



**Australian Energy Market Commission**

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## **RULE DETERMINATION**

# **National Gas Amendment (Prioritisation of Tied Controlled Withdrawal Bids) Rule 2010**

### **Rule Proponent**

Australian Energy Market Operator

### **Commissioners**

Tamblyn  
Henderson

20 May 2010

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Chairman

For and on behalf of the Australian Energy Market Commission

**RULE  
CHANGE**

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## **Citation**

AEMC 2010, Prioritisation of Tied Controlled Withdrawal Bids, Rule Determination, 20 May 2010, Sydney

## **About the AEMC**

The Council of Australian Governments, through its Ministerial Council on Energy (MCE), established the Australian Energy Market Commission (AEMC) in July 2005 to be the rule maker for national energy markets. The AEMC is currently responsible for rules and providing advice to the MCE on matters relevant to the national energy markets. We are an independent, national body. Our key responsibilities are to consider rule change proposals, conduct energy market reviews and provide policy advice to the Ministerial Council as requested, or on AEMC initiative.

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## Summary

On 16 November 2009, the Australian Energy Market Operator (AEMO) asked the Australian Energy Market Commission (Commission or AEMC) to consider a Rule Change Request to introduce new tie-breaking provisions for equally-beneficial controllable withdrawal bids<sup>1</sup> in the Victorian Declared Wholesale Gas Market (DWGM).

The Commission has determined to make the Rule proposed by AEMO (proposed Rule) in respect of this Rule Change Request as it is satisfied that the proposed Rule will or is likely to contribute to the achievement of the National Gas Objective (NGO).

The Commission published a notice under section 303 of the National Gas Law (NGL) on 23 December 2009 notifying that it had commenced the Rule Change Process and that it had under section 62 of Schedule 3 of the NGL dispensed with the first round of consultation in the Rule Change Process.<sup>2</sup>

On 25 February 2010 the Commission published its draft Rule determination on AEMO's Rule Change Request. In the draft Rule determination the Commission determined not to make a draft Rule in respect of the Rule Change Request as it was not satisfied that the proposed Rule would or would be likely to contribute to the achievement of the NGO. The Commission has decided to make this proposed Rule in the final Rule determination following its consideration of submissions on the draft Rule determination and further analysis.

AEMO's proposed Rule provided that holders of Authorised Maximum Daily Quantity (AMDQ or authorised MDQ) or AMDQ credits should be prioritised in the event of there being multiple equally-beneficial controllable withdrawal bids. The proposed Rule would, if implemented, replace the current arrangements under the National Gas Rules (NGR) rule 214(c)<sup>3</sup> in which equally-beneficial controllable withdrawal bids are scheduled to the "same extent". AEMO has advised that NGR rule 214(c) has been implemented, practically, in such a way that equally-beneficial controllable withdrawal bids are scheduled on a pro-rated basis.

AEMO indicated in the Rule Change Request that the proposed Rule would increase consistency in the treatment of scheduling between equally-beneficial withdrawal and injection bids in the Victorian DWGM. AEMO stated that the proposed Rule therefore represents good regulatory practice. AEMO also indicated that the proposed Rule may contribute to signalling investment in the Victorian Declared Transmission System (DTS) in situations of system constraints because it would incrementally increase the utility of AMDQ and AMDQ credits. AEMO therefore considered that the proposal

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1 In this final Rule determination the phrase "controllable withdrawal bid" is a reference to a withdrawal bid for a controllable quantity under Part 19 of the National Gas Rules.

2 AEMO had requested in the Rule Change Request that the Commission dispense with the first round of consultation under section 62 of Schedule 3 of the NGL.

3 See Appendix B for NGR rule 214.

promotes an environment of efficient investment, operation and use of natural gas services.<sup>4</sup>

In making its final Rule determination, the Commission's assessment of the proposed Rule against the NGO has been informed by submissions on the draft Rule determination. In its assessment, the Commission has focussed on the impacts of the proposal on various aspects of the NGO including efficient investment, efficient use of natural gas services and price and reliability.

Following careful consideration of submissions and analysis of the issues raised, the Commission is now satisfied that the proposed Rule will or is likely to contribute to the achievement of the NGO by providing efficiency benefits. There are likely to be incremental benefits in terms of increased regulatory certainty on the allocation of gas in tie-breaking scenarios for parties seeking to withdraw gas at the Culcairn withdrawal point. Greater certainty over the allocation of gas is likely to promote improved risk management from market participants which could bring price and reliability benefits to customers, promoting more efficient operation and use of natural gas services.

In addition, the Commission is now satisfied that there are likely to be marginal benefits for efficient network investment. This is because the proposed Rule is likely to increase the incentives, at the margin, for third parties to underwrite unregulated network investment in return for receiving AMDQ/ AMDQ credit contracts. These incentives are likely to increase as the proposed Rule should provide greater certainty for holders of AMDQ/ AMDQ credits about their controllable gas withdrawals from the Victorian DTS. The Commission also considered whether the proposed Rule would contribute to increasing the likelihood of more efficient investment occurring as a result of the regulatory assessment processes undertaken by the Australian Energy Regulator (AER). However, the Commission is not satisfied, on the basis of the evidence, that there are likely to be any impacts on this process to suggest that investment efficiency will or is likely to increase.

Furthermore, the Commission does not consider, after analysing submissions, that the conceptual risk identified in the draft Rule determination regarding the proposed Rule's impact on the potential exercise of market power and hence the inefficient allocation of gas, is material. No submission contended that market power issues exist at Culcairn, and the Commission has no evidence of barriers to trading AMDQ/ AMDQ credits. While market power issues could arise, conceptually, in low-probability circumstances, the Commission has no evidence of their materiality.

The Commission considers that the proposed Rule is likely to provide incremental benefits and is satisfied that it will or is likely to contribute to the achievement of the NGO.

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<sup>4</sup> Rule Change Request, p.7.

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# 1 AEMO's Rule change request

## 1.1 The Rule Change Request

On 16 November 2009, the Australian Energy Market Operator (AEMO or Rule Proponent) made a request to the Commission to make a Rule to introduce new tie-breaking provisions for equally-beneficial controllable withdrawal bids<sup>5</sup> in the Victorian DWGM (the Rule Change Request).

## 1.2 Rule Change Request Rationale

In the Rule Change Request the Rule Proponent sought to address an inconsistency between the treatment of scheduling of equally-beneficial controllable withdrawal bids and equally-beneficial injection bids in the Victorian DWGM.

Under the current DWGM arrangements, AEMO uses injection and withdrawal bids, together with forecasts of uncontrollable demand and other relevant information, to determine the injection and withdrawal bids to schedule in each of the five scheduling intervals in the gas day. In determining the schedule of injections and withdrawals, AEMO may need to apply tie-breaking rules. These are applied whenever there are two or more "equally-beneficial" injection or withdrawal bids. In this context, AEMO considers that "equally-beneficial" bids means bids that:<sup>6</sup>

" in the absence of a tie-break procedure, and taking account of bid price, location, accredited constraints, system capacity and the temporal and physical distribution of system demand over the gas day, would be scheduled with equal priority on a pro-rated basis by the scheduling systems and processes."

NGR rule 214 is set out in Appendix B of this final Rule determination. This rule provides for scheduling and prioritisation of different types of injection and withdrawal bids in the DWGM. In particular, Rules 214(c) and (d) provide that AEMO must as far as practicable apply the following principles:

- (c) where two or more withdrawal bids are equally beneficial, those withdrawal bids should be scheduled to the same extent;
- (d) where two or more injection bids are equally beneficial, then those injection bids that are associated with AMDQ credit certificates<sup>7</sup> or authorised MDQ<sup>8</sup> should

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<sup>5</sup> In this final Rule determination the phrase "controllable withdrawal bid" is a reference to a withdrawal bid for a controllable quantity under Part 19 of the National Gas Rules.

<sup>6</sup> AEMO submission, p.4.

<sup>7</sup> We refer to AMDQ credit certificates in this final Rule determination as AMDQ credits. See section 5.3.2 for more information about AMDQ credits.

<sup>8</sup> We refer to authorised MDQ in this final Rule determination as AMDQ. See section 5.3.2 for more information about AMDQ.

be scheduled before other injection bids that are not associated with AMDQ credit certificates or authorised MDQ.

AMDQ and AMDQ credits are instruments which confer limited rights on parties that withdraw/inject specified amounts of gas from/into the Victorian DTS. These rights are allocated to customers at injection and withdrawal points on the Victorian DTS.

The present tie-breaking rules therefore differ in their treatment of equally-beneficial controllable withdrawal bids and equally-beneficial injection bids. AEMO considered that the rules are inconsistent in their treatment of withdrawal and injection bids in the scheduling process<sup>9</sup> and that this inconsistency should be removed in the interests of good regulatory practice<sup>10</sup>.

AEMO therefore considered that where there are equally-beneficial controllable withdrawal bids, holders of AMDQ and AMDQ credits should be prioritised. AEMO also indicated that by giving preference to holders of AMDQ and AMDQ credits the rule change may contribute to signalling investment in the Victorian DTS in situations of system constraints because it incrementally increases the utility of AMDQ and AMDQ credits.<sup>11</sup>

### **1.3 Solution proposed by the Rule change Request**

The proposed Rule provides that holders of AMDQ or AMDQ credits should be prioritised in the event of there being multiple equally-beneficial controllable withdrawal bids in the DWGM.

If implemented, the proposed Rule would therefore replace the current arrangements under which equally-beneficial controllable withdrawal bids are scheduled to the same extent, irrespective of whether parties hold AMDQ or AMDQ credits at those withdrawal points. AEMO has advised that it has implemented the phrase "scheduled to the same extent" by scheduling bids on a pro-rated basis. In this final Rule determination we use the term "pro-rated" to refer to AEMO's implementation of this rule.

### **1.4 Relevant background**

Under section 295(3)(a) of the NGL, a request for a Rule regulating a declared wholesale gas market can only be made by AEMO or the Minister of an adoptive jurisdiction. The Rule Change Request is a request to regulate a declared wholesale gas market and was made by AEMO, satisfying section 295(3)(a) of the NGL.

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<sup>9</sup> Rule Change Request, p.3.

<sup>10</sup> Rule Change Request, p.7.

<sup>11</sup> Rule Change Request, p.7.

## 1.5 Commencement of Rule making process

On 23 December 2009, the Commission published a notice under section 303 of the NGL advising of its intention to commence the Rule change process in respect of the Rule Change Request. An information paper prepared by AEMC staff identifying specific issues was also published concurrently with the Rule Change Request.<sup>12</sup>

The Commission decided to dispense with the first round of public consultation in the Rule change process under clause 62 of Schedule 3 of the NGL as requested by the Rule Proponent. Accordingly, there was no first round consultation in the Rule change process. The basis for making this decision is set out below.

AEMO requested that the AEMC exercise its discretion under clause 62 of Schedule 3 of the NGL to dispense with the first round of public consultation in the Rule change process<sup>13</sup> and the pre-draft determination public hearing<sup>14</sup>. Clause 62 of Schedule 3 of the NGL is a transitional provision applying to Rule change requests that were proposals to amend superseded jurisdictional rules at the “relevant changeover date”. In this case, the superseded jurisdictional rules were the Victorian Gas Industry Market and System Operations Rules version 31 (MSOR)<sup>15</sup> and the relevant changeover date was 1 July 2009.

Under clause 62 of Schedule 3 of the NGL, the Commission may dispense with a particular step in the Rule change process if the Commission is of the opinion that the relevant step is unnecessary because no equivalent step existed under the superseded jurisdictional rules or the same or a similar step has already been taken under the superseded jurisdictional rules.<sup>16</sup>

The Commission was able to exercise its discretion to dispense with the first round of public consultation<sup>17</sup> as the MSOR's rule change process did not include a step equivalent to the first round consultation in the standard AEMC Rule change process as set out in the NGL.

## 1.6 Publication of draft Rule determination

On 25 February 2010 the Commission published a notice under section 308 of the NGL and a draft Rule determination in relation to the Rule Change Request (the draft Rule determination).

In the draft Rule determination the Commission determined not to make a draft Rule.

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<sup>12</sup> This Information Paper is available from the AEMC website [www.aemc.gov.au](http://www.aemc.gov.au).

<sup>13</sup> Section 303(3)(a) of the NGL.

<sup>14</sup> Section 307 of the NGL.

<sup>15</sup> See [www.aemo.com.au](http://www.aemo.com.au).

<sup>16</sup> Clause 62(2) of Schedule 3 of the NGL.

<sup>17</sup> Section 303(3)(a) of the NGL.

Submissions on the draft Rule determination closed on 8 April 2010. The Commission received six submissions on the draft Rule determination. They are available on the AEMC website.<sup>18</sup> A summary of the issues raised in submissions and the Commission's response to each issue is contained in Appendix A.1.

