT had moved from April 2015 to December 2015; and
- the estimate of the total system implementation cost of PRT had increased by 37 per cent (from \$500,400 to \$687,500).

AEMO sought feedback from market participants to understand the implications of the revised implementation costs and timeframe (that is, December 2015) on the interest in take-up of PRT if the proposed rule was made. The submissions from stakeholders were forwarded to the Commission for consideration.

However, on 20 October 2014, AEMO notified the Commission of a further change to the estimated timeframe for implementation of PRT. It noted that, in the instance the Commission decided to make a rule to introduce PRT in the DWGM, the expected date of implementation would now be late March-early April 2016. AEMO stated:⁷

“Issues arising with deployment of changes to the STTM systems, in June 2014, led AEMO to undertake a critical review of its market IT system development and testing processes. In turn, this led to a reassessment of the development scope and effort required for implementation of PRT.”

AEMO indicated that this new timeframe was not expected to change the revised implementation costs.

On 23 October 2014, the AEMC again extended the period of time for the publication of the final rule determination and final rule to 27 November 2014. The Commission considered that the extension of time was necessary to allow it to consult publically with stakeholders on the issue of AEMO’s revised estimated costs and timeframes associated with implementing the proposed rule.

To facilitate this consultation, the AEMC published an explanatory note inviting written submissions and comments on this specific issue. Submissions closed on 6 November 2014. The Commission received three submissions.

All stakeholder submissions received in response to the three rounds of consultation are available on the AEMC website (www.aemc.gov.au). A summary of the issues

⁷ AEMO letter to AEMC, 20 October 2014. See AEMC, Explanatory note - Request for submissions on a specific issue, 23 October 2014, p.7.

raised in submissions, and the Commission's response to each issue, is contained in Appendix B.

2 Final rule determination

2.1 Rule making test

Under s. 291(1) of the National Gas Law (NGL), the Commission may only make a rule if it is satisfied that the rule will, or is likely to, contribute to the achievement of the national gas objective (NGO). The NGO is set out under s. 23 of the NGL as follows:

“The objective of this Law is to promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas.”

2.2 Assessment criteria

To give effect to the NGO, the Commission has considered the following principles in assessing the rule change request:

- *Competition:* Arrangements which facilitate access to unused pipeline capacity may increase competition between market participants. This could occur by broadening the tools available for portfolio management, lowering barriers to entry for new market participants (including new retailers) and enhancing participation by end users in the DWGM. Increasing competitive pressure could result in lower prices to consumers.
- *Flexibility:* Well-functioning and flexible pipeline trading arrangements may lower transaction costs for market participants seeking access to short-term pipeline services. In addition, arrangements which generate interest between buyers and sellers may contribute to pipeline capacity trading liquidity.
- *Efficient use of gas transmission capacity:* Arrangements which encourage the reallocation of unused pipeline capacity will facilitate efficient use of existing infrastructure and should contribute to the pipeline being expanded in an efficient manner.

In assessing the request against the NGO, the Commission also considered the likely long term costs and benefits of the proposed rule compared to the counterfactual of not making the proposed change to the NGR. In doing so, the Commission considered whether the proposed rule is likely to lead to more efficient use of, and investment in, natural gas pipelines, which is in the long term interests of consumers.

As noted in the consultation paper for this rule change request, the Commission has been mindful of the direction and outcomes (where relevant) of any other streams of

work currently taking place which are also exploring issues affecting the development of the eastern Australian gas market.⁸

2.3 Final rule determination

The Commission's final rule determination is to not make the proposed rule submitted by AEMO.

Having regard to the issues raised by AEMO in the rule change request, the Commission considers that there are potential benefits associated with implementing the proposed rule submitted by AEMO. These benefits were highlighted in the Commission's draft rule determination.⁹

However, in light of a number of matters which have arisen since its draft rule determination, the Commission is unable to conclude with certainty that AEMO's proposed rule will, or is likely to, contribute to the achievement of the national gas objective (NGO). This conclusion has been driven by the following factors:

- *Revised cost of implementing PRT.* Following the publication of the draft rule determination, AEMO advised that the cost of implementing the proposed PRT mechanism had increased by 37 per cent from \$500,400 to \$687,500;
- *Revised estimate of the timeframe for implementing PRT.* Following the publication of the draft rule determination, AEMO advised that the earliest possible date for the IT implementation of the proposed PRT mechanism would be April 2016. With this substantially different timeframe, it is difficult to determine with any certainty whether sufficient quantities of AMDQ and AMDQ cc will be traded (that is, made available and sought) to render the costs of implementing PRT worthwhile;
- *Victorian gas market review.* The forthcoming Victorian gas market review that has been initiated by the Victorian Government has created uncertainty and a change in market conditions. The outcomes of this AEMC review may also impact on the operation of PRT. This has implications for the PRT cost-benefit assessment. In this uncertain environment, market participants appear reluctant to commit to using PRT to the extent initially anticipated.

Taking these factors together, the Commission is not satisfied that the proposed rule will, or is likely to, contribute to the achievement of the NGO. The Commission has therefore determined not to make the proposed rule.

⁸ A number of strategic gas market reports have been released by the AEMC, and the Commonwealth and Victorian Governments, exploring issues affecting the development of the eastern Australian gas market. Among other things, these reports have included consideration regarding access to transmission pipeline capacity under contract and market carriage arrangements. See AEMC 2014, Portfolio Rights Trading, Consultation Paper, 13 March 2014, p.7.

⁹ AEMC 2014, Portfolio Rights Trading, Draft Rule Determination, 19 June 2014, p.8.

2.4 Relevant strategic priority

This rule determination relates to the second of the AEMC's current strategic priorities: promoting the development of efficient gas markets (the gas priority).

3 Commission's assessment

3.1 Proponent's view

3.1.1 The problem identified by AEMO

In section 3 of its rule change request, AEMO identified a number of issues which it believes are affecting market participants' ability to acquire AMDQ and AMDQ cc to meet their injection tie-breaking and uplift hedge needs. The key issues outlined by AEMO are set out below.

- *Allocation of AMDQ at Longford.* AMDQ associated with Longford is allocated for Tariff V customers (small customers such as households) between market participants based on their customer base. This may give rise to a situation where a market participant has been allocated more AMDQ than it has injection capacity at Longford.¹⁰ Since AMDQ allocated to Tariff V customers cannot be transferred (see below), it is effectively stranded.
- *The market in AMDQ transfers is not liquid.* The NGR provide for the transfer of AMDQ and AMDQ cc. However, for practical reasons, the AMDQ associated with Tariff V customers (equivalent to two thirds of all AMDQ and AMDQ cc) cannot be transferred in this manner.¹¹ In addition, AMDQ held by Tariff D customers (larger customers with daily demand meters) tends to be widely dispersed and held by those with minimal incentive to trade.
- *Alternatives to AMDQ and AMDQ cc that provide injection tie-breaking rights are limited.* It is possible to gain injection tie-breaking rights by selling an agency injection hedge nomination (AIHN) to a market participant who has AMDQ or AMDQ cc but no injections at the relevant injection point. An AIHN provides the market participant with physical injection with a tie-breaking right and payment for validating the other market participants' uplift hedge. Importantly, an AIHN does not provide an uplift hedge benefit to the injecting party. In addition, the process is complicated and tends to be used intra-company only.

¹⁰ According to AEMO, currently all 990TJ of AMDQ has been fully allocated. The three major retailers are responsible for over 75 per cent of the allocations as a result of them supplying Tariff V customers. However, these retailers now have a more diversified supply portfolio - over time, they have progressively moved away from Gippsland gas supplies to BassGas or Otway gas. As a result, these retailers are holding more AMDQ than they require to support their injection tie-breaking rights and uplift hedge at the Longford close proximity point. On the other hand, the Longford close proximity point remains the major source of gas supplies for some other market participants even though they do not have sufficient AMDQ allocations to cover their current injection tie-breaking rights and uplift hedge requirements.

¹¹ AMDQ can be transferred: between Tariff D customer sites; from a Tariff D customer site to the reference hub; from the reference hub to a Tariff D customer site; and between parties at the reference hub. Transfers of AMDQ cc may only be undertaken between parties at the reference hub. See AEMO Wholesale Market AMDQ Transfer Procedures (Victoria) v2.0 available at www.aemo.com.au.

- *Allocation of AMDQ cc.* AMDQ cc tends to be released in tranches, often for five years in line with APA GasNet's access arrangement period. This means that market participants must forecast their requirements out five years when tendering for AMDQ cc. This is likely to result in over or underestimation. In addition, new entrants within the five year period will be unable to obtain AMDQ cc from APA GasNet if the full allocation has been sold.
- *Creation of new AMDQ cc at Longford.* AEMO considers that expanding the Longford-Melbourne pipeline through either an expansion that is then included in APA GasNet's regulated capital base (regulated expansion), or by privately funded augmentation is unlikely in the near future.¹² Consequently, obtaining AMDQ cc through an increase in capacity of the Longford-Melbourne pipeline is also unlikely.

To highlight the extent of, specifically, the mismatch between allocated AMDQ and injections at Longford, AEMO provided some analysis in the rule change request. Based on consultation with stakeholders in 2011-2012 and drawing on data from winter 2011, AEMO found that approximately 250TJ of the 990TJ of allocated AMDQ at Longford was not supported by injections at the Longford close proximity point. That is, 250TJ of capacity on the Longford-Melbourne pipeline was not used.

Using data from winter 2012, AEMO also compared market participants' scheduled injections at the Longford close proximity point with their allocated AMDQ at Longford. This analysis showed that while some market participants were allocated up to 142TJ of AMDQ over their scheduled injections, other market participants experienced a shortfall of up to 92TJ of AMDQ relative to their scheduled injections.

In AEMO's view, this analysis showed that there is potentially up to 92TJ of AMDQ available for trade between market participants who have either a surplus or shortfall of AMDQ at Longford relative to their actual injections at the Longford close proximity point.¹³

3.1.2 The solution proposed by AEMO

To address these issues, AEMO proposed changes to the NGR to facilitate the introduction of PRT in the DWGM. PRT is intended to allow market participants to more readily carry out short term trades of the benefits attached to AMDQ and AMDQ cc. The holder of the AMDQ and AMDQ cc would remain unchanged.

To facilitate PRT, trades would need to be given effect in AEMO's scheduling and settlement process. A key feature of the proposed PRT arrangements was therefore a

¹² In respect of a regulated expansion, AEMO considers that the current underutilisation of the Longford-Melbourne pipeline would make it difficult for APA GasNet to successfully argue to the Australian Energy Regulator (AER) that an expansion would create an economic benefit and should be included in its capital base. In respect of a privately funded expansion, AEMO considers that injection tie-breaking right benefits alone would be unlikely to incentivise market participants to sign the long term contracts needed to underpin the investment.

¹³ AEMO rule change request, pp.7-8.

new IT interface for registering and confirming bilateral trades between market participants. However, the proposed arrangements did not include contract terms and payments. This is because financial transactions arising from PRT would take place through bilateral contracts between the trading participants.

In summary, the proposed rule required AEMO to:

- transfer the entitlement to the benefits associated with AMDQ and AMDQ cc between market participants;
- adjust trading market participants' AMDQ and AMDQ cc allocations in line with information submitted from PRT (the adjusted figures must then be used to calculate the injection tie-breaking right); and
- develop and publish PRT procedures to implement the PRT mechanism.

AEMO's rationale for the rule change can be summarised as:

- *Price impact on consumers.* AEMO considered that the proposed changes would, by promoting more efficient utilisation of existing pipeline capacity, defer the need for costly augmentation of the DTS. Deferring increases in the capital base would delay increases in transportation tariffs. In addition, AEMO considered that improving the ability of market participants to manage their risk exposure via injection tie-breaking rights and an uplift hedge would ultimately deliver lower gas costs to consumers.
- *Competition.* AEMO considered the proposed changes would promote competition in the DWGM by providing larger market participants with the flexibility to manage hedging instruments in the short term, and smaller market participants and new entrants with a mechanism to access AMDQ or AMDQ cc to manage short term exposure.
- *Risk management.* By providing market participants with greater flexibility to optimise scheduled injections and uplift hedge to mitigate the risk of uplift payments, AEMO considered that the proposed changes would increase certainty of supply and result in more efficient allocation of gas.
- *Transparency.* AEMO considered that, by broadening the AMDQ and AMDQ cc transferrable base and allowing a more liquid market for AMDQ and AMDQ cc to develop, the introduction of PRT would improve market transparency.

AEMO anticipated that the introduction of PRT would encourage more efficient utilisation of the Victorian DTS on the basis that if market participants are able to access the benefits of AMDQ and AMDQ cc, then they may be more willing to utilise the existing pipeline.

AEMO included a high level cost-benefit assessment in its rule change request. The results indicated that the PRT mechanism may return positive net market benefits

where the traded quantity of AMDQ and AMDQ cc was above 10TJ for each year over the lifetime of the project (which is assumed to be five years).

In addition, after consulting with market participants, AEMO identified what it considered to be sufficient opportunities for the take-up of PRT. Assuming each market participant retains a five per cent position buffer to manage risk associated with demand fluctuations, AEMO identified scope for between 5-10TJ of AMDQ that could be transferred at Longford, and a further 10-20TJ of AMDQ cc at Iona.¹⁴

3.2 Stakeholder responses to the consultation paper

The Commission received six submissions from stakeholders on the rule change request.¹⁵ An overview of submissions is provided in section 3.3.2 in the context of the solution proposed by AEMO.¹⁶

Broadly, most stakeholders who made submissions on the AEMC's consultation paper were supportive of the proposed rule change.¹⁷

AGL Energy (AGL) expressed full support for the proposal and noted that freeing up underutilised rights, and creating an opportunity for the buying and selling of those rights, would enhance economic efficiency and thus contribute positively to the NGO. It considered that the ability to trade potentially up to 90TJ of AMDQ would bring about sufficient benefits to warrant the rule change and associated costs.¹⁸

GDFSAE considered the proposed rule would enhance the DWGM by increasing the ability to trade both AMDQ and AMDQ cc, particularly for market participants who use these hedging instruments for injection prioritisation and insurance against constrained uplift charges. It cited the potential challenges associated with exchanging or trading AMDQ cc, and the lack of liquidity in AMDQ, as the reason why it supported the proposal.¹⁹

Both Lumo Energy and Hydro Tasmania considered that permitting the trading of AMDQ would improve the efficiency of the DWGM. Specifically, Lumo Energy considered the proposal would promote more efficient utilisation of existing pipeline capacity which, in turn, would defer new pipeline capacity and lead to lower transportation tariffs in the long run.²⁰

¹⁴ There is currently no opportunity for trade of AMDQ cc at Culcairn. This is because the full allocation of AMDQ cc at Culcairn tends to be supported by injections.

¹⁵ AGL Energy, Lumo Energy, GDF Suez Australian Energy (GDFSAE), Hydro Tasmania, APA Group, Alinta Energy.

¹⁶ A more detailed summary of the key issues raised by stakeholders, including the Commission's response to each issue, is set out in Appendix B.

¹⁷ Consultation paper submissions: AGL Energy, p.1; Lumo Energy, p.1; GDFSAE, p.2; Hydro Tasmania, p.1; APA Group, p.1; Alinta Energy, p.1.

¹⁸ AGL Energy, consultation paper submission, p.1.

¹⁹ GDFSAE, consultation paper submission, p.1.

²⁰ Lumo Energy, consultation paper, p.1; Hydro Tasmania, consultation paper submission, p.1

APA Group (APA) noted there was an issue with the current market structure of the DWGM in respect of providing market participants with the certainty they required. It considered the proposed rule may partly address this issue. However, it also considered that the PRT mechanism would create significant additional complexity on top of an already complex and technically challenging market structure. Overall, APA considered that a contract carriage based market model would offer superior outcomes for market participants, and ultimately consumers. It recommended that it ought to be considered in the context of the long term development of the Australian gas market.²¹

Alinta Energy (Alinta) welcomed efforts to improve trade in the benefits of AMDQ and considered the proposal may result in more efficient allocation of gas by allowing participants to trade with greater certainty and manage their risk exposure. It may also result in customers facing a more competitive market for supply. However, while it considered the proposal had a number of benefits in line with the NGO, it was not convinced that the proposal would increase transparency in the market, as suggested by AEMO.

In addition, Alinta did not consider that it was clear that the development of an additional instrument or a mandatory system administered by AEMO was the only approach to address the issues identified by AEMO. Alinta suggested that alternatives may be preferable. Specifically, Alinta identified two alternatives to portfolio rights trading which is considered warranted further consideration.²² For a discussion of these options, see Chapter 4 of the draft rule determination.²³

3.3 Commission's draft assessment

3.3.1 The problem identified by AEMO

In its draft rule determination, the Commission considered that, in light of recent developments in the eastern Australian gas market which have led to changing patterns of demand and supply, there may be a role for some mechanism that will help broaden the tools available for market participants to manage their risk.

The DWGM operates under a market carriage model which means that market participants cannot reserve firm capacity on the DTS. However, they may hold AMDQ or AMDQ cc which provides market participants with a means of optimising their injections and mitigating the risk of uplift payments. In general, market participants will seek to hold enough AMDQ or AMDQ cc to cover their anticipated injections at the relevant injection point.

As outlined in Chapter 1, there are a number of ways market participants can acquire AMDQ and AMDQ cc. They can: enter into an arrangement with an existing right holder to transfer ownership of the AMDQ or AMDQ cc permanently; apply for

²¹ APA Group, consultation paper submission, pp.1-2.

²² Alinta Energy, consultation paper submission, pp.1-3.

²³ AEMC 2014, Portfolio Rights Trading, Draft Rule Determination, 19 June 2014, Chapter 4.

AMDQ cc when the DTS' capacity is expanded; fund an expansion of the DTS; acquire existing AMDQ cc from the DTS owner when they expire; and bid for spare AMDQ at auction.

