



Australian Energy Market Commission

RULE DETERMINATION

NATIONAL GAS AMENDMENT (DWGM SIMPLER WHOLESale PRICE) RULE 2020

PROPONENTS

Victorian Minister for Energy, Environment and Climate Change
Australian Energy Market Operator

12 MARCH 2020

RULE

INQUIRIES

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ABOUT THE AEMC

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

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SUMMARY

- 1 The Australian Energy Market Commission (Commission) has made a rule that amends the National Gas Rules (NGR) to simplify wholesale pricing in relation to the Victorian Declared Wholesale Gas Market (DWGM) by:
 - requiring that when AEMO produces pricing schedules, which determine market prices, it takes into account transmission constraints that affect withdrawals of gas at system withdrawal points at which withdrawal bids may be made
 - removing the link between authorised maximum daily quantity (AMDQ) or capacity certificates and uplift payments, such that a congestion uplift category is no longer required.
 - 2 The rule retains the current principle that uplift payments are to be allocated so far as practicable to market participants that caused the need for ancillary payments, however, it removes rules that require AEMO to take into account the extent to which a market participant's use of gas is in excess of a baseline derived from AMDQ or capacity certificates. The Commission considers that such a baseline-based congestion uplift mechanism does not appropriately allocate 'cost to cause' and would involve unwarranted complexity and cost. The principle of allocating cost to cause so far as practicable can be achieved through the other categories of uplift set out in AEMO's uplift payment procedures.
 - 3 The rule, which is a more preferable rule, was made in relation to a consolidated rule change request from the Victorian Minister for Energy, Environment and Climate Change and the Australian Energy Market Operator (AEMO). The consolidated rule change is referred to as the *DWGM simpler wholesale price* rule change request.
 - 4 In deciding to make this rule, the Commission has taken into account interactions with the rule for the separate rule change on *National Gas Amendment (DWGM improvements to AMDQ regime) Rule 2020*.
- Background**
- 5 On 24 November 2016, the Commission received a rule change request from AEMO, on behalf of EnergyAustralia,¹ that sought to amend the NGR. The rule change request sought to allow AEMO to include physical constraints that limit scheduled withdrawals in the determination of the pricing schedule for the Victorian DWGM.
 - 6 On 5 November 2018, the Commission received a rule change request from the Victorian Minister for Energy, Environment and Climate Change that sought to amend the NGR. The rule change request sought to simplify wholesale pricing and improve risk management options in the Victorian DWGM by socialising or smearing the recovery of congestion uplift payments across market participants, instead of the current approach that aims to recover congestion uplift payments from those parties that caused the congestion.
 - 7 As these two rule change requests related to a common subject matter and were seeking to

¹ AEMO is the only party other than the Victorian Minister who can proposed changes to the rules relating to the DWGM. AEMO has proposed the rule change after receiving a request to do so from EnergyAustralia.

address similar issues the Commission consolidated them under s.300 of the NGL.

- 8 On 5 November 2018, the AEMC also received two other related rule change requests from the Victorian Minister for Energy, Environment and Climate Change, seeking to amend the NGR:
- The *DWGM forward trading market* rule change request proposed establishing a forward trading exchange to make it easier for buyers and sellers to trade gas and lock in a future price in the Victorian gas market. On 3 October 2019, the Commission published a final determination decision to not make this rule.
 - The *DWGM improvement to AMDQ regime* rule change request proposed introducing separate tradable entry and exit certificates, enabling a secondary trading platform to be introduced and making certificates available for a range of different tenures. On 12 March 2020, the Commission published a final determination decision to make a more preferable rule.
- 9 While the Commission has assessed these two related rule change requests through separate processes from the *DWGM simpler wholesale price* rule change that is the subject of this final determination, interactions between the rule changes have been taken into account in determining the rules.
- Features of the rule**
- 10 The rule amends the requirements on AEMO when it produces pricing schedules, which determine market prices. The rule replaces the requirement for AEMO to not consider transmission constraints in the pricing schedule with a requirement to take into account any transmission constraints affecting withdrawals of gas at system withdrawal points at which withdrawal bids may be made. The rule retains a requirement for AEMO not to take into account transmission constraints affecting injections of gas.
- 11 The rule simplifies uplift payment arrangements by:
- retaining the current principle that 'uplift payments are to be allocated so far as practicable to the cause'
 - clarifying that total uplift payments for a gas day must equal the total ancillary payments for that gas day
 - removes the reference to transmission constraints when AEMO is determining uplift payments (with the exception of DTS Service Provider uplift)
 - removing the link between uplift payments and AMDQ or capacity certificates, such that a congestion uplift category is no longer required
 - removing the concept of congestion uplift hedge and the need for market participants to submit injection hedge nominations
 - removing the need for market participants to inject gas to be eligible for protection against congestion uplift payments.
- 12 The rule does not spread congestion uplift payments across all market participants, as proposed by the rule change proponent, but instead removes the requirement for a baseline-based congestion uplift mechanism.

- 13 The categories of uplift are set out in AEMO's uplift payment procedures and the principle of allocating cost to cause so far as practicable will continue to guide the application of other existing categories of congestion uplift (declared transmission system service provider congestion, surprise and common). AEMO must review, and where necessary, amend its procedures to reflect the changes to the rules relating to congestion uplift. AEMO is required to consult with industry in updating these procedures. Removal of the congestion uplift category from AEMO's procedures may result in increases in other uplift categories, guided by the principle that uplift payments are to be allocated so far as practicable to the cause.
- 14 The AEMC has made changes from the draft rule so that the NGR no longer requires a congestion uplift category as, following further stakeholder consultation, it considers such a baseline-based mechanism does not appropriately allocate cost to cause and is not practicable.
- 15 The current congestion uplift framework is complex, does not effectively allocate cost to causers, does not provide meaningful short-term signals to avoid causing constraints or long-term investment signals and it can be difficult for market participants to manage the risk of congestion uplift payments. It is not practical to develop a congestion uplift mechanism that would appropriately address the issues with the current arrangements. It is therefore more preferable to remove the congestion uplift category.

Benefits of the rule

- 16 Having regard to the issues raised in the rule change request and during consultation, the Commission is satisfied the rule will, or is likely to, contribute to the achievement of the NGO for the following reasons:
- **Improved risk management in the DWGM** — in situations where there is a physical withdrawal constraint in the DTS, the rule reduces uncertainty and scheduling risk for market participants around whether their injection bids may be constrained off despite being below the market price. The rule also removes the need for market participants to manage the risk of incurring congestion uplift payments. The rule removes the concept of congestion uplift hedge, by removing the requirement for market participants to inject gas, hold AMDQ or exit capacity certificates and submit injection hedge nominations to protect against the risk of congestion uplift payments.
 - **Improved signals and incentives for efficient operation and use of pipeline capacity** — compared to the current arrangements, the rule results in a more efficient scheduling process and utilisation of pipeline capacity. Currently, physically infeasible withdrawal bids may result in a higher price and lower quantity of gas traded. Under the rule, the market clearing engine will no longer 'see' physically infeasible withdrawal bids resulting in a market price and quantity that is more in line with the physical capability of the system.
 - **Promotion of competition in downstream markets** — the rule removes the need for market participants to protect against the risk of incurring congestion uplift payments, which may encourage new entrants to the Victorian retail gas market.

- **Lower regulatory and administrative burden** — the benefits of implementing the rule are expected to outweigh the costs. Removing the need to manage the risk of congestion uplift will reduce the administrative burden.

Implementation

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The rule sets out the following timing for commencement of the rule:

- the amendments relating to accounting for transmission constraints that affect withdrawals of gas at system withdrawal points in the pricing schedule are to commence on 31 March 2020
- the amendments relating to the congestion uplift framework are to commence on 1 January 2023, immediately after the *National Gas Amendment (DWGM improvements to AMDQ regime) Rule 2020* commences
- amendments for transitional arrangements are to commence on 19 March 2020.

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The transitional arrangements require that, by 1 January 2022, AEMO must review and where necessary, amend the uplift payment procedures, ancillary payment procedures and any other procedures that AEMO considers relevant, to take into account the rule. The transitional provisions also require AEMO to review and where necessary amend the gas scheduling procedures to take into account Schedule 1 of the amending rule by 31 March 2020, and in doing so AEMO is not required to follow the normal consultation process in Part 15 of the NGR.

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1 RULE CHANGE REQUEST AND RULE MAKING PROCESS

This chapter provides a summary of the rule change request, relevant background information and the rule making process for the DWGM simpler wholesale price rule change request.

For additional background information on the operation of the DWGM please see the AEMC background paper.²

1.1 The consolidated rule change request

On 24 November 2016, the Commission received a rule change request from AEMO, on behalf of EnergyAustralia, that sought to amend the NGR. The rule change request sought to enable AEMO to include constraints in relation to withdrawals within the DTS in the pricing schedule for the Victorian DWGM.

On 5 November 2018, the Commission received a rule change request from the Victorian Minister for Energy, Environment and Climate Change seeking to amend the NGR. The rule change request sought to simplify wholesale pricing and improve risk management options in the Victorian DWGM by 'socialising' or 'smearing' the recovery of congestion uplift payments across market participants, instead of the current approach that aims to recover congestion uplift payments from those parties that caused the congestion.

As these two rule change requests relate to a common subject matter and were seeking to address similar issues, the Commission consolidated them under s.300 of the NGL.

1.2 Current arrangements

In the course of trading gas within the DWGM on a given day, market participants may be exposed to:

- payments related to selling or buying gas from other market participants at the market price.
- ancillary and uplift payments aimed at recovering the cost of any transmission constraints within the DTS.
- market participant fees.³

There are currently four types of uplift payments:

- surprise uplift
- congestion uplift
- congestion Declared Transmission System Service Provider (DTS SP)

² AEMC, *Declared Wholesale Gas Market Background Paper*, Consultation paper, 14 March 2019.

³ For the full set of market participant fees see 2019-20 AEMO Final Budget and Fees: https://www.aemo.com.au/-/media/Files/About_AEMO/Energy_Market_Budget_and_Fees/2019/Final-201920-AEMO-Final-Budget-and-Fees-inc-ERA-final-determination.pdf

- common uplift.

This rule change request relates to congestion uplift payments. More information on these payments is outlined in the AEMC background paper.⁴

This section provides background information that is specific to the rule change request in this final determination. It provides an overview of current arrangements relating to:

- the application of constraints in the DTS
- the congestion uplift framework
- uplift payment amounts in recent years.

1.2.1 Application of constraints in the DTS

Under the current arrangements the pricing schedule is an output of a market clearing engine assuming no physical constraints within the DTS (an 'infinite pool' model) and determines the market price for the gas day and any updates to the market price during the gas day. The quantity of gas is determined in the operating schedule. Table 1.1 provides a high-level summary of the different functions of the pricing schedule and the operating schedule.

Table 1.1: Differences between the pricing and operating schedule

PRICING SCHEDULE	OPERATING SCHEDULE
Ignores transmission constraints within the DTS	Includes transmission constraints within the DTS
Determines balance of day price	Hourly shadow price to determine efficient dispatch
Determines DTS-wide price	Location specific shadow price to determine efficient dispatch
Determines daily market prices and any updates to price during the gas day	Determines gas quantity

Source: AEMC

Under the current NGR, AEMO is not able to include constraints internal to the DTS in the pricing schedule. Physical constraints are included in the operating schedule and not the pricing schedule, as explained in the AEMC background paper.⁵

1.2.2 Congestion uplift framework

Congestion uplift payments

Congestion uplift seeks to recover the costs of locational transmission constraints from those parties that caused them. Congestion uplift payments are levied on market participants who

⁴ AEMC, *Victorian Declared Wholesale Gas Market Background Paper*, Consultation paper, 14 March 2019.

⁵ AEMC, *Declared Wholesale Gas Market Background Paper*, Consultation paper, 14 March 2019.

are scheduled to withdraw in excess of their allocated portion of the physical capacity of the system, as defined by their authorised maximum interval quantity (AMIQ), derived from their authorised maximum daily quantity (AMDQ).

"Locational" constraints arise when a pipeline does not have the capacity to transport sufficient gas even if there were adequate forewarning of supply and demand conditions. For example, if on a very cold day there is high and sustained demand for gas in Melbourne, then the Longford to Melbourne pipeline may be unable to service this demand from the cheapest gas (offered at Longford). This would be the case even if AEMO has sufficient forewarning of high demand, because it is not able to increase pipeline pressure sufficiently to satisfy demand through Longford injections. As a result, more expensive gas may be required along an unconstrained pipeline from another source (for example from Dandenong LNG or Iona Underground Storage Facility) to meet the shortfall.

Locational constraints can be avoided by building more pipeline capacity, however this comes with its own costs relating to transmission investment. For this reason, congestion uplift seeks to allocate costs related to locational constraints by charging market participants which exceed their AMIQ,⁶ which is derived from AMDQ holdings. Therefore buying AMDQ is a proxy for contributing to the cost of the transmission system.

Congestion uplift hedge protection

Under the current arrangements, a market participant is able to hedge against congestion uplift payments if it:

- holds sufficient AMDQ
- is scheduled to inject gas into the DTS at a physical injection point matched to the location of its AMDQ, and
- nominates a quantity of its scheduled injection as a hedge against congestion uplift payments. This is called an injection hedge nomination (IHN). Alternatively a market participant can use an agency injection hedge nomination (AIHN). An AIHN is submitted by a separate market participant and provides the recipient market participant with protection against congestion uplift payments.⁷

If a market participant has a congestion uplift hedge:

- it will not be required to pay congestion uplift payments if it withdraws a quantity of gas equal to or below its nomination, and
- it will not receive an ancillary payment if it is constrained on to inject gas up to its AMDQ.

Under the current arrangements, AMDQ provides financial protection against congestion uplift payments. The ability to hedge against congestion uplift payments is limited to those market participants with physical injections matched to the location of their AMDQ. If a market participant is a spot buyer, that does not inject gas, it must enter a bilateral

⁶ Under the current arrangements, market participants that intend to use an uplift hedge against congestion uplift payments assign a percentage of their total uplift hedge as authorised maximum interval quantity (AMIQ) for each scheduling interval. AEMO, *Technical guide to the Victorian Declared Wholesale Gas Market*, July 2013, p84.

⁷ AEMO, *Technical Guide to the Victorian Declared Wholesale Gas Market*, pp. 82-83.

agreement with a market participant that is injecting at the location of its AMDQ, to receive hedge nominations (AIHNs).

1.2.3

Uplift payment amounts

In recent years uplift payment amounts have generally been small in relation to the size of the market. However, under the current arrangements these amounts can vary significantly in the face of unexpected events.

On 1 October 2016, an outage at the Longford processing facility resulted in approximately \$3.1 million of out of merit order gas being scheduled to meet a supply shortfall, of which approximately \$2.8 million was funded through congestion uplift payments. Stakeholder views and further discussion on this event are set out in section 4.2.

Figure 1.1 below shows the total amount of uplift payments in the DWGM in 2017, 2018 and the first half of 2019.⁸ During this period of time:

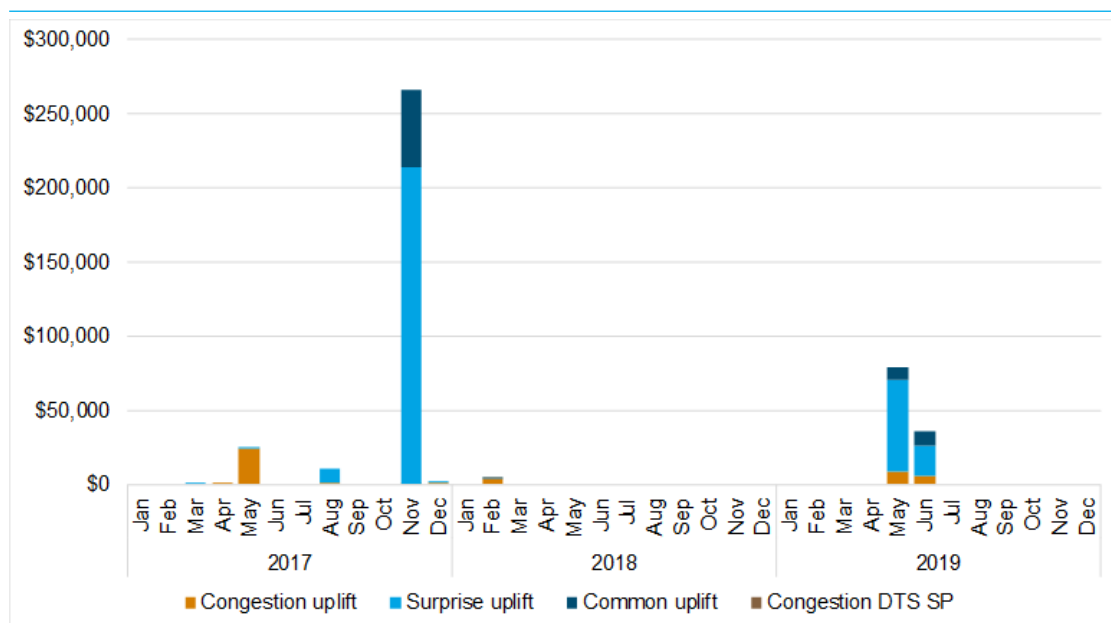
- in 2017 total uplift payments were \$303,085, of which congestion uplift payments were \$26,590
- in 2018 total uplift payments were \$4,427, of which congestion uplift payments were \$3,860.⁹
- in 2019 total uplift payments were \$115,290, of which congestion uplift payments were \$14,630.