On 10 May 2010 the Commission received a letter from the Energy Supply Association of Australia (esaa) commenting on the draft Rule determination. The esaa letter did not raise any substantive issues that were not already covered in submissions received by 8 April 2010. The Commission has responded to the issues raised in the esaa letter in Appendix A.1.

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18 [www.aemc.gov.au](http://www.aemc.gov.au)

## 2 Final Rule Determination

### 2.1 Commission's determination

In accordance with section 311 of the NGL the Commission has made this final Rule determination in relation to the Rule proposed by AEMO. In accordance with section 313 of the NGL the Commission has determined to make the Rule proposed by the Rule proponent.

The Commission's reasons for making this final Rule determination are set out in section 3.1.

The *National Gas Amendment (Prioritisation of Tied Controlled Withdrawal Bids) Rule 2010 No 1*. (Rule as Made) is published with this final Rule determination. The Rule as Made commences at 6:00am<sup>19</sup>, Australian Eastern Standard Time, on 7 June 2010. The Rule as Made is the same as the Rule proposed by the Rule Proponent. Its key features are described in section 3.2.

### 2.2 Commission's considerations

In assessing the Rule Change Request the following was material and relevant:

- the Commission's powers under the NGL to make the Rule;
- the Rule Change Request;
- submissions received during consultation on the draft Rule determination;
- the AEMO and Victorian Energy Networks Corporation (VENCorp) consultation on the proposed Rule prior to its submission to the AEMC, including submissions to and minutes of the VENCorp Gas Market Consultative Committee (GMCC) and the AEMO Gas Wholesale Consultative Forum (GWCF);
- the introduction of the Short Term Trading Market (STTM) in New South Wales (NSW)<sup>20</sup>;
- VENCorp's 2004 Victorian Gas Market Pricing and Balancing Review to the Victorian Government;
- CRA International's 2008 Strategic Review of the Victorian Gas Market;

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<sup>19</sup> At this time the Victorian DWGM gas day starts.

<sup>20</sup> The NSW Application Act to apply the adoptive provisions of the STTM was assented to on 28 April 2010 and the Ministerial Council on Energy (MCE) Energy Market Reform Bulletin No. 177 (21 April 2010) noted that the STTM Sydney hub will be commissioned on 4 June 2010. See [www.parliament.nsw.gov.au](http://www.parliament.nsw.gov.au) and [www.mce.gov.au](http://www.mce.gov.au).

- the December 2009 Discussion Paper from the Victorian Department of Primary Industries (DPI) submitted to the AEMO GWCF entitled *Proposal to align planning arrangements for the Victorian electricity transmission grid and the Victorian Declared Gas Transmission System*<sup>21</sup>; and
- the Commission’s analysis as to the ways in which the proposed Rule will or is likely to contribute to the achievement of the NGO.

### **2.3 Commission’s power to make the Rule**

The Commission is satisfied that the Rule as Made falls within the subject matter about which the Commission may make Rules. The Rule as Made falls within the matters set out in section 74 of the NGL as it relates to regulating the operation of a declared wholesale gas market. In particular, it relates to the principles determining which controllable withdrawal bids AEMO is to schedule in the Victorian DWGM.

### **2.4 Rule making test**

Under section 291(1) of the 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 NGO. This is the decision making framework that the Commission must apply.

The NGO is set out in section 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.”

Under section 291(2) of the NGL, for the purposes of section 291(1) of the NGL the AEMC may give such weight to any aspect of the NGO as it considers appropriate in all the circumstances, having regard to any relevant MCE statement of policy principles. There is no relevant MCE statement of policy principles. For the Rule Change Request, the Commission considers that the relevant aspect of the NGL is efficient investment in transmission pipeline services and efficient use of natural gas services for the long term interests of consumers of natural gas with respect to price and reliability of supply of natural gas.

The Commission is satisfied that the Rule as Made will or is likely to contribute to the achievement of the NGO because it promotes economic efficiency:

- it is likely to promote more efficient network investment by providing holders of AMDQ/AMDQ credits with greater certainty about the quantities of gas they will be scheduled to withdraw from the DTS through controllable withdrawal bids in the DWGM in situations of tied bids. This greater certainty of withdrawals for holders of AMDQ/AMDQ credits should, at the margin,

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21 See [www.aemo.com.au](http://www.aemo.com.au).

enhance incentives on third parties to underwrite unregulated network investment by APA GasNet in return for AMDQ/ AMDQ credit contracts. This is likely to, at the margin, promote efficient unregulated investment in the DTS; and

- it is likely to promote more efficient operation and use of natural gas services by providing Victorian DWGM participants with greater certainty about the scheduling of controllable gas withdrawals allowing them to more effectively and efficiently manage their risks. This is likely to result in reliability and price benefits when compared with the existing arrangements under which scheduling of gas withdrawals are pro-rated in situations of tied bids for both holders and non-holders of AMDQ and AMDQ credits.

Further discussion about how the Rule as Made will or is likely to contribute to the achievement of the NGO is in section 3.

#### **2.4.1 Compatibility of the Rule as Made with the proper performance of AEMO's declared system functions**

Under section 295(4) of the NGL, the Commission may only make a Rule that has effect with respect to an adoptive jurisdiction if satisfied that the proposed Rule is compatible with the proper performance of AEMO's declared system functions.<sup>22</sup> The Commission considers that the Rule as Made will impact on AEMO's declared system function of operating the DWGM<sup>23</sup>. This is because the Rule as Made will impact the scheduling of controllable withdrawal bids. To the extent that the Rule as Made promotes improved risk management by DWGM participants, it should lead to more efficient operation of the DWGM and use of natural gas services. As such, the Commission considers that the Rule as Made is compatible with the proper performance of AEMO's declared system functions.

#### **2.5 Other requirements under the NGL**

In applying the Rule making test in section 291 of the NGL, the Commission has also had regard to any relevant MCE Statements of Policy Principles as required under section 73(a) of the NGL<sup>24</sup>. There are no relevant MCE Statements of Policy Principles.

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<sup>22</sup> AEMO's declared system functions are set out in section 91BA(1) of the NGL.

<sup>23</sup> Section 91BA(1)(f) of the NGL.

<sup>24</sup> Under section 73(a) of the NGL the AEMC must have regard to any relevant MCE statement of policy principles in making a Rule.

### 3 Commission's reasons

The Commission has analysed the Rule Change Request and assessed the issues/propositions arising out of the Rule Change Request. For the reasons set out below, the Commission has determined that a Rule be made. Its analysis of the Rule proposed by the Rule Proponent is also set out below.

#### 3.1 Assessment

In raising this Rule Change Request, AEMO sought to address an inconsistency between the treatment of scheduling of equally-beneficial controllable withdrawal bids and equally-beneficial injection bids in the Victorian DWGM.

AEMO submitted that by introducing consistency in these arrangements the proposed Rule represents good regulatory practice. AEMO also submitted that the proposed Rule also promotes an environment of efficient investment, operation and use of natural gas services.<sup>25</sup>

After considering submissions on the draft Rule determination and further analysis, the Commission is satisfied that the proposed Rule will or is likely to contribute to the achievement of the NGO.

The issues considered by the Commission in making its final Rule determination are set out below.

##### 3.1.1 The potential impact of the proposal

In order to assess the impacts of the proposal under the NGO, the Commission has considered the scope of the likely impact of the proposed Rule.<sup>26</sup> The likely impact in practice appears to be restricted to a narrow range of circumstances at the Culcairn withdrawal point at times that parties are seeking to export gas through the Victoria-NSW interconnector in excess of its capacity (i.e. where there are constraints on the interconnector). Such a scenario could occur where there are supply shortages and/or high demand in NSW such that NSW wholesale prices exceed those in the Victorian DWGM.

In its draft Rule determination the Commission indicated that, in these circumstances, it is possible that controllable withdrawal bids would be tied at \$400/GJ<sup>27</sup> reflecting the NSW STTM market price cap (and where prices in Victoria are lower than \$400/GJ).

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<sup>25</sup> Rule Change Request, p.7.

<sup>26</sup> The Commission's supporting analysis is in Appendix C.

<sup>27</sup> GJ stands for gigajoule. 1 GJ = 1000 megajoules.

However, in responses to the draft Rule determination, a number of stakeholders (AEMO<sup>28</sup>, AGL<sup>29</sup>, APA Group<sup>30</sup>, the Major Energy Users (MEU)<sup>31</sup>) indicated that irrespective of the NSW STTM price cap, parties in the DWGM may price their bids to withdraw gas at Culcairn at the DWGM VoLL (\$800/GJ) in order to ensure that gas withdrawals are scheduled into NSW to satisfy contractual requirements. Stakeholders also noted that the STTM is a Sydney hub and parties may have contractual requirements elsewhere in regional NSW which are not subject to the NSW STTM price cap.

The Commission accepts that parties may be willing to bid up to the DWGM VoLL of \$800/GJ to help to ensure that gas is scheduled into NSW. To the extent that Victorian DWGM participants seek to export gas through the Victoria-NSW interconnector at volumes in excess of the pipeline capacity, parties could bid up to VoLL levels to seek to secure flows. Victorian parties may be motivated to seek to export gas in excess of the pipeline capacity for a range of reasons including fulfilling contracts on the NSW side of the interconnect, or to benefit from differences in prices on the Victorian and NSW side of the interconnect. An example of the latter situation is where the Victorian DWGM spot market price<sup>32</sup> is lower than the NSW STTM price or the wholesale prices prevailing in regional gas markets. Under the proposed Rule, gas for withdrawals at Culcairn would be allocated to those parties holding AMDQ/AMDQ credits in these scenarios.

Whilst at present the Commission considers that in the short term the tie-breaking rules under the proposed Rule would only be triggered in these limited circumstances, it is possible that they could arise elsewhere on the Victorian DTS over time as the network configuration and demand changes.

### 3.1.2 Impacts on efficient network investment

Following analysis of further information provided in submissions on the draft Rule determination, the Commission considers that AEMO's proposed Rule will or is likely to contribute to promoting more efficient pipeline investment. The Commission has been persuaded to change its view from the draft Rule determination in light of substantive comments in submissions addressing this issue.

Following analysis of submissions, the Commission recognises that the proposal strengthens the benefits of holding AMDQ<sup>33</sup> at the Culcairn withdrawal point in the scenarios set out in section 3.1.1.<sup>34</sup> In particular, the Commission considers that the

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28 AEMO submission, p.7.

29 AGL submission, p.2.

30 APA Group submission, p.3.

31 MEU submission, p.1.

32 The price that Victorian parties will pay for their scheduled gas withdrawals.

33 In the current DWGM arrangements, there is a total of 17 TJ of AMDQ and there are no AMDQ credits for withdrawals at Culcairn. 1 TJ = 1000 GJ.

34 There may be benefits in the future of holding AMDQ/AMDQ credits at other withdrawal points.

proposed Rule should provide holders of AMDQ with greater certainty regarding their scheduled withdrawals especially at times when pipeline capacity is constrained.

This is likely to lead at the margin to greater incentives for parties to enter into bilateral AMDQ/AMDQ credit arrangements with APA GasNet, as owner of the DTS, to underpin investment outside of the AER's regulatory assessment framework. The Commission considers that any such market-led investment is likely to be efficient.

It should be noted that the Commission considers that any additional investment incentives that arise from the proposal are likely to be at the margin. Further, the Commission also notes that any such incentives might be diluted by the DWGM's market carriage framework and the absence of fully-firm transmission rights within an open access regime.

Following analysis of submissions, the Commission is not satisfied that information relating to increased demand for AMDQ and AMDQ credits will or is likely to lead to more efficient regulated investment decisions, in particular at the Culcairn withdrawal point. It is difficult to assess what weight would be given to AMDQ/AMDQ credit information in informing investment and capital expenditure proposals for evaluation by the AER under the existing regulatory framework.

Several factors would suggest that minimal weight would be given to this information. These factors include:

- AEMO does not take into account AMDQ/AMDQ credit-related information in undertaking its forecasting and planning process;<sup>35</sup>
- Auctions of AMDQ under the NGR<sup>36</sup> relating to new pipeline capacity occur on an ex-post basis following the AER's approval of the relevant capital expenditure. As such, the auctions and the values of the AMDQ derived from them would not inform the investment assessment process;
- There is limited trading of AMDQ/AMDQ credits and it would therefore be difficult to rely on the price or value of these in informing investment decisions;<sup>37</sup>
- AMDQ/AMDQ credits play a limited role within the open access and market carriage arrangements that apply in Victoria. They do not represent a fully developed capacity product and participants are not required to secure these rights before they can flow gas on the network.<sup>38</sup>

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<sup>35</sup> AEMO's advice. See section 5.5.1.

<sup>36</sup> See NGR rules 329 and 330.

<sup>37</sup> AEMO's advice and Commission's assessment. See section 5.5.1.

<sup>38</sup> See section 5.5.2.

### **3.1.3 Impacts on efficient use of natural gas services**

In its draft Rule determination, the Commission considered that the proposed Rule might lead to inefficiencies in the allocation of gas at the Culcairn withdrawal point when compared with the existing arrangements under which tied withdrawal bids are pro-rated. These risks could arise where there exist barriers to trading of AMDQ/AMDQ credits, or where the proposed Rule has the effect of leading to or reinforcing market power in relevant markets in NSW. The exercise of market power in market stress circumstances could cause significant commercial damage to parties with significant detrimental impacts on competition. This could potentially prevent parties from competing to supply gas to customers in relevant markets (e.g. retail) in NSW with significant detrimental impacts on prices.

Submissions on the draft Rule determination did not support the Commission's initial and tentative concerns about market power issues and no evidence was provided to suggest that market power or barriers to trading exist. As such, and in the absence of any evidence of barriers to trading or market power, the Commission does not consider that the proposed Rule is likely to lead to inefficiencies in the allocation of gas at Culcairn.

### **3.1.4 Impact of the proposal on effective and efficient risk management**

Following analysis of submissions on the draft Rule determination, the Commission considers that the proposed Rule is likely to increase regulatory certainty for market participants relative to the existing arrangements under which controllable withdrawal bids are pro-rated. This is because allocating gas to holders of AMDQ/AMDQ credits is clearer and more certain than the existing pro-rating mechanism. The Commission considers that greater certainty over the allocation of gas in these circumstances is likely to promote more efficient risk management both by parties that hold and do not hold AMDQ/AMDQ credits, possibly bringing reliability and price benefits to customers, promoting the efficient operation and use of natural gas services.

Having analysed submissions, the Commission is now satisfied that the proposed Rule will or is likely to contribute to the achievement of the NGO. The proposed Rule is likely to provide incremental benefits as it is likely to have risk management benefits, e.g. for parties transporting gas through the DTS, and it is likely to promote the more efficient operation and use of natural gas services.

### **3.1.5 Overall conclusion**

On balance, after weighing up the factors outlined above, the Commission is satisfied that the proposed Rule will or is likely to contribute to the achievement of the NGO.

The proposal is likely to have incremental benefits in terms of consistency and improved risk management for market participants, and is likely to contribute to promoting more efficient network investment at the margin. Further, the Commission

does not consider that the proposal would lead to inefficiencies in the allocation of gas at Culcairn.

### **3.2 Rule as Made**

The Rule as Made implements the proposal in the Rule Change Request as it changes the scheduling of withdrawals in the DWGM. Controllable withdrawal bids associated with AMDQ or AMDQ credits will be scheduled before controllable withdrawal bids that are not associated with AMDQ or AMDQ credits in the following situation:

- where there are multiple equally-beneficial controllable withdrawal bids; and
- where those multiple equally-beneficial controllable withdrawal bids cannot all be scheduled.

If there are multiple equally-beneficial controllable withdrawal bids associated with AMDQ or AMDQ credits that cannot all be scheduled (for example due to a pipeline constraint), those controllable withdrawal bids will all be scheduled "to the same extent", that is on a pro-rated basis according to the AMDQ and AMDQ credits associated with those bids.

### **3.3 Civil Penalties**

The Rule as Made amends rule 214 of the NGR and does not introduce new rules into the NGR. Rule 214 of the NGR is not prescribed as a civil penalty provision and the Commission will not recommend to the MCE that it be prescribed as a civil penalty provision. The reason for this is that the Rule as Made does not substantively amend NGR rule 214.

### **3.4 Conduct Provisions**

The Rule as Made amends rule 214 of the NGR and does not introduce new rules into the NGR. Rule 214 of the NGR is not prescribed as a conduct provision and the Commission will not recommend to the MCE that it be prescribed as a conduct provision. The reason for this is that the Rule as Made does not substantively amend NGR rule 214.

## 4 Commission's analytical framework

This chapter describes the analytical framework that the Commission has applied to assess the Rule Change Request in accordance with the requirements set out in the NGL (and explained in chapter 2).

### 4.1 General analytical framework

As discussed in section 2.4, the Commission may give such weight to any aspect of the NGO as it considers appropriate in all the circumstances.<sup>39</sup> For this Rule Change Request, the Commission considers it is appropriate to give weight to the following aspect of the NGO: efficient investment in transmission pipeline services and efficient use of natural gas services for the long term interests of consumers of natural gas with respect to price and reliability of supply of natural gas.

Economic efficiency is a concept central to the NGO. As the Commission has discussed in relation to Rule change requests under the National Electricity Law, economic efficiency is commonly considered to have three elements:

- productive efficiency - e.g. the natural gas market should be operated on a least cost basis given the existing and likely network and other infrastructure;
- allocative efficiency - e.g. natural gas production and consumption decisions should be based on prices that reflect the opportunity cost of the available resources; and
- dynamic efficiency - e.g. ongoing productive and allocative efficiency should be maximised over time. Dynamic efficiency is commonly linked to the promotion of efficient long-term investment decisions.

In the context of regulated energy markets, a relevant consideration is the extent and form of market intervention. Interventions in the operation of the market should be minimised. This enables resources to be allocated primarily on the basis of prices established through market mechanisms, hence supporting productive, allocative and dynamic efficiency.

The Commission also seeks to apply principles of good regulatory design and practice as it considers that the NGO has implications for the means by which the regulatory arrangements operate (in addition to their ends). In applying these principles, the Commission seeks to have regard to the need, where practicable, to:

- promote stability and predictability - market Rules should be stable, or changes to them predictable, so that participants and investors can plan and make informed short and long-term decisions; and

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<sup>39</sup> Having regard to any relevant MCE statement of policy principles.

- promote transparency - to the extent that intervention in the market is required, it should be based on, and applied according to, transparent criteria.

#### **4.2 Application of analytical framework for the Rule Change Request**

In the present circumstances the application of this analytical framework has involved focussing on the following issues:

- the likely impact on the efficiency of investment in gas transmission pipelines;
- the likely impact on the efficient use of natural gas services;
- the likely impact on the promotion of reliability of supply of natural gas.

The Commission has focussed on this set of issues because:

- the Rule Proponent stated that the proposed Rule may contribute to signalling investment in the DTS;
- the Commission considers that the proposed Rule has the potential to impact the efficient allocation of gas by impacting on competition; and
- the Commission considers that the proposed Rule may impact the ability of parties to manage their risks at times of market stress.

The application of the Commission's analytical framework in this instance has involved the following tasks and methods:

- reviewing the development of the proposed Rule in the prior VENCORP and AEMO consultations, including examining the views of stakeholders;
- considering submissions in response to the draft Rule determination;
- examining reviews of the Victorian wholesale gas market since 1998; and
- undertaking bilateral discussions with AEMO (as the Rule Proponent and DWGM operator), the AER and APA GasNet to inform the Commission's assessment of the Rule Change Request.

## 5 Efficient investment in gas transmission pipelines

The supply of natural gas to consumers depends on an effective supply chain, which includes natural gas producers, transmission and distribution pipelines and retailers. The NGO specifically references efficient investment in natural gas services, a key aspect of which is investment in transmission pipelines.

A key question for the Commission in assessing this Rule Change Request is whether the proposed rule will or is likely to promote efficient investment in gas transmission pipelines.

### 5.1 Rule Change proponent's view

The Rule Proponent stated in the Rule Change Request that the proposed Rule:<sup>40</sup>

“...may contribute to signalling investment in the DTS (Declared Transmission System) in situations of system constraints because it incrementally increases the utility of authorised MDQ and AMDQ credits. Part of the purpose of these rights is to act as a signal to augment the DTS. In summary, AEMO considers the proposed Rule... strengthens an investment mechanism which, in turn, promotes an environment of efficient investment, operation and use of natural gas services.”

The Rule Proponent further explained:<sup>41</sup>

“AEMO expects that the proposed Rule may increase the value of authorised MDQ and AMDQ credits because where a tied withdrawal bidding situation occurs, the withdrawal bid of a Market Participant who holds authorised MDQ and AMDQ credits that is allocated or nominated to a controllable withdrawal point would be accepted over those who do not hold them. This change is expected to affect Market Participants holding authorised MDQ or AMDQ credits at the Culcairn withdrawal point. ... The benefit of the rule change, while incremental, is to send a potential signal to invest in the DTS as a consequence of the increased marginal value of authorised MDQ and AMDQ credits.”

### 5.2 Stakeholder views

#### 5.2.1 Initial VENCORP/AEMO consultation

A number of stakeholders are specifically recorded as expressing views on this issue during the VENCORP consultation on this Rule Change Request:

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<sup>40</sup> Rule Change Request, p.7

<sup>41</sup> Rule Change Request, p.7.

- APA GasNet noted in the original VENCORP consultation on the proposed Rule that investment in additional capacity was being hampered by the inability to offer certainty in withdrawal rights<sup>42</sup>;
- Origin Energy and Visy Paper stated at GMCC meeting 143 that the main benefit of prioritising tied controllable withdrawal bids would be increased signals for investment in the network<sup>43</sup>; and
- AEMO stated in its submission to the draft Rule determination that there was much wider participation than just APA GasNet, Origin Energy and Visy Paper in the GMCC/GWCF discussions on the Rule Change Request.<sup>44</sup>

### 5.2.2 Consultation on draft Rule determination

A number of stakeholders commented on the Commission's analysis in the draft Rule determination on how the proposed Rule could inform efficient regulated and unregulated network investment.

#### Impact of proposed Rule in informing efficient regulated network investment

Only one stakeholder commented on the Commission's analysis about how the proposed Rule could inform efficient regulated network investment. APA Group agreed with the Commission that AEMO does not take AMDQ information into account in its planning of the transmission network.<sup>45</sup>

#### Impact of proposed Rule in informing efficient unregulated network investment

Four stakeholders who made submissions on the draft Rule determination commented on the Commission's analysis about how the proposed Rule could inform efficient unregulated network investment:

- AEMO stated that:
  - it had been informed and lobbied by users and potential users of the Culcairn interconnect that the existing arrangements regarding tie-breaks for controlled withdrawal bids did not facilitate investment to expand the Victoria-NSW interconnect<sup>46</sup>; and

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<sup>42</sup> Noted in VENCORP's submission to the GMCC meeting 143 held 23 September 2008. See [www.aemo.com.au](http://www.aemo.com.au).

<sup>43</sup> Minutes of the GMCC meeting 143 held on 23 September 2008. See [www.aemo.com.au](http://www.aemo.com.au).

<sup>44</sup> AEMO submission, p.8.

<sup>45</sup> APA Group submission, p.2.

<sup>46</sup> AEMO submission, p.6.

- third parties, such as a gas-fired power station, may be willing to fund the costs of a capacity expansion if they could obtain certainty in gas withdrawals<sup>47</sup>;
- APA Group considered that shippers would be more likely to be willing to fund network enhancements if they had greater certainty of gas flows<sup>48</sup>;
- Origin Energy:
  - stated that the proposal would increase future certainty of access to market (i.e. at Culcairn), in turn enhancing incentives to invest in pipeline capacity. Origin indicated that certainty of access is likely to become more important as gas-fired generation capacity expands and demand for gas increases in response to climate change policies<sup>49</sup>; and
  - disagreed that the potential for free-riding effectively removed any incentive for participants to fund new capacity in return for AMDQ rights as free-riding only occurs during unconstrained situations and AMDQ rights were most valuable during constraints<sup>50</sup>;
- the MEU<sup>51</sup> and AGL<sup>52</sup> commented that prioritising capacity rights holders in tie-break situations had been incorporated within the STTM on the basis that providing capacity right holders with priority in situations of tied bids promoted investment in capacity.

### 5.3 Victorian planning and investment arrangements

The Commission has analysed the potential impact of the proposed Rule, if it were made, on the efficiency of investment in gas transmission pipelines in Victoria.

As outlined in AEMO's Rule Change Request and the draft Rule determination, a possible impact of the proposal is that it would increase the value of holding AMDQ or AMDQ credits. This is because holders of AMDQ and AMDQ credits at withdrawal points would be prioritised when withdrawal bids are tied.

The Commission accepts that an impact of the proposed Rule would be that it incrementally increases the benefits of holding AMDQ or AMDQ credits.

However, a key issue for the Commission is whether this in turn is likely to promote efficient investment in the DTS.

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<sup>47</sup> AEMO submission, p.7.

<sup>48</sup> APA Group submission, p.3.

<sup>49</sup> Origin Energy submission, p.2.

<sup>50</sup> Origin Energy submission, pp.2-3.

<sup>51</sup> MEU submission, p.2.

<sup>52</sup> AGL submission, p.3.

In order to address this question, it is important to set out the existing investment and planning framework in Victoria and the role of AMDQ and AMDQ credits in this framework.

### **5.3.1 Arrangements for planning and investment in Victorian gas transmission pipelines**

Under the current DWGM arrangements, AEMO operates the DTS, which is owned by APA GasNet. APA GasNet is responsible for investment in the DTS, and planning is undertaken by both AEMO and APA GasNet.

#### **AEMO's planning role**

AEMO undertakes planning as part of its "declared system functions" under section 91BA(1)(d) of the NGL:

“to provide information and other services to facilitate decisions for economically efficient investment in markets for natural gas.”

NGR rule 323 places an obligation on AEMO to prepare and publish an annual planning review by 30 November each year. AEMO fulfills this obligation with the publication of its *Victorian Electricity & Gas Transmission Networks Annual Planning Report* and any updates to that report.<sup>53</sup> As part of the annual planning review, AEMO forecasts supply and demand and transmission system capacity for the next five years. It also develops potential network augmentation options to address constraints on the DTS. While AEMO has a planning role, it appears unable under the NGR<sup>54</sup> to direct APA GasNet to undertake a specific investment.<sup>55</sup>

In developing potential major<sup>56</sup> network augmentation options, AEMO's practice is to assess the options against an economic value test.<sup>57</sup> The economic value test (NGR rule 79(2)(a)) is that there is a positive overall economic value of the expenditure. In determining the overall economic value, AEMO will evaluate the costs of network congestion in particular locations and the costs associated with load shedding in the absence of investment being undertaken. The avoided costs of congestion and load shedding will be compared with the total costs of investment in a network augmentation to determine whether an investment is justified.

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<sup>53</sup> For example, AEMO's 2009 *Victorian Annual Planning Report Update*.

<sup>54</sup> Noting that section 91BC of the NGL gives AEMO the power to direct a Registered participant to undertake actions with respect to the DTS in relation to maintaining and improving the reliability of supply of natural gas, the control of the flow of natural gas or any other matter that may affect the safety, security or reliability of the DTS.

<sup>55</sup> Also see DPI, Discussion paper for the AEMO GWCF, December 2009, p.5.

<sup>56</sup> AEMO has advised the AEMC that deterministic planning standards are used for local augmentations.

<sup>57</sup> VENCorp Annual Planning Report 2009, p.108.

The Commission understands from discussions with AEMO that the price or value of AMDQ or AMDQ credits is not used by AEMO in assessing the efficiency or market benefits of network augmentation options.

### **Investment in the DTS**

Decisions on whether to augment the DTS are made by APA GasNet. The Commission considers that investment in the DTS is likely to occur through two potential routes:

- APA GasNet undertakes an investment following an AER determination that the investment would be conforming capital expenditure in terms of NGR rule 79, with the cost of the investment being recovered from tariff revenues; and
- APA GasNet underwrites an investment by agreeing network capacity contracts with third parties.

#### **5.3.2 The role of AMDQ and AMDQ credits**

AMDQ and AMDQ credits are instruments which confer limited rights on parties that withdraw/inject specified amounts of gas from/into the DTS. These rights are allocated to customers at injection and withdrawal points on the DTS.

AMDQ and AMDQ credits are tradable and provide their holders with benefits:

- they can be used to hedge against congestion uplift charges;
- their holders are entitled to preferential curtailment treatment; and
- their holders receive priority in having injection bids scheduled whenever there are "equally-beneficial" (tied) injection bids.

Most of the AMDQ for withdrawals (990TJ) was allocated to customers at the start of the Victorian wholesale gas market in 1998/9. It should also be noted that there are specific AMDQ rights for 17 TJ of withdrawals at the Culcairn exit point from the Victoria-NSW pipeline interconnector. These were allocated to GasNet (now APA GasNet) at the commencement of the Victorian wholesale gas market. 16 TJ of these rights have subsequently been allocated by GasNet to customers at the Culcairn exit point.

### **5.4 Impact of the proposed rule on withdrawal points**

In order to understand the impacts of the Rule Change Request on investment in the DTS, it is important to understand which withdrawal points would be affected by the proposal in the short and long term.

In the short term under the current DWGM, the proposed Rule appears likely to only affect the scheduling of withdrawals at one withdrawal point in the DTS, namely Culcairn in a narrow range of circumstances. These circumstances are at times that

parties are seeking to export gas through the Victoria-NSW interconnector in excess of its capacity. At such times Victorian market participants may price their bids at the DWGM VoLL in order to ensure access to gas.

While the proposed rule appears likely to only affect withdrawals at the Culcairn withdrawal point under the current network configuration, it may affect withdrawals at other offtake points in the DTS in the future depending on the development of the Victorian gas market.

The Commission considers that this restricted scope of the proposed Rule has implications governing the extent to which the proposal would impact network investment. Any investment impacts associated with the proposal are likely, at least under the current market arrangements, to be confined to the Culcairn withdrawal point.

## **5.5 Analysis of impact of the proposed Rule on efficient investment**

As noted above, whilst the Commission accepts that an impact of the proposed Rule is that it increases the benefits of holding AMDQ or AMDQ credits, a key issue is whether this is likely to have consequential impacts on efficient investment in the DTS.

For the reasons outlined below, the Commission considers that the proposed Rule is likely to promote efficient network investment.

We discuss the likely impact of the proposed Rule on the efficiency of investment under two scenarios outlined below, namely:

- where APA GasNet undertakes an investment following an AER determination that the investment would be conforming capital expenditure in terms of NGR rule 79, with the costs of the investment recovered from tariff revenues;
- where APA GasNet underwrites an investment through network capacity contracts agreed with third parties (e.g. gas retailers).

### **5.5.1 APA GasNet undertaking investment following an AER determination that the investment would be conforming capital expenditure**

The Commission is not satisfied that the proposed Rule is likely to inform more efficient investment undertaken by APA GasNet following a determination by the AER that the investment would be conforming capital expenditure in terms of NGR rule 79. The reasons for this are explained below.

Under current arrangements, APA GasNet may underwrite a pipeline investment with regulated revenues if the AER determines that the forecast capital expenditure was conforming forecast capital expenditure in terms of NGR rule 79. This forecast conforming capital expenditure would then become part of APA GasNet's projected capital base under NGR rule 78 and APA GasNet would recover the cost of the forecast expenditure through tariffs approved by the AER.

The basis upon which the AER determines whether forecast capital expenditure would be conforming is given in NGR rule 79. The test has the following two components:

- (a) the capital expenditure must be such as would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of providing services; and
- (b) it must be justifiable under one of a number of grounds, which include that: there would be a positive overall economic value, it would be necessary to maintain and improve safety, and it would be necessary to comply with regulatory obligations.

The Commission has considered how the proposed Rule, if made, could affect the way in which the AER undertakes its assessment of forecast capital expenditure.

As noted above, under the proposed Rule it appears likely that AMDQ and AMDQ credits associated with withdrawals at constrained offtake points would have a greater value compared to the existing arrangements. This is because the proposal would provide holders of AMDQ/AMDQ credits with greater certainty over their controllable withdrawals. This may result in greater demand and higher prices for these instruments.

In principle, any incremental increase in demand for and/or the price of AMDQ and AMDQ credits could inform the assessment by the AER of whether forecast capital expenditure would be conforming under NGR rule 79.

However, the Commission considers that it is unclear what weight would be given to this information by APA GasNet and the AER in the assessment of forecast expenditure. There are several reasons underpinning the Commission's view and these are set out below.

#### *AEMO's planning process*

The Commission understands that the AER's assessment of forecast capital expenditure is informed by forecasts prepared through AEMO's planning processes.<sup>58</sup> However, under the present planning model adopted in Victoria, AEMO does not take the value of AMDQ/AMDQ credits into account when considering potential network augmentations. As such, to the extent that the AER relies on information from AEMO, this input is unlikely to reflect information about the demand for AMDQ/AMDQ credits.

#### *Allocations of AMDQ/AMDQ credits*

Under the present NGR, auctions are used to allocate AMDQ (and AMDQ credits) in circumstances where the whole or part of the costs of a pipeline extension or expansion

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<sup>58</sup> For example, GasNet attached advice from VENCORP to its May 2007 submission to AER for its third Access Arrangement for the Victorian Principal Transmission System (the previous name for the DTS). GasNet Access Arrangement Submission, 14 May 2007, Attachment A, see [www.aer.gov.au](http://www.aer.gov.au).

are added to the declared transmission service provider's asset base. These auctions occur under NGR rules 329 and 330. Whilst such auctions would provide a signal of the value of the AMDQ/ AMDQ credits, the fact that they occur following the AER's regulatory assessment process suggests that any information arising from the auctions relating to the value of AMDQ/ AMDQ credits does not inform the regulated investment process.

#### *Congestion and trading of AMDQ*

Origin Energy submitted that the value of AMDQ/ AMDQ credits will be likely to rise in an environment of increasing pipeline constraints and congestion resulting from the greater demand for gas under climate change policies.<sup>59</sup> Such an increase in value may also lead to increased liquidity in the trading of these products. In particular, holders of these rights are likely to value the increased certainty that they will be able to withdraw gas and the reduced risk that they will be constrained off. The Commission agrees with this and considers it is possible that the AER could rely on information relating to the value of AMDQ/ AMDQ credits in informing its assessments of efficient capital expenditure.

However, it is unclear what weight would be given to this information by the AER to justify regulated investment in the DTS. For example, if the market-based evidence demonstrated that AMDQ/ AMDQ credits were increasing in value in the light of pipeline congestion, it is likely to be important for the AER to understand whether the increase in value is sustained and demonstrates a strong investment signal. If the evidence indicated that high AMDQ/ AMDQ credit values were transient in nature then it is possible that limited weight could be attributed to those values for the purposes of justifying investment.

#### *The value of AMDQ within the Victorian DWGM*

In addition, it is also unclear what weight the AER would give to information relating to the value of AMDQ/ AMDQ credits when neither represent a fully developed tradable capacity product under which the holders of the product are granted financial or physical rights to flow gas through injection or withdrawal points on the DTS.

As such, in the absence of further evidence on how the AER would use AMDQ/ AMDQ credit information, the Commission has not been satisfied that the proposal will or is likely to contribute to informing more efficient investment undertaken by APA GasNet following a determination by the AER under NGR rule 79.

#### *Overall assessment*

In assessing the proposed Rule, it is necessary to consider the incremental impact of the proposed Rule relative to the existing arrangements. The Commission recognises that the proposal could incrementally increase demand for AMDQ (e.g. in the short term at Culcairn). However, in the absence of evidence on what weight the AER would give to information relating to the value of AMDQ/ AMDQ credits to inform assessments of

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<sup>59</sup> Origin Energy submission, p.2.

efficient forecast expenditure under the existing arrangements, the Commission is not satisfied that the proposed Rule would be likely to inform more efficient regulated network investment decisions.

### **5.5.2 Third parties underwriting investments in return for capacity contracts**

The Commission's view in the draft Rule determination was that it was not clear that the proposed Rule would be likely to lead to additional demand from parties to underwrite unregulated network investments in return for AMDQ/ AMDQ credit contracts from APA GasNet.

Following analysis of submissions, the Commission now considers that the proposed Rule is likely to lead to increased incentives on parties to underwrite unregulated investment in the DTS. This is likely to promote efficient investment in the DTS. The reasons for this view are explained below.

APA GasNet has indicated that it may seek to underwrite investment in the DTS by entering into network capacity contracts with third parties.<sup>60</sup> These contracts would involve APA GasNet selling AMDQ/ AMDQ credits or rights to those instruments for a period of time.

As has been noted above, it is possible that the proposed Rule would have the incremental effect of increasing demand for AMDQ at Culcairn given the potential value associated with holding AMDQ during times of constraints on the interconnector. This value derives from having a greater certainty of access to gas withdrawals.

The Commission notes that under the current market carriage framework applying in Victoria, AMDQ rights play a limited role. In particular, these rights do not represent a fully firm right to access the network to the exclusion of other parties that do not hold these rights. Notwithstanding this, the Commission considers that, under the existing arrangements, holders of AMDQ/ AMDQ credits can derive value from the prioritisation of injection bids in scenarios of equally-beneficial injection bids. Furthermore, under the proposed Rule, value could be derived from prioritisation of equally-beneficial controllable withdrawal bids. This is because AMDQ and AMDQ credits would provide increased levels of certainty that gas that has been injected into the DTS by a shipper or supplier could also be withdrawn (e.g. at Culcairn) during periods of constraints. Origin Energy contended that the real value of infrastructure access rights (such as AMDQ) only manifests during constraints.<sup>61</sup>

Given the increased value of AMDQ/ AMDQ credits under the proposed Rule, third parties who could benefit from holding AMDQ/ AMDQ credits may have an increased incentive to procure those instruments. In addition, there may be a greater incentive on these parties to underwrite unregulated network investment by APA GasNet in return

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<sup>60</sup> APA GasNet submission to the CRA Strategic Review of the Victorian Gas Market Options Paper, p.2.

<sup>61</sup> Origin Energy submission, p.3.

for an AMDQ/AMDQ credit contract. APA Group<sup>62</sup>, AEMO<sup>63</sup> and Origin Energy<sup>64</sup> stated that third parties may be more likely to fund an investment if they had greater certainty of gas withdrawals.

In light of the submissions received on this issue, the Commission accepts that the proposed Rule would be likely to lead at the margin to greater incentives for third party investment. In principle, parties may be likely to underwrite investment (e.g. at Culcairn) through AMDQ/AMDQ credit holdings to the extent that these rights provide an increased level of certainty over gas withdrawals in the DWGM. In addition, the Commission considers that market-driven investment underpinned by AMDQ/AMDQ credit holdings is likely to be efficient.

For these reasons and having taken into account the information provided in submissions, the Commission has therefore altered its view from that set out in the draft Rule determination. The Commission would however note that its considerations on the issue have been finely balanced and that any such investment impacts are likely to be marginal. This is because under the open access framework that applies in Victoria, parties holding AMDQ/AMDQ credits do not have fully firm transportation rights that can be used to the exclusion of others. In particular, parties can benefit from an investment (e.g. additional capacity resulting in fewer constraints and/or pipeline extensions) during unconstrained conditions without contributing to the cost of that investment.

## **5.6 Conclusion**

The Commission is satisfied that the proposed Rule is likely to promote more efficient network investment at the margin as it is likely to lead to an increase in the incentives for third parties to underwrite unregulated network investment in return for AMDQ/AMDQ credit contracts.

The Commission asked in the draft Rule determination whether the proposed Rule, if made, should only be applied on a forward-looking basis. As discussed elsewhere in this final Rule determination, the Commission considers that the Rule should be made and have effect for existing holders of AMDQ/AMDQ credits as it will have risk management and potential reliability benefits for existing holders of AMDQ/AMDQ credits.

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62 APA Group submission, p.3.

63 AEMO submission, p.7.

64 Origin Energy submission, p.2.

## 6 Efficient use of natural gas services

A key factor the Commission has considered in assessing the Rule Change Request is the extent to which the proposed Rule would, by prioritising holders of AMDQ/AMDQ credits, lead to a more efficient allocation of gas and therefore promote the efficient use of natural gas services, when compared to the existing arrangements.

Having considered submissions, the Commission does not consider that the proposed Rule is likely to lead to inefficiencies in the use of natural gas services.

### 6.1 Rule Change proponent's view

The Rule Change proponent did not address this issue in its Rule Change Request.

### 6.2 Stakeholder views

#### 6.2.1 Initial VENCORP/AEMO consultation

AEMO and VENCORP consulted on this Rule Change Request prior to it being submitted to the Commission. The publically available documents from those consultations and the papers from the meetings of VENCORP's GMCC and AEMO's GWCF do not indicate stakeholder views on this issue.

#### 6.2.2 Consultation on draft Rule determination

All six stakeholders who made submissions on the draft Rule determination commented on the Commission's analysis in the draft Rule determination about how the proposed Rule could affect the efficient use of natural gas services:

- Tradability of AMDQ/AMDQ credits:
  - Origin Energy stated that:
    - the limited trading in AMDQ rights to date has been primarily due to the lack of pipeline congestion, and the incentives to trade should increase if capacity tightens<sup>65</sup>; and
    - a reluctance to trade AMDQ rights may reflect prudent risk management by AMDQ holders for managing uncertain future demand<sup>66</sup>;
  - Infratil Energy Australia (IEA) stated that:

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<sup>65</sup> Origin Energy submission, p.3.

<sup>66</sup> Origin Energy submission, p.3.

- parties had been unwilling to trade AMDQ credits and AMDQ for Tariff D customers<sup>67</sup> but there were no barriers to trading, while AMDQ for Tariff V customers<sup>68</sup> cannot be traded<sup>69</sup>; and
- in its experience, lack of access to AMDQ/AMDQ credits has been a barrier to market entry and growth.<sup>70</sup>
- Market power and competition risks:
  - AEMO<sup>71</sup> and APA Group<sup>72</sup> stated that AMDQ holders cannot prevent non-holders from accessing pipeline capacity unless the AMDQ holder is prepared to match the other party's bid price;
  - AEMO<sup>73</sup>, AGL<sup>74</sup> and APA Group<sup>75</sup> considered the fact that parties had obtained AMDQ indicated that those parties valued the supply of natural gas more highly;
  - Origin Energy stated that:
    - section 46 of the Trade Practices Act may be sufficient to deal with any market power concerns<sup>76</sup>;
    - the role of AMDQ rights in enhancing market power was only of concern if there were barriers to new entrants underwriting pipeline investment<sup>77</sup>; and
    - there is little evidence of misuse of market power in relation to the existing prioritisation of AMDQ holders for equally-beneficial injection bids<sup>78</sup>;
  - AGL<sup>79</sup> and the MEU<sup>80</sup> stated that the issue of market power was not a material issue as there were low flows of gas at Culcairn into NSW; and

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<sup>67</sup> Tariff D customers are customers consuming in excess of 10 TJ/year or their maximum quantity is over 10 GJ/hour. See AEMO, *Technical Guide to the Victorian Gas Wholesale Market January 2010*, [www.aemo.com.au](http://www.aemo.com.au).

<sup>68</sup> Tariff V customers are customers who are not tariff D customers. In general, they are residential, small to medium-sized commercial and industrial sites. See AEMO, *Technical Guide to the Victorian Gas Wholesale Market January 2010*, [www.aemo.com.au](http://www.aemo.com.au).

<sup>69</sup> Infratil Energy Australia submission, p.1.

<sup>70</sup> Infratil Energy Australia, p.1.

<sup>71</sup> AEMO submission, p.5.

<sup>72</sup> APA Group submission, p.5.

<sup>73</sup> AEMO submission, p.5.

<sup>74</sup> AGL submission, p.3.

<sup>75</sup> APA Group submission, p.5.

<sup>76</sup> Origin Energy submission, p.3.

<sup>77</sup> Origin Energy submission, p.3.

<sup>78</sup> Origin Energy submission, p.3.

- Infratil Energy Australia stated that lack of AMDQ trading had resulted in natural gas being inefficiently allocated especially where there is injection dependence<sup>81</sup>.

There was no evidence from stakeholders of market power issues associated with the Culcairn withdrawal point.

### **6.3 Analysis of potential impacts on efficient use of natural gas services**

As noted above, a direct impact of the proposed Rule is that holders of AMDQ/AMDQ credits at withdrawal points would be given priority in the scheduling of gas withdrawals in tie-break scenarios. This would differ from the current arrangements under which tied bids would be pro-rated.

The Commission has therefore considered whether the allocation of gas in these circumstances would promote the efficient use of gas services. Related to this, the Commission has considered the potential competition impacts of the proposal. To the extent that the proposal has impacts on competition, these could translate into impacts on prices.

In considering these issues, it is important to reiterate that the tie-breaking provisions would be likely to only affect the scheduling of withdrawals at the Culcairn withdrawal point in the present market arrangements. The likely impact in practice appears to be restricted to times that parties are seeking to export gas through the Victoria-NSW interconnector in excess of its capacity. At such times Victorian market participants may price their bids at the DWGM VoLL in order to ensure access to gas.

While the proposed rule appears likely to only affect withdrawals at one offtake point in the short term, it may affect withdrawals at other offtake points in the DTS in the future depending on the development of the Victorian gas market.

#### **6.3.1 How the efficient use of gas services could be affected by making the proposed Rule**

The Commission considered whether there was a risk that the proposed Rule could lead to inefficiencies in the allocation of gas at the Culcairn withdrawal point when compared to the existing arrangements under which tied controlled withdrawal bids are pro-rated.

The Commission considered, and AEMO agreed<sup>82</sup>, that an inefficient allocation of gas would occur in circumstances where a rule is in place which prevents gas being allocated to parties that value it the most.

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79 AGL submission, p.3.

80 MEU submission, p.2.

81 Infratil Energy Australia submission, p.2.

The nature and extent of these risks is discussed further below.

### **Tradability of AMDQ/AMDQ credits**

In practical terms, the proposed Rule creates a risk that a party that values the gas more highly relative to the holder of AMDQ/AMDQ rights would be prevented from accessing the gas at the Culcairn withdrawal point.

However, as AMDQ/AMDQ credits are tradable, the potential for these circumstances to arise might appear limited. This is because the party that places a higher value on exporting gas to NSW could seek to purchase AMDQ/AMDQ credits from their holders, or alternatively enter into some other form of commercial arrangement that would facilitate the export of gas into NSW.

While trading of AMDQ can occur, it should be noted that trading of AMDQ in Victoria has been limited and that the identity of holders of AMDQ is confidential under the NGR.<sup>83</sup> Further, there is no organised platform for the trading of AMDQ/AMDQ credits.

Notwithstanding this, parties wishing to obtain AMDQ/AMDQ credits can approach their holders, either directly or through APA GasNet, and make an offer to procure those instruments. Decisions about trading are commercial decisions taken by market participants and the Commission has no evidence of barriers to trading AMDQ/AMDQ credits. While the Commission notes Infratil Energy Australia's concern that holders of AMDQ/AMDQ credits may have been unwilling to offer them to other parties<sup>84</sup>, it is possible that this behaviour might also represent prudent risk management given uncertainty about future gas demand and potential constraints on the DTS.

For example, holders of AMDQ at Culcairn hold these rights as a hedge against the risks of current or future constraints and may be only willing to trade them at significant value reflecting the protection they provide against congestion uplift charges. Nevertheless, Infratil Energy Australia's comments potentially raise broader issues regarding the role of AMDQ/AMDQ credits in the Victorian market, the allocation of the costs of congestion uplift, and the mechanisms by which these rights are allocated to parties. The Commission observes that it is important for any initial allocation of rights at withdrawal points to be undertaken on a formalised, transparent, efficient and non-discriminatory basis so that parties that place the highest value on the rights have the opportunity to acquire them in competition with other parties.

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82 AEMO submission, p.5.

83 NGR rule 328(4).

84 Infratil Energy Australia submission, p.1.

## Market power and competition risks

The Commission considers that the proposed Rule does not appear likely to impact negatively on the effectiveness of competition in relevant markets in NSW or other regional areas. In addition, no evidence has been submitted to the Commission to suggest that there are market power concerns at the Culcairn withdrawal point.

In its draft Rule determination, the Commission noted that to the extent the proposed Rule negatively impacted the effectiveness of competition or enhanced the potential to exercise market power, the proposed Rule would be inconsistent with promoting the efficient use of natural gas services and that it would be unlikely to promote the achievement of the NGO. These potential negative impacts are explained below.

To the extent that holders of AMDQ hold market power in NSW markets (e.g. retail), the Commission considered whether the proposed Rule would be likely to have the effect of exacerbating that power. This might occur in circumstances in which the proposed Rule would affect scheduling of controllable withdrawals at Culcairn. In these circumstances the exercise of any market power at the Culcairn withdrawal point could prevent other parties from competing to supply customers in NSW. Under such a scenario, the party that holds AMDQ at Culcairn might refuse to trade its AMDQ to potential competitors in order to frustrate entry into NSW or another relevant market. Alternatively, parties holding the AMDQ may refuse to trade the gas that had been allocated to them (by virtue of the proposed Rule) in order to preserve their market power.

Analysis of the scenarios in which the tie-break rule would likely be triggered at the Culcairn withdrawal point indicated that the exercise of market power might occur at times when the supply of Victorian natural gas is highly valued, for example when Victorian participants are prepared to pay up to \$800/GJ for the export of gas into NSW, or when there are supply shortages and high demand in NSW leading to high prices in the NSW STTM. Whilst experience suggests high prices are improbable they are not unprecedented as illustrated by the recent experience in Victoria when the imbalance price reached the market price cap of \$800/GJ.<sup>85</sup>

At times of high prices and market stress, the exercise of market power could cause significant commercial damage to parties with significant detrimental impacts on competition. For example, retailers seeking to export gas into NSW in scenarios of high prices and supply shortages could be subject to significant financial risk in the form of imbalance prices if they are unable to get their gas to market. Further, to the extent that competitive sources of gas are withheld from NSW, the price impacts could be significant.

To the extent that market power was exacerbated by the prioritisation of AMDQ holders in tie-break scenarios, the Commission considered that making the proposed Rule would be inconsistent with promoting the efficient use of natural gas services.

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<sup>85</sup> For one scheduling interval on 22 November 2008.

The Commission raised these issues for stakeholder comment in the draft Rule determination noting that it had not received representations from industry participants or customers of market power concerns at the Culcairn withdrawal point or any other withdrawal point. It had also not performed an analysis about whether existing holders of AMDQ at Culcairn had market power in retail markets in NSW or any other regional area.

No submission on the draft Rule determination identified market power concerns at the Culcairn withdrawal point or any other withdrawal point.<sup>86</sup> Consequently, the Commission has not undertaken further analysis on the potential for the proposed Rule to negatively impact on the effectiveness of competition or the potential to exercise market power.

Furthermore, the Commission also notes the arguments put forward by AEMO<sup>87</sup> and APA Group<sup>88</sup> that AMDQ holders cannot prevent non-holders from accessing pipeline capacity unless they are willing to match the non-holder's bid price. The Commission considers that this mitigates against the risk of any potential abuse of market power.