However, as indicated by AEMO, there remain a number of challenges for market participants seeking to acquire AMDQ and AMDQ cc for their short term needs. In its draft rule determination, the Commission identified two key issues with the existing arrangements:

- While the AMDQ transfer process allows market participants to transfer ownership of AMDQ and AMDQ cc between themselves, it is only applicable to Tariff D AMDQ, and to AMDQ cc: Tariff V AMDQ is excluded on the basis that there is no designated permanent owner. In addition, Tariff D customers tend to be widely dispersed and have little incentive to trade. Together, this means the base of rights holders able and willing to trade unused AMDQ is relatively small which has implications for liquidity.
- A tender process to obtain expired AMDQ cc is often only held every five years, while auctions to obtain spare AMDQ from defunct customer sites are discretionary and often involve small quantities of AMDQ. Therefore, while providing an important means of reallocating permanent ownership of AMDQ and AMDQ cc in the medium to long term, these mechanisms do not cater to market participants' day to day risk management needs.

The Commission therefore noted that there is no efficiently flexible and timely mechanism which allowed market participants to effectively manage their short term risk exposure, and optimise their supply portfolios. As suggested by AEMO, this may have implications for the efficient use of, and investment in, pipeline capacity in the DTS if left unaddressed.

3.3.2 The solution identified by AEMO

In its draft rule determination, the Commission recognised AEMO's efforts to introduce a new mechanism to assist market participants to manage their short term risks in the DWGM. It considered that the proposed PRT mechanism would address two key gaps in the current arrangements:

- It would broaden the base of rights holders able to bilaterally trade AMDQ and AMDQ cc. It would do so by providing for the transfer of the market benefits associated with AMDQ and AMDQ cc, without changing the holder of the AMDQ and AMDQ cc. This would avoid fundamental questions around ownership of Tariff V AMDQ.
- By facilitating bilateral trade of AMDQ and AMDQ cc, market participants would have the flexibility to tailor the terms and conditions of each trade to their individual needs. For example, decisions about the quantity of AMDQ and AMDQ cc available for trade (including whether a quantity is fixed or variable (or as available)), as well as decisions around the duration of a contract

(including whether it is short term or long term) and location would be made by market participants, subject to the benefits they would derive.

As noted in the draft rule determination, the Commission considered that by broadening the AMDQ and AMDQ cc tradeable base, PRT would allow for a more liquid market for AMDQ and AMDQ cc. However, this would not lead to improved market transparency as suggested by AEMO. Rather, the Commission considered that improvements in liquidity would, by generating interest among market participants in PRT, help to build competition in the Victorian gas market over time.²⁴

The Commission also considered that providing market participants with a flexible tool to help mitigate against the risk of uplift hedge should lead to the more efficient allocation of gas by assisting market participants in optimising their injections. This would be likely to encourage more efficient use of existing pipeline capacity and, in turn, potentially defer or remove the need for augmentation of the DTS.²⁵

With that said, the Commission recognised that the proposed amendments to the NGR focussed specifically on ensuring that market participants engaged in PRT would receive the relevant market benefits of a trade. For this to occur, trades would need to be given effect in AEMO's scheduling and settlement processes which would necessitate changes to AEMO's market systems. In this sense, the Commission considered AEMO's proposed amendments to be facilitative: they would provide for all market participants, including holders of Tariff V AMDQ, to receive the benefit from participation in PRT. The success of the PRT mechanism – in particular, its ability to lead to more efficient utilisation of the DTS – would be driven by several additional factors.

First, PRT would not provide value to market participants if there was no market for AMDQ and AMDQ cc. That is, there would need to be willing buyers and sellers. As noted in section 3.1.2, AEMO suggested that there was the potential for trade of between 5-10TJ of AMDQ at Longford, and 10-20TJ of AMDQ cc at Iona. This view of the potential opportunities for trade appeared to be supported by some stakeholders in their submissions to the consultation paper. Lumo Energy considered that AEMO's analysis of the potential trading quantities was conservative and that volumes were realistically likely to be closer to 30TJ in any given year.²⁶ AGL Energy also observed that the ability to trade potentially up to 90TJ in AMDQ would bring about sufficient benefits to warrant the rule change.²⁷

Recognising that it is difficult to identify with certainty the likely volumes of AMDQ and AMDQ cc to be traded through the proposed PRT mechanism, the Commission was comfortable that sufficient quantities existed to make the proposed PRT provisions potentially worthwhile.

²⁴ AEMC 2014, Portfolio Rights Trading, Draft Rule Determination, 19 June 2014, p.16.

²⁵ *ibid.*

²⁶ Lumo Energy, consultation paper submission, p.2.

²⁷ AGL Energy, consultation paper submission, p.1.

Second, PRT would only be viable if market participants seeking AMDQ or AMDQ cc were able to find willing counter-parties. At discussions held at the Gas Wholesale Consultative Forum (GWCF) during development of the proposed PRT mechanism, AEMO indicated its intention to create a new Market Information Bulletin Board (MIBB) report detailing market participants' AMDQ and AMDQ cc positions. The MIBB report would be market participant specific and only accessible by authorised users nominated by the market participant (that is, by invitation only).

Stakeholders did not comment directly on the matter of transparency of information regarding surpluses and shortfalls in AMDQ and AMDQ cc in their submissions to the consultation paper. Given the potential impacts this could have on the viability of the PRT mechanism, the Commission discussed this matter in Chapter 4 of the draft rule determination.²⁸

3.3.3 Commission's draft rule determination

Overall, the Commission considered that the proposed PRT mechanism would provide an efficient, flexible and timely mechanism that allowed participants to better manage their short term risk exposure and optimise their portfolios. The Commission's draft determination was to make a draft rule which was consistent with the proposed rule submitted by AEMO.

3.4 Stakeholder responses to the draft rule determination

The Commission received submissions from Lumo Energy and AGL in response to the draft rule determination. Both stakeholders expressed support for the Commission's draft rule determination for the reasons outlined in their earlier submissions to the consultation paper.

3.5 Commission's final assessment

As outlined in the Commission's draft rule determination, there are potential benefits associated with implementing the proposed rule submitted by AEMO. However, since making its draft rule determination, a number of matters have come to the Commission's attention which has led it to conclude that the potential benefits of making AEMO's proposed rule may not outweigh the potential costs of doing so, at this time. These matters are discussed below.