In the first half of 2019, three events resulted in uplift payments as AEMO was required to schedule out of merit order injections from Dandenong LNG to maintain system security. All three instances were during periods of high system demand. In the first two instances high demand coincided with under delivery from some participants while in the third instance there was an unexpected increase in demand from gas powered generation (GPG) following an outage at the Loy Yang A coal power station.

⁸ This is the sum of payments for surprise uplift, congestion uplift, congestion DTS SP uplift and common uplift.

⁹ The DWGM background paper incorrectly stated that total uplift payments were \$1.08 million in 2018. For more information on the correction of this data, refer to the information sheet on the AEMC's website.

Figure 1.1: Uplift payments by type for 2017-19



Source: AEMC analysis of AEMO provided uplift data.

1.3 Rationale for the rule change request and proposed solution

1.3.1 Apply constraints on scheduled withdrawals in the pricing schedule

Under the current arrangements, a system constraint would act to physically limit scheduled withdrawals from the DTS but this constraint is not applied in the pricing schedule. AEMO suggests that this has adverse market outcomes and reduces the ability of market participants to hedge their risks effectively. AEMO's rule change proposal (on behalf of EnergyAustralia) seeks to address these issues by internalising withdrawal constraints in the pricing schedule. More information on the issues with the current arrangements and the proposed solution is provided in Chapter 3.

1.3.2 Spreading congestion uplift across market participants

The Victorian Government suggests that the current treatment of uplift payments (in particular the congestion uplift methodology) is a barrier to effective risk management and trade in the DWGM. The rule change proposal seeks to address these issues by socialising or spreading congestion uplift across market participants. More information on the issues with the current arrangements, the proposed solution and the more preferable rule, are provided in Chapter 4.

1.4 The rule making process

On 14 March 2019, the Commission published a notice advising of its commencement of the rule making process and consultation in respect of the rule change request.¹⁰ A consultation paper identifying specific issues for consultation was also published. Submissions closed on 26 April 2019.

The Commission received 11 submissions as part of the first round of consultation. The Commission also held a stakeholder workshop on 16 May 2019.

On 13 June 2019 the Commission extended the period of time to make the draft determination to 5 September 2019. The Commission considered that this extension was necessary due to the complex issues in the *DWGM improvements to AMDQ regime* rule change request and the interaction with the *DWGM simpler wholesale price* rule change request.¹¹

On 5 September 2019 the Commission published a draft determination and draft rule.

The Commission received 10 submissions and one late submission as part of the second round of consultation.

On 14 November 2019 the Commission extended the period of time to make the final determination to 12 March 2020. The Commission considers that this extension was necessary due to the complexity of the issues raised in the rule change request and stakeholder submissions on the *DWGM improvements to AMDQ regime* rule change request and the interaction with the *DWGM simpler wholesale price* rule change request.¹²

The Commission formed a technical working group to discuss implementation issues and interactions between the rule changes on DWGM simpler wholesale price (GRC0049) and DWGM improvement to AMDQ regime (GRC0051). Working group meetings were held on 9 December 2019 and 3 February 2020.

The Commission considered all issues raised by stakeholders in submissions and feedback from workshops. Issues raised in submissions are discussed and responded to throughout this final rule determination. Issues that are not addressed in the body of this document are set out and addressed in Appendix A.

1.5 Related final determination on DWGM improvement to AMDQ regime

In considering the final determination on this *DWGM simpler wholesale price* rule change, the Commission has considered interactions with the final determination and the accompanying final rule on *DWGM improvements to AMDQ regime*. The final determinations and final rules for both of these DWGM rule changes have been published on 12 March 2020.

Key aspects of the *DWGM improvements to AMDQ regime* rule are:

¹⁰ This notice was published under s.308 of the National Gas Law (NGL).

¹¹ AEMC, *Extension notice under NGL*, 13 June 2019.

¹² AEMC, *Extension notice under NGL*, 14 November 2019.

- introducing separate, tradable entry and exit capacity certificates
- making capacity certificates available for a range of different tenures through regular auctions.

These changes are expected to allow for more efficient allocation of tie-breaking benefits to participants in the market.

The interaction between the more preferable rule accompanying this rule determination, and the rule accompanying the final determination on the AMDQ regime, are discussed further in chapter 4.

2 FINAL RULE DETERMINATION

This chapter outlines the:

- Commission's final rule determination
- rule making test for changes to the NGR
- more preferable rule test
- assessment framework for considering the rule change request
- Commission's consideration of the more preferable rule against the national gas objective (NGO).

2.1 The Commission's final rule determination

Having considered views expressed by stakeholders in submissions and undertaken further analysis on the likely benefits of the proposed rule change, the Commission has determined to make a rule which is a more preferable rule to address the issues identified in the rule change requests.

The more preferable rule made by the Commission is published with this rule determination. The key features of the more preferable rule are set out below.

Key features of the more preferable rule

The rule amends the requirements on AEMO in using an optimisation program to produce pricing schedules, which determine market prices. The rule replaces the requirement for AEMO to not consider transmission constraints in the pricing schedule with a requirement to take into account any transmission constraints affecting withdrawals of gas at system withdrawal points at which withdrawal bids may be made.¹³ The rule retains a requirement for AEMO not to take into account transmission constraints affecting injections of gas.

The final rule also makes a number of changes to the NGR to simplify uplift payments by longer requiring a congestion uplift category.

The final rule retains the current principle in the NGR that 'uplift payments are to be allocated so far as practicable to the cause'¹⁴. It also retains elements of the draft rule that simplified the congestion uplift framework by removing the need to inject gas, hold AMDQ and submit injection hedge nominations for congestion uplift hedge and removes rules and definitions in relation to these elements.

The rule removes the requirement for AEMO to take into account the extent to which a market participants AMIQ (or exit capacity certificates) are exceeded by its scheduled withdrawals and forecast demand in allocating uplift payments.¹⁵ This removes the link between AMDQ or capacity certificates and uplift payments and the requirement for a congestion uplift category.

¹³ See rule 221 of the Amending Rule.

¹⁴ NGR 240(2)(a)

¹⁵ NGR 240(2)(b)

The final rule clarifies that total uplift payments for a gas day must equal the total ancillary payments determined in accordance with rule 239 for that gas day. The rule also removes references to AEMO taking into account the attribution of ancillary payments to transmission constraints when determining uplift payments.¹⁶ This is because ancillary payments need to be recovered via uplift payments whether they are linked directly to a transmission constraint or not.

The Commission's reasons for making this final determination are set out in section 2.4.

Further information on the legal requirements for making this final rule determination is set out in Appendix B.

2.2 Rule making test

2.2.1 Achieving the NGO

The Commission may only make a rule if it is satisfied that the rule will, or is likely to, contribute to the achievement of the national gas objective (NGO).¹⁷ This is the decision-making framework that the Commission must apply.

The NGO is:¹⁸

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, safety, reliability and security of supply of natural gas.

2.2.2 Making a more preferable rule

Under s. 296 of the NGL, the Commission may make a rule that is different (including materially different) to a proposed rule (a more preferable rule) if it is satisfied that, having regard to the issue or issues raised in the rule change request, the more preferable rule will or is likely to better contribute to the achievement of the NGO.

In this instance, the Commission has made a more preferable rule. The reasons are summarised below.

2.3 Assessment framework

In assessing the rule change request against the NGO the Commission has considered the following principles:

¹⁶ A requirement is retained for AEMO to determine and publish to extent to which transmission constraints were caused by a failure of the DTS SP to fulfil obligations under the service envelope agreement, when ancillary payments are attributable to that constraint (See 240(9)) of the Amending Rule) as changes to DTS SP uplift were considered out of scope.

¹⁷ Section 291(1) of the NGL.

¹⁸ Section 23 of the NGL.

- **Effective risk management in the DWGM** - whether market participants are able to manage price and volume risk and options to improve the effectiveness of risk management activities.
- **Signals and incentives for efficient investment in and operation and use of pipeline capacity** - whether investment in, and the operation and use of the DTS will occur in an efficient and timely manner and options to strengthen the signals and incentives for efficient investment in, operation of and use of the DTS.
- **Trading between the DWGM and interconnected pipelines** - whether the current DWGM arrangements inhibit trading of gas between the DTS and interconnected facilities and pipelines, and options to allow producers and shippers to effectively operate across gas trading hubs on the east coast without incurring substantial transaction costs.
- **Promoting competition in upstream and downstream markets** - whether the DWGM continues to encourage the introduction of new gas supplies to the market and promote competition among retailers for the sale of gas, and the extent to which the design of the DWGM may be a deterrent to large users participating in the market.
- **Regulatory and administrative burden** - whether the cost of implementing the proposed solution(s) is/are proportional to the costs of managing the issues they are trying to resolve.

2.4 Summary of reasons for making a rule

The rule made by the Commission is attached to and published with this rule determination.

Assessment against the NGO

Having regard to the issues raised in the rule change request and during consultation, the Commission is satisfied the rule will, or is likely to, contribute to the achievement of the NGO for the reasons set out below against the assessment framework.

AEMO has estimated that their total cost of implementing this rule change and changes to the *DWGM improvements to AMDQ regime* rule change is between \$8.2 to \$11.5 million. This estimate includes changes to AEMO's systems, including the development of new systems and the changes to existing systems. Most of this cost is expected to be attributed to the changes to the AMDQ regime. Given the large volumes of gas traded in the DWGM (around 248 PJ in 2019), the cost estimate of these changes equates to around \$0.01/GJ for the volume of gas traded over a five-year period.

The Commission acknowledges that each market participant may also incur some costs in updating their internal systems, however no implementation cost estimates were provided by market participants.

Implementation costs need to be considered against cost savings over time due to the simplifications and improvements achieved through this rule change, as well as broader efficiency gains.

The Commission is of the view that the benefits of implementing this rule change, including promoting competition and reducing administrative burden, are likely to outweigh the implementation costs. These benefits are summarised below.

- **Effective risk management in the DWGM** - in situations where there is a physical withdrawal constraint in the DTS, the rule reduces uncertainty and scheduling risk for market participants around whether their injection bids may be constrained off despite being below the market price. The rule also removes the need for market participants to manage the risk of incurring congestion uplift payments.
- **Signals and incentives for efficient investment in and operation and use of pipeline capacity** - compared to the current arrangements, the rule improves the signalling of physical constraints in the determination of the pricing schedule and is expected to lower prices and increase the quantity of gas traded, allowing for more efficient operation. The rule retains the principle that uplift payments are to be allocated so far as practicable to the causer, which provides an incentive to avoid causing ancillary payment. As congestion uplift has not provided a significant signal for pipeline investment in the DTS, which is instead provided through the regulatory process, removing the congestion uplift category is not expected to impact investment signals.
- **Trading between the DWGM and interconnected pipelines** - to the extent the rule improves certainty around the wholesale price and the removes the need for market participants to protect against the risk of congestion uplift payments this may encourage inter-regional trade.
- **Promoting competition in upstream and downstream markets** - the rule removes the need for market participants to protect against the risk of incurring congestion uplift payments, which may encourage new entrants to the Victorian retail gas market. As the rule simplifies wholesale pricing by removing the need to congestion uplift risk, it may encourage new supply sources (e.g. interstate gas supplies or potentially LNG imports) to enter the market.
- **Regulatory and administrative burden** - the benefits of implementing the rule are expected to outweigh the costs. The rule also reduces administrative burden as it removes the requirement for market participants to purchase AMDQ cc and inject or submit hedge nominations to activate congestion uplift protection.

Rationale for the rule amendment

The rule requires that pricing schedules takes into account transmission constraints that affect withdrawals of gas at system withdrawal points at which withdrawal bids may be made, as proposed by AEMO. The Commission considers that this component of the rule is likely to contribute to the NGO as it:

- is likely to lower prices and increase the quantity of gas traded
- is likely to improve the ability of market participants to manage scheduling risk by reducing uncertainty
- is unlikely to be costly to implement.

On congestion uplift, the rule retains the current principle that uplift payments are to be allocated so far as practicable to market participants that caused the need for ancillary payments, however, it removes rules that require AEMO to take into account the extent to which a market participant's use of gas is in excess of a baseline derived from AMDQ or capacity certificates. The Commission considers that this component of the rule is likely to contribute to the NGO as it:

- simplifies risk management, which may encourage interregional trade and competition
- reduces regulatory and administration burden for AEMO and market participants.

Having regard to the issues raised in the rule change request and during consultation, the Commission is satisfied that the more preferable rule will, or is likely to, better contribute to the NGO than the proposed rule to spread congestion uplift, as under the more preferable rule uplift payments more broadly would continue to be allocated so far as practicable to the causer and the rule would not require congestion uplift to be calculated, reducing administrative burden on AEMO and market participants.

The AEMC has made changes from the draft rule so that the NGR no longer requires a congestion uplift category as, following further stakeholder consultation, it considers such a baseline-based mechanism does not appropriately allocate cost to cause and is not practicable.

3 APPLICATION OF CONSTRAINTS IN THE PRICING SCHEDULE

This chapter provides a summary of the issues with the current arrangements, the rule change proposal to include physical constraints that limit scheduled withdrawals in the pricing schedule, stakeholder views and the Commission's final determination.

A summary of the key aspects is set out below.

Under the current arrangements, AEMO is not able to include a system constraint that would act to physically limit scheduled withdrawals from the DTS, in the determination of the pricing schedule. The proponent suggests that this results in:

- market outcomes that are unpredictable and do not reflect the supply/demand balance
- higher market prices and a lower quantity of gas traded, compared to if withdrawal constraints were internalised in the pricing schedule
- uncertainty and risk that reduces market participant's ability to hedge effectively.

The rule change proposal is for the pricing schedule to take account of withdrawal constraints.¹⁹

The Commission has made a rule based on the rule change proposal. The Commission considers that, compared to the current arrangements, the rule is:

- likely to lower prices and increase the quantity of gas traded
- likely to improve risk management
- unlikely to be costly to implement
- in the long-term interests of consumers.

3.1 Issues with the current arrangements raised in the rule change request

Under the current arrangements, AEMO is not able to include a system constraint that would act to physically limit scheduled withdrawals from the DTS, in the determination of the pricing schedule. Physical constraints are included in the operating schedule and not the pricing schedule, as explained in the AEMC background paper.²⁰

AEMO suggests that the current arrangements have the adverse outcomes described below.²¹

Market outcomes

¹⁹ The rule change proposal did not suggest the pricing schedule take account of injection constraints. This is discussed further in section 3.4.

²⁰ AEMC, Declared Wholesale Gas Market Background Paper, Consultation paper, 14 March 2019.

²¹ The previous practice was to apply constraints internal to the DTS in the pricing schedule and operating schedule. In 2014, AEMO presented a brief to the Gas Wholesale Consultative Forum (GWCF) which identified that this practice did not comply with the NGR. After discussions with industry, on 4 May 2015 the Wholesale Market Gas Scheduling Procedures (Victoria) v 2.0 took effect. The updated procedures introduced a new type of constraint and outlined the circumstances where the existing constraints could be applied. AEMO (on behalf of EnergyAustralia), Rule change request - *Application of constraints in the Declared Transmission System*, 24 November 2016, p2.

AEMO claims that under current arrangements market outcomes are unpredictable and do not reflect the supply/demand balance.²² For example, following the introduction of AEMO's new procedures in May 2015, where constraints internal to the DTS were active, maintenance of the Brooklyn Compressor restricted net withdrawals from the South West Pipeline to zero in the operating schedule, while the pricing schedule included all withdrawal bids. As the constraint does not cause ancillary payments in this case, there is no incentive for market participants to minimise the impact of the constraint. Therefore the pricing schedule is developed using demand that is not technically feasible on the day and is unrepresentative of the actual supply/demand balance.²³

The proponent also suggests that higher market prices occur than would occur if system constraints act to physically limit scheduled withdrawals from the DTS were represented in the pricing schedule.²⁴ This reduces gas trading compared to the situation where system constraints that would act to physically limit scheduled withdrawals from the DTS are represented in the pricing schedule.²⁵

Ability to hedge effectively

The proponent suggests that the uncertainty and risk associated with the current arrangements reduces a market participant's ability to hedge effectively in the market where constraints internal to the DTS limit withdrawals.

3.2 Rule change proposal

The rule change proposal seeks to include withdrawal constraints in the determination of the pricing schedule. This would mean that where a system constraint would act to physically limit controllable withdrawals from the DTS, AEMO would be required to apply a constraint to represent this in the pricing schedule.

Currently, rule 221(4) of the NGR states:

The inputs and assumptions set out in subrule (3) must be applied by AEMO in an optimisation program in which valid bids submitted by Market Participants are used to produce pricing schedules that specify injections and withdrawals of gas to be made in each gas day in a way that minimises the cost of satisfying the expected demand for gas in that gas day and for the purpose of doing so, AEMO must not take into account any transmission constraints affecting the transportation of gas in the declared transmission system during that gas day.

The rule change request proposes that rule 221(4) of the NGR be amended so that:²⁶

²² AEMO, *Rule change request - Application of constraints in the declared transmission system*, 24 November 2016, p7.

²³ *Ibid*, pp4-5.

²⁴ *Ibid*, p6.

²⁵ *Ibid*, p7.

