

01 April 2016

Mr John Pierce Chairman Australian Energy Market Commission PO Box A2449 SYDNEY SOUTH **NSW 1235**

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Dear Mr Pierce

Pipeline Access Discussion Paper

AEMO welcomes the opportunity to comment on the Australian Energy Market Commission's (AEMC) Pipeline Access Discussion Paper. Effective pipeline capacity trading arrangements are essential to enhancing the efficiency of the east coast gas market. AEMO supports the pipeline access reforms proposed by the AEMC.

Implementing the initiatives

The success of the reforms relies on engagement and commitment of industry in the development and implementation process. While it is important that pipeline operators provide a leadership role in the development and implementation of the initiatives, AEMO agrees with the Commission that there should be regulatory oversight of the reforms.

Standardisation of capacity products

Standardisation of capacity products will aid efficient trading and operations. Standardisation of secondary trading agreements should be a priority activity for industry. Consideration should be given to the legal framework that will govern secondary capacity transactions.

Efficient short-term trading of capacity between shippers would be supported by the ability to update allocation agreements at short notice on all pipelines as well as the preapproval of delivery point flexibility.

Capacity trading platform

As there are already three capacity trading platforms, if a new platform is implemented then it should provide additional services and functionality to shippers.

The many potential transportation paths and contract periods will create a large number of markets making it challenging to match transactions. To aid the matching of transactions, consideration could be given to a daily auction to complement continuous trading on the capacity trading platform as well as facilitating the participation of brokers (or other third parties) in the capacity trading platform.

Auction for contracted un-nominated capacity

AEMO supports the implementation of the proposed auction for contracted, un-nominated capacity. AEMO considers that there is value in implementing the auction on all pipelines on the east coast regardless of their level of contracting. Further, limiting the application of the

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proposed auction in response to concerns relating to renominations would undermine the benefits of the proposed auction.

AEMO looks forward to engaging further with you during the course of this Review. If you would like to discuss the contents of this submission further, please do not hesitate to contact Violette Mouchaileh on 03 9609 8551.

Yours sincerely,

Peter Geers

Executive General Manager, Markets

Attachments: AEMO submission on Pipeline Access Discussion Paper



Attachment: AEMO submission to Pipeline Access Discussion Paper

This attachment outlines AEMO's view on the matters considered in the Pipeline Access Discussion Paper.

Implementing the initiatives

Effective pipeline capacity trading arrangements are an essential component of efficient wholesale gas markets. An inability to promote effective capacity trading and hub service arrangements should be a trigger to consider virtual hubs covering larger sections of the east coast gas transmission network.

The success of the reform relies on engagement and commitment of industry in the development and implementation process. There are benefits of an 'industry' led approach. Pipeline operators are best placed to develop initiatives like the standardisation of transportation services across the east coast transmission network. However, AEMO agrees with the Commission's concerns in relation to the implementation of the initiatives absent regulatory oversight. In the absence of this oversight it is natural that the pipeline-led approach would favour arrangements that are in the interest of pipeline owners.

Ref.	Question	AEMO Response
2.1.1	Has the Commission accurately and comprehensