24 October 2019

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Mr John Pierce
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Australian Energy Market Commission
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Dear Mr Pierce

Australian Energy Market Commission draft determinations – DWGM Improvement to AMDQ Regime and DWGM Simpler Wholesale Price Rule Changes

AEMO welcomes the opportunity to comment on the Australian Energy Market Commission's (AEMC) draft determinations for the DWGM Improvement to AMDQ Regime and DWGM Simpler Wholesale Price National Gas Amendment (the rule changes).

AEMO is concerned that the rules are being drafted without a clear articulation of a detailed design that has been consulted on with industry. Instead the proposal is being progressed through the drafting of new rules and the deletion of old rules which may have unintended consequences and in places may be unworkable. In AEMO's experience for a significant market design change, it is more effective when the rules are drafted to meet the objectives of a design that has been developed upfront and in concert with industry and market institutions. Such an approach also allows the requirements in the rules to be mapped back to the objectives of the design and at present a lack of a design makes this difficult to do. As a result of this disconnect, while working through both draft determinations, AEMO has exposed a significant number of design issues, gaps and inconsistencies in the rules that will need to be resolved ahead of the final determination.

Despite the length of the reform process to date, the rule change process has not facilitated adequate feedback and design iteration prior to the draft rules being published. It is not clear to AEMO whether the AEMC is planning to undertake further development of a market design and industry consultation ahead of making a final determination (as a delay to the final rule would likely be required). AEMO's preference would be for further AEMC-led rounds of consultation and design development. If this is not possible, AEMO considers that the rules will need to be pitched with a lower level of prescription or changed in several areas as identified in our submission. By making the rules less prescriptive and leaving more of the design detail to the procedures, AEMO will be able to undertake further consultation and design work with industry as part of procedure development and implementation. While this approach would reduce the chance of problems emerging when AEMO implements the rules, AEMO considers that currently there is still a material risk that further rule changes may be required ahead of implementation to address unforeseen issues.

AEMO remains supportive of the overarching policy intent of both rule change proposals from the Victorian Government and committed to their implementation. Specifically, we support the

features of the draft rule for changes to the AMDQ regime. The phasing out of authorised MDQ and AMDQ credit certificates and their replacement with separate entry and exit capacity certificates will be a considerable improvement over the current arrangements. The ability for a greater number of participants to access tie-breaking rights for injections and withdrawals through a market-based mechanism will lead to more efficient outcomes in the DWGM. We also support the ability for AEMO to auction and participants to acquire capacity certificates on a more granular basis than the current 5-year period. This change will better enable participants to tailor their tie-breaking (and uplift hedging) requirements to their expected supply and demand. Shorter tenors for capacity certificates will also facilitate competition and support new entry to the market as capacity certificates will not be able to be locked up for an entire access period.

With respect to the simpler wholesale price rule change, our preference remains the removal of congestion uplift. However, the AEMC's preferred rule should be an incremental improvement over the status quo. It should be noted that retaining congestion uplift, while modifying other aspects of the market's design, is not without its issues as we discuss in further detail in this submission. Finally, we also support the application of constraints rule change but consider that this may need to be expanded to injection constraints and not just apply to withdrawal constraints.

Our submission provides our perspective on both rule changes. Our submission is in two parts: Attachment A provides our views on the simpler wholesale price rule change, and Attachment B provides our views on the improvements to the AMDQ regime rule change.

If you would like to discuss the contents of this submission further, please do not hesitate to contact Paddy Costigan, Manager Market Design on 03 9609 8407.

Yours sincerely,

Peter Geers

Chief Strategy and Markets Officer

Attachment A – Simpler wholesale price rule change

Overview of AEMO's view on the draft determination

AEMO agrees with the Victorian Government in its rule change proposal that risk management in the DWGM could be enhanced through making changes to the uplift framework. In particular, and as discussed in our previous submissions, the current way in which congestion uplift is allocated is deficient and poorly attributes cost to cause. Congestion uplift can also be (and 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.