²⁶ The rule change request provides specific proposed drafting changes to rule 221(4) of the NGR, however this drafting is based on an earlier (now outdated) version of that rule. The drafting of rule 221(4) in the body of the text above reflects the current drafting of the rule.

- where a system constraint would act to physically limit scheduled withdrawals from the DTS, AEMO will apply a constraint to represent this in the pricing schedule
- a differential between the pricing and operating schedules will remain in cases where constrained on injections are required.²⁷

The proponent claims that if implemented, this rule change would mean that in determining the pricing schedule, the market clearing engine would only 'see' the withdrawal bids that are physically feasible in the schedule. In effect there would be greater alignment between the pricing and operating schedules under certain circumstances.²⁸

In practice, AEMO will implement this change by applying a Net Flow Transmission Constraint (NFTC) in the pricing schedule. A NFTC allows multiple injection and withdrawal meters at a common location to be combined so that the net aggregate flow at that location is constrained to reflect the physical capability of the DTS.²⁹

Determination of the pricing schedule under the current arrangements

Under the current version of the NGR, when withdrawals are constrained off there is no mechanism for compensating withdrawal bids below the market price. This means that where there are constrained withdrawals, an equivalent quantity of injections are not scheduled.

Figure 3.1 demonstrates the outcome in the pricing schedule under the current arrangements. The market price (P1) is determined according to the intersection of demand and supply assuming no internal constraints in the DTS. However, due to physical constraints the withdrawal bid represented by the green dashed line is not physically possible. As there is no mechanism for compensating lower priced withdrawal bids (i.e. it is not possible to 'constrain on' out-of-merit order gas), an equivalent quantity of injection bids are necessarily constrained off, represented by the red dashed line. This results in a market quantity (Q1).

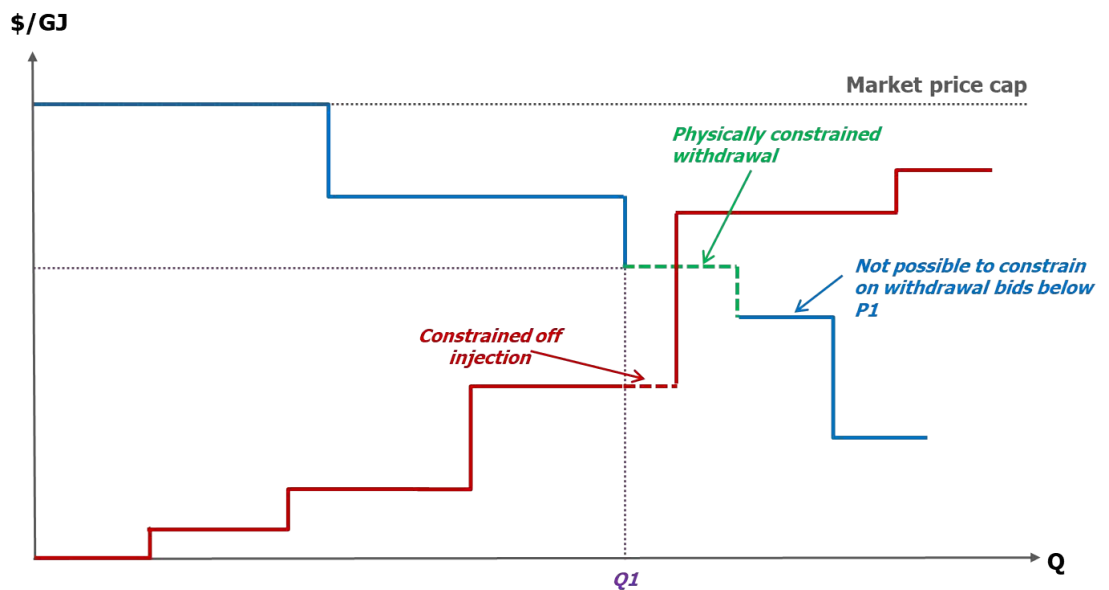
This creates an economic deadweight loss borne by would-be injectors and withdrawers. Injection bids below the market price are constrained off even where there are no physical constraints preventing these injections. Withdrawal bids below the market price and above the price of the constrained off injections are not scheduled even where there are no constraints preventing these withdrawals. The proponent suggests that this produces a pricing schedule with a higher price and lower quantity of gas traded, compared to the case where withdrawal constraints were included in the determination of the pricing schedule. No ancillary payments apply as no market participant has been constrained on.

²⁷ AEMO (on behalf of EnergyAustralia), *Rule change request - Application of constraints in the declared transmission system*, 24 November 2016, p6.

²⁸ The Commission notes that the rule change request does not propose completely aligning the pricing and operating schedules. The proposal is to apply physical constraints on withdrawals in the determination of the pricing schedule.

²⁹ AEMO (on behalf of EnergyAustralia), *Rule change request - Application of constraints in the declared transmission system*, 24 November 2016, p3.

Figure 3.1: Pricing schedule under the current arrangements



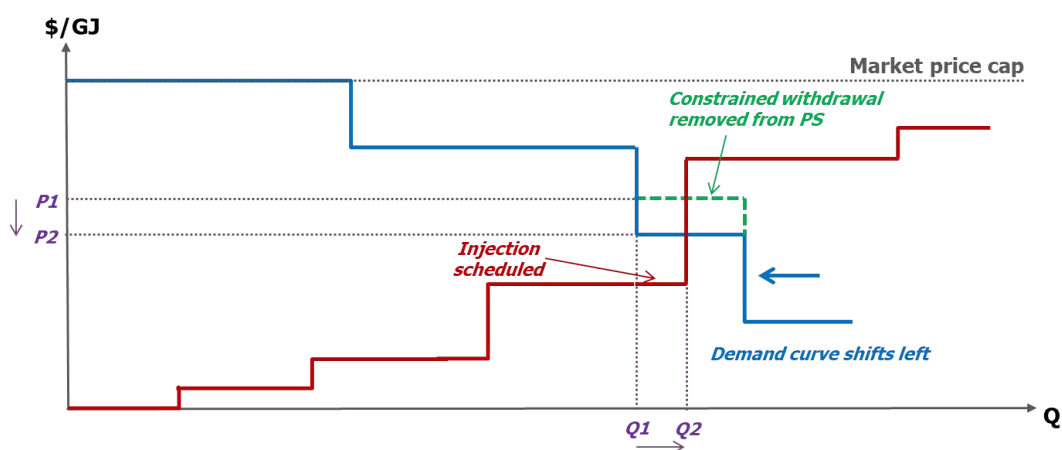
Source: AEMC analysis

Determination of the pricing schedule under the proposed rule

Figure 3.2 compares outcomes in the pricing schedule under the current arrangements and the proposed rule. It shows that:

- under the current arrangements, physically constrained withdrawal bids are not included in the determination of the pricing schedule, resulting in a price of $P1$ and a quantity of gas trade of $Q1$. In effect, the market clearing engine does not currently 'see' the physically constrained withdrawal bids represented by the green dashed line.
- the rule change to include physically constrained withdrawal bids in the determination of the pricing schedule causes a leftwards shift of the demand curve, a lower price of $P2$ and a higher quantity of gas traded of $Q2$.
- no ancillary payments apply as no market participant has been constrained on.

Figure 3.2: Pricing schedule under the proposed rule



Source: AEMC analysis

The proponent suggests that outcomes under the rule change proposal, compared to the current arrangements, would be:

- lower price
- increase volume of gas traded
- improved risk management for market participants by providing greater certainty around scheduling in situations where there are physical withdrawal constraints
- no change in ancillary payments.

3.3 Draft determination

The following subsections summarise stakeholder views and the Commission's draft determination position.

3.3.1 Stakeholder views on consultation paper

In public submissions and during the DWGM stakeholder workshop (16 May 2019) stakeholders were generally supportive of the proposed rule to internalise withdrawal constraints in determining the pricing schedule. Submissions focused on risk management. There was a general agreement that the proposed rule would improve the ability of market participants to manage their risks.

AEMO noted that the current arrangements may be causing higher prices where the market participant's cumulative withdrawal bids exceed the constraint to deliver gas to a system withdrawal point.³⁰ This can cause market participants to bid differently in the DWGM and may lead to unpredictable outcomes.

³⁰ AEMO submission on the consultation paper, p.17.

AGL suggested that the current arrangements are leading to irrational outcomes which are unpredictable for market participants.³¹ The pricing schedule does not take into account physical constraints on withdrawals leading to:

- a higher market price for all participants
- gas that is priced between the rational price and the pricing schedule price not being scheduled.

AGL suggested that by aligning the operating schedule and pricing schedule we would expect to see rational and predictable outcomes.³²

EnergyAustralia noted that the current arrangements are unpredictable and do not reflect the underlying demand and supply for gas.³³ The price in the pricing schedule is often set on demand that is 10 to 20 per cent higher than is technically feasible and that there is an ongoing risk that participants may be unable to effectively hedge using injections.

Powershop suggested that withdrawal constraints internal to the DTS should be included in the pricing schedule to avoid adverse outcomes as described in the consultation paper.³⁴

ERM Power suggested that the current approach of not considering withdrawal constraints in the determination of the pricing schedule can distort market prices and result in scheduling outcomes that are confusing and unpredictable, creating risks for market participants.³⁵ When controllable withdrawal constraints are not considered in the determination of the pricing schedule and infeasible controllable withdrawal bids included in the pricing schedule and later removed in the operating schedule, AEMO will also constrain down injection bids in the operating schedule (in order of price, and regardless of location) by an equivalent quantity. The impact of this is that supply offered in at prices lower than the market price may not be scheduled in the operating schedule. Affected shippers are therefore exposed to the risk of not being able to inject gas to hedge a position, and may face prices up to \$800/GJ. ERM suggests that these are suboptimal market outcomes.

Origin Energy submitted that the proposed rule may not fundamentally improve the ability of participants to manage price and volume risk in the market.³⁶ The proposed change would simplify the existing framework by creating greater alignment between the pricing and operating schedules under certain circumstances. However, given the change is only intended to address those circumstances where a withdrawal constraint is offset by a reduction in injections (and therefore no uplift payments are required), it is unlikely to improve the ability of participants to manage congestion uplift more broadly.

No stakeholders which commented on the risk management aspects of the proposed rule suggested that the above analysis is incorrect, or that the proposed rule change is inappropriate.

31 AGL submission on the consultation paper, p. 2.

32 It should be noted that the rule change request does not propose completely aligning the operating and pricing schedules. The proposal is to apply physical constraints on withdrawals in the determination of the pricing schedule.

33 EnergyAustralia, submission on consultation paper, p.2.

34 Powershop submission on the consultation paper, p. 3-4.

35 ERM Power submission on the consultation paper, p. 3.

36 Origin submission on the consultation paper, p. 2.

Through the consultation process AEMO has indicated that it does not expect the rule change to be costly to implement. AGL submitted that realigning the operating and pricing schedule presents a low regulatory and administrative burden, as these arrangements were in place as recently as 2015.³⁷ EnergyAustralia agreed that adding that there is unlikely to be a significant impact on industry.³⁸

Stakeholders did not consider that there would be any significant interaction between the proposal to internalise withdrawal constraints in the pricing schedule and the separate rule change proposal on *National Gas Amendment (DWGM improvements to AMDQ regime) Rule 2020*:

- AEMO considered that it would still be relevant to internalise withdrawal constraints if separate exit capacity certificates were introduced. Exit capacity certificates would provide tie breaking benefits to provide priority in scheduling equally priced withdrawal bids, so there is still likely to be competition to become the marginal bidder at some locations where withdrawal capacity exceeds exit AMDQ.³⁹
- EnergyAustralia considered that aligning the pricing and operating schedules in the specific circumstances of the rule change request would not result in any loss of congestion signals, as constrained on withdrawals and associated ancillary payments rarely occur.⁴⁰
- AGL considered that aligning the pricing schedule and operating schedule would contribute to addressing the Victorian Government's DWGM risk management concerns.⁴¹

3.3.2

Commission's draft determination

The Commission's draft rule was consistent with the proposed rule. The Commission considered that, compared to the current arrangements, the draft rule was:

- likely to lower prices and increase the quantity of gas traded
- likely to improve risk management
- unlikely to be costly to implement
- able to work alongside rule amendments to other parts of the DWGM that are being considered
- in the long-term interests of consumers.

Lower price and higher quantity of gas traded

The draft rule was likely to be welfare enhancing in situations when there are physical constraints on withdrawals in the DTS. Under the current arrangements, infeasible withdrawal bids are considered in setting the pricing schedule. This may mean that other withdrawal bids are not scheduled and injection bids are unnecessarily constrained off. By accounting for

³⁷ AGL submission on the consultation paper, p. 3.

³⁸ EnergyAustralia submission on the consultation paper, p. 2.

³⁹ AEMO, submission on consultation paper, p.15.

⁴⁰ EnergyAustralia, submission on consultation paper, p.2.

⁴¹ It should be noted that the rule change does not propose completely aligning the pricing schedule and operating schedule. The proposal is to apply withdrawal constraints in the determination of the pricing schedule in the same way that these are applied in the operating schedule. See AGL, submission on consultation paper, p. 2.

transmission constraints that affect withdrawals of gas in the determination of the pricing schedule, the market clearing engine will no longer 'see' the infeasible withdrawal bids leading to a lower market price and higher quantity of gas traded in the pricing schedule.

Improve risk management

The Commission was also of the view that the draft rule would incrementally improve risk management by market participants in the DTS. In situations where there is a physical withdrawal constraint, there is uncertainty for participants around whether their injection bids may be constrained off despite the bid being below the market price. Under the draft rule this likelihood was diminished, providing a small improvement in market participants' ability to manage risk.

3.4 Final determination

This section summarises stakeholder submissions to the draft determination and the Commission's final determination.

3.4.1 Stakeholder views

Submissions on the draft determination

Stakeholders that made submissions to the draft determination were generally supportive of the draft rule. There was a view that the draft rule would facilitate better risk management and several stakeholders encouraged the Commission to implement the rule as soon as is practicable.

AEMO was supportive of this aspect of the draft rule, however made two comments that:

1. the rule will need to be limited to controllable withdrawal quantities rather than all withdrawals; and
2. it should be considered whether the rule should also apply for constraints for controllable injection quantities.⁴²

After considering these points and through further consultation with AEMO the Commission agrees that the rule should only be applied to transmission constraints that affect withdrawals of gas at system withdrawal points at which withdrawal bids may be made rather than all withdrawals. This wording is slightly broader than controllable withdrawal quantities as it allows consideration of withdrawals at transfer points as well as delivery points. This would be a return to how the market was scheduled prior to the change in 2015. The Commission also notes that any constraint on uncontrollable withdrawal quantities automatically implies a curtailment event with the price for that schedule set to the market price cap (currently \$800/GJ).

AEMO's second point related to the possibility that injection congestion may become more of an issue in future years if new sources of supply come online. AEMO can foresee scenarios where injection capacity is far greater than pipeline capacity with the potential for a greater

⁴² AEMO's submission on the draft determination, p. 6-7.

quantity of injections to be scheduled in the pricing schedule than the operating schedule at certain locations. In such a scenario AEMO would have to constrain off low priced injections at the congested location and constrain on higher priced injections at an uncongested location in the operating schedule. This scenario would have the opposite effect to the withdrawal constraints issue, with price being depressed in the pricing schedule, and ancillary payments being created in the operating schedule from the higher priced constrained on injections. In theory, the same logic as to why withdrawal constraints should be reflected in the pricing schedule may also apply to injection constraints, however further analysis would be required to determine the potential implication of such a change.⁴³

The Commission acknowledges that the future possibility of new supply sources may warrant consideration of the possibility of injection constraints becoming more likely in the future. However, this issue is beyond the scope of the original rule change request, which was specifically about accounting for withdrawal constraints in the determination of the pricing schedule.⁴⁴ As such the Commission is not able to make a rule on this issue.

The Commission notes the possibility that new supply sources could cause injection constraints in the future. If stakeholders foresee this as being an issue it could be raised through AEMO's Gas Wholesale Consultative Forum and AEMO or the Victorian Government are could submit a separate rule change request on this topic.

Other stakeholders supported the draft determination to account for transmission constraints that affect withdrawals of gas in the determination of the pricing schedule:

- Brickworks note that this change will lead to a rational pricing outcome reflective of withdrawals that can physically occur.⁴⁵
- The Victorian Government note that they are pleased that the draft rule, in the opinion of the AEMC, is likely to lower gas prices and is cost effective for AEMO to implement.⁴⁶
- ERM suggest that it will enhance the ability of participants to manage risks, and reduce uncertainty and unpredictability of scheduling outcomes that can arise under the current arrangements.⁴⁷
- Origin notes that it would simplify the framework by creating greater alignment between the pricing and operating schedules under certain circumstances.⁴⁸
- AGL considers this will lead to more rational and predictable pricing outcomes. AGL notes that the DWGM would no longer be able to constrain off withdrawals at a price that is lower than the market price. Including withdrawal constraints in the pricing schedule will improve the confidence of market participants that pricing outcomes reflect the physical capability of the system. AGL is supportive of this change being implemented as soon as possible by AEMO.⁴⁹

43 AEMO's submission on the draft determination, p. 7.

44 AEMO, Rule change request - *Application of constraints in the declared transmission system*, 24 November 2016.

45 Brickwork's submission to the draft determination, p. 1.

46 Department of Environment, Land, Water and Planning, submission to draft determination, p. 1

47 ERM Power submission to the draft determination, p. 1.

48 Origin submission to the draft determination, p. 2.

49 AGL submission to the draft determination, p. 2.

- EnergyAustralia suggest that it will improve the application of withdrawal constraints in the DWGM and therefore improve market outcomes. EnergyAustralia also notes that this rule change has significant support from industry.⁵⁰

Workshop

During the DWGM Technical Workshop held on 9 December 2019 stakeholders expressed general support for the draft rule. However, some stakeholders raised issues about the long period of time between when the rule change request was submitted in November 2016 and the implementation of the rule.⁵¹

The Commission notes that, at the time the rule change request was submitted, the Commission was undertaking the Review of the Victorian Declared Wholesale Gas Market. The final report of this review was published in July 2017, which included three recommendations for rule changes.⁵² It was considered that it would be best to assess the rule change request on the Application of constraints in the Declared Transmission System at the same time as the three other rule changes on the DWGM. In response to the three recommendations from the review, the Commission received three rule change requests in October 2018 and the Commission commenced the rule change processes for these three rule changes in March 2019.