3.5.1 Implementation costs and timeframes

In preparing the final rule determination and final rule, the Commission sought clarification from AEMO on an appropriate commencement date for the final rule, should it be made by the Commission. AEMO was unable to provide a certain timeframe for implementation, but confirmed that any changes to its IT systems to

²⁸ AEMC 2014, Portfolio Rights Trading, Draft Rule Determination, 19 June 2014, Chapter 4.

implement PRT would not be included in its April 2015 IT release as originally indicated in its rule change request.²⁹ AEMO also informed the Commission that there may be some changes to the estimated costs associated with implementing the proposed rule.

In order to re-estimate the costs and timeframe associated with implementing PRT, AEMO carried out an internal review. It subsequently notified the Commission of the following changes:³⁰

- The estimated timeframe for implementation of PRT had moved from April 2015 to December 2015.
- The estimate of the total system implementation cost of PRT had increased to \$687,500 from \$500,400 (a 37 per cent increase).
- Under a reduced IT functionality model, the estimate of the total system implementation cost of PRT would be \$559,500 (a 12 per cent increase).

Using the updated estimates, AEMO revisited its original cost-benefit assessment and found that positive net market benefits would only be achieved if the total traded quantity of AMDQ and AMDQ cc was greater than 13TJ each year, over a five year period. This is greater than the original estimate of 9.5TJ.

AEMO also sought feedback from a selection of market participants.³¹ This was to understand the implications of the revised implementation costs and timeframe (that is, December 2015) on the interest in take-up of PRT if the proposed rule was made. Of the six responses received:

- two stakeholders continued to support the implementation of PRT;
- three stakeholders considered that further consideration of the PRT mechanism should be put on hold in light of the anticipated Victorian gas market review (see next section); and
- one stakeholder did not have a clear view but noted that the benefits of PRT remain marginal.

Following its review of the initial cost-benefit assessment, including the further consultation with stakeholders on the likely take-up of PRT, AEMO notified the Commission of a further change to the estimated timeframe for implementation of PRT.³² AEMO explained that, on the basis that it had suspended all IT development

²⁹ AEMO, rule change request, cover letter.

³⁰ See AEMC, Explanatory note - Request for submissions on a specific issue, 23 October 2014, Appendix A.

³¹ AEMO carried out a targeted consultation which focussed on those stakeholders who had participated in the AEMC's rule change process and/or were part of the PRT working group. Several other stakeholders with a particular interest in the Victorian DWGM were also consulted.

³² See AEMC, Explanatory note - Request for submissions on a specific issue, 23 October 2014, Appendix B.

work for PRT to focus on updating its cost-benefit assessment, the required system changes to implement PRT would not be completed until late March-early April 2016. This new timeframe was not expected to change the revised implementation costs – this estimate remains in the order of \$687,500.

3.5.2 AEMC Victorian gas market review

In October 2013, the Victorian Government published a report by the Victorian Gas Market Taskforce (Reith Report) which recommended (among other things) that the AEMC undertake a review of pipeline capacity, investment, planning and risk management mechanisms in the Victorian DWGM.³³ The objective of the review would be to explore whether the arrangements for access to pipeline capacity promote competition and risk management, and provide appropriate investment signals and incentives.

Further, in October 2014 the Victorian Government announced that it would be funding an AEMC led review of capacity and risk management mechanisms in the Victorian gas market in 2014.³⁴ This was announced as part of its Energy Statement which sets out its plan to secure continued access for Victorian consumers to least cost electricity and gas over the long term.

At the time AEMO advised the Commission of the changes to the implementation costs and timeframe for PRT, it also acknowledged that any recommendations for change arising from an AEMC led review could affect AMDQ and AMDQ cc. Assuming that any changes to the market would be likely to have a target implementation date within five years, AEMO considered that (taking a conservative approach) this would shorten the expected life of PRT and would place an upper time limit on the cost-benefit assessment for PRT.

3.5.3 Additional consultation

In light of AEMO's revised implementation plan and the announcement of the Victorian gas market review, the Commission considered it necessary and appropriate to consult publicly with all stakeholders. It sought views on the implications of the changes to the implementation costs and timeframe (of April 2016) on the potential up-take and benefits of the proposed PRT mechanism. The Commission published an explanatory note outlining the new information and requesting submissions and comments from stakeholders.³⁵

The Commission received three submissions to the explanatory note, from AGL, Origin and Lumo Energy. AGL commented it was difficult to justify the expenditure on PRT in light of the increase in estimated implementation costs and the pending Victorian

³³ Victorian Government 2013, Gas Market Taskforce - Final Report and Recommendations, October 2013.

³⁴ Victorian Government 2014, Victoria's Energy Statement.

³⁵ AEMC, Explanatory note - Request for submissions on a specific issue, 23 October 2014.

gas market review. Similarly, Origin and Lumo both considered PRT should be put on hold pending the outcomes of the forthcoming Victorian gas market review.

3.5.4 Commission's final rule determination

In its rule change request, AEMO suggested that there was the potential for trade of between 5-10TJ of AMDQ at Longford, and 10-20TJ of AMDQ cc at Iona. AEMO's view of the potential opportunities for trade was generally supported by stakeholders in their submissions to the AEMC's consultation paper.

In the draft rule determination, the Commission stated that it was satisfied that sufficient quantities of tradeable AMDQ and AMDQ cc exist to make the PRT provisions potentially worthwhile. However, it did acknowledge that PRT would not provide value to market participants if there was no market for AMDQ and AMDQ cc. That is, there must be willing buyers and sellers.

It has been difficult to identify with certainty the likely volumes of AMDQ and AMDQ cc that may be traded through the PRT mechanism. This task has been made all the more difficult now that AEMO has confirmed that PRT would not be implemented before April 2016.

While the Commission recognises that there is still some support for the introduction of the proposed PRT mechanism from a number of potential buyers of AMDQ and AMDQ cc; it also acknowledges the lack, and loss, of support from potential sellers. This change in support has largely been driven by AEMO's revised PRT implementation plan and the regulatory uncertainty created by the announcement of the Victorian gas market review.³⁶

Given the increased uncertainty regarding the potential uptake of PRT by market participants, it is difficult for the Commission to conclude that sufficient quantities of AMDQ and AMDQ cc will be made available by market participants to render the cost of implementing PRT in April 2016 worthwhile. Further, as participation in PRT is voluntary, it is likely that the market for short-term trades of AMDQ and AMDQ cc may take time to develop. This increases the uncertainty around the quantities expected to be traded through this mechanism.