In addition, congestion uplift can be challenging for participants to effectively hedge against. A congestion uplift hedge requires that a participant injects gas and owns AMDQ at the same location. This means that a participant who is buying gas from the pool or has supply at a different location from its AMDQ is unable to hedge against congestion uplift. Due to the various issues with the current design, we agree that congestion uplift is in need of reform.

As mentioned in previous submissions, AEMO is of the view that attempting to achieve cost-to-cause for congestion uplift under the current market design through tweaking the uplift framework is not practical. Instead, we have advocated throughout the AEMC's review and this rule change process for the introduction of a statutory planning standard to address locational and system congestion.[1] Uplift would then primarily be to recover the costs associated with 'surprise' events and DTS service provider non-performance. Without a more fundamental change to the market design e.g. locational pricing (a proposal that would be unlikely to stack up on a cost-benefit basis), AEMO is of the belief that removing congestion uplift remains the most pragmatic and cost-effective solution.

AEMO notes that the AEMC has opted instead to retain the congestion uplift category whilst making changes both to the design of congestion uplift and the rights required to hedge congestion uplift exposure. While we consider that this change will be an incremental improvement over the status quo, we believe that there will continue to be inefficient and potentially undesirable market outcomes from retaining congestion uplift. The most significant issue is that withdrawal congestion is largely a locational issue, whereas the approach in the draft rules treats congestion on a system-wide basis.

The disconnect between locational capacity certificates and congestion uplift can be addressed to an extent by applying a zonal overlay to congestion uplift hedging (a concept that we expand on below) for controllable exit certificates. However, for uncontrollable exit capacity certificates it would not be practical to use zones for the purpose of measuring and hedging against congestion uplift exposure. This is because participants do not provide demand forecasts on a zonal basis nor

[1] This view is supported by Recommendation 23 of the *Independent Review of Victoria's Electricity and Gas Network Safety Framework, Final Report dated December 2017* (the Grimes Review) – available at https://engage.vic.gov.au/electricity-network-safety-review

is the retail market zonal. In addition, due to how uplift payments are calculated and allocated the potential for misallocation of a surprise event to congestion uplift remains an issue.

It is also particularly concerning as to how gas-powered generation (GPG) will fit into this framework. Under the draft rules GPG will be able to acquire uncontrollable exit capacity certificates via an auction and use this to hedge their exposure. In AEMO's view, uncontrollable exit capacity certificates (which do not provide a tie-breaking right) are likely to be of low-value to most participants. There is also likely to be a large volume of uncontrollable exit capacity certificates available relative to demand given they are to be determined on a 1-20 system demand basis. As such, it seems probable that GPG loads will be able to fully hedge themselves against congestion at minimal cost whereas participants withdrawing at controllable locations will likely face competition for the relatively scarce controllable exit capacity certificates. This dynamic is further exacerbated by the lack of a profile applied to the new capacity certificates - we elaborate further on this below.

Thus, while the rule change addresses one of the deficiencies associated with congestion uplift (the requirement for AMDQ to be injection validated), new issues have been introduced and some existing problems will be retained. Due to the various issues associated with congestion uplift and its weak cost-to-cause relationship, we remain unconvinced that congestion uplift provides useful market or investment signals that will encourage efficient behaviour from participants. It is for these reasons that AEMO's preference remains the removal of congestion uplift as an uplift category and instead supports the introduction of a statutory planning standard.

If it is decided that congestion uplift is to be retained, AEMO has identified several issues with the proposed approach outlined in the draft determination and Rules that will need to be addressed as part of the final determination and in the Procedures. We remain concerned that there are a significant number of design elements that need to be resolved ahead of implementation and this makes it difficult to assess the benefits of the proposal. The remainder of this attachment discusses the issues we've identified in the draft determination.

Removal of profiling

In the current market, a participant's exposure to congestion uplift reflects how much their gas consumption exceeds their "right" - AMDQ. Under the current NGR and Procedures, AMDQ, for the purpose of hedging against congestion uplift, is subject to a profile – Authorised Maximum Interval Quantity (AMIQ). AMIQ limits how much of the daily quantity of AMDQ can be allocated to any one period. AMIQ reflects that while AMDQ is daily value, there are hourly constraints to system capacity and that system-wide demand exhibits a diurnal profile. AMIQ is similar to the concept of maximum hourly quantity (MHQ) that is common in gas transportation agreements.

Under the draft rules, AMDQ will be replaced by capacity certificates. However, for the purpose of hedging against congestion uplift, there is no new equivalent to AMIQ as references to profiles have been removed from the NGR in the draft determination. This implies that no profile applies to the new capacity certificates and that exceedance is calculated at a daily granularity i.e. a participant's daily consumption against the daily quantity of capacity certificates. Such a design may have unintended consequences. The lack of hourly or interval limits to capacity certificates

favours peaky loads at the expense of flat loads. For example, say a GPG is generating for the evening peak and is withdrawing its entire daily quantity of gas during this period. Let's say the peakiness of this withdrawal requires out-of-merit-order gas to be scheduled for this period to maintain minimum pressures. If the GPG has acquired a sufficient number of capacity certificates to meet its load on a daily basis, it will be fully hedged against the costs of this withdrawal (assuming the withdrawal was forecast by the GPG, and so there is no surprise exposure). This would not be possible under the current market as only a portion of the participant's AMDQ would be able to be allocated to the evening peak. The ancillary payments will therefore be allocated as uplift charges to other participants through congestion uplift and surprise uplift or, common uplift. This outcome is neither equitable nor is it likely to lead to efficient outcomes in scheduling or in the capacity certificates auction.

AEMO suggests that the AEMC needs to consider the application of profiles and interval limits for capacity certificates that are used to hedge against congestion uplift in the NGR. The nature of the profiles used (e.g. whether they are specified by participants or derived from forecasts) and limits imposed require industry consultation. If these matters are given a head of power in the NGR but their detail is to be specified in the Procedures, then AEMO would need to be able to undertake this consultation after the final determination has been made and prior to system implementation.

Capacity certificate interaction with the congestion uplift hedge

AEMO considers that there is a potential flaw in the intent of the draft rules with respect to how the congestion uplift hedge is calculated. Rule 420 states that, in making the Uplift Payment Procedures, AEMO must apply the following principles:

a) uplift payments are to be allocated so far as practicable to the cause;
b) in allocating uplift payments arising from events occasioning daily transmission constraints AEMO must take into account the extent to which a Market Participant's exit capacity certificates are exceeded by the sum of its scheduled withdrawals and forecast demand for the relevant gas day

The draft determination further elaborates by describing congestion uplift as where "Participants' withdrawals exceed exit certificates on a daily, DTS wide basis."

Under this drafting all exit capacity certificates are aggregated for a participant and measured against that participant's scheduled and forecast withdrawals for the purpose of determining exceedance on a DTS-wide basis. This is the practice in the current market but as the congestion uplift hedge is injection validated the exceedance calculation also reflects the system's (injection) capacity. This new arrangement is problematic as a participant could use a right at a controllable exit point to hedge an uncontrollable load or controllable withdrawals at a different location. This would mean that for the purpose of hedging against congestion uplift, there is no relationship between the capacity certificates and the actual capacity of the system that they are intended to reflect. For example, a participant could buy a capacity right at Culcairn to hedge its withdrawals at Iona. Given the withdrawal capacity at Culcairn is not related to the withdrawal capacity at Iona, this is not a practical outcome.

AEMO proposes that if congestion uplift is retained, and the proposed modification to AMDQ in the other rule change is progressed, that calculation of capacity certificate exceedance will need to be done on a locational basis. A pragmatic way of achieving this would be to use the same zones as are used in the determination of capacity certificates under rule 328B. Under this approach exposure to congestion uplift would be equal to the difference between the participant's total withdrawals in that zone and their total exit capacity certificates in that zone for the relevant horizon. Such an approach would mean that Culcairn zone exit capacity certificates could only be used to hedge against Culcairn zone withdrawals. It is assumed that uncontrollable withdrawals will be in a single system-wide zone. A single zone for uncontrollable withdrawals is probably the most pragmatic approach for non-site-specific demand but may present challenges for large site-specific demand, and in particular GPG. A zonal congestion hedging arrangement is more complex than current market's design but is one of the issues that arises from retaining congestion uplift and changing the underlying rights used in the exceedance calculation. The final design would require further consultation with industry.