3.4.2

Commission's final determination

The Commission's final determination position is to make a rule that requires AEMO to take into account transmission constraints affecting withdrawals of quantities of gas at system withdrawal points at which withdrawal bids may be made during the gas day in the determination of the pricing schedule. The reasons for this decision are consistent with the reasons outlined in section 3.3.2. In the Commission's view, this component of the final rule is:

- likely to lower prices and increase the quantity of gas traded
- likely to improve risk management
- unlikely to be costly to implement
- able to work alongside rule amendments being implemented for other parts of the DWGM
- in the long-term interests of consumers.

The final rule also removes the requirements on AEMO to use an optimisation program to produce pricing schedules, which determine market prices.⁵³ The rule retains a requirement for AEMO not to take into account transmission constraints affecting injections of gas.

By 31 March 2020, AEMO is required to review, and where necessary, amend and publish the gas scheduling procedures to take into account Schedule 1 of the amending rule. In doing

⁵⁰ EnergyAustralia submission to the draft determination, p. 1.

⁵¹ A summary of the discussion is available on the rule change homepage, *Minutes of technical workshop on DWGM simpler wholesale price and DWGM improvement to AMDQ regime*, 9 December 2019.

⁵² Review available at <https://www.aemc.gov.au/markets-reviews-advice/review-of-the-victorian-declared-wholesale-gas-mar>

⁵³ See rule 221 of the Amending Rule.

so, AEMO is not required to comply with rule 135EC to 135EG which set out the usual consultation process AEMO must follow when amending procedures.

Implementation costs

The Commission noted that AEMO has estimated that their total cost of implementing this rule change and changes to the *DWGM improvements to AMDQ regime* rule change is \$8.2 to \$11.5 million. AEMO has stated that it expects that implementation costs of this component of the final rule to be small. It is expected that the final rule will not result in substantial operational costs for AEMO or market participants as the change is effectively a return to how the DWGM was scheduled prior to 2015.

Interactions with *National Gas Amendment (DWGM improvements to AMDQ regime) Rule 2020*

The Commission considers that there is unlikely to be any significant interaction between the final rule to account for transmission constraints that affect withdrawals of gas at system withdrawal points at which withdrawal bids may be made in pricing schedules and the *National Gas Amendment (DWGM improvements to AMDQ regime) Rule 2020*. The final AMDQ rule involves the creation of separate entry and exit capacity certificates of different tenures. These changes aim to improve the ability for market participants to gain capacity certificates for the purpose of risk management in the DWGM.

Under the current arrangements, the market clearing engine considers withdrawal bids that are physically constrained in determining the market price in the pricing schedule. As there is no mechanism to compensate, and therefore schedule an equivalent amount of unconstrained withdrawal bids below the market price, a quantity of injections equal to the amount of physically constrained withdrawals are necessarily de-scheduled.

The final rule to include withdrawal constraints in the determination of the pricing schedule would mean that where some withdrawal bids are physically constrained, these bids will not be 'seen' by the market clearing engine in determining the market price. Consequently, the withdrawal quantities in the pricing schedule would be higher, and the market prices lower, than under the current arrangements.

It is possible that within the increased withdrawal quantity that is scheduled, withdrawal tie breaking benefits associated with exit capacity certificates with withdrawal tie-breaking benefits could have value in determining which withdrawals are scheduled in a case where withdrawal bids are tied. Market participants will continue to be scheduled on the basis of their bids and the benefits of tie-breaking will continue to apply where constraints are binding, or when multiple bids are equally beneficial to the schedule.

4 CONGESTION UPLIFT FRAMEWORK

This chapter provides a summary of the issues with the current congestion uplift framework, possible solutions, stakeholder views and the Commission's draft and final determination positions.

A brief summary of this chapter is set out below.

The proponent considered that the current treatment of uplift payments, in particular the congestion uplift methodology, is a barrier to effective risk management and trade in the DWGM. The proponent proposed that congestion uplift payments are spread across market participants.

In the draft determination, the Commission considered that the current congestion uplift framework provided a reasonable balance in trading off the costs and benefits of allocating congestion costs to causers, however there were issues as the current approach was complex and may be difficult for market participants to manage the risk of congestion uplift. To address these issues, the draft rule removed the injection test from the congestion uplift framework.

Given stakeholder feedback on the draft determination and further analysis of interactions between this rule change and the changes to the AMDQ regime in the separate rule change *DWGM improvements to AMDQ regime rule 2020*,⁵⁴ the Commission's final determination is to remove the rules which require AEMO to have a congestion uplift category. The current congestion uplift mechanism is no longer fit for purpose and the Commission does not consider that a practical alternative mechanism could be developed that would provide meaningful signals and incentives for participants to avoid causing congestion.

To address issues with the current arrangements, the Commission has made a more preferable rule, which retains the current principle that uplift payments are to be allocated so far as practicable to market participants that caused the need for ancillary payments, however, it removes rules that require AEMO to take into account the extent to which a market participant's use of gas is in excess of a baseline derived from AMDQ or capacity certificates. This removes the link between authorised maximum daily quantity (AMDQ) or capacity certificates and uplift payments, such that a congestion uplift category is no longer required.

4.1 Current arrangements for congestion uplift

This section summarises the issues raised by the rule change proponent with the current congestion uplift framework, stakeholder views and the Commission's draft and final determination positions to not retain this approach.

⁵⁴ <https://www.aemc.gov.au/rule-changes/dwgm-improvement-amdq-regime>

4.1.1

Issues raised by the rule change proponent with the current arrangements

The proponent considers that the current treatment of uplift payments (in particular the congestion uplift methodology) is a barrier to effective risk management and trade in the DWGM, as explained below.

The current uplift methodology is highly complex

It is difficult for market participants to understand and predict the outcomes of the current uplift methodology.⁵⁵

The current uplift methodology may not effectively allocate costs to the causers of those costs⁵⁶

The congestion uplift framework was designed to address constraints relating to high levels of demand that would not be able to be met due to capacity constraints in the DTS. This type of congestion is less likely to occur now than in the past due to physical and commercial changes in the market.

Congestion due to maintenance or outage is more likely to occur now, but in these circumstances the congestion uplift methodology is unlikely to allocate costs to cause and may be contributing to inefficient and inequitable market outcomes, as noted below in relation to the event on 1 October 2016.

The current uplift methodology may deter financial risk management and trade

The ability to hedge against congestion uplift is restricted to participants with physical injections matched to the location of their AMDQ, which may negatively impact trading.

A market participant that is only a buyer from the spot market is unable to directly hedge against congestion uplift even if it has AMDQ. Its only option is to enter into an agency injection hedge nomination (AIHN) with an injecting participant at the location of the AMDQ. The injecting participant could be a competitor and unwilling to provide the buyer with an AIHN. The proponent suggests that this increases the transaction costs of purchasing gas from the spot market as the arrangement must be entered into bilaterally and ex ante.

Otherwise the participant must acquire its own gas supply contract, inject and hold sufficient AMDQ to manage the risk of congestion uplift. The proponent suggests this may be challenging if the participant only requires a small volume of gas, which is likely for a spot market buyer, particularly a new entrant.

A market participant that exclusively transports gas from Longford to Culcairn through the DTS is unable to hedge its congestion uplift exposure. A market participant that is injecting at Longford requires AMDQ in order to hedge congestion uplift and it cannot acquire AMDQ without acquiring tariff V or tariff D customers in Victoria - which is unlikely if it is just intending to transport gas through the system. This may serve as a disincentive for inter-regional trade.

⁵⁵ Victorian Minister for Energy, Environment and Climate Change, *Rule change proposals for the declared wholesale gas market reforms*, 29 October 2019, p2.

⁵⁶ Ibid, p4.

The effectiveness of risk management options is limited as the market price does not reflect the total wholesale cost of gas. This limits the effectiveness of any physical forward position of financial derivative hedges entered into by market participants outside of the DWGM.⁵⁷

- a market participant that is scheduled to inject gas bought outside of the DWGM to meet its own withdrawals requirements will not be exposed to the market price if it is in balance, but would still be exposed to, and may incur, uplift payments
- a market participant which enters into a financial derivative contract to hedge its exposure to the market price, would still be exposed to, and may incur, uplift payments.

The evolution of the market may result in more frequent or more material uplift payments being levied

The proponent notes that, while the above issues have been of relatively little consequence during the stable market environment of the recent past, they are becoming increasingly apparent and costly in a more dynamic market.

The proponent notes that of 27 days leading to positive ancillary payments from July 2008 to October 2018, 21 have occurred in the 2016 and 2017 calendar years.⁵⁸ Within the days of positive ancillary payments in 2016 and 2017, congestion costs were the largest category of uplift payments due to a single events - the unplanned shut-down of the Longford gas processing facility on 1 October 2016. In this event, the AER noted that "approximately \$3.1 million in ancillary payments were generated across the market as gas was scheduled out of merit order including from Dandenong LNG".⁵⁹ Of the \$3.1 million in ancillary payments on 1 October 2016, \$2.8 million were allocated to market customers as congestion uplift payments.⁶⁰ The amount allocated to market customers as congestion uplift payments was according to the rules, although the nature of the congestion, being caused by an unplanned outage of a major facility, does not accord well with many stakeholders' understanding of what ordinarily constitutes congestion on gas pipelines.⁶¹

4.1.2

Stakeholder views on consultation paper

Stakeholders had mixed views on whether there was a problem with the current arrangements for congestion uplift. Most stakeholders considered that while there were issues with the current 'cost to cause' methodology, there were also issues with the rule change proposal (see section 4.3) to spread congestion uplift across market participants. Stakeholders views on issues related to the current arrangements are outlined below.

Cost reflectivity

57 Victorian Minister for Energy, Environment and Climate Change, *Rule change proposals for the declared wholesale gas market reforms*, 29 October 2019, p3.

58 The proponent notes that over this period of time, AEMO's procedures and methodologies have been subject to modification for reasons other than congestion management. Victorian Minister for Energy, Environment and Climate Change, *Rule change proposals for the declared wholesale gas market reforms*, 29 October 2019, p4.

59 AER, *Weekly Gas Market Report*, 25 September - 1 October 2016.

60 AEMO, *DWGM Event - Intervention - 1 October 2016*, 14 October 2016, p6.

61 Victorian Minister for Energy, Environment and Climate Change, *Rule change proposals for the declared wholesale gas market reforms*, 29 October 2018, p4.

Stakeholders had mixed views on the cost reflectivity of congestion uplift under the current arrangements. AEMO, ERM and EnergyAustralia suggested that there were issues with the current 'cost to cause' methodology:

- AEMO considered that the congestion scenario that the uplift framework was designed for is no longer the only relevant scenario and it can result in uplift costs being allocated to congestion uplift event when no congestion has occurred.⁶²
- EnergyAustralia and ERM considered that it may not effectively allocate cost to the causers of congestion.⁶³
- AEMO and ERM suggest that it can allocate congestion costs due to issues occurring outside the DTS.⁶⁴ ERM note that on 1 October 2016, the outage at the Longford processing facility resulted in \$3.1m of out of merit order gas being scheduled to meet the supply shortfall, of which approximately 90% was funded through congestion uplift payments. ERM suggested that the current arrangements resulted in participants with no contracts for Longford gas, and who had no part to play in causing the shortfall, incurring congestion uplift payments if they did not have a congestion uplift hedge.⁶⁵

Other stakeholders had mixed or supportive views on the current arrangements:

- Some stakeholders considered that it was imperfect but addressed various trade-offs. Origin noted that the trade-off associated with the gross pool, open access framework is the absence of locational price signals, such that the allocation of congestion uplift to causers is likely to be imperfect.⁶⁶ Major Energy Users note that in the development of the DWGM and its subsequent refinements over the years there had not been developed a solution that provided a better overall outcome than the current uplift arrangements.⁶⁷ The AER suggested that it was unlikely that any one approach would be able to deliver more cost reflective pricing, a simpler methodology, greater predictability and a single price to facilitate hedging.⁶⁸
- AGL cautioned against using the events of 1 October 2016 as a 'day of focus' for assessing this rule change request. On 1 October 2016 gas powered generators (GPG) in South Australia were under direction following the state-wide black out and a Contingency Gas Event was occurring in Sydney. Losing gas supply from Longford placed additional stress on the DTS and led to high cost gas supply being required.⁶⁹
- Powershop considered that the market allocated costs correctly on 1 October 2016. On this day a supply interruption occurred and gas was required to be scheduled out of bid merit order. The participants who failed to meet their scheduled injections from Longford created the requirement for more gas to be injected from other supply sources and through other pipelines. The market allocated costs correctly such that the market

62 AEMO, submission on consultation paper, p.2 and p.13.

63 Submissions on consultation paper: EnergyAustralia, p.3.; ERM, p.2.

64 Submissions on consultation paper: AEMO, p2; EA, p3; ERM, p2.

65 ERM, submission on consultation paper, p2.

66 Origin, submission on consultation paper, p.4.

67 Major Energy Users, submission on consultation paper, p.2.

68 AER, submission on consultation paper, p.4.

69 AGL, submission on consultation paper, p.1.

participants who failed to follow scheduling instructions and failed to validate their AMDQ were allocated congestion uplift.⁷⁰

Risk management

Stakeholders suggested there were risk management issues with congestion uplift under the current arrangements:

- Stakeholders thought the congestion uplift methodology is complex⁷¹ and difficult to understand⁷² and predict.⁷³
- ERM suggested that a disproportionately higher level of risk is imposed on participants who are purchasing from the market but not injecting (or who might be injecting but do not have matching AMDQ).⁷⁴
- ERM also suggested that, by imposing risks on participants who are not physically injecting into the market, the congestion uplift arrangements also continue to hinder the development of financial instruments and new ways of trading.⁷⁵
- AEMO noted that market participants have purchased unallocated authorised MDQ at auction and configured IHN to maximise congestion uplift hedge and allocated authorised MDQ to maximise injection tie-breaking benefits. AEMO said that although this indicates market participants are using congestion uplift hedges to manage their exposure to congestion uplift, the availability of authorised MDQ (both unallocated or available for sale) is limited which reduces the effectiveness of this measure.⁷⁶

Powershop supported the current arrangements from a risk management perspective as reasonable components of a market in which a retailer buys goods and transports them to market.⁷⁷

Short-term signals and incentives

Stakeholders had mixed views on the current congestion uplift framework on short term signals and incentives. Powershop noted that a market that allocates on a 'cost-to-cause' basis supports effective procurement from reliable sources and acts to increase system security and integrity.⁷⁸

Other stakeholders did not support the current congestion uplift framework:

- AEMO suggested that the incentives created by the current uplift framework can be a deterrent to trading gas on the DWGM.⁷⁹

70 Powershop, submission on consultation paper, p.3.

71 Submissions on consultation paper: AEMO, p.2; AGL, p.2.

72 EnergyAustralia, submissions on consultation paper, p.3.

73 ERM, submissions on consultation paper, p2.

74 ERM, submission on consultation paper, p.2.

75 Ibid, p.2

76 AEMO, submission on consultation paper, p.14.

77 Powershop, submission on consultation paper, p.2.

78 Powershop, submission on consultation paper, p.2.

79 AEMO, submission on consultation paper, p2.

- ERM suggested that the market design should provide incentives for shippers to adhere to their operating schedules and forecast withdrawals as accurately as possible and this is largely achieved under the current market design by surprise uplift and deviation pricing (i.e. not through congestion uplift).⁸⁰

Long-term investment signals

Stakeholders considered that the current congestion uplift framework did not provide a signal for pipeline investment in the DTS.