The Commission acknowledges that any recommendations arising from the pending Victorian gas market review may have implications for the use of AMDQ and AMDQ cc, and consequently the PRT mechanism.³⁷ However, precisely what impact the review may have is unknown at this time.

Therefore, while the Commission believes there are potential benefits associated with implementing the proposed rule submitted by AEMO, it is unable to conclude with

³⁶ See submissions from AGL Energy and Origin Energy in response to the AEMC's explanatory note.

³⁷ For example, any changes made to the Victorian gas market arrangements which caused a reduction in the life span of the PRT project from the anticipated five years would mean that the total quantity of AMDQ and AMDQ cc required to be traded annually in order to return positive net market benefits, would need to be even greater than the 13TJ currently required.

certainty that the potential benefits of implementing the PRT mechanism in April 2016 will outweigh the costs of doing so. For this reason, the Commission is not satisfied that implementing the proposed rule will, or is likely to, contribute to the NGO.

The Commission has therefore determined not to make the rule proposed by AEMO.

Abbreviations

AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
AGL	AGL Energy
AIHN	agency injection hedge nomination
Alinta	Alinta Energy
AMDQ	authorised MDQ
AMDQ cc	AMDQ credit certificates
AMIQ	Authorised Maximum Interval Quantity
APA	APA Group
Commission	See AEMC
DTS	declared transmission system
DWGM	declared wholesale gas market
GDFSAE	GDF Suez Australian Energy
GWCF	Gas Wholesale Consultative Forum
MCE	Ministerial Council on Energy
MIBB	Market Information Bulletin Board
NGL	National Gas Law
NGO	national gas objective
NGR	National Gas Rules
PRT	portfolio rights trading

A Legal requirements

This appendix sets out the relevant legal requirements under the National Gas Law for the AEMC in making this final rule determination.

A.1 Final rule determination

In accordance with s. 311 of the NGL, the Commission has made this final rule determination in relation to the rule proposed by AEMO. The Commission has determined not to make the proposed rule.

A.2 Power to make the rule

The Commission is satisfied that the proposed rule falls within the subject matter about which the Commission may make rules.

The proposed rule falls within s. 74 of the NGL. More specifically, it relates to AEMO's declared system functions and the operation of a declared wholesale gas market (s.74(1)(a)(v)).

Further, the proposed rule falls within the matters set out in Schedule 1 to the NGL as it relates to clause 55B because it relates to the operation and administration of a regulated gas market.

A.3 Commission's considerations

In assessing the rule change request, the Commission has considered:

- the Commission's powers under the NGL to make the rule;
- the rule change request;
- stakeholder submissions received during consultation;
- AEMO's revised implementation costs and timeframe for PRT;
- the fact that there is no relevant Ministerial Council on Energy (MCE) statement of policy principles;³⁸ and
- the Commission's analysis as to the ways in which the proposed rule will or is likely to, contribute to the NGO.

³⁸ Under s. 73 of the NGL, the AEMC must have regard to any relevant MCE statement of policy principles in making a rule.

A.4 Other requirements

A.4.1 Compatibility with AEMO's declared system functions

Under s. 295(4) of the NGL, the Commission may only make a rule that has effect with respect to an adoptive jurisdiction if it is satisfied that the proposed rule is compatible with the proper performance of AEMO's declared system functions.³⁹

A.4.2 AEMO's allocated powers, functions and duties

Under s. 295(5) of the NGL, the Commission may only make a rule that affects the allocation of powers, functions and duties between AEMO and a service provider for a declared transmission system if AEMO consents to the making of a rule or the rule is requested by the Minister of the relevant adoptable jurisdiction.

In relation to this rule change request, there was no requirement for AEMO to consent to the AEMC making the proposed rule, because the proposed rule did not affect the allocation of powers, functions and duties between AEMO and APA GasNet, the service provider for the Victorian declared transmission system.

³⁹ AEMO's declared system functions are specified in s. 91BA of the NGL.

B Summary of issues raised in submissions

B.1 First round of consultation

The table below provides a summary of the policy issues raised by stakeholders in their submissions to the consultation paper. The table sets out the Commission's response to each issue.

The submissions received are available on the AEMC website at www.aemc.gov.au.

Stakeholder	Issue	AEMC response
APA Group	APA supports initiatives that seek to improve the operation of the DWGM by addressing known shortcomings in the Victorian market. It notes that a key shortcoming is the inability of market participants to manage their risk exposure when they do not have adequate AMDQ or AMDQ cc. It considers this risk exposure arises because the design of the DWGM is based on market carriage, and is also a legacy of the initial allocation of AMDQ. (p.1)	The Commission has noted APA Group's views in relation to shortcomings in the DWGM. Detailed consideration of this issue is beyond the scope of this rule change.
APA Group	APA notes that the rule change attempts to create additional opportunities for market participants to access instruments designed to provide some elements of the firmness available on contract carriage pipelines. It considers there is an issue with the market structure of the DWGM in respect of providing market participants with the certainty they need. However, it considers that the rule change will only partially address the issue. (p.1)	The Commission has noted APA Group's views on the likely ability of the proposed rule to address the issues identified in the DWGM.
APA Group	APA considers that the PRT mechanism will create significant additional complexity on top of an already complex and technically challenging market structure. It notes that other market models offer opportunities for improving market liquidity without giving rise to issues in respect of firm capacity rights, and that these models operate without the complexity or cost of the DWGM.	The draft rule determination acknowledged that while the introduction of a new mechanism may add a degree of additional complexity to the market and some cost, the benefits of providing market participants with additional flexibility while avoiding the need for fundamental change to the current market design would outweigh that cost. See