AEMO also notes that the rule 240(b) only refers to exit capacity certificates and not uncontrollable exit capacity certificates. We assume that the intent is that congestion uplift will apply to both uncontrollable and controllable withdrawals and therefore exceedance is to be measured against both exit capacity certificates and uncontrollable exit certificates. We question whether the reference to only exit capacity certificates could be a drafting error.

Transmission Constraints

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. AEMO questions whether this qualification is necessary. Given the nebulous definition of transmission constraint in the NGR, we consider that in practice it is likely going to be difficult to determine what share of ancillary and uplift payments are determined by and attributable to a transmission constraint. Further, the Procedures specify how ancillary payments are determined and how uplift is allocated across the various categories. Specifically, in accordance with draft rule 240 (2) (b), the calculations in the Procedures outline what share of uplift is attributable to congestion uplift which is the portion of uplift related to an exceedance of AMIQ (or capacity certificates under the new rules). It is not clear what the purpose of the reference to daily and intraday transmission constraints is and these definitions are likely a legacy issue. AEMO considers that these references could be removed from rules 239 and 240 without affecting the policy intent of ancillary payments and the uplift payments.

Application of constraints

AEMO supports the Commission's draft determination to include withdrawal constraints in the pricing schedule. We consider that this will aid participant risk management and will improve the price signals in the DWGM.

AEMO notes that the new rule 221(4) (a) states that AEMO must "take into account any transmission constraint affecting withdrawals of gas in the declared transmission system during that gas day". We consider that this rule will need to be limited to controllable withdrawal

quantities rather than all withdrawals. Otherwise AEMO would need consider how it applies to net flow transportation constraints that affect uncontrollable quantities. We do not believe that this is the intent of the new rule and is likely a drafting error. We also note that part 221(4) (b) should also only apply to controllable quantities.

As in our previous submissions, AEMO also wishes to highlight that injection congestion may become more of an issue in future years as new supply sources come online. We can foresee scenarios where injection capacity is far greater than pipeline capacity with the potential for a greater 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 should also apply to injection constraints. We therefore question whether this rule should apply to both withdrawal and injection constraints for controllable quantities.

Attachment B – Improvement to AMDQ regime

Overview of AEMO's view on the draft determination

AEMO is supportive of the key features of the draft rule. We consider that the phasing out of authorised MDQ and AMDQ CC as an equitable and efficient outcome for the market. The creation of separate entry and exit capacity certificates to replace AMDQ will also be an improvement as it better reflects the system's capacity and will enable participants to acquire tie-breaking rights for both injections and withdrawals when capacity is available aiding risk management. The ability to auction and acquire capacity certificates on a more granular basis than the current 5-year period will better enable participants to tailor their tie-breaking (and uplift hedging) requirements to their expected supply and demand. Shorter tenors for capacity certificates will also facilitate competition and support new entry to the market as capacity certificates will not be able to be locked up for an entire access period.

System Capability Modelling

AEMO believes there is scope for greater alignment between the system capability modelling required for the determination of capacity available to support capacity certificates each calendar year (draft rule 328), the Victorian Gas Planning Review (VGPR) published by 31 March every two years, and the transitional requirement for the initial system capability modelling by 1 January 2022 (transitional rule 67). It would avoid duplication of effort if all were published at the same time and on a similar basis.

While the VGPR requires information to be provided for that review, it is not clear from the draft rules if information provided for the VGPR (which is confidential) can be used for the system capability modelling required under draft rule 328. AEMO seeks clarification on this matter in the final rules.

AEMO is also of the view that it would be beneficial to combine the VGPR and system capability modelling rules, and to create the requirement for AEMO to implement a planning Procedure covering both.