- AEMO and ERM considered that investment signals from congestion uplift are muted or weak under the current arrangements.⁸¹
- Origin noted the trade-off associated with the gross pool, open access framework absence of locational price signals, such that the signals for investment within the system are likely to be imperfect.⁸²
- Lochard Energy note that despite the slight increase in the AMDQ cc price over the years, this, in itself, has not led to material capacity expansion on the South West Pipeline (SWP).⁸³
- ERM did not expect pipeline investments in the DTS to be driven by market signals through the congestion uplift framework. Instead, they noted pipeline investments are primarily driven through the regulatory investment process. ERM consider that capacity based instruments (such as AMDQ), that are created with the objective of providing signals for market investment, are unlikely to be effective under a market carriage regime given the market clearing process ultimately determines the allocation of both capacity and commodity.⁸⁴

Competition in downstream markets

Stakeholders suggested the current arrangements for congestion uplift had the following issues in relation to downstream competition:

- AEMO suggested the uplift framework was overly complex and may act as a barrier to entry.⁸⁵
- The AER, through its wholesale market monitoring program, noted that market participants did not understand how the uplift payments levied on them were allocated and that uplift payments can be a significant financial burden on participants without AMDQ. This may disproportionately affect smaller players and may act as a disincentive to new players considering entering the market.⁸⁶
- ERM suggested that the disproportionately higher level of risk imposed on participants who do not have a congestion uplift hedge was likely to affect new entrant retailers and

80 ERM, submission on consultation paper, p.2.

81 Submissions on consultation paper: AEMO, p.14; Lochard Energy, p.3.

82 Origin, submission on consultation paper, p.4.

83 Lochard Energy, submission on consultation paper, p.3.

84 ERM, submission on consultation paper, p.3.

85 AEMO, submission on consultation paper, p.2.

86 AER, submission on consultation paper, p.4.

other small participants (who are likely to find it difficult to secure contracts for small quantities of gas on competitive terms).⁸⁷

Trading between interconnected pipeline and facilities

Stakeholders had mixed views on the effect of the current congestion uplift arrangements on inter-regional trade. AGL suggested that gas can currently be traded in and out of the DWGM efficiently on transportation agreements at every interval of the DWGM gas day. The DWGM enables participants to manage uplift charges, particularly by diversifying their supply options and to receive an appropriate payment if out of merit gas is required.⁸⁸

Other stakeholders suggested that the current uplift framework did not support inter-regional trade:

- AEMO suggested that it increased risk in trading gas between the DTS and interconnected facilities due to the risk of incurring congestion uplift payments (e.g for a participant who injects at Longford but has no authorised MDQ for uplift hedge). A trader will need to price this risk in their operating strategy.
- ERM suggested that participants seeking to buy gas from the DWGM to move to another location in the east coast network currently faced increased risks. This outcome was at odds with recent gas market reforms that have been implemented with the objective of facilitating trading across the interconnected east coast gas market.⁸⁹

4.1.3

Commission's analysis and draft determination

In the draft determination, the Commission considered that the current congestion uplift framework provided a reasonable balance in trading off the costs and benefits of allocating congestion costs to causers, however there were some issues with this approach as outlined below.

Cost reflectivity

The Commission considered that the current arrangements do not always effectively allocate the cost of constraints to the causer, however they provide an appropriate trade-off between cost reflectivity and practicality.⁹⁰ The DTS is a complex meshed network with multiple sources of supply, meaning that there are a range of potential scenarios that can result in uplift payments and it is difficult to always allocate costs to the causer of the constraint. It would likely be possible to develop a more cost reflective congestion uplift methodology, however this would be more complex and would be costly to design and implement. The Commission considered that the current obligation in the NER appropriately addresses this trade-off as it requires uplift payments to be 'allocated so far as practicable to the cause'.⁹¹

⁸⁷ ERM, submission on consultation paper, p.2.

⁸⁸ AGL, submission on consultation paper, p.3.

⁸⁹ ERM, submissions on consultation paper, p.2.

⁹⁰ After further analysis and consideration of interactions with the *National Gas Amendment (DWGM improvements to AMDQ regime) Rule 2020*, the Commission's final determination was that the congestion uplift framework does not provide an appropriate trade-off between cost reflectivity and practicality.

⁹¹ NER clause 240(2)(a)

The Commission noted that while congestion uplift payments can result from events that occur outside the DTS (e.g. Longford outage on 1 October 2016), market participants inside the DTS currently have an ability to manage this risk by purchasing contracts that allow them to inject gas to hedge against the risk of incurring congestion uplift payments.

Risk management

The Commission noted that risk management is a key issue with the current congestion uplift framework.

The current congestion uplift hedge mechanism is complex and may be difficult for market participants (particularly new entrants) to understand. This may deter financial risk management and trade in the DWGM.

It may also be difficult for market participants to manage the risk of congestion uplift payments. The ability to hedge against congestion uplift payments is limited to those market participants with physical injections matched to the location of their AMDQ and the current allocation of AMDQ may be inefficient due to a lack of flexibility in the tenure of products and a lack of trading. The Commission noted that the new AMDQ regime proposed in the draft rule *on DWGM improvements to AMDQ regime*, would support more efficient allocation of certificates by enabling market participants to purchase certificates over shorter tenures.

Short-term signals and incentives

The Commission's draft determination position was that the:

- current congestion uplift framework can, in some cases, provide beneficial short-term signals and incentives
- current arrangements are beneficial in that the allocation of uplift costs, so far as practicable to the causer, provides an incentive for market participants to procure gas from a range of sources and locations for uplift hedge, which may help avoid some constraints.

A downside of the current arrangements are that some market participants may find it difficult to obtain congestion uplift hedge protection and this may be a disincentive to trade gas in the DWGM.

The current inefficient allocation of AMDQ contributes to bias in the allocation of uplift payments to market participants and inefficient market outcomes.

Long-term investment signals

Congestion uplift provides a weak signal for pipeline investment under the current arrangements. Almost all pipeline investments in the DTS are through the regulatory investment process, as opposed to being driven by market signals through congestion uplift.⁹² This is a function of the market carriage regime where the market clearing process

⁹² The Commission notes that there have been some market driven investments in the DTS. For example, Origin note that market investments have been made to increase export capacity at Culcairn for market participants that have capacity agreements outside the DTS on the other side of the pipeline near Culcairn. Origin, submission on consultation paper, p4.

determines the allocation of both capacity and commodity and there is no locational price signal.

Competition in downstream markets

It is unclear that the congestion uplift framework is deterring new entry in downstream market. Stakeholders noted that it can be difficult to understand and manage the risk of incurring congestion uplift payments and that this may be a barrier to entry for smaller retailers, who may find it difficult to secure contracts for small quantities of gas on competitive terms. However, it is noted a number of smaller retailers have entered the Victorian gas retail market in recent years, so the materiality of the factor on market entry decisions may not be significant.

Trading between interconnected pipeline and facilities

The Commission noted the mixed views from stakeholders on the effect of the current congestion uplift arrangements on inter-regional trade. These are related to the ability to hedge congestion uplift, which are discussed above.

4.1.4

Stakeholder submissions on draft determination

Stakeholder submissions to the draft determination generally preferred to amend or remove the congestion uplift framework, as opposed to retaining the current congestion uplift framework. Stakeholder views on these changes are outlined in section 4.3 and 4.4 respectively.

Specific views on the current congestion uplift framework were mixed:

- AEMO reiterated its position from the first round of consultation that there are issues with the current arrangements. The congestion uplift allocation methodology is deficient and poorly attributes on a cost to cause basis. Congestion uplift has been allocated when there is no 'congestion' and when congestion uplift does occur it may be allocated to parties who did not contribute to the congestion event.⁹³
- Brickworks noted that the current congestion uplift mechanism disadvantages market participants to the extent that they physically inject gas from injection points other than Longford and market participants that are buying gas from the DWGM pool and are not physically injecting gas.⁹⁴
- ERM did not consider that congestion uplift provided an investment signal. ERM considered that the total amount of uplift payments is the appropriate indicator for investment signals, as opposed to the portion allocated to the congestion uplift category.⁹⁵
- The ACCC noted that, while congestion costs have been limited to date, this could become a greater issue in future.⁹⁶

⁹³ AEMO, submission on draft determination, p3.

⁹⁴ Brickworks, submission on draft determination, p2.

⁹⁵ ERM, submission on draft determination, p1.

⁹⁶ ACCC, submission on draft determination, p2.

- Origin were concerned about changes to the congestion uplift and AMDQ framework.⁹⁷ Origin supported applying a 'causer pays' approach to the allocation of congestion uplift that provides meaningful signals for market participants and allows for effective risk management.⁹⁸

4.1.5 Commission's analysis and final determination

As per the draft determination, the Commission's final view is that the current congestion uplift framework is not fit for purpose as:

- it does not always effectively allocate the cost of constraints to the causer
- the congestion uplift hedge mechanism is complex and may be difficult for market participants (particularly new entrants) to understand and activate, which may deter trade in the DWGM
- congestion uplift provides a weak signal for pipeline investment.

Stakeholder feedback and additional analysis for the final determination indicates that congestion uplift is unlikely to provide meaningful short-term signals and incentives for market participants to avoid congestion events. The congestion uplift concept was originally designed for system constraints in the DTS at a time when there was a single pipeline from Longford to Melbourne. Over time, expansions of the DTS have meant that congestion uplift does not always provide clear or strong locational signals for participants to act in a way that would avoid causing constraints.

The table below shows that, over the recent period since the Longford outage on 1 October 2016,⁹⁹ a number of events that resulted in congestion uplift payments were due to unplanned outages or unexpected increases in demand. In most of these events, it is unlikely that market participants could have expected or foreseen these events and changed their behaviour in a way to make them less likely to occur. Therefore, it does not appear that congestion uplift provides a clear signal that participants can respond to in the short term.

Table 4.1: Amount and cause of events including an allocation of congestion uplift payments, from December 2016 to December 2019

DATE	CONGESTION UP-LIFT PAYMENT	CAUSE
5/12/2016	\$33,581	"Pigging" program on the South West Pipeline required injections at Iona CPP
26/05/2017	\$24,066	Insufficient injections at Iona CPP during a planned outage at Brooklyn Compressor Station
3/08/2017	\$1,026	Lower than expected temperatures and higher than forecast GPG demand

⁹⁷ Origin, submission on draft determination, p1.

⁹⁸ Ibid, p4.

⁹⁹ This event resulted in approximately \$3.1 million of out of merit order gas being scheduled to meet a supply shortfall, of which approximately \$2.8 million was funded through congestion uplift payments.

DATE	CONGESTION UP-LIFT PAYMENT	CAUSE
30/11/2017	\$623	Longford equipment outage
20/12/2017	\$984	Higher than forecast GPG demand during planned outage at Brooklyn Compressor Station
23/02/2018	\$3,860	Unplanned outage at the Brooklyn Compressor Station
27/05/2019	\$2,761	High demand and under-delivery from Longford
29/05/2019	\$6,473	High demand, lower than expected temperatures and higher than forecast GPG demand
19/06/2019	\$5,615	High demand, unplanned coal plant outage resulting in higher than forecast GPG demand

Source: AEMO, *DWGM Intervention Reports*, Notice of threat to system security.

4.2 Rule change proposal to spread congestion uplift

This section summarises the rule change proposal to spread congestion uplift across market participants, stakeholder views and the Commission's draft determination to not apply this option.

4.2.1 Rule change proposal to spread congestion uplift

In order to address the issues with the current uplift framework in the DWGM (detailed in section 4.1), the Victorian Minister proposed the changes outlined below.

To change the way congestion uplift payments are recovered

The current cost to cause methodology for allocating congestion uplift payments to market participants would be replaced with a pro-rata method that spread congestion uplift payments across market participants.

The proponent suggested that there are likely to be different ways that congestion uplift could be spread across market participants and that the AEMC should explore different implementation methods through the rule change process. For example, common uplift is currently recovered on a pro-rata basis from market participants based on each participant's withdrawal quantities relative to all withdrawals on the relevant gas day.

To retain the way surprise and congestion DTSSP are recovered

The proponent proposed surprise uplift would be retained in its current form as it is necessary to maintain incentives for market participants to accurately forecast their gas requirements and facilitate efficient decisions regarding adjusting their gas requirements.

Congestion DTSSP was also proposed to be retained in its current form. The proponent suggests that the rationale for changing the recovery of congestion uplift does not appear to

hold for the DTS service provider, which arises when the service providers fails to comply with its obligations under the Service Envelope Agreement.¹⁰⁰

4.2.2 Stakeholder views on consultation paper

Most stakeholders were opposed to the rule change proposal to spread the recovery of congestion uplift payments across market participants. Stakeholders views on individual issues related to the current arrangements are outlined below.

Cost reflectivity

Stakeholder views were mixed. AGL did not support the proposal to spread congestion uplift as the causer pays principle should continue to underlie uplift payments to encourage participants to consider how they manage their diversity of supply. Much of the congestion cost incurred by parties arises from the out of merit order gas that is required from another uncongested source.¹⁰¹

Some stakeholders were supportive of the proposal to spread congestion from a cost allocation perspective:

- ERM suggested that, if costs cannot be allocated to their cause, the rule change proposal would be reasonable and results in a more even risk allocation. It would allocate a greater proportion of total uplift payments on a pro-rata basis to withdrawals, in a similar method to the way in which common uplift is allocated.¹⁰²
- AEMO supported spreading congestion uplift provided it could be established that the ability to allocate the costs of congestion to the actual causers is sufficiently difficult that misallocation is likely. AEMO note that it could result in an increase in ancillary payments in some circumstances.¹⁰³
- Qenos suggested that the rule change proposal was a fairer way to allocate congestion uplift as these costs should be smeared across all participants and not just attributed to those without AMDQ.¹⁰⁴

Risk management

Most stakeholders did not consider that spreading congestion uplift would improve the ability of market participants to manage risk:

- Origin noted that it is unlikely to address all of the factors that may limit the use of financial derivatives, largely because not all trading risk is captured in a single commodity price in the DWGM.¹⁰⁵

100 The DTS service provider (APA Group) and AEMO are parties to the Service Envelope Agreement, under which: (a) The service providers makes available the entire VTS to AEMO and provides a range of supporting services to AEMO, and (b) AEMO operates the VTS in accordance with the National Gas Rules.

101 AGL, submission on consultation paper, p.2.

102 ERM, submission on consultation paper, p.2.

103 AEMO, submission on consultation paper, pp.13 and 15.

104 Qenos, submission on consultation paper, p.2.

105 Origin, submission on consultation paper, p.3.

- Powershop considered that spreading congestion uplift would not promote the use of risk management solutions such as financial derivatives (any increase in risk would be built into the price of the contract).¹⁰⁶
- MEU noted that it would not remove all uplift charges, so would merely result in a “cleaner” gas price, rather than a “clean” gas price.¹⁰⁷
- Lochard Energy noted that the value of AMDQ in providing a hedge against congestion uplift should be retained.¹⁰⁸

Some stakeholders noted that spreading congestion uplift could have positive effects on risk management:

- Qenos suggested it would make it easier to manage the cost of purchasing and transporting gas and move it from Longford to Culcairn.¹⁰⁹
- AEMO noted that it would make outcomes more predictable and simplify current processes as market participants would not need to provide an IHN or AIHN as uplift hedge would be removed.¹¹⁰
- AEMO also noted that it may improve incentives for a net buyer to trade gas in the DWGM. Under the current arrangements such participants may be disincentivised from trading due to challenges with hedging congestion uplift exposure.¹¹¹
- The AER noted that a simplified pricing methodology may assist the development of markets for risk management products (such as futures or forward markets) to the extent that participants are able to effectively mitigate a greater proportion of their total market price risk.¹¹²

Short-term signals and incentives

Stakeholders were concerned about the potential effect of spreading congestion uplift on short-term signals and incentives:

- APA, AGL, EnergyAustralia and Origin were concerned that it could reduce the incentive to minimise congestion.¹¹³ APA suggested that it could encourage consequence-free risky or inappropriate bidding behaviour.¹¹⁴
- Powershop suggested that it could “diminish system integrity”. It may encourage market participants to contract for less reliable or lower priority gas to achieve cost reductions as other participants would be accountable for losses resulting from poor performance of such contracts.¹¹⁵

106 Powershop, submission on consultation paper, pp.2-3.

107 Major Energy Users, submission on consultation paper, p.2.

108 Lochard Energy, submission on consultation paper, p.3.

109 Qenos, submission on consultation paper, p.2.

110 AEMO, submission on consultation paper, p.15 and 19.

111 Ibid, p.8.

112 AER, submission on consultation paper, p.4.

113 Submissions on consultation paper: APA, p2; AGL, p.3; Origin, p.3.; EnergyAustralia, p.3.

114 APA, submissions on consultation paper, p.2.

115 Powershop, submissions on consultation paper, p.3.

- Origin and EnergyAustralia suggested that, while demand driven congestion in the DTS has been rare in recent times, this dynamic could change if participants do not face an appropriate share of costs of any congestion they may cause.¹¹⁶
- The AER noted the possibility that constraints relating to high level of demand could reoccur as the market continues to evolve, particularly due to unpredictable demand from GPG.¹¹⁷ Origin considered that demand from GPG is a concern in this regard as it has the potential to cause significant congestion in the DTS, particularly through winter periods and intraday when GPG demand has not been forecast.¹¹⁸
- Origin suggested that it would be a perverse outcome if spreading congestion uplift resulted in higher levels of congestion and exposed certain market participants to higher levels of congestion uplift payments. Therefore, GPG should continue to face incentives to minimise congestion.¹¹⁹
- Lochard Energy suggested that until a clear and more effective capacity price signal is available, the price of AMDQ, together with the current arrangements for congestion uplift, both provide indicators of demand for capacity and should be retained.¹²⁰

Long-term investment signals

Powershop consider that spreading congestion uplift would inhibit efficient investment of the gas market.¹²¹ AEMO support spreading congestion uplift provided it could be established that system demand driven congestion in the DTS is rare and therefore the removal of congestion uplift is unlikely to materially impact incentives for investment.¹²²

Competition in downstream markets

Stakeholders had mixed views on whether spreading congestion uplift would improve retail competition. Origin and AEMO had positive views, suggesting that:¹²³

- it would reduce the risk of participating in the market as a net buyer
- removing the complex hedging uplift mechanism would simplify the congestion uplift framework, which may improve the ability of new entrants to understand and manage their exposure to uplift. This may reduce barriers to entry and encourage new entrants into the market, promoting competition amongst retailers.

Powershop suggested that it may limit new entrants to the market as it may encourage participants to contract for less reliable gas in the knowledge that other participants are

116 Submissions on consultation paper: Origin, p.3; EnergyAustralia, p.3.

117 The AER noted that incidence of constraints had declined in recent years due to the expansion of the South west pipeline and Victoria-NSW interconnect. In addition, further expansions of the South west pipeline (WORM project) are to occur in the coming years. However the AER cautioned that the trend of decreasing incidence of constraints may not continue. AER, submissions on consultation paper, pp.4-5.

118 Origin, submission on consultation paper, p.3.

119 Origin, submission on consultation paper, p3.

120 Lochard Energy, submission on consultation paper, p.4.

121 Powershop, submission on consultation paper, p.3.

122 AEMO, submission on consultation paper, p.13.

123 Submissions on consultation paper: Origin, p.1.; AEMO, p.20

accountable for losses resulting from poor performance of such contracts. This could contribute to greater volatility and uncertainty over costs.¹²⁴

Trading between interconnected pipeline and facilities

MEU considered that spreading congestion uplift payments would result in Victorian consumers being levied with the uplift charges associated with the export of gas to other regions and that Victorian end users should not be obliged to pay such costs.¹²⁵ Qenos suggested it would make it easier to manage the cost of purchasing and transporting gas and move it from Longford to Culcairn.¹²⁶

Implementation costs

AEMO and AGL considered that implementing the rule change proposal would likely have a low administrative cost.¹²⁷ AEMO noted that it would need to make procedure and system changes to facilitate the spreading of congestion uplift.

4.2.3

Commission's analysis and draft determination

The Commission did not consider that spreading congestion uplift would support the National Gas Objective for the reasons set out below.

Cost reflectivity

The Commission considered that spreading congestion uplift would not be cost reflective. It would reduce the accuracy of the allocation of uplift costs to the market participant that caused a constraint, compared to the current arrangements.

Risk management

Spreading congestion uplift would likely result in all market participants that withdraw gas paying small additional amounts of uplift payments, but would not allow for the risk of these payments to be managed effectively.

It would however reduce the volatility of congestion uplift payments, over an extended period of time, for individual market participants that have not typically used the congestion uplift hedge. This may be beneficial for net buyers or smaller participants that may find it difficult to purchase contracts to obtain the congestion uplift hedge. By reducing the risk of infrequent large congestion uplift payments to these market participants, it may improve their incentives to trade gas in the DWGM.

Market participants generally manage wholesale price risk by buying gas supply agreements outside of the DTS and ensuring participation on both sides of the market. This approach does not cover all commodity trading risk, as market participants can still be exposed to other cost risks relating to deviation and uplift payments.

Short-term signals and incentives

¹²⁴ Powershop, submission on consultation paper, p.3.

¹²⁵ Major Energy Users, submissions on consultation paper, p.3.

¹²⁶ Qenos, submission on consultation paper, p.2.

¹²⁷ Submissions on consultation paper: AEMO, p.22; AGL, p.3.

Spreading congestion uplift could diminish short-term incentives for market efficiency.

Ancillary payments could increase as some scheduled injections that historically were used for IHNs and did not receive ancillary payments could be eligible to receive ancillary payments as uplift hedge would no longer apply. However this would not be expected to be a material increase as ancillary payments commonly go to high priced gas that is not used for IHNs.

Long-term investment signals

Similar to the current arrangements, if congestion uplift were spread across market participants, it would not be expected to provide a signal for pipeline investment. Pipeline investment in the DTS is primarily through the regulatory process.

Competition in downstream markets

Spreading congestion uplift may encourage new entrants to the Victorian gas retail market to some extent. It would reduce the volatility of congestion uplift payments, over an extended period of time, to individual market participants that have not typically used the congestion uplift hedge. The extent to which this factor may influence market entry decisions appeared to be low based on a number of retailers recently entering the market.

Trading between interconnected pipeline and facilities

The Commission notes the mixed views from stakeholders on the effect of the current congestion uplift arrangements on inter-regional trade. These are related to the ability to hedge congestion uplift, which are discussed above.

4.2.4 Stakeholder views on draft determination

Some stakeholders reiterated views that they were opposed to the rule change request to spread the recovery of congestion uplift payments across market participants. Stakeholder views were:

- MEU and Brickworks did not support spreading congestion uplift as it would reduce incentives for market participants to prevent and better manage the risks of congestion.¹²⁸
- EnergyAustralia does not support spreading congestion uplift as it would remove signals to minimise congestion uplift.¹²⁹

4.3 Draft determination to remove injection test from the congestion uplift framework

This section summarises the Commission's draft determination position to remove the injection test from the congestion uplift framework and retain the congestion uplift category, stakeholder views on the draft determination and the Commission's final determination to not apply this approach.

¹²⁸ Submissions on draft determination: MEU, p2; Brickworks, p1.

¹²⁹ EnergyAustralia, p3.

4.3.1 Commission's analysis and draft determination

In the draft determination, the Commission noted that the key issues with the current congestion uplift framework related to risk management, as outlined below:

- The congestion uplift hedge mechanism is complex and may be difficult for market participants (particularly new entrants) to understand.
- It may be difficult for market participants to manage the risk of congestion uplift payments. The ability to hedge against congestion uplift payments is limited to those market participants with physical injections matched to the locations of their AMDQ. If a market participant is a spot buyer, that does not inject gas, it must enter into a bilateral agreement with a market participant that is injecting gas at the location of its AMDQ, to receive hedge nominations.
- The current allocation of AMDQ is inefficient meaning that a proportion of the market may have insufficient AMDQ to protect against congestion uplift payments.

To address these issues with the current arrangements, the Commission's draft rule:

- retained the current approach in which uplift payments are allocated so far as practicable to the cause¹³⁰
- retained the ability of market participants to protect against the risk of incurring congestion uplift payments
- simplified the mechanism for market participants to protect against the risk of incurring congestion uplift payments by:
 - removing the need for market participants to inject gas to be eligible for protection against congestion uplift payments
 - removing the concept of congestion uplift hedge and the associated need for market participants to submit hedge nominations (IHN or AIHNs)
 - implementing a new congestion mechanism based on market participant's daily withdrawals (controllable and/or uncontrollable withdrawals, as applicable) of gas exceeding their allocation of exit capacity certificates, on a whole of DTS basis.¹³¹ This was instead of the current measure in which market participants are protected from the risk of incurring congestion uplift payments if they withdraw less than their Authorised Maximum Interval Quantity (AMIQ) for a scheduling interval and are physically injecting at the location of the AMDQ.

The draft rule for the *DWGM simpler wholesale price* rule change interacted with the draft rule for the *DWGM improvements to AMDQ regime* rule change,¹³² in particular through the new concept of uncontrollable exit capacity certificates.

Under the current arrangements, AMDQ is owned by some tariff D gas consumers and held on behalf of tariff V consumers by AEMO. AMDQ currently provides tariff D and V customers with:

¹³⁰ NGR 240(2)(a) under the current rules.

¹³¹ This reflected the original congestion measure used when the DWGM started.

¹³² These two rule changes were run on a parallel timeline, with the draft determinations for both rule change published on 5 September 2019.

- limited curtailment protection, and
- congestion uplift hedge protection as long as the participant submits an injection hedge nomination, injects gas at the location of their AMDQ and withdraws less gas than their AMIQ profile.

The draft rules for the DWGM simpler wholesale price and DWGM improvements to AMDQ regime introduced uncontrollable exit capacity certificates to replace the current AMDQ for tariff D and V customers. Uncontrollable exit capacity certificates were to provide consumers that withdraw on an uncontrollable basis with:

- limited curtailment protection in case of emergencies, and
- protection against congestion uplift payments as long as a market participants' daily withdrawals of gas did not exceed their allocation of exit capacity certificates, on a whole of DTS basis.

In the draft rule, uncontrollable exit capacity certificates were to be auctioned and only market participants could participate in these auctions. Stakeholders did not support the draft rule, as detailed in section 4.3.2 below. The final AMDQ rule removes the concept of uncontrollable exit capacity certificates, as explained in section 4.3.3 below.

4.3.2 Stakeholder views on draft determination

Stakeholders had mixed views on the draft determination to simplify the congestion uplift framework by removing the injection test as outlined below.

Removing injection test from congestion uplift framework

Most stakeholders supported removing the injection test from the congestion uplift framework:

- The Victorian Government, AGL, ERM and EnergyAustralia supported removing the injection test. The reasons included that it simplifies the congestion uplift mechanism¹³³, provides a better outcome of consumers of gas¹³⁴ and removes barriers to entry as it would not disadvantage those who are using financial instruments to hedge their position or those who are purchasing gas from the wholesale market.¹³⁵
- While Brickworks supported removing the injection test, it was concerned that it may lead to a small number of market participants (who did not cause the ancillary payment) being exposed to larger congestion uplift payments than the current arrangements.¹³⁶
- AEMO considered that, if congestion uplift were to be retained, then removing the injection test would be an improvement on the status quo. However, AEMO considered that it was not practical to achieve cost to cause under the current market design¹³⁷ through tweaking the uplift framework, for example by removing the injection test.¹³⁸

¹³³ EnergyAustralia, submission on draft determination, p1.

¹³⁴ MEU, submission on draft determination, p2.

¹³⁵ Submissions on draft determination: AGL, p3, ERM, p2.

¹³⁶ Brickworks, submission on draft determination, p2.

¹³⁷ Under the current market design market prices are set in the pricing schedule on a daily DTS-wide basis and do not account for locational and hourly constraints.

Origin did not support removing the injection test from the congestion uplift framework. Origin noted that the requirement to physically inject gas for congestion uplift protection encourages market participants to support their underlying customer demand with a corresponding source of supply, which has been important for maintaining security of supply. It also means that both injectors and withdrawers face locational congestion risks, which provides an incentive for market participants to diversify supply across different injection points.¹³⁹

Daily DTS-wide basis of congestion uplift mechanism

Stakeholders views on the new daily DTS-wide congestion uplift mechanism were mixed. It was supported by the Victorian Government as it was a simplified approach for allocating congestion uplift.¹⁴⁰ Most stakeholders did not support it for the following reasons outlined below:

- AEMO and AGL noted that a system-wide mechanism would not account for locational congestion caused by withdrawals. It was unclear whether a participant must withdraw gas at the location they hold exit capacity certificates for congestion uplift protection. For example, a participant may be able to use exit capacity certificates at Culcairn to protect against the risk of congestion uplift for its withdrawals at Iona.¹⁴¹
- AEMO, AGL, EnergyAustralia¹⁴² and Origin¹⁴³ did not support a congestion uplift mechanism based on daily withdrawals. It may favour peaky loads, such as GPG, at the expense of flat loads.¹⁴⁴ If market participants used their entire daily capacity certificate volume at the same time of the day it could exceed the capacity of the DTS.¹⁴⁵ AEMO suggested that an AMIQ or equivalent interval concept remain in the congestion uplift mechanism so participants are incentivised to manage withdrawals across the gas day.¹⁴⁶
- Origin suggested that GPG could create significant intra-day congestion but avoid congestion uplift costs due to daily withdrawals being within exceedance levels.¹⁴⁷
- Origin noted that injectors would not face congestion uplift costs, which may weaken incentives for market participants to diversify supply and/or address locational supply constraints.¹⁴⁸
- ERM did not think it would allocate costs to their cause or provide incentives for the efficient operation of the market. ERM suggested it would give rise to complexity and cost, without providing any real benefits to market participants or gas consumers.¹⁴⁹

138 AEMO, submission on draft determination, p3.

139 Origin, submission on draft determination, p4.

140 Victorian DELWP, submission on draft determination, p1.

141 Submission on draft determination: AEMO, p3; AGL, p4.

142 EnergyAustralia, submission on draft determination, p3.

143 Origin, submission on draft determination, p2.

144 AEMO, submission on draft determination, p4.

145 AGL, submission on draft determination, p4.

146 AEMO, submission on draft determination, p4.

147 Origin, submission on draft determination, p2.

148 Ibid, p2.

149 ERM, submission on draft determination, p.2.

Some stakeholders suggested that, instead of the daily DTS-wide congestion uplift mechanism in the draft rule, that the Commission should consider a zonal and interval-based congestion uplift mechanism for the final rule. The Commission's consideration of a zonal and interval-based congestion uplift mechanism is set out in section 4.3.4.

Uncontrollable exit capacity certificates

As discussed earlier, there is an interaction between this rule change and the *DWGM Improvements to the AMDQ regime* rule change. A number of stakeholders made one submission covering both draft determinations. Stakeholder comments on the concept of uncontrollable exit capacity certificates in the draft AMDQ rule are included below as they are relevant to the design of the congestion uplift framework.

Stakeholders did not support the draft AMDQ rule to create a new concept of uncontrollable exit capacity certificates to provide congestion uplift protection and to auction these certificates for the reasons outlined below:

- The need to participate in an auction for uncontrollable exit capacity certificates could pose an additional barrier to entry within the retail market.¹⁵⁰
- It would require market participants to incur additional costs compared to the current arrangements. MEU and Brickworks noted that it would replace the existing free allocation of AMDQ and impose new costs on some industrial and manufacturing consumers to minimise the risk of congestion costs.¹⁵¹ Origin noted that it would introduce new costs to be managed, compared to the current arrangements in which tariff V customers are dynamically allocated to retailers upon acquisition.¹⁵²
- It could create challenges for market participants from a risk management perspective. Origin noted that, given the high level of churn of tariff V customers, market participants would face significant uncertainty around the level of uncontrollable exit capacity certificates required to manage supply to their customer base. ERM noted that participants who have secured certificates are likely to face incentives to hold onto them. Brickworks noted market participants that have not obtained sufficient certificates would become fully exposed to congestion uplift.¹⁵³
- Given that uncontrollable exit capacity certificates do not provide tie-breaking rights, they are likely to be of low value to most participants. This may allow GPG loads to fully protect themselves against congestion uplift payments at minimal cost, whereas participants withdrawing at controllable locations may face competition for relatively scarce controllable exit capacity certificates.¹⁵⁴
- There is potential for hoarding of uncontrollable exit capacity certificates that could work against the long-term interest of gas users by discouraging new entrants. Smaller

150 Victorian DELWP, submission on draft determination, p2.

151 Submissions on draft determination: MEU p2, Brickworks, p1.

152 Origin, submission on draft determination, p1.

153 Submissions on draft determination: Origin, p1; ERM, p2; Brickworks, p1.

154 AEMO, submission on draft determination, p4.

retailers, who may lack the financial capacity to successfully bid for uncontrollable exit capacity certificates could disproportionately bear the cost of congestion uplift.¹⁵⁵

- Retailers' could, within their own businesses, allocate uncontrollable exit capacity certificates against small consumers (tariff V) and maximise their recovery of costs from large gas consumers (tariff D).¹⁵⁶
- A more efficient and pragmatic approach may be to dynamically allocate uncontrollable exit capacity certificates, similar to current arrangements.¹⁵⁷

Market and investment signals

Stakeholders did not consider that the revised congestion uplift mechanism proposed in the draft rule for the simpler wholesale price would provide useful signals:

- AEMO noted that, due to the weak relationship between cost to cause, it was not convinced that congestion uplift provides useful market or investment signals that would encourage efficient behaviour from participants.¹⁵⁸
- ERM suggested that the purchase of capacity certificates (with funds going to AEMO to offset the costs of operating the system) will not impact investment in the system, given that investment occurs primarily through the AER regulatory process, as opposed to being market lead.¹⁵⁹

4.3.3

Commission's analysis and final determination

The Commission's final determination is to not require AEMO to have category of uplift payments relating to a daily DTS-wide congestion uplift mechanism. While removing the injection test is expected to improve the congestion uplift framework, a daily DTS-wide congestion uplift mechanism is not expected to provide meaningful signals and incentives to avoid causing constraints.

Removing the injection test

Given the decision to no longer require a congestion uplift category, the rules setting out the injection test are removed along with all the other rules that related to AEMO applying a congestion uplift category.

In response to stakeholder concerns that removing the injection test may have broader potential flow on effects, the Commission considers that the final rule would make risk management easier for new entrants or small retailers that are only seeking to withdraw from the market as they would not need to take a physical injection position or complete the complex congestion uplift hedge processes. Market participants would continue to have an incentive to diversify their sourcing of gas from different injection points to balance their net daily injection and withdrawals positions and associated exposure to imbalance payments.

Daily DTS-wide congestion uplift mechanism

¹⁵⁵ Submissions on draft determination: ACCC, p2; AER, p2; Brickworks, p2

¹⁵⁶ Brickworks, submission on draft determination, p2.

¹⁵⁷ Submissions on draft determination: AEMO, p12; Vic DELWP, p2.

¹⁵⁸ AEMO, submission on drafter determination, p4.

¹⁵⁹ ERM, submission on draft determination, p2.