For the reasons outlined above, the Commission considers that the proposed Rule does not appear likely to impact negatively on the effectiveness of competition or the potential to exercise market power in relevant markets in NSW or other regional areas.

## **6.4 Conclusion**

The Commission does not consider that the proposed Rule is likely to lead to inefficiencies in the use of natural gas services, as there is no evidence of market power concerns or barriers to trading AMDQ and AMDQ credits.

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<sup>86</sup> AGL (p.3) and the MEU (p.2) stated that the issue of market power was not a material issue as there were low flows of gas at Culcairn into NSW.

<sup>87</sup> AEMO submission, p.5.

<sup>88</sup> APA Group submission, p.5.

## **7 Promoting reliability and reduced prices through effective and efficient risk management**

In this section the Commission considers the extent to which the proposed Rule would promote certainty and more efficient risk management leading to more efficient operation and use of natural gas services through reliability and price benefits.

### **7.1 Rule Change proponent's view**

The Rule Proponent did not address this issue in the Rule Change Request.

### **7.2 Stakeholder views**

#### **7.2.1 Initial VENCORP/AEMO consultation**

AEMO and VENCORP consulted on this Rule Change Request prior to it being submitted to the Commission. The publically available documents from those consultations, and papers from the meetings of VENCORP's GMCC and AEMO's GWCF do not indicate specific stakeholder views on this issue.

#### **7.2.2 Consultation on draft Rule determination**

Three stakeholders who made submissions commented on the Commission's analysis in the draft Rule determination about how the proposed Rule could promote reliability and reduced prices through effective and efficient risk management:

- Origin Energy stated that the proposed Rule would increase future certainty of access to market, particularly in terms of delivery of gas into NSW<sup>89</sup>;
- APA Group stated that the proposed Rule would lead to more certainty about the outcomes of gas bidding and to shippers being able to better manage their risks<sup>90</sup>; and
- AEMO stated that users and potential users at Culcairn had informed it that the current AMDQ arrangements were detrimental in terms of promoting risk management as they receive little or no benefit in terms of physical certainty of gas delivery.<sup>91</sup>

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89 Origin Energy submission, p.2.

90 APA Group submission, p.6.

91 AEMO submission, p.6.

### 7.3 Analysis of potential impacts on reliability

The Commission considers that the proposed Rule is likely to promote more efficient operation and use of natural gas services by promoting reliability and lower prices. This is likely to occur through the proposed Rule allowing parties to more effectively and efficiently manage their risks at times of market stress and potential supply shortages. This is discussed further below.

#### 7.3.1 Increased certainty for participants

As the Commission has noted, under the existing arrangements, scheduling of tied controllable withdrawal bids is undertaken on a pro-rated basis for all parties. This provides limited certainty for parties about the quantities of gas they would be scheduled to withdraw from the DTS in circumstances in which there were tied bids. These situations in practice appear to be restricted to times that parties are seeking to export gas through the Victoria-NSW interconnector in excess of its capacity. At such times Victorian market participants may price their bids at the DWGM VoLL in order to ensure access to gas.

In these situations, applying the existing tie-break arrangements by pro-rating bids could lead to significant uncertainty for parties as to the volumes of gas that are likely to be scheduled to withdraw.

Under the existing pro-rated arrangements, the amount of gas scheduled to be withdrawn by a party would depend on both:

- the total quantity of gas bid for withdrawals from that offtake point amongst all parties;
- the relative quantities of gas bid for withdrawals by each party; and
- the prices in the withdrawal bids.

The Commission considers that under the proposed Rule, both holders and non-holders of AMDQ and AMDQ credits would be likely to have greater certainty about the likely amounts of gas they would be scheduled to withdraw in situations of tied bids. This view was supported by Origin Energy<sup>92</sup> and APA Group<sup>93</sup>. Greater certainty would result as all Victorian market participants would be able to bid in the knowledge that AMDQ and AMDQ credit holders will be prioritised in the event of tied bids. Holders of AMDQ and AMDQ credits would be able to rely on being scheduled to withdraw quantities of gas up to their level of AMDQ and AMDQ credits<sup>94</sup> in scenarios where tied bids are likely to occur. Non-holders of AMDQ and AMDQ credits will commensurately know that holders will be prioritised over them.

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<sup>92</sup> Origin Energy submission, p.2.

<sup>93</sup> APA Group submission, p.6.

<sup>94</sup> Subject to network constraints.

The Commission notes that the evidence provided in submissions suggests that this additional level of certainty is important for parties shipping gas through the Culcairn withdrawal point. Origin Energy stated that, as a party sourcing gas from Bass Strait producers and withdrawing it at Culcairn for gas-fired generation in NSW, AMDQ rights give it a critical level of certainty for injections in an environment in which congestion is becoming increasingly important. Origin Energy stated that it did not have a similar level of certainty for withdrawals during times of constraints and that a more complete AMDQ transport right would increase the future certainty of parties being able to access and take gas to market.<sup>95</sup>

The Commission considers that certainty about gas injections and controllable withdrawals in the DWGM may become more important for Victorian market participants in the future should network congestion increase. Congestion may increase from an enhanced demand for gas from climate change policies, which may result in more gas-fired generation. Origin Energy stated that this was an expected impact of climate change policy.<sup>96</sup>

The greater certainty of gas withdrawals at Culcairn (and at potentially other withdrawal points in the future) would allow both holders and non-holders of AMDQ and AMDQ credits to be better able to manage their risks. This view was supported by AEMO.<sup>97</sup> This could potentially lower the risk management costs of both holders and non-holders of AMDQ/AMDQ credits (e.g. through potentially less expenditure on hedges against non-supply of gas through Culcairn) and provide productive efficiency benefits. Productive efficiency can be achieved when an output is produced at the minimum possible cost given available technology and input prices. It is possible that lower risk management costs to parties could be passed onto customers through lower prices.

Similarly, more efficient management of risks at times of market stress may promote reliability at those times, a key aspect of the NGO. This is because all market participants would have increased certainty regarding the outcomes of any tie-breaking scenarios and would be able to better manage their risks around this.

Having considered the additional information provided in submissions, the Commission now considers there are likely to be incremental benefits in terms of increased regulatory certainty about the allocation of gas in tie-breaking scenarios for parties seeking to withdraw gas at the Culcairn withdrawal point. Stakeholders agreed with the Commission that there would be greater certainty. This could lower risk management costs for both holders and non-holders of AMDQ/AMDQ credits, potentially leading to lower costs for consumers and promoting reliability at times of market stress.

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<sup>95</sup> Origin Energy submission, p.2.

<sup>96</sup> Origin Energy submission, p.2.

<sup>97</sup> AEMO submission, p.6

### **7.3.2 Incentive for non-holders of AMDQ and AMDQ credits to be innovative**

The draft Rule determination identified a potential secondary effect from the increased certainty provided to non-holders of AMDQ and AMDQ credits. This potential secondary effect was that those parties may have an incentive to find new and innovative ways of managing their risks, thereby promoting dynamic efficiency. Dynamic efficiency refers to the processes of technological and managerial innovation and reflects the ability of parties such as gas retailers to improve the quality and costs of their services and to respond to emerging resource availability and market developments.

To the extent that non-holders of AMDQ and AMDQ credits seek to develop more innovative alternative arrangements for managing risks in high market stress scenarios, such as those that could potentially occur at Culcairn, these benefits could be passed onto customers through lower prices.

The Commission notes Infratil Energy Australia's view that this potential effect identified in the draft Rule determination was "optimistic" and that in its experience a lack of access to and/or withholding of AMDQ/AMDQ credits had proven a significant barrier to market entry and growth.<sup>98</sup> However, the Commission remains of the view that a potential effect of the proposed Rule is that it will provide an incentive for non-holders of AMDQ and AMDQ credits to find new and innovative ways of managing their risks.

## **7.4 Conclusion**

The Commission considers that the proposed Rule is likely to promote the more efficient operation and use of natural gas services by promoting lower prices and reliability at times of market stress through allowing parties to more effectively and efficiently manage their risks.

The Commission has altered its view from the draft Rule determination that the materiality of the effect of the proposed Rule in promoting lower prices and reliability at times of market stress was unclear. The Commission now considers that the proposed Rule is likely to have incremental risk management benefits and that it is likely to promote the more efficient operation and use of natural gas services.

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<sup>98</sup> Infratil Energy Australia submission, p.1.

## Abbreviations

AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
AMDQ or authorised MDQ	Authorised Maximum Daily Quantity
Commission	See AEMC
DPI	Victorian Department of Primary Industries
DTS	Victorian Declared Transmission System
DWGM	Declared Wholesale Gas Market
esaa	Energy Supply Association of Australia
GMCC	Gas Market Consultative Committee
GWCF	Gas Wholesale Consultative Forum
IEA	Infratil Energy Australia
MCE	Ministerial Council on Energy
MEU	Major Energy Users
MSOR	Market and System Operations Rules version 31
NGL	National Gas Law
NGO	National Gas Objective
NGR	National Gas Rules
NSW	New South Wales
STTM	Short Term Trading Market
VENCorp	Victorian Energy Networks Corporation

## A Summary of issues raised in submissions

### A.1 Consultation on the draft Rule determination

Six stakeholders made submissions on the draft Rule determination:

- AEMO;
- AGL;
- APA Group;
- IEA;
- MEU; and
- Origin Energy.

On 10 May 2010 the Commission received a letter from the esaa commenting on the draft Rule determination. The Commission has also responded to the issues raised in the esaa letter in the table below.

Stakeholder	Issue	AEMC response
AEMO, p.4.	Prior to the Commencement of the DWGM in March 1999, the 17TJ of available AMDQ at Culcairn was allocated to APA GasNet. Market Participants currently holding AMDQ or AMDQ Credits at Culcairn have purchased or otherwise procured those rights from APA GasNet since market commencement, yet under the current	The Commission recognises that the proposed Rule would likely increase the certainty of holders of AMDQ/AMDQ credits to access gas withdrawals. This may lead to more efficient risk management by both holders and non-holders of AMDQ/AMDQ credits.

Stakeholder	Issue	AEMC response
	<p>Rules they receive little or no real benefit from those rights in terms of physical certainty in gas delivery.</p>	<p>While the Commission considers the proposed Rule would allow Victorian market participants to more efficiently manage their risks, it recognises that AMDQ and AMDQ credits are not equivalent to a fully-firm capacity right.</p>
<p>AEMO, p.4.</p>	<p>Contrary to what is stated in section 1.2 of the Draft Determination, “equally beneficial” bids are not simply bids with equal prices. A more accurate description is contained in footnote 2, page 2 of AEMO’s Rule Change Request, namely “equally beneficial bids means bids that, in the absence of a tie-break procedure, and taking account of bid price, location, accredited constraints, system capacity and the temporal and physical distribution of system demand over the gas day, would be scheduled with equal priority on a pro-rated basis by the scheduling systems and processes.”</p>	<p>The Commission notes this correction and has taken it into account in its analysis.</p>
<p>AEMO, p.5.</p>	<p>One of the benefits of the proposed Rule is that it is more likely than the existing rule to ensure that gas is allocated to those who value it most. If two parties submit equally priced withdrawal bids and only one holds AMDQ, the holder of the AMDQ values the gas more highly as it is willing to pay both the price of the gas and the additional cost of procuring the AMDQ.</p>	<p>The Commission agrees that holding AMDQ may indicate a higher value of gas. However, the Commission has not had access to commercial information indicating the prices or terms and conditions on which AMDQ has been purchased. In the absence of this information, the Commission has been unable to draw a conclusion that a holder of AMDQ values gas more highly than non-holders.</p>
<p>AEMO, p.5.</p>	<p>The potential risk identified in the draft Rule determination that “the proposed Rule creates a risk that a party that values the gas more highly relative to the holder of AMDQ/AMDQ rights is prevented from accessing the gas at Culcairn” can</p>	<p>The Commission accepts that the risk is low and that the holder of the AMDQ would need to match the other parties’ bids in order to have gas scheduled.</p>