Implementing a planning Procedure would allow AEMO and industry to develop a consistent approach to determine the maximum capacity that is "…simultaneously physically feasible when tested against a 1 day in 20 year peak demand gas day…" as required in draft rule 328(2). A planning Procedure would also help resolve the following issues:

- Taking both gas-powered generation (GPG) and other system demand into account – the VGPR separates them. This is compounded by likely entry of new GPG in Victoria in the medium term.
- Evolving flow patterns of injections to and withdrawals from the declared transmission system have a significant impact on system capability and must necessarily be based on assumptions of future flows.
- Determining the availability of entry or exit capacity certificates where there is unequal capacity between the relevant zone and the connected facility. For example, the capacity

on the Victorian Northern Interconnect to deliver to the Culcairn System Injection Point is 150 TJ per day, whereas the DTS can transport injections at Culcairn of up to 226 TJ per day[2] - so which should limit the availability of entry capacity? If it was the DTS capacity of 226 TJ, a scheduling constraint would limit the operational schedule to 150TJ, which devalues the entry capacity certificates.

Auction product design

AEMO considers greater clarity is required for the auction tenors and auction product design. Under the draft rules, AEMO must define different auction product tenors. At a minimum, draft rule 328B(9) requires that there must be:

1. at least one capacity certificate with a tenor of at least three years that accounts for no more than 50% of the available capacity of the declared;
2. At least one type of capacity certificate with a tenor of one year and;
3. At least one type of capacity certificate with a seasonal tenor that accounts for at least 10% of the available capacity.

AEMO has identified potential issues with this approach that need consideration. The first issue is that longer-dated product tenors will not be available for all locations due to constraints in system capacity and the modelling requirements outlined in the rules. Rule 328 (2) requires AEMO to undertake system modelling to determine the amount of capacity that will be available in each capacity certificate zone for the auction products. This modelling is to be done using a 1 day in 20-year peak demand gas day assumption. The issue with this approach is that for each auction tenor (three yearly, yearly, seasonal etc) the capacity auctioned needs to be available for each day included in that tenor. For a location like Iona withdrawal zone, there will likely be no capacity available in that zone on a 1-in-20 demand day for the winter months. As a consequence, if AEMO is to auction a yearly (or three yearly) product at Iona there will be no capacity available to be auctioned in this product tenor as the product's capacity would not be available for every day included in that period. Iona auction products will therefore only be available in monthly or seasonal tenors.

A second and related issue is that the amount of capacity that will be available in longer product tenors will be restricted by the requirement that the capacity must be available for each day in that tenor on a 1-in-20 demand day. Therefore, the lowest capacity available over the entire period will set the amount of capacity that can be auctioned for the whole period. For example, say Culcairn injection zone has a capacity of 200 TJ in January but only 100 TJ in June. Under the current drafting, the maximum amount of injection capacity that could be made available for a three-year product tenor would be 50 TJ despite the fact that there is more capacity available in January. Participants would only be able to acquire the additional capacity in January through seasonal or monthly products which may not be auctioned until closer to the time.

[2] section 5.3.2, "Victorian Gas Planning Report" published by AEMO, dated March 2019, viewed 17 October 2019 at

A further issue is that participants who wish to acquire capacity on a three-yearly basis are potentially restricted in their ability to sculpt their requirements (through their bids) to their demand. When buying a three-yearly product the participant is buying the same amount of capacity for every day in that period. So, if a participant has higher demand for capacity certificates in the particular product in winter than they do in summer, they will be forced to buy the higher amount for the entire period. This design limits the ability of participants to tailor their bids to their demand profiles for longer-dated products.

An alternative approach would be to replace the multiple product tenors outlined in the rules with a single product tenor that is auctioned in different tranches ahead of the relevant period. Such an auction design is similar to the design of the Settlements Residue Auction (SRA) in the National Electricity Market.