Stakeholder	Issue	AEMC response
	(p.1)	Chapter 3 of this final rule determination for the Commission's current view on this issue.
APA Group	APA considers that contract carriage market models offer superior outcomes for market participants and ultimately customers, and ought to be considered in the context of the long term development of the Australian gas market. (p.2)	This matter was outside the scope of the rule change and would, as suggested, be better considered in the context of longer term development of the DWGM and, more broadly, the eastern Australian gas market.
AGL Energy	AGL suggests that rule change is timely given the oft-stated need that is cited in recent gas market reviews to make secondary transportation capacity available on a voluntary basis. It considers the PRT rule and procedure change package should be seen within the context of broader work by SCER and APA Group in relation to secondary capacity trading. (p.2)	In considering the rule change request, the Commission was mindful of the direction and outcomes of the various other streams of work taking place in relation to issues affecting the development of the eastern Australian gas market. See Chapter 3 of this final rule determination.
AGL Energy	AGL noted that is was fully supportive of the rule and procedure change package as it represents faithfully the outcomes and resolutions of Transmission Capacity Working Group (TCWG). ⁴⁰ It believes that the facility to trade potentially up to 90TJ in AMDQ will bring about sufficient benefits to warrant not only the rule change, but the costs AEMO would need to incur to modify its systems. In addition, by freeing up underutilised rights and creating an opportunity for the buying and selling of portfolio rights, AGL considers the proposal must be seen as enhancing economic efficiency and thereby contributing positively to the NGO. (p.1)	The Commission considered the potential benefits of the proposal.
Lumo Energy	Overall, Lumo Energy considers that, by allowing market participants to make use of existing financial rights associated with AMDQ and AMDQ cc, the proposal should defer augmentations in the long run, leading to lower gas prices for consumers. For this reason, it considers the proposal is consistent with the NGO. (p.1)	The Commission noted Lumo Energy's support for the proposal.

⁴⁰ The concept of PRT was first considered by the TCWG in 2011. In August of that year, the TCWG was formed by the GWCF to investigate issues affecting the development of the DWGM, in particular, issues related to transmission capacity.

Stakeholder	Issue	AEMC response
Lumo Energy	Lumo Energy considers AEMO's analysis of potential trading quantities is quite conservative and that trading quantities in any given year are realistically likely to be close to 30TJ. It strongly agrees that PRT will deliver a net benefit to the market over its life (which is assumed to be 5 years). (p.2)	The draft rule determination noted that it was not clear what quantity of AMDQ and AMDQ cc would be traded through the PRT mechanism. As outlined in Chapter 3 of the final rule determination, estimating the quantities of AMDQ and AMDQ cc likely to be traded is even more difficult in light of delay to the commencement date of PRT and the pending Victorian gas market review.
Hydro Tasmania	Hydro Tasmania supports the proposed rule and believes it will improve the efficiency of the DWGM. It considers that permitting AMDQ trading will significantly increase supply, releasing AMDQ that has become stranded as retailers have diversified supply away from Gippsland. (p.1)	The Commission has considered this potential benefit.
Alinta Energy	Alinta supports additional trading of AMDQ. However, it notes that it is not clear that the development of an additional instrument or a mandatory system administered by AEMO is the only approach to the issues raised and that alternatives may be preferable. Alinta notes that a number of matters require further consideration and the value of alternative proposals should be investigated before it can fully support the rule. (pp.1,3)	A discussion of the two alternatives identified by Alinta was provided in Chapter 4 of the draft rule determination.
Alinta Energy	Alinta can see a number of potential benefits in line with the NGO. It notes that the proposal may increase its ability to acquire and trade hedging instruments in the short term and therefore may facilitate greater levels of trade and competition. It may also improve its ability to manage market risk and mitigate potential charges in the market resulting from uncertain supply. However, in contrast with the view of AEMO, Alinta is less clear that the proposed rule will increase transparency significantly, if at all. (p.1)	As stated by Alinta, the ability of the PRT mechanism to improve market transparency is unclear. As noted in Chapter 3 of the draft rule determination, broadening the tradeable base of AMDQ and AMDQ cc has the potential to generate more interest among market participants in PRT. This in turn may help to build competition and liquidity in the Victorian gas market over time.
Alinta Energy	Alinta notes that while the proposal relies on bilateral contracts, it is unclear how this will guarantee a transparent or liquid market. It considers that while the differences may be marginal, the existence of multiple forms of instrument may not be ideal. (p.2)	As above. In addition, the draft rule determination noted that while the introduction of a new mechanism may add a degree of additional complexity to the market (which may come at some cost), the benefits of providing market participants with additional flexibility while avoiding the need

Stakeholder	Issue	AEMC response
		for fundamental change to the current market design, could outweigh that cost. See Chapter 3 of the final rule determination.
Alinta Energy	It is not clear to Alinta why the decision to restrict the ability of tariff V customers to trade AMDQ cannot be revisited. It considers that if all AMDQ was able to be freely traded, there would be less need for the proposed approach. While this may reduce AEMO's role in allocating AMDQ, outside of regular auctions, thought should be given to whether this approach is more desirable. (p.2)	An advantage of the proposed PRT mechanism is that it would provide for the transfer of the <i>market entitlements</i> associated with AMDQ and AMDQ cc, without changing the holder of the AMDQ and AMDQ cc. This would avoid fundamental questions around ownership of Tariff V AMDQ and, in turn, the need to make a fundamental change to the market (which would likely be required if the proposal to free up all Tariff V and D AMDQ for trade was progressed).
Alinta Energy	Alinta is unclear how the proposal may impact scheduling, for example AMIQ. While it is not proposing that limits be imposed on the terms of trading under PRT, it notes that it is not necessarily the case that market impacts will be understood or immediately appreciated by participants. (p.2)	The introduction of the proposed PRT mechanism would only impact scheduling when the system was constrained and market participants had equal-priced injection bids. This is because, by participating in PRT, more market participants may have access to injection tie-breaking rights. That said, the rules and procedures for scheduling and AMIQ would be unchanged in the event the proposed rule was implemented.
Alinta Energy	Alinta considers the potential to be exposed to increased ancillary payments for market participants who do not hold AMDQ or portfolio rights is of concern and does not contribute to transparency. (p.2)	A discussion of the impact of PRT on ancillary payments was provided in Chapter 4 of the draft rule determination.
Alinta Energy	Alinta is supportive of the trading of AMDQ where the costs of implementation are proportionate, and a net benefit can be demonstrated. Given the implementation costs for AEMO are significant at around \$500,000, it considers there needs to be certainty that the proposal is the least costly of all option available. (p.2)	The Commission has considered the potential costs and benefits of the proposal.
Alinta	Alinta considers a number of alternatives to PRT warrant further	A discussion of the two alternatives identified by Alinta was

Stakeholder	Issue	AEMC response
	<p>consideration, including:</p> <ul style="list-style-type: none"> • Allowing for the sale of all existing AMDQ through bi-lateral contract. This would mean the exiting limitations on AMDQ trade for tariff V customers would be lifted and allocation of AMDQ would be primarily derived from exchange on the market. Alinta suggests that the AEMC consider the potential merits of a more preferable rule for the purpose of freeing up the ability to trade existing AMDQ including that held by tariff V customers. • Regular auctioning of a greater proportion of AMDQ. These auctions would cover fixed periods into the future for the purposes of encouraging more active use of AMDQ. This would allow increased opportunities to purchase AMDQ. Once AMDQ has been purchased and where a participant does not utilise that AMDQ, it will have a greater incentive to trade to cover paid costs. (p.3) 	<p>provided in Chapter 4 of the draft rule determination.</p>

B.2 Second round of consultation

The Commission received submissions on the draft rule determination and draft rule from Lumo Energy and AGL. The Commission notes both stakeholders' support for the draft rule. No new issues were raised. These submissions are available on the AEMC website at www.aemc.gov.au.

B.3 Third round of consultation

The table below provides a summary of the comments put forward by stakeholders in their submissions to the explanatory note - request for submissions on a specific issue. The table sets out the Commission's response to each comment.

The submissions are available on the AEMC website at www.aemc.gov.au.

Stakeholder	Issue	AEMC response
AGL Energy	AGL noted that while it had supported the proposed rule when it was first developed in 2011, a number of issues have arisen since which had caused it to rethink the timing and appropriateness of the proposal. It considered that the net benefit of the project had always been marginal at best. With projected implementation costs having increased by 37 per cent with no corresponding increase in the benefits, it considered the net economic outlook had not improved. (p.1)	The Commission has considered this view.
AGL Energy	AGL also noted that, given the AEMC will soon review aspects of the Victorian wholesale gas market with a view to improving capacity signalling and risk management, it would be difficult to justify the proposed expenditure on PRT, which would impact the same matters. (p.2)	The Commission's view on this matter is set out in section 3.5.4.
Origin Energy	Origin acknowledged the AEMC's Victorian gas market review and considered that, given recommendations arising from the review may have implications for the implementation and use of PRT, PRT should be put on hold pending the outcomes of that review. (p.1)	The Commission's view on this matter is set out in section 3.5.4.
Origin Energy	Origin also noted that, should a final rule be made by the AEMC, implementing an IT solution with reduced functionality was not an appropriate option. It noted that offering Web Services was necessary to keep in line with its existing nominations functionality. (p.1)	The Commission has considered this view.
Lumo Energy	Lumo noted its support for the rule change request in its original submission to the consultation paper. However, given that the AEMC's Victorian gas market review could influence the outcomes of the PRT cost benefit analysis, Lumo considered it would be prudent for the AEMC to refrain from making the proposed rule. In Lumo's view, the Victorian gas market review should proceed before the rule change is progressed any further.	The Commission's view on this matter is set out in section 3.5.4.

C AMDQ and AMDQ cc allocation in the DWGM

Allocating AMDQ

AMDQ was first allocated at market commencement in 1998. The allocation of 990TJ was (and has remained) commensurate with the capacity of the Longford-Melbourne pipeline at the time the sole source of gas supply for the DWGM. Recognising that the DTS was comprised of pre-existing assets that had at least partially been paid for by existing customers of the Victorian Gas and Fuel Corporation, at the start of the market the rights to the existing 990TJ of capacity were allocated to customers in two tranches:

- Tariff D customers (that is, those large customers who had meters measuring daily demand and whose gas tariff included a daily-demand-based component); and
- Tariff V based customers (that is, smaller customers on an energy usage tariff generally based on cumulative gas usage over a two monthly billing cycle).

Tariff D AMDQ was allocated to Tariff D customers individually on the basis of their historic demand.

After allowing for diversity of the individual Tariff D customer allocations of AMDQ, the remainder of the remaining 990TJ of available capacity was allocated to Tariff V customers as a block allocation: that is, not to individual customers. There is no designated permanent owner of Tariff V AMDQ. Instead, gas retailers are allocated the market rights associated with Tariff V AMDQ in proportion to the aggregate of their Tariff V customers' usage. This allocation is adjusted on a daily basis to reflect customer transfers, which continually change the Tariff V allocations between retailers.

The rationale for allocating AMDQ to customers rather than market participants, retailers or shippers was to not create a barrier to retail competition. If AMDQ were held by retailers, there was a concern that those retailers who won customers from rival retail businesses would then be forced into a position of either trying to negotiate with that rival retailer to sell them AMDQ, or take on additional risk.

Allocating AMDQ cc

Since the commencement of the DWGM, the capacity of the DTS has increased as a result of numerous augmentations.⁴¹ As new pipeline capacity becomes available, AMDQ cc are created to provide similar benefits to those arising from AMDQ on the Longford pipeline. AMDQ cc gives market participants a contractual right to the market benefits of the AMDQ cc.

The increase in pipeline capacity resulting from an extension or expansion project is agreed between APA GasNet (the DTS owner) and AEMO (the operator of the DTS

⁴¹ Changes to the DTS have included the Interconnect, the South West Pipeline, the connection of the former Western Transmission System, the Brooklyn Lara Loop and the BassGas project.

and the DWGM). Once agreement is reached and the new capacity becomes operational, new certificates are created. AEMO allocates the AMDQ cc to market participants for quantities and periods as directed by APA GasNet. The directions from APA GasNet reflect the outcome of a competitive tender process it manages. In this process, interested market participants are able to tender for an amount of AMDQ cc for a specified period.

AMDQ cc is not differentiated by final customer (Tariff V or D) and is not allocated directly to customers. Rather, market participants with AMDQ cc must advise AEMO whether the allocated AMDQ cc are to be nominated to sites or the reference hub.

Figure C.1 illustrates the current allocation of AMDQ and AMDQ cc in the DWGM.

Figure C.1 Current allocation of AMDQ and AMDQ cc



Figure C.2 illustrates the potential opportunities for the trade of AMDQ and AMDQ cc in the DWGM, as identified by the AEMO in its rule change request.

Figure C.2 Opportunities for PRT