Stakeholder	Issue	AEMC response
	not occur. This is because it is only in situations of tied bids that AMDQ holders would be prioritised and these parties have indicated a higher value of gas through procuring AMDQ.	
AEMO, p.6.	The concern in the draft determination that "the party that holds the AMDQ/AMDQ Credits might refuse to trade its AMDQ/AMDQ credits to potential competitors in order to frustrate entry into NSW or another relevant market" is unfounded and would not be a viable strategy to exert market power. Simply holding and refusing to trade AMDQ at a withdrawal point would not prevent a competitor from flowing gas at that point. The holder of the AMDQ would still need to match other parties' market bids in order to get their gas scheduled and, regardless of whose gas is scheduled, all gas withdrawal bids would be met and gas would flow to meet customer requirements up to the physical capacity of the pipeline. Under the Victorian DWGM arrangements, provided there is spare physical capacity on the pipeline, parties who do not hold AMDQ rights are able to flow gas through the pipeline at no additional cost. Under the proposed Rule, the only time that holders of AMDQ rights would get priority treatment over parties without AMDQ would be in the event of tied bids with aggregated bid quantities exceeding the pipeline capacity.	The Commission agrees that holding and refusing to trade AMDQ at a withdrawal point would not necessarily prevent a competitor from flowing gas at that point except potentially in circumstances of pipeline capacity constraints and tied bids and that the AMDQ holder would need to match the non-holder's bids to get their gas scheduled.
AEMO, p.6.	While the increased utility of AMDQ and AMDQ credits appears to provide an incremental benefit, AEMO has been informed and lobbied by various users or potential users of the Culcairn	The Commission agrees that the proposed Rule would improve the ability of parties exporting gas at Culcairn to more efficiently manage their risks, potentially providing reliability and price benefits to

Stakeholder	Issue	AEMC response
	interconnect, in particular, that this is an important deficiency in the current market arrangements in terms of risk management and in facilitating investment to expand the interconnect.	consumers.
AEMO, p.9.	AEMO is concerned by comments in the draft Rule determination relating to the materiality of the potential benefits resulting from the proposed Rule, as many changes to the Rules only provide incremental improvements in the achievement of the NGO.	<p>The Rule-making test in the National Gas Law does not include a materiality threshold.</p> <p>Commission decisions involve a weighing up of costs and benefits against the NGO and the materiality comment was made in this context.</p> <p>The Commission's analysis of the potential benefits and costs of a proposal includes consideration of the ongoing economic impacts of the proposal on the DWGM and other gas markets, in addition to the transitional costs.</p>
AGL, pp.1-2.	The Rule Change Request was the culmination of a long and intensive consultative process involving stakeholders representing gas suppliers, gas transmission and distribution companies, first and second tier retailers, and end-users of gas. The process conducted by AEMO provided all stakeholders with extensive information and the opportunity to discuss the merits of multiple options at length. Over the life of this issue, various versions were considered and discarded; but the finalised rule change submitted to the Commission was based on unanimous support from all stakeholders. This lengthy process appears to have been given minimal recognition by the Commission.	<p>The Commission examined all publically-available materials relating to the previous VENCORP/AEMO Rule change process pertaining to this Rule Change Request.</p> <p>The Commission is required under the National Gas Law to independently assess all Rule change requests with reference to the National Gas Objective, which is focussed on the concept of economic efficiency in the long term interests of consumers.</p> <p>The Commission will consider in its assessment of a Rule change request, among other things, the information provided in the Rule proponent's Rule change request, submissions made by</p>

Stakeholder	Issue	AEMC response
		stakeholders and information the Commission itself collects. As the Commission must assess a proposal against the NGO, unanimity of views of market participant stakeholders may be a factor for consideration. However, the strength of market participant stakeholder views is not a determinative factor in the Commission's assessment.
AGL, p.2.	The AEMC should not have dispensed with the first round of consultation if it had doubts about the extent and inclusiveness of the earlier VENCop/AEMO consultation. It would be perverse for the Commission to reject the proposal in the draft determination having dispensed with the first round of consultation. AGL took the dispensation of the first round of consultation as tacit recognition that the previous consultation was equivalent to an AEMO first round of consultation.	The Commission exercised its discretion under transitional provisions of the National Gas Law. These provisions apply with respect to Rule change proposals current at 1 July 2009 that were Rule change proposals for superseded jurisdictional market rules (the MSOR). The Commission exercised its discretion to dispense with the first round of consultation as it was of the view that the first round of consultation was unnecessary given that no equivalent step existed under the superseded jurisdictional market rules.
AGL, pp.2-3.	There has been active interest in AMDQ credits when they have been made available by APA GasNet notwithstanding the Commission's statement in section 3.1.2 of the draft Rule determination that it is "unclear whether there would be demand for bilateral agreements from APA GasNet from parties such as gas retailers under the market carriage framework that applies in the Victorian DWGM".	The phrase in the draft Rule determination referred to by AGL is, on reflection, unclear and was intended to refer to the likelihood of parties such as gas retailers entering into bilateral AMDQ/AMDQ credit arrangements with APA GasNet to underpin investment outside the AER's regulatory assessment framework.
AGL, p.3.	It is necessary for parties with a commercial presence on the NSW side of the Culcairn interconnect to obtain AMDQ/AMDQ credits to ensure reliability of supply, if they source gas from	The Commission recognises that the proposed Rule would likely increase the certainty of holders of AMDQ/AMDQ credits to access gas withdrawals. This may lead to more efficient risk

Stakeholder	Issue	AEMC response
	Victoria.	management by both holders and non-holders of AMDQ/AMDQ credits which has the potential to improve the reliability of supply and to lead to decreased costs for consumers.
AGL, p.3.	Parties obtaining AMDQ/AMDQ credits and bidding for withdrawals at \$800/GJ if necessary are indicating that they value the supply of natural gas more highly than other parties. Such parties will also have firm shipping rights on the NSW side of Culcairn. If these parties cannot have access to gas in the event of tied bids, this would tend to undermine the premise of contract carriage and the worth of property rights. The STTM design incorporates prioritisation of scheduling for firm capacity-holders in the event of a tie.	<p>The Commission agrees that the tradability of AMDQ/AMDQ credits should allow parties to indicate their higher value of the supply of natural gas through procuring those rights.</p> <p>However, the Commission has not had access to commercial information indicating the prices or terms and conditions on which AMDQ has been purchased. In the absence of this information, the Commission has been unable to draw a conclusion that a holder of AMDQ values gas more highly than non-holders.</p>
APA Group, p.2.	The fact that the Rule change request would affect AMDQ rights only at Culcairn is not a reason to refuse the proposal.	The Commission agrees.
APA Group, p.2.	Greater certainty of gas flows is likely to mean that shippers are more likely to fund enhancements to the network.	The Commission agrees.
APA Group, p.3.	Victorian participants may make bids for controllable withdrawals at Culcairn at the Victorian VoLL in order to ensure some supply. The NSW STTM price is irrelevant to this.	The Commission agrees that Victorian participants may bid their controllable withdrawal bids at Culcairn at the Victorian VoLL in order to ensure gas is scheduled for withdrawal at Culcairn.
APA Group, p.5.	Parties are able to use capacity on a pipeline if AMDQ rights are not called on.	The Commission agrees.

Stakeholder	Issue	AEMC response
APA Group, p.5.	The proposal would provide shippers holding AMDQ with greater certainty of bidding outcomes helping to promote the reliability of supply, an NGO aspect.	The Commission recognises that the proposed Rule would likely increase the certainty of holders of AMDQ/AMDQ credits to access gas withdrawals. This may lead to more efficient risk management by both holders and non-holders of AMDQ/AMDQ credits which has the potential to improve the reliability of supply and to lead to decreased costs for consumers.
APA Group, p.5.	The lack of certainty surrounding the shipping of gas from Victoria to NSW provides an impediment to the development of interstate trade in gas and to the expansion of the NSW system.	The Commission notes this comment.
APA Group, p.5.	It is unclear how the proposal could create a risk that a party valuing gas more highly relative to the holder of AMDQ rights could be prevented from accessing gas, as the only relevant situation is in situations of tied bids. In these situations, the AMDQ holder clearly values the gas more as it has obtained AMDQ and firm transport rights in NSW in addition to its gas bid. In addition, the tradability of AMDQ is irrelevant to this. The fact there may be barriers to trading AMDQ does not prevent gas from being allocated efficiently.	<p>The Commission agrees that a non-holder of AMDQ is prevented from accessing gas only in situations of tied bids under the Rule as Made.</p> <p>The Commission disagrees that the tradability of AMDQ/AMDQ/credits is irrelevant as barriers to trading of AMDQ/AMDQ credits may prevent parties obtaining AMDQ/AMDQ credits even if they value the supply of natural gas more highly than those holding AMDQ/AMDQ credits. This may lead to natural gas not being allocated to its most valued use.</p> <p>The Commission does not have evidence of barriers to trading AMDQ/AMDQ credits.</p>
APA Group, p.6.	The Commission appears to have interpreted the Rule-making test, "if it is satisfied that the Rule will, or is likely to, contribute to the achievement of the	The Commission does not interpret the Rule-making test in the manner stated. The Rule-making test under the National Gas Law is that the

Stakeholder	Issue	AEMC response
	NGO", in such a way that the proposed Rule must positively and significantly contribute to the NGO.	Commission can only make a Rule if it is satisfied the Rule will, or is likely to, contribute to the achievement of the NGO - it does not incorporate a materiality threshold. For example, it is plausible that the Commission might make a proposed Rule if it considered there were likely to be marginal benefits that would contribute to the achievement of the NGO.
esaa, p.2.	In choosing to dispense with the first round of consultation it would appear necessary for the AEMC to have arrived at a preliminary judgement on the adequacy and merits of the Rule Change Request and the need for further consultation.	As discussed above, the Commission exercised its discretion to dispense with the first round of consultation as it was of the opinion the first round of consultation was unnecessary given that no equivalent step existed under the superseded jurisdictional market rules. The transitional provisions of the National Gas Law do not provide for the Commission to dispense with a stage in this Rule change process on the basis of a preliminary judgement on the adequacy and merits of the Rule Change Request.
esaa, p.2.	The qualification of the AEMC's decision in the draft Rule determination that it was made "based on the information considered to date" implies a deficiency in the AEMC's processes of gathering and analysing evidence and to consult with market participants and AEMO. The AEMC should have sought to reconcile information deficiencies and differences in opinion between itself and AEMO prior to making the draft determination.	<p>The Commission consulted extensively with AEMO, APA GasNet and other parties before making its draft Rule determination.</p> <p>In the draft Rule determination the Commission appropriately sought views from stakeholders on a number of issues to inform its final Rule determination.</p>
esaa, p.2.	The draft Rule determination presented very little analysis or evidence to back up its concern that the Rule change request could lead to inefficiencies in	The Commission requested stakeholder feedback on its concern that the proposed Rule had the potential to lead to gas being allocated inefficiently

Stakeholder	Issue	AEMC response
	the allocation of gas at the Culcairn withdrawal point.	at the Culcairn withdrawal point. The Commission considered that it was necessary to understand and analyse the impacts of the proposal on the efficient allocation of gas and the issues identified in the draft Rule determination sought to elicit responses on these matters.
esaa, p.2.	<p>While the Rule change process allows for stakeholders to express concern in respect of a draft Rule determination, the draft determination signals a presumption that the final Rule determination will reach the same conclusion unless evidence can be presented to overturn the conclusion.</p> <p>For a Rule change request such as this, where the proposal had been subject to extensive consultation and is widely supported by market participants, it would appear appropriate that any presumption should favour the proposed Rule.</p>	<p>After analysing submissions, the Commission decided to make the proposed Rule.</p> <p>As noted above, the Commission is required under the National Gas Law to independently assess all Rule change requests with reference to the National Gas Objective, which is focussed on the concept of economic efficiency in the long term interests of consumers.</p> <p>The Commission will consider in its assessment of a Rule change request, among other things, the information provided in the Rule proponent's Rule change request, submissions made by stakeholders and information the Commission itself collects. As the Commission must assess a proposal against the NGA, unanimity of views of market participant stakeholders may be a factor for consideration. However, the strength of market participant stakeholder views is not a determinative factor in the Commission's assessment.</p>
esaa, p.3.	This is the first Rule change request to be considered by the AEMC under the National Gas Law. The AEMC's decision to reject the Rule change request with such limited consultation and analysis may be considered to have	Following the analysis of submissions on the draft Rule determination, the Commission has decided to make the proposed Rule as it is satisfied that the proposed Rule will or is likely to contribute to the

Stakeholder	Issue	AEMC response
	inappropriately "set the tone" for its regulatory approach to Australian gas markets and is therefore of concern to all market participants.	achievement of the National Gas Objective.
IEA, p.1.	There are no barriers to trading AMDQ credits or Tariff D AMDQ, but holders of those instruments have been unwilling to offer it.	The Commission notes IEA's experience, and further notes that it is plausible that an unwillingness to offer AMDQ/AMDQ credits for trading may represent prudent risk management on behalf of their holders.
IEA, p.2.	Lack of trading of ADMQ has resulted in gas being allocated inefficiently.	The Commission notes IEA's comment about the level of trading of AMDQ.
IEA, p.2.	Request for the Commission to clarify the treatment of withdrawal AMDQ in the event of curtailment and/or a threat to system security in the Victorian gas and/or electricity markets.	The Commission understands that the DWGM curtailment tables are given in the AEMO document entitled <i>Gas Load Curtailment and Gas Rationing and Recovery Guidelines</i> . The Commission further understands that the Rule as Made does not impact the treatment of AMDQ for withdrawals in the event of curtailment and/or a threat to system security in the Victorian gas and/or electricity markets. This is because the curtailment treatment of parties holding AMDQ and AMDQ credits is given in NGR rule 343 which has not been amended by the Rule as Made.
MEU, p.1	The AEMC ignored the unanimity of support for the Rule change request amongst all stakeholders involved in its development.	<p>The Commission is required under the National Gas Law to independently assess all Rule change requests with reference to the National Gas Objective, which is focussed on the concept of economic efficiency in the long term interests of consumers.</p> <p>The Commission will consider in its assessment of</p>