For example, say all capacity certificate zones had a monthly product tenor. The amount of capacity made available in each product tenor would be determined ex ante by the maximum amount of capacity that is modelled on a 1-in-20 basis in that product's tenor i.e. a month. The NGR (or Procedures) would then need to dictate how much of that capacity is to be allocated to each tranche ahead of time. For example, say the auction runs annually and there are the following tranches: three years ahead, two years ahead and one year ahead. Note that the tranches are illustrative only and there could be additional tranches available closer to the relevant month or further ahead – this is a matter that will require industry consultation. The additional tranches could also include unsold capacity from previous auctions and updates to available capacity identified in subsequent modelling. The initial years of the capacity certificate auction may also need transitional arrangements – for example capacity for the first year will not be able to be sold three years ahead if the first auction only runs one year prior.

An example of an auction product under this model may look something like the below:

Table 1: Maximum capacity available for each month

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
120	120	120	110	80	80	60	80	120	120	120	120

Table 2: Capacity available three years ahead - 20% of the maximum (as specified in Procedures/Rules)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
24	24	24	22	16	16	12	16	24	24	24	24

Table 3: Capacity available two years ahead - 30% of the maximum (as specified in Procedures/Rules)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
36	36	36	33	24	24	18	24	36	36	36	36

Table 4: Capacity available one year ahead - 50% of the maximum (as specified in Procedures/Rules)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
60	60	60	55	40	40	30	40	60	60	60	60

There are advantages and disadvantages to this approach. An advantage to this approach is it readily facilitates the sale of capacity certificates in advance of the period, and it also enables participants to match their bids to their expected demand. Such a design could also facilitate secondary trading of capacity via the auction (similar to the recently implemented secondary trading in SRA). A potential drawback is that there are a lot of products under this model (at least one for each month), and that participants who want to buy capacity for multiple months at once would need to submit a bid for each month – although similar to SRA, linked bidding could be facilitated. AEMO acknowledges that there are further details that would need to be worked out through industry consultation for this option (as well as the option in the draft rules).

The alternative we have suggested is only one of many potential variations to the auction and product design. In AEMO's view, the auction design needs more work and industry consultation and highlights the risk of trying to re-design the market through simply changing the rules. It would be preferable to articulate and consult on the intended design upfront and then the rules and procedures can be drafted to meet that design. If the AEMC is not planning to undertake any further industry consultation or design work ahead of the final determination, then AEMO suggests that the NGR is made less prescriptive so that AEMO can undertake further consultation with industry as part of procedure development and implementation.

Secondary Trading

AEMO questions whether there will be sufficient demand at market start to justify the introduction of a separate platform for secondary trading of capacity certificates, and whether capacity trading should be phased in at a later point. If certificates are made available over multiple tranches and periods, the risk of an inefficient allocation of capacity certificates between participants will be reduced.

Under the auction product model where there are multiple different tenors, splicing would be required to match capacity certificates acquired in the auction to any capacity certificates bought or sold in the secondary market. Splicing is required because a market participant holding a three-year product would be unable to use a standardised secondary trading platform once the three-

year tenor had started. As an example of splicing, market participant 'A' purchases a three-year product for 5,000 GJ per day at auction, and market systems would reflect that capacity holding. 'A' then used secondary trading to sell 1,000 GJ for six months to market participant 'B'. Market systems would need to reflect that 'A' held 5,000 GJ until the start of the six-month period, 4,000 GJ during the six months, and 5,000 GJ for the balance of the three years. Market systems would also need to reflect that 'B' held 1,000 GJ for the six-month period. This approach would increase implementation complexity and cost.

As an alternative to a separate secondary market, a potential option could be to facilitate secondary trading via the auction itself (similar to the secondary trading that has recently been implemented in SRA in the National Electricity Market) as mentioned above. Under this model, participants offer any capacity they wish to trade directly into the auction for the relevant product. Capacity offered by participants is then sold alongside any primary capacity in the next relevant auction and participants receive the relevant clearing prices for any of their capacity that is sold. Secondary trading through the auction itself cannot be readily facilitated through the auction and product design that has been proposed in the draft rules.