Following stakeholder feedback it is noted that the proposed daily basis of the congestion uplift mechanism is not the right time-frame and is unlikely to provide sufficient incentives for market participants to avoid causing constraints.

Also, the DTS-wide basis of the congestion uplift mechanism is too broad to provide sufficient incentives for market participants to avoid causing constraints in specific zones within the system.

Uncontrollable exit capacity certificates

The Commission's final determination in relation to the *DWGM improvements to AMDQ regime* rule change is to no longer introduce the concept of uncontrollable exit capacity certificates, for the following reasons:

- The need for a market participant to participate in an auction and purchase uncontrollable exit capacity certificates to protect against congestion uplift could impose an additional barrier to entry.
- It would create challenges for market participants from a risk management perspective. If a retailer has a high level of churn of residential customers and uncertainty over the total load of their customer base across peak and non-peak seasons, it would face uncertainty over the level of uncontrollable exit capacity certificates required to manage its risk of exposure to congestion uplift payments.
- Most uncontrollable withdrawals, with exceptions such as GPG, are unable to control their withdrawals of gas and act in a way to avoid causing a constraint. Therefore, the auctioning of uncontrollable exit capacity certificates is not expected to provide clear signals or incentives to avoid congestion. For these reasons, the Commission does not consider that uncontrollable exit capacity certificates should be auctioned and paid for. The Commission's consideration of an alternative approach in which uncontrollable exit capacity certificates are dynamically allocated and provided freely is outlined in section 4.4.

This has resulted in the need for consequential changes to be made to the *DWGM simpler wholesale price* final rule.

Market and investment signals

The Commission's final determination is that a daily DTS wide congestion uplift mechanism is unlikely to provide clear signals and incentives for market participants to avoid causing constraints. As the DWGM is a market carriage system where access is non-firm, the purchase of exit capacity certificates is unlikely to incentivise investment in the DTS, as this is expected to remain primarily through the AER regulatory process.

4.3.4

Zonal and interval-based congestion uplift mechanism

To address the problems with the daily DTS-wide congestion uplift mechanism, as set out above, the Commission considered an alternative option of a zonal and interval-based congestion uplift mechanism. This section explains the nature of a zonal and interval based mechanism, stakeholder views on it and the Commission's final determination to not apply this approach.

Description of zonal and interval-based congestion uplift mechanism

A zonal and interval-based congestion uplift mechanism could retain the following aspects of the draft rule:

- allocation of uplift payments so far as practicable to the cause
- removing the injection test and need to submit injection hedge nominations for congestion uplift hedge
- market participants able to purchase exit capacity certificates to provide congestion uplift protection for controllable withdrawals.

This mechanism could involve the following changes from the draft rule:

- The concept of uncontrollable exit capacity certificates could be removed and there would be no auction or need to purchase uncontrollable exit capacity certificates. Instead, AEMO would dynamically allocate an uncontrollable exit capacity 'amount' to market participants on a zonal and interval basis.
- Market participants would be exposed to congestion uplift payments where their withdrawals exceed their controllable exit capacity certificates and uncontrollable exit capacity 'amount', on a zonal and interval basis.

Stakeholder views

The option of a zonal and interval-based congestion mechanism was not included in the consultation paper or draft determination but was developed following stakeholder feedback on the draft rule. The Commission discussed this option with stakeholders at the DWGM Technical Working Group meeting on 9 December 2019.

Some stakeholders considered that a zonal and interval-based congestion uplift mechanism would be an improvement on a daily DTS-wide congestion uplift mechanism, however it was unlikely to be practical.

AEMO considered that a zonal congestion uplift mechanism would be more complex than the current market design, which is one of the issues associated with retaining congestion uplift and changing the underlying basis used for the exceedance calculation. AEMO noted that applying a zonal overlay would address the disconnect between locational capacity certificates and congestion uplift in the daily DTS-wide congestion uplift mechanism, however it would not be practical to apply a zonal approach for uncontrollable exit capacity certificates as participants do not provide demand forecasts on a zonal basis, nor is the retail market zonal. As GPG are uncontrollable withdrawals, AEMO were concerned about how GPG may fit into a zonal based framework.¹⁶⁰

Commission's analysis

The Commission considers a zonal and interval-based mechanism would be more complex than the current congestion uplift framework and it does not appear that a practical mechanism could be developed that would provide clear signals and incentives that outweigh the costs.

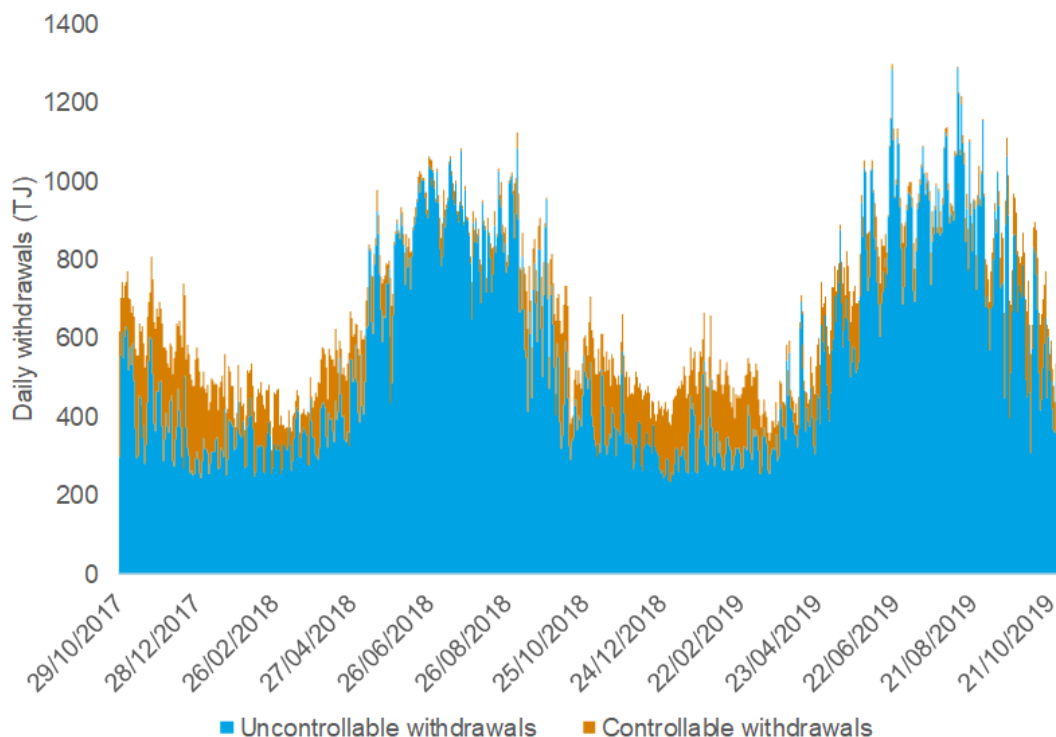
¹⁶⁰ AEMO, submission on draft determination, pp.3-4 and 6.

Practicality of mechanism

There are a number of limitations associated with developing a practical zonal and interval-based congestion uplift mechanism:

- AEMO would have to take on the role of calculating a new baseline for market participants' exposure to congestion uplift payment. As uncontrollable exit capacity certificates are removed, AEMO would need to derive the level of uncontrollable withdrawal exceedance for congestion uplift on some basis, for example by dynamically allocating an amount using demand forecast profiles. Whilst dynamic allocation is used for AMDQ in relation to tariff V customers, it would be more challenging to develop for tariff D customers.
- Participants would have a limited ability to manage the risk of congestion uplift payments as participants would not be able to buy certificates to protect against congestion uplift and are unlikely to invest in additional pipeline capacity.
- Developing a zonal based mechanism would involve fundamental changes to the market that are unlikely to provide material benefits. The DWGM is a 'single hub' with non-site specific demand forecasts provided on a hub-wide basis and with a single retail market. It does not appear to be practical to divide uncontrollable withdrawal exceedance into zones as this would require uncontrollable withdrawals to move to forecasting demand on a zonal basis. This would have broader implications, for example in terms of changes required to systems and processes, and is unlikely to produce a meaningful signal for congestion.
- It would be difficult to determine a reasonable basis for GPG units:
 - *If GPG were to remain classified as uncontrollable* - the uncontrollable exit capacity 'amount' would need to be calculated on some basis. Historical gas usage from a GPG unit over one year or averaged over a number of years may not be appropriate as it is likely to be dependent on outages at other generators, weather conditions and other factors. Alternatively a baseline using the maximum allowable withdrawals in the grid connection agreement for GPG units would be too high.
 - *If GPG were to be made controllable* - GPG could protect against congestion uplift payments by purchasing exit capacity certificates, increasing the proportion of total withdrawals that are controllable. However, the remaining uncontrollable withdrawals, that would still represent the majority of system withdrawals (see Figure 4.1) would not have an ability to respond to avoid potential system constraints. In addition, re-classifying GPG as controllable withdrawals would have broader implications as GPG units would need to be accredited with AEMO and scheduled.

Figure 4.1: Volume of uncontrollable and controllable withdrawals in the DTS, October 2017 to October 2019



Source: AEMO

Materiality of congestion uplift payments

Creating a more complex congestion uplift framework would also not be appropriate given that congestion uplift payments have generally not been material in recent years.

Since the large congestion uplift payment event on 1 October 2016, congestion uplift payments have been relatively small:

- in 2017 total uplift payments were \$303,085, of which congestion uplift payments were \$26,590
- in 2018 total uplift payments were \$4,427, of which congestion uplift payments were \$3,860.¹⁶¹
- in 2019 total uplift payments were \$115,290, of which congestion uplift payments were \$14,630.

For more information on uplift payments in recent years, refer to section 1.2.3.

¹⁶¹ The DWGM background paper incorrectly stated that total uplift payments were \$1.08 million in 2018. For more information on the correction of this data, refer to the information sheet on the AEMC's website.

4.4 Final determination to not require a congestion uplift category

This section describes the final rule which no longer requires a congestion uplift category and stakeholder views on the Commission's preliminary thinking on this issue received at the DWGM technical working group meeting on 9 December 2019.

4.4.1 Description of final rule to not require a congestion uplift category

The final rule makes a number of changes to the NGR to simplify uplift payments by no longer requiring AEMO to develop a congestion uplift category.

The final rule retains the current principle in the NGR that 'uplift payments are to be allocated so far as practicable to the cause'¹⁶². It also retains elements of the draft rule that simplified the congestion uplift framework by removing the need to inject gas, hold AMDQ and submit injection hedge nominations for congestion uplift hedge and removes rules and definitions in relation to these elements.

The most significant change between the draft and final rule is that the final rule removes the requirement for AEMO to take into account the extent to which a market participants AMIQ (or exit capacity certificates) are exceeded by its scheduled withdrawals and forecast demand in allocating uplift payments.¹⁶³ This removes the link between AMDQ or capacity certificates and uplift payments and the requirement for a congestion uplift category.

The final rule clarifies that the total uplift payments determined for a gas day must equal the total of any ancillary payments determined for that gas day. NGR 240(1)(a) is amended and 240(1)(b) is deleted as the link to transmission constraints is unnecessary. This is because ancillary payments need to be recovered via uplift payments whether they are linked directly to a transmission constraint or not, and further information on attribution of ancillary payments to transmission constraints is not likely to be useful to market participants.¹⁶⁴ Also, given the broad definition of transmission constraints in the NGR, AEMO considers that it is difficult to determine what share of ancillary uplift payments are determined by and attributed to a transmission constraint.

NGR 240(9)(b) to (d) are deleted as the need for AEMO publish information about quantities of gas withdrawn by tariff V and D withdrawal points for the purposes of uplift payments is redundant. There will no longer be a link between congestion uplift and AMDQ or capacity certificates. Information on the amount of uplift payments by category, and the associated volumes in GJ, will continue to be published.

By 1 January 2022, AEMO is required to review, and where necessary, amend and publish its uplift payment procedures, ancillary payment procedures and any other relevant procedures to take into account the amending rule.

¹⁶² NGR 240(2)(a)

¹⁶³ NGR 240(2)(b)

¹⁶⁴ A requirement is retained for AEMO to determine and publish to extent to which transmission constraints were caused by a failure of the DTS SP to fulfil obligations under the service envelope agreement, when ancillary payments are attributable to that constraint (See 240(9)) of the Amending Rule) as changes to DTS SP uplift were considered out of scope. Also there may be some value in this information for market participants.

4.4.2

Stakeholder views

The more preferable final determination to not require a congestion uplift category was not included in the consultation paper or draft determination as a specific option but was raised by some stakeholders in submissions and discussed at the DWGM technical working group meeting on 9 December 2019. Stakeholder views were mixed:

- AEMO suggested that, without a fundamental change to the market design, removing congestion uplift is the most pragmatic and cost-effective solution. A more fundamental change to the market design could involve setting locational prices, as opposed to the current approach in which market prices are set for DTS-wide, however AEMO did not consider that such a change would pass a cost-benefit test.¹⁶⁵
- ERM supported removing the congestion uplift mechanism and recovering total uplift payments through the remaining uplift types.¹⁶⁶ ERM considered that this would be a simpler and more transparent approach and that surprise uplift and deviation payments provide incentives for market participants to minimise deviations and forecast accurately, and therefore go some way to allocate costs (including system congestion costs) to their cause.¹⁶⁷

Stakeholders raised the following questioned or concerns related to removing the congestion uplift category:

- Origin questioned whether it was better than the current arrangements and suggested that internalising withdrawal constraints in the pricing schedule may reduce ancillary payments and therefore address the problem. Origin questioned whether potential flow on effects (such as financial) of removing the congestion uplift category had been considered.¹⁶⁸
- AEMO noted that if congestion uplift were removed it may be more difficult to allocate uplift payments to congestion DTS SP.¹⁶⁹
- EnergyAustralia asked how Longford production falling over may interact with the uplift framework.¹⁷⁰

4.4.3

Commission's analysis and final determination

The Commission's final determination is to no longer require a congestion uplift category.

The current congestion uplift framework is complex, does not effectively allocate cost to causers, does not provide meaningful short-term signals to avoid causing constraints or long-term investment signals and it can be difficult for market participants to manage the risk of congestion uplift payments.

165 AEMO, submission on draft determination, p3.

166 Currently, the other uplift payment types are surprise uplift, congestion DTS SP uplift and common uplift.

167 ERM, submission on draft determination, p1.

168 AEMC, *Minutes of technical workshop on DWGM simpler wholesale price and DWGM improvement to AMDQ regime*, 9 December 2019, p2.

169 Ibid, p3.

170 Ibid, p2.

It does not appear practical to develop a baseline-based congestion uplift mechanism that would appropriately address the issues with the current arrangements. It is therefore more preferable to remove the congestion uplift category.

There are a number of benefits to this approach:

- It retains the principle that uplift payments are to be allocated so far as practicable to the cause, which is important to guide the continued development of the uplift payment procedures.
- It removes the need for market participants to manage the risk of incurring congestion uplift payments. The rule removes the concept of congestion uplift hedge, by removing the requirement for market participants to inject gas or submit injection hedge nominations to activate congestion uplift protection.
- It reduces the administrative burden for AEMO and market participants as it removes the complex congestion uplift hedge processes.

The Commission considers that this component of the rule is likely to contribute to the NGO as it:

- simplifies risk management, which may encourage interregional trade and competition
- reduces regulatory and administration burden for AEMO and market participants.

The rule does not spread congestion uplift payments across all market participants, as proposed by the rule change proponent, but instead removes the requirement for a baseline-based congestion uplift mechanism. This is preferable as uplift payments more broadly would continue to be allocated so far as practicable to the causer and the rule would not require congestion uplift to be calculated, reducing administrative burden on AEMO and market participants.

The categories of uplift are set out in AEMO's uplift payment procedures. AEMO must review, and where necessary, amend its procedures to reflect the changes to the rules relating to congestion uplift. AEMO is required to consult with industry in updating these procedures. Removal of the congestion uplift category from AEMO's procedures may result in increases in other uplift categories, guided by the principle that uplift payments are to be allocated so far as practicable to the cause.

Some stakeholders questioned whether the removal of the congestion uplift category may increase the allocation of uplift payments to common uplift, that would then be allocated across market participant. Under the current arrangements common uplift is allocated to market participants based on their actual daily withdrawals as a proportion of total actual daily system withdrawals. Since 2017, the majority of uplift payments have been allocated to surprise uplift, with a relatively small amount allocated to common uplift, as shown in Figure 1.1. The Commission notes that AEMO will need to amend their uplift (and other) procedures to reflect the rule through industry consultation, which may involve changes to the calculation of other uplift categories.

The Commission's response to issues raised by stakeholders related to no longer requiring the congestion uplift category are outlined below.

The Commission notes Origin's concern about potential flow on effects of removing congestion uplift and does not expect this to result in material negative effects. The Commission notes that:

- congestion uplift does not currently provide meaningful short-term signals that market participants can foresee and act to avoid causing a constraint or meaningful long-term investment signals, which occur primarily through the regulatory process
- other market arrangements, that provide important financial and system balancing incentives for market participants, will not change. The rule does not change the incentives for market participants to:
 - balance their injections and withdrawals on a daily basis (imbalance payments),
 - avoid deviating from their scheduled injections and withdrawals (deviation payments), or
 - avoid deviating from scheduled injections, effective demand forecast and controllable withdrawals and changing demand forecast and controllable withdrawals between schedules (surprise uplift).

The Commission notes AEMO's position that the removal of congestion uplift may make it more difficult to allocate uplift payments to congestion DTS SP. The focus of this rule change request was on addressing issues relating to congestion uplift, as opposed to congestion DTS SP. In amending its procedures to reflect the rule, AEMO will have the opportunity to consider changes to the allocation of ancillary payments to uplift payment types, which may include congestion DTS SP. This is a matter for AEMO to consider in consultation with industry.

The Commission notes EnergyAustralia's question about how the potential for Longford production to decline over time may interact with the uplift framework. The Commission notes that the congestion uplift framework was originally designed for the DTS when it was a single pipeline from Longford to Melbourne, and with expansions of the DTS over time, it is no longer providing meaningful signals or incentives to avoid causing constraints. The uplift framework will retain the principle of allocating costs so far as practicable to the cause and provide incentives for market participants and the DTS SP to avoid causing constraints. These principles provide a framework under which future changes to the DTS, such as the decline of injections from Longford or new injections from a new injection point (e.g. an import terminal), can be managed. AEMO will need to amend their uplift (and other) procedures to reflect this rule change, and may amend these procedures further, at a later date, if it considers there is a need to do so.

5 IMPLEMENTATION

This chapter discusses the implementation timing, transitional arrangements and level of specification in the Commission's rule.

5.1 Timing for commencement of the rule

The timing for commencement of the rule is as follows:

- The amendments relating to AEMO taking into account transmission constraints affecting withdrawals of gas at system withdrawal points at which withdrawal bids may be made in the pricing schedule are to commence on 31 March 2020.¹⁷¹ The Commission expects that AEMO will consult with industry on any changes to the gas scheduling procedures to take into account the amending rule prior to commencement of the rule.
- The amendments relating to the removal of the requirement for a congestion uplift category are to commence on 1 January 2023,¹⁷² immediately after the commencement of schedule 1 of the *National Gas Amendment (DWGM improvements to AMDQ regime) Rule 2020*.
- The transitional arrangements are to commence on 19 March 2020.¹⁷³

5.2 Transitional arrangements

The transitional arrangements require that, by 1 January 2022, AEMO must review and where necessary, update and publish the uplift payment procedures, ancillary payment procedures, and any other relevant procedures to take into account the final rule.

The amendments relating to AEMO taking into account transmission constraints affecting withdrawals of gas at system withdrawal points at which withdrawal bids may be made in the pricing schedule are to commence on 31 March 2020. The transitional arrangements waive some rules relating to AEMO's consultation requirements when amending the gas scheduling procedures to take into account the final rule. This is in order to allow a 31 March 2020 implementation date. The Commission expects that AEMO will consult with industry prior to the commencement of the rule, however through a shorter process than required under Part 15 of the NGR.

¹⁷¹ Schedule 1 of the *National Gas Amendment (DWGM Simpler Wholesale Price) Rule 2020*

¹⁷² Schedule 2 of the *National Gas Amendment (DWGM Simpler Wholesale Price) Rule 2020*.

¹⁷³ Schedule 3 of the *National Gas Amendment (DWGM Simpler Wholesale Price) Rule 2020*.

ABBREVIATIONS

AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
AIHN	Agency Injection Hedge Nomination
AMDQ	Authorised Maximum Daily Quantity
AMDQ cc	AMDQ credit certificates
AMIQ	Authorised Maximum Interval Quantity
Authorised MDQ	Authorised Maximum Daily Quantity
COAG Energy Council Commission	Council of Australian Government's Energy Council See AEMC
DFPC	Directional Flow Point Constraint
DTS	Declared Transmission System
DTSSP	Declared Transmission System Service Provider
DWGM	Declared Wholesale Gas Market
GPG	Gas powered generation
IHN	Injection Hedge Nomination
MEU	Major Energy Users
MCE	Ministerial Council on Energy
NFTC	Net Flow Transmission Constraint
NGL	National Gas Law
NGO	National Gas Objective
NGR	National Gas Rules
WORM	Western Outer Ring Main

A SUMMARY OF OTHER ISSUES RAISED IN SUBMISSIONS

This appendix sets out a summary of other issues raised by stakeholders during the rule change. If an issue raised in a submission has been discussed in the main body of this document, it has not been included in this tab. Table A.1 provides a summary of other issues raised in the first round of consultation and the AEMC's response to each issue.

Table A.1: Summary of other issues raised in submissions - first round of consultation

STAKEHOLDER	ISSUE	AEMC RESPONSE
<p>AEMO, pp 2 and 11. AGL, pp.1-2.</p>	<p>AEMO suggest if congestion uplift is spread across market participants, consideration should be given to how congestion will be efficiently managed in the future. AEMO previously highlighted (in the 2017 DWGM review) that a planning standard could be considered to mitigate against future congestion by ensuring that there is an efficient level of investment in network capacity to meet the needs of industry and consumers.</p> <p>AGL also suggested that the AEMC consider whether a planning standard should be applied to the DTS.</p>	<p>State and territory governments are responsible for the regulation of gas transmission and distribution pipelines within their jurisdiction. This includes service reliability standards. Therefore, consideration of whether to apply a Planning standard in the DTS is a matter for the Victorian Government.</p>
<p>AGL, p.3.</p>	<p>Suggest that the AEMC and AEMO could investigate whether the procedures can be made clearer to provide greater transparency around how uplift charges, including congestion uplift, are incurred. Providing more information for participants may assist them to mitigate against charges.</p>	<p>The draft rule changes the uplift mechanism and will require AEMO to amend their uplift procedures through a consultation process. This will provide the opportunity for participants to provide input into these procedures.</p>
<p>AGL, p.3. EnergyAustralia, p.3.</p>	<p>AGL suggest that market information should be improved through advance notices of constraints that market participants can respond to. AGL suggests that such notices, coupled with more frequent</p>	<p>The Commission notes the suggestion to improve market information through advance notices of constraints. This proposal is outside scope for this</p>

STAKEHOLDER	ISSUE	AEMC RESPONSE
	provisional schedules (e.g. every hour, 24 hours before a schedule), could be a simple change that gives participants better information to manage their exposures, though not directly simplifying the price.	rule change and is a matter that AEMO can address through changes to its procedures.
EnergyAustralia, p.3.	EnergyAustralia suggested that there is potential for the minimisation of market impacts from unplanned outage events (i.e. 1 October 2016 Longford outage) by improving information flow between production plant operators, AEMO and participants so that participants have more time to adjust injections at others points into the DTS, therefore minimising the cost of out of merit gas. EnergyAustralia encouraged the AEMC to investigate further the asymmetry of information in the market that often occurs during unplanned outages.	The Commission notes the point raised in relation to potential asymmetry of information during unplanned outages. AEMO may be able to address this by amending its procedures and publishing more information. Stakeholders could submit a rule change if they consider that additional information should be included on the Bulletin Board.
AEMO, p. 17.	The AEMC should consider whether extending the proposed solution to include constraints on supply congestion is beneficial. Supply congestion may occur where there are more bids for injection at less than the marginal price than can be accommodated by the pipeline. This scenario may be possible at Iona and if any of the proposed LNG import facilities are built. Any unintended consequences for DTS SP congestion uplift should also be considered.	The Commission considers that extending the rule change to include constraints on injections is out of scope as it goes beyond the issues identified in the rule change request relating to the pricing schedule.
ERM, pp.2-3.	ERM suggest that there are situations where the current market design does not provide incentives for shippers to adhere to their operating schedules and forecast withdrawals as accurately as possible. For example, on 1 October 2016, AEMO issued an ad-hoc schedule that replaced the 6 AM operating schedule. ERM suggest that the effect of this ad hoc schedule was that those who failed to deliver gas in accordance with the original 6 AM schedule had	The Commission notes potential amendments related to ad hoc schedules are out of scope to be considered as part of this rule change request.

STAKEHOLDER	ISSUE	AEMC RESPONSE
	<p>minimal deviations and hence minimal exposure to deviation payments and surprise uplift. ERM suggest that this is another part of the market design that would be worth reviewing.</p>	
<p>Major Energy users, p.3.</p>	<p>As there is no quantitative assessment or an assessment of the costs that will be spread across market participants, the MEU has difficulty accepting the rule change proposal would improve outcomes for most end users.</p>	<p>For the reasons outlined in chapter 4, the Commission has decided not to spread congestion uplift across market participants. Therefore, a quantitative assessment of the costs of spreading congestion uplift is not necessary.</p>
<p>Major Energy Users, p.3.</p>	<p>There has been no assessment as to whether a significant proportion of the uplift charges that will be socialised derive from specific areas of the DTS. If this is the case, the uplift charges should be allocated to where the uplift is caused and so provide a price signal for needed investment to address the congestion. The MEU notes that in electricity market, the AEMC is considering dynamic regional pricing to address localised congestion costs. There is no contemplation that this might be an option for the DWGM.</p>	<p>As outlined in chapter 4, the Commission does not consider that congestion uplift provides a price signal for pipeline investment to address congestion.</p> <p>The draft rule is not to spread congestion uplift and retain an approach based on allocating the cost of constraints as far as practicable to the causer.</p> <p>The Commission notes that dynamic regional pricing is out of scope to be considered through this rule change request.</p>
<p>AEMO, p.15.</p>	<p>AEMO suggests that the AEMC considers improving transparency by requiring the methodology for the determination of DTS SP uplift to be included in the AMDQ Procedures and moving limitations to liability for DTS Service Provider uplift in rule 240(7) from the Service Envelope Agreement to the rules. Consideration also needs to be given to the impact of the AEMO rule change request on application of constraints in the DTS on NFTCs and DTS SP congestion uplift.</p>	<p>The suggestion to move limitations of liability for the determination of DTS SP uplift from the Service Envelope Agreement to the rules is outside scope for this rule change. If a stakeholder considered that this information should be moved to the rules, it could submit a rule change request.</p>

STAKEHOLDER	ISSUE	AEMC RESPONSE
		<p>See section 3.2 for comments in relation to the application of constraints in the DTS on NFTCs.</p> <p>The draft rule is not expected to have an impact on DTS SP congestion uplift. The draft rule to internalise withdrawal constraints in the determination of the pricing schedule is not expected to result in a requirement for out of merit order gas to be constrained on and is not expected to result in additional DTS SP congestion uplift.</p>
Powershop, p.2.	Powershop does not consider that the two rule changes that were consolidated into the <i>DWGM simpler wholesale price</i> rule change address similar issues and should have been considered in isolation from each other, as separate rule changes.	<p>The Commission considers that the two rule change requests relate to a common subject matter and are seeking to address similar issues. The issues relate to wholesale pricing in the DWGM, which is inter-related between market prices set in the pricing schedule and ancillary and uplift payments resulting from the operating schedule.</p>

Table A.2 provides a summary of other issues raised in the second round of consultation and the AEMC's response to each issue.

Table A.2: Summary of other issues raised in submissions - second round of consultation

STAKEHOLDER	ISSUE	AEMC RESPONSE
Origin, p2	Origin raised issues in relation to the AMDQ rule change and congestion uplift framework and considered that further consultation should be undertaken with market participants ahead of making a final determination. This should ideally be through the formation of a technical working group.	The Commission decided to extend the making of the final determination to discuss complexities and interactions between the DWGM simpler wholesale price and DWGM improvements to AMDQ regime rule changes. A technical working group was established.
AGL, p3. EnergyAustralia, p3.	EnergyAustralia suggested that better market information could assist in minimising market impacts of ancillary payment events, such as the 1 October 2016 Longford event. Improving information flow between production plant operators, AEMO and participants would provide participants have more time to adjust injections at other points into the DTS, therefore minimising the cost of out of merit order gas being injected. AGL suggested that market impacts could be minimised through greater market information/notices about constraints and issues with supply sources, plus additional provisional schedules, for example an hour before each actual schedule.	The Commission notes the suggestion to improve market information through advance notices of constraints. This proposal is outside scope for this rule change and is a matter that AEMO may be able to address through changes to its procedures.
EnergyAustralia, p3.	EnergyAustralia noted that ancillary payments are more frequently occurring due to issues outside of the DTS, for example production issues with the Longford gas plant. Uplift in this case would appear to be more reflective of surprise uplift.	The Commission notes the important role of surprise uplift in allocating costs to cause.
Brickworks, p2.	Brickworks were concerned that the draft rule could result in a similar incident to 1 October 2016 - when large congestion uplift costs are passed through to a small volume of withdrawals that did not have congestion uplift protection. Brickworks only supports the	The Commission's final determination removes the congestion uplift category and therefore removes the need for market participants to manage the risk of congestion uplift payments.

STAKEHOLDER	ISSUE	AEMC RESPONSE
	<p>removal of the injection test if either one of the following amendments are made: (1) removing injection test is amended to include physical injections from all injection points in the injection test, and (2) removing injection test should be accompanied by an obligation on AEMO to amend the uplift procedures to remove ancillary payment costs that are not caused by the MP who are allocated congestion uplift. (3) Add an obligation on AEMO to remove ancillary costs that are due to unplanned or storage facility outages.</p>	<p>AEMO is required to amend their Uplift (and other) procedures to reflect the rule through industry consultation. AEMO may consider amending the methodology for other uplift payment categories.</p>
<p>AEMO, p3.</p>	<p>AEMO advocate for the introduction of a statutory planning standard to address locational and system congestion.</p>	<p>State and territory governments are responsible for the regulation of gas transmission and distribution pipelines within their jurisdiction. This includes service reliability standards. Therefore, consideration of whether to apply a Planning standard in the DTS is a matter for the Victorian Government.</p>
<p>AEMO, p6.</p>	<p>AEMO notes that draft rules 239 and 240 refer to daily and intraday transmission constraints as a pre-condition for determining ancillary payments and uplift payments. Given the nebulous definition of transmission constraints in the NGR, AEMO considers that in practice it is likely to be difficult to determine what share of ancillary uplift payments are determined by and attributed to a transmission constraint. AEMO questions whether this qualification is necessary and if it is a legacy issue. AEMO suggests that removing these references would not affect the policy intent of ancillary payments and uplift payments.</p>	<p>References to transmissions constraints in the new rule 240 have been modified.</p>

B LEGAL REQUIREMENTS UNDER THE NGL

This appendix sets out the relevant legal requirements under the NGL for the AEMC to make this rule determination.

B.1 Final rule determination

In accordance with ss. 311 and 313 of the NGL the Commission has made this final rule determination and accompanying final rule (which is a more preferable rule) in relation to the consolidated rule change proposal from the Victorian Minister for Energy, Environment and Climate Change and AEMO, on behalf of EnergyAustralia.¹⁷⁴

The Commission's reasons for making this final rule determination are set out in section 2.4.

A copy of the rule is attached to and published with this final rule determination. Its key features are described in section 2.1 and in more detail in Chapters 3 and 4.

B.2 Power to make the rule

The Commission is satisfied that the more preferable rule falls within the subject matter about which the Commission may make rules. The more preferable rule falls within s. 74 of the NGL as it relates to the operation of a declared wholesale gas market; and the activities of Registered Participants in a regulated gas market. Further, the more preferable rule falls within the matters set out in Schedule 1 to the NGL as it relates to AEMO's functions, powers and duties, and the duties and obligations of Registered Participants in regard to a declared wholesale gas market; and the setting of prices in the declared wholesale gas market.

B.3 Commission's considerations

In assessing the rule change request the Commission considered:

- its powers under the NGL to make the rule
- the rule change request
- submissions received during first and second round consultation, and at the Technical Working Group
- the Commission's analysis as to the ways in which the proposed rule will or is likely to, contribute to the NGO.

There is no relevant Ministerial Council on Energy (MCE) statement of policy principles for this rule change request.¹⁷⁵

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 Australian

¹⁷⁴ AEMO is the only other party of than the Victorian Minister who can propose changes to the rules relating to the DWGM. AEMO has proposed this rule change after receiving it from EnergyAustralia.

¹⁷⁵ Under s. 73 of the NGL the AEMC must have regard to any relevant MCE statement of policy principles in making a rule. The MCE is referenced in the AEMC's governing legislation and is a legally enduring body comprising the Federal, State and Territory Ministers responsible for energy. On 1 July 2011, the MCE was amalgamated with the Ministerial Council on Mineral and Petroleum Resources. The amalgamated council is now called the COAG Energy Council.

Energy Market Operator (AEMO)'s declared system functions.¹⁷⁶ The more preferable rule is compatible with AEMO's declared system functions because it leaves those functions unchanged.

B.4 Civil penalties

The Commission cannot create new civil penalty provisions. However, it may recommend to the COAG Energy Council that new or existing provisions of the NGR be classified as civil penalty provisions.

The rule does not amend any clauses that are currently classified as civil penalty provisions under the NGL or National Gas (South Australia) Regulations. The Commission does not propose to recommend to the COAG Energy Council that any of the proposed amendments made by the rule be classified as civil penalty provisions.

B.5 Conduct provisions

The Commission cannot create new conduct provisions. However, it may recommend to the COAG Energy Council that new or existing provisions of the NGR be classified as conduct provisions.

The rule does not amend any rules that are currently classified as conduct provisions under the NGL or National Gas (South Australia) Regulations. The Commission does not propose to recommend to the COAG Energy Council that any of the proposed amendments made by the rule be classified as conduct provisions.

¹⁷⁶ Section 295(4) of the NGL.