Stakeholder	Issue	AEMC response
		<p>a Rule change request, among other things, the information provided in the Rule proponent's Rule change request, submissions made by stakeholders and information the Commission itself collects. As the Commission must assess a proposal against the NGO, unanimity of views of market participant stakeholders may be a factor for consideration. However, the strength of market participant stakeholder views is not a determinative factor in the Commission's assessment.</p>
MEU, p.1, and AGL, p.2.	<p>The AEMC needs to recognise that the NSW STTM operates at the Sydney hub and does not directly interface with gas on the NSW side of the Victoria-NSW interconnect.</p>	<p>The Commission agrees with this point and has updated its analysis to incorporate DWGM bidding behaviour in which Victorian participants may bid their controllable withdrawals at Culcairn at up to \$800/GJ.</p>
MEU, p.1.	<p>It is not appropriate to analyse the impact of the proposed Rule in terms of the interaction of the DWGM and NSW STTM as gas transferred to NSW through Culcairn does not interface the STTM.</p>	<p>The Commission agrees that gas transported to NSW from Victoria through the interconnector does not interface the STTM at Culcairn. The Commission has updated its analysis in relation to DWGM bidding behaviour as discussed above.</p> <p>However, the Commission still considers that it is plausible for the bidding behaviour of DWGM participants to be affected by the NSW STTM over the timeframe in which the Rule as Made will affect scheduling. This is because a DWGM participant that is also a STTM participant may seek to co-optimize their behaviour between both markets. For example, such a party may seek to transfer gas from Culcairn to the Sydney hub (if possible) at times of high NSW STTM prices relative to Victorian DWGM prices.</p>

Stakeholder	Issue	AEMC response
MEU, pp.1-2.	AMDQ is the market carriage equivalent of shipping rights in contract carriage regimes. In situations of tied bids, priority should be given to capacity rights holders. This principle of prioritising capacity rights holders in situations of tied bids has been incorporated into the STTM.	<p>While AMDQ and AMDQ credits provide their holders with greater certainty in relation to injections and with controllable withdrawals under the Rule as Made, they are not fully-fledged capacity rights.</p> <p>The Commission has assessed the proposed Rule against the National Gas Objective.</p>
MEU, p.2 and AGL, p.3.	The materiality of the potential market power issues is limited, as the flow of gas into NSW through Culcairn is much smaller than the general NSW gas demand.	The Commission notes this comment and has concluded that the potential for exercise of market power is limited for the reasons discussed above.
Origin Energy, p.1.	Any market power concerns associated with holding or selling AMDQ are capably managed by the general economy-wide competition law provisions of the Trade Practices Act.	The Commission notes this comment.
Origin Energy, p.2.	The Commission took a backward-looking approach to the value of AMDQ in its draft Rule determination. AMDQ rights to date have not played a significant role in driving new investment in pipeline capacity; however, this may not continue to be the case. Pipeline capacity on the PTS to date has been more than sufficient to meet demand requirements. The subsequent lack of pipeline congestion means that the benefits of holding AMDQ have been limited. However, this could well change in a future environment dominated by the need to constrain carbon emissions, which is expected to significantly expand gas fired generation capacity and demand	The Commission agrees that the proposal should be assessed with reference to a potential future environment of increasing gas demand in response to climate change policies. In this environment, network constraints could increase. In turn, this could increase the value of AMDQ.

Stakeholder	Issue	AEMC response
	for gas more generally. In an environment of increasing pipeline congestion AMDQ rights will become more valuable.	
Origin Energy, p.2.	Linking withdrawal of gas to such rights in the same way as injection of gas will improve the overall firmness of AMDQ as a transportation right, particularly given that in many cases participants are responsible for both the injection and withdrawal of gas on behalf of their customers.	The Commission agrees with this assessment.
Origin Energy, p.2.	A more complete AMDQ transport right would increase future certainty of access to market, in turn enhancing commercial incentives to invest in pipeline capacity in an environment where such capacity is anticipated to become an increasingly scarce commodity.	The Commission notes this comment.
Origin Energy, pp.2-3.	Disagree with the AEMC that the potential for free-riding effectively removes any incentive participants might have to fund new pipeline capacity in return for AMDQ rights. Free-riding only occurs during unconstrained conditions, when capacity is plentiful, it is not an issue when capacity becomes constrained which is precisely when AMDQ rights have their most value for those that hold them. In these circumstances non-rights holders would face the congestion costs and are the first to be constrained off the network.	The Commission agrees that AMDQ rights would have most value during constraints. While free-riders may not prevent AMDQ holders accessing gas at times of constraints, these parties would likely benefit from the investment (e.g. additional capacity resulting in fewer constraints and/or pipeline extensions) during unconstrained conditions without contributing to the costs of the investment. This is likely to be a disincentive on third parties potentially underwriting an unregulated investment within an open access regime such as the Victorian DWGM.
Origin Energy, p.3.	The real value of AMDQ or any other kind of infrastructure access right is that they can provide a level of certainty around future access to market;	The Commission notes and agrees with this comment, and has updated its analysis.

Stakeholder	Issue	AEMC response
	<p>however such value only manifests during constrained conditions. Therefore, by focusing on unconstrained conditions which have been a feature of the Victorian market to date, we consider the AEMC may be undervaluing AMDQ rights as an investment incentive, particularly in the context of a future environment where pipeline constraints are likely to become an increasing risk for participants.</p>	<p>As noted above, however, the Commission does consider that free-rider effects remain in an open access framework.</p>
Origin Energy, p.3.	<p>There is little evidence that the prioritisation of AMDQ and AMDQ credit holders for injection bids has been exploited or led to any misuse of market power.</p>	<p>The Commission does not have evidence of exploitation or misuse of market power in relation to the prioritisation of AMDQ and AMDQ credit holders for injection bids.</p>
Origin Energy, p.3.	<p>While trading in AMDQ rights has to date been relatively muted, this is more a consequence of the excess capacity in the network to date (or the lack of pipeline congestion) rather than any exercise of market power or lack of value inherent in those rights. If overall capacity tightens, any spare capacity will become more valuable, and therefore incentives to trade unused spare capacity should increase.</p>	<p>The Commission considers that AMDQ and AMDQ credits would be likely to become more valuable if network congestion increased. In such circumstances the incentives to trade would also increase.</p>
Origin Energy, p.3.	<p>Market participants may have good reasons for holding onto some spare capacity inherent in their AMDQ rights; as this may reflect a prudent risk measure for dealing with uncertain future demand rather than any express intention to exclude others from the market (forgoing revenues from trading AMDQ rights purely deterring new entry is a high risk strategy). If some withholding of AMDQ rights leads to an excess demand for them, this should</p>	<p>The Commission agrees that AMDQ/AMDQ credit holders may not offer them for trade on the basis of prudent risk management.</p>

Stakeholder	Issue	AEMC response
	be reflected in their value or pricing and subsequently strengthen incentives for pipeline investment to release more such rights (or the threat of investment by new entrants may be enough for existing participants to release some excess AMDQ capacity).	
Origin Energy, p.3.	From a competition policy perspective, the role of AMDQ rights in enhancing market power is only of concern if there are barriers to new entrants undertaking pipeline investment. However, given the status of APA GasNet as an independently regulated monopoly with no ties to particular participants, it is not evident that this is the case.	The Commission notes that parties can negotiate capacity expansions with APA GasNet but that this may be a costly way of mitigating any exercise of market power.
Origin Energy, p.3.	If any misuse of market power becomes an issue (such as withholding AMDQ rights with the express purpose of preventing a new entrant from entering the market), section 46 of Part IV of the Trade Practices Act appears to be able to address this concern directly.	The Commission notes this statement.

## **B Existing tie-breaking rules for tied injection and withdrawal bids**

This appendix presents the existing tie-breaking provisions for tied withdrawal bids and tied injection bids, as set out in NGR rule 214.

### **214 Priority of bids in the scheduling process**

For the purpose of scheduling under rule 215, if two or more bids are equally beneficial for scheduling, then AEMO must as far as practicable apply the following principles:

- (a) an increase in the amount of gas injected in accordance with an injection bid should be scheduled before scheduling a reduction in gas withdrawn under a withdrawal bid;
- (b) subject to paragraph (d), where two or more injection bids are equally beneficial, those injection bids should be scheduled to the same extent;
- (c) where two or more withdrawal bids are equally beneficial, those withdrawal bids should be scheduled to the same extent;
- (d) where two or more injection bids are equally beneficial, then those injection bids that are associated with AMDQ credit certificates or authorised MDQ should be scheduled before other injection bids that are not associated with AMDQ credit certificates or authorised MDQ.

## **C Circumstances in which the proposed rule would impact scheduling of controllable withdrawals**

This appendix presents the Commission's analysis about the circumstances in which it appears likely the proposed Rule would currently impact the scheduling of controllable withdrawal bids. These are the circumstances in which there could be multiple equally-beneficial controllable withdrawal bids and some of those bidders hold AMDQ or AMDQ credits.

AEMO states that multiple "equally-beneficial" controllable withdrawal bids means bids that:<sup>99</sup>

“in the absence of a tie-break procedure, and taking account of bid price, location, accredited constraints, system capacity and the temporal and physical distribution of system demand over the gas day, would be scheduled with equal priority on a pro-rated basis by the scheduling systems and processes.”

AEMO determines a schedule of DWGM injections and withdrawals using the Market Clearing Engine, a computer program. This program seeks to minimise the cost of satisfying the expected demand for gas over the gas day by optimising a mathematical expression called the Objective Function.<sup>100</sup> AEMO has indicated that two withdrawal bids would be considered to be "equally-beneficial" if both contributed equally to optimising the Objective Function.

AEMO advises that it is likely that equally-beneficial controllable withdrawal bids at Culcairn would have the same bid price.

### **C.1 Withdrawal points at which the proposed Rule may impact scheduling**

AEMO's proposed Rule would apply to controllable withdrawal bids. It appears likely that it would only affect controllable withdrawals at the Culcairn offtake point in the short term. The reason for this is that Culcairn is the only one of the four points on the DTS at which controllable withdrawal bids are made<sup>101</sup> where constraints can affect withdrawals and are likely to do so in the near future. Consequently, it is likely that Culcairn is the only such withdrawal point for which parties may wish to hold AMDQ or AMDQ credits in the near future.

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<sup>99</sup> Rule Change Request, p.2.

<sup>100</sup> This occurs under NGR rule 215(2) which obliges AEMO to use an optimisation program to produce operating schedules specifying injections and withdrawals for each hour of the gas day in a way that minimises the cost of satisfying the expected demand for gas over that gas day.

<sup>101</sup> Culcairn, Iona, SEA Gas and VicHub.

## **C.2 Circumstances in which the proposed Rule would affect scheduling**

Following analysis of submissions, the Commission is of the view that tied controllable bids to withdraw gas at Culcairn are most likely to occur at times that parties are seeking to export gas through the Victoria-NSW interconnector in excess of its capacity and Victorian market participants price their bids at the DWGM VoLL (\$800/GJ) in order to ensure access to gas. It should be noted that the unconstrained DWGM spot price is likely to result in Victorian participants being subject to much lower imbalance charges than \$800/GJ.

In the draft Rule determination the Commission examined the bidding behaviour of Victorian DWGM participants with reference to the NSW STTM. However, in responses to the draft Rule determination, stakeholders noted that the STTM is a Sydney hub and that parties may have contractual requirements elsewhere in regional NSW not subject to the NSW STTM price cap (\$400/GJ). Stakeholders indicated that parties in the DWGM may price their bids to withdraw gas at Culcairn at the DWGM VoLL in order to ensure that gas withdrawals are scheduled into NSW to satisfy contractual requirements, irrespective of the NSW STTM price cap.

The Commission accepts that parties may be willing to bid up to the DWGM VoLL to help to ensure that gas is scheduled into NSW. To the extent that Victorian DWGM participants seek to export gas through the Victoria-NSW interconnector at volumes in excess of the pipeline capacity, parties could bid up to VoLL levels to seek to secure flows. As discussed above, it appears likely that Victorian parties would be subject to much lower imbalance charges than \$800/GJ. Victorian parties may be motivated to seek to export gas in excess of the pipeline capacity for a range of reasons including fulfilling contracts on the NSW side of the interconnector or to benefit from differences between Victorian and NSW prices.

Under the proposed Rule, parties holding AMDQ/AMDQ credits in scenarios of withdrawal bids at the Victorian VoLL would be scheduled to withdraw gas before other parties.