AEMO also wishes to highlight that there may be regulatory issues with implementing a secondary market that are difficult to assess at this stage. It is possible that AEMO may need to seek an Australian Financial Services License exemption or an amendment to our existing exemptions in order to operate this market. It is not possible for us to assess whether this is required while the design of the secondary market and the trading products (exit capacity certificates and uncontrollable exit capacity certificates) and the benefits they confer are still being defined. The AEMC could obtain legal advice on this matter prior to finalising the rules and design.

Auctioning uncontrollable exit capacity certificates

AEMO is not convinced that auctioning uncontrollable exit capacity certificates is the most efficient or pragmatic option. A participant's share of DTS capacity for uncontrollable exit capacity certificates is relative to their tariff V and tariff D load and they pay regulated transmission tariffs to the DTS service provider that reflect their consumption. Access to and investment in the DTS and the distribution systems that connect to the DTS are regulated and it is not clear what the prices (if any) that are generated from the uncontrollable exit capacity certificates are intended to signal.

Uncontrollable exit capacity certificates also do not provide a tie-breaking right and their primary role in the draft rule is to provide participants with a hedge against congestion uplift[3]. As the quantity of uncontrollable exit capacity certificates to be made available will be calculated on a 1-in-20 demand basis, they are likely to be a non-scarce resource – it makes little sense to auction them off. AEMO notes that controllable exit and entry capacity certificates, which importantly provide a tie-breaking right, are likely to be scarce and in demand at certain locations so it makes more sense to auction these. AEMO would propose uncontrollable exit capacity certificates are

[3] The draft rule also proposes uncontrollable exit capacity certificates provide limited curtailment protection, but AEMO has suggested that this be removed – see comments on Curtailment in event of a transmission constraint.

dynamically allocated similar to how authorised MDQ is dynamically allocated in the current market. However, consideration will need to be given as to how GPG (which is uncontrollable) can be allocated uncontrollable exit capacity certificates.

If the simpler wholesale price rule change decides to remove congestion uplift, AEMO would recommend removing uncontrollable exit capacity certificates altogether.

Capacity certificates and curtailment in event of a transmission constraint

If curtailment is required as a result of a transmission constraint, draft rule 343(2) requires AEMO to curtail those customers not covered by uncontrollable exit capacity certificates before those that are covered. AEMO considers it would not be practicable to do this because uncontrolled exit capacity certificates are no longer assigned to customers, and the quantum of capacity certificates allocated is likely to exceed the uncontrolled system demand in most circumstances.

Further, the curtailment of gas customers in the DWGM is decided using the Gas Emergency Protocol (the Protocol), which includes the Gas Load Curtailment and Gas Rationing and Recovery Guidelines. The Protocol is a requirement of the section 56 of the National Gas (Victoria) Act 2008, which requires AEMO to have regard to the economic and social needs of the Victorian community when making the Protocol. It is therefore more appropriate for all curtailment to be determined under this regulatory instrument rather than the National Gas Rules. As such, AEMO would support decoupling the curtailment process from the market and removing this clause from the NGR.

Allocation of rights to system injection and withdrawal points and across bid steps

AEMO has identified two possible gaps in the rules with respect to allocation of rights to system injection and withdrawal points and across bid steps. The first gap is how the new capacity certificates are allocated across multiple bid steps for the purpose of tie breaking and the second gap is how capacity certificates are allocated from capacity certificate zones to system points.

Under the current market's design, participants have AMDQ at a close proximity point (CPP) and provide AEMO with a percentage allocation to each system injection point in the CPP. This is required as participants' bids are scheduled and subject to tie-breaking at the system injection point level while the rights are at the CPP level. In the draft Rules, this ability to allocate the new capacity certificates to a system injection or withdrawal point has been removed. As the new capacity certificates will be acquired and allocated on a zonal basis (similar to CPPs, which are effectively a zone) but bidding and scheduling will continue to be done on a system injection (or withdrawal) point basis, there will need to be an ability to allocate the capacity certificates to a system injection or withdrawal point as appropriate. There are several options for how this could be done including dynamic allocation as part of scheduling or a participant-specified allocation similar to the current practice.

Consideration also needs to be given in the NGR or Procedures with respect to how capacity certificates are allocated across bids. For example, are capacity certificates pro-rated across all bid steps or are they allocated in price-order?

The exact allocation mechanisms require further industry consultation and could be specified in the Procedures. However, AEMO considers that the Rules need to establish the ability for capacity certificates to be allocated from zones to system injection or withdrawal points and for capacity certificates to be allocated across bid steps.

Other issues with draft AMDQ rules

AEMO has identified a number of further issues with the draft rules that need clarification:

- Agent Participation. AEMO notes that the current rules framework does not contemplate the existence of agent participants. AEMO believes that the rules may need to consider the ability for related entities to participate in the auction and acquire capacity certificates on behalf of each other. For example, a participant may have 3 registered entities in the DWGM. This participant may want a single participant (either one of the three DWGM registered entities, or perhaps a non-DWGM registered entity) to participate in the auction for capacity certificates on behalf of all of their registered entities. Having a single entity manage participation on behalf of multiple related entities can be beneficial for participants in minimising collateral costs, administration costs and settlement. The Procedures could specify the requirements for agent participation e.g. nomination and registration, and for allocation of purchased capacity certificates between the registered entities. The pipeline capacity trading markets provide one potential way for establishing agent participants.
- Eligibility to participate in the capacity certificates auction. In rule 328B(4) AEMO considers the reference to subrule (4)(b) (and the subrule itself) appear unnecessary as the rule 328B(4) limits any action to be in accordance with the Procedure. This would also make it clearer that AEMO can suspend or limit access to auctions. It would be clearer if the requirements for the Procedure (subrule 328B(8)) included criteria for being an eligible person, and actions to be taken by AEMO if they ceased to an eligible person (which could include suspending or limiting access to the auction).
- Specification of capacity certificate zones. Rule 328B(8)(c) requires zones to be specified in the Capacity Certificates Auction Procedures. AEMO would suggest that an approach similar to Rules 627 to 629 for the pipeline capacity trading markets would be more appropriate. These Rules outline the principles and process by which AEMO must determine zones and the Capacity Transfer and Auction Procedures require these to be published. AEMO then publishes the zones in a register rather than in the Procedures themselves. This means that any changes to the zones only require an update to the register rather than a Procedure change.
- Unsold auction capacity. Rule 328B(14) requires unsold capacity to be made available for next capacity auction for the same type of auction product. If auction products are defined as separate tenors this drafting may not work. For example, if there is an Iona entry auction for calendar year 2023 (the yearly auction), there will not be another calendar year 2023 auction. The next relevant auction for Iona entry in 2023 would either be a monthly or seasonal auction. The drafting should be adjusted so that any unsold capacity from a

capacity certificates auction is made available in the next relevant auction for a period included in the auction product as specified in the Procedures.

- Allocation of uncontrollable exit capacity certificates by DTS SP. Rule 329D allows allocation of uncontrollable exit capacity certificates under direction of the DTS SP. This is problematic as any expansion to the system that results in increased uncontrollable capacity should result from the access arrangement process and form part of the regulated asset base and therefore be allocated by AEMO. Increase in pipeline capacity that is not included in the approved capital expenditure of the DTS SP should be limited to controllable entry and exit capacity and specifically exclude uncontrollable exit capacity certificates.
- Rules numbering. AEMO is concerned with Rules numbering conventions that are being used. Typically, where the content of NGR provisions are substantially changed new rules are created and the old Rules are replaced with "deleted". Similarly, when rule provisions are deleted the rule number is retained in the NGR, but the content is replaced with deleted. AEMO notes that, for example, the title and content of r ule 328 has substantially changed and goes from five subrules to four, but the existing numbering has been retained which could cause confusion in compliance registers.
- Definition of uncontrollable exit capacity certificate. The definition of uncontrollable exit capacity certificates includes references to tariff D and tariff V withdrawal points. This implies that the uncontrollable exit capacity certificate may be associated with these sites, rather than with a market participant. AEMO considers that it may be more appropriate for the definition to state that the uncontrollable exit capacity certificates are owned by market participants and link them to delivery points for which a market participant must submit demand forecasts under rule 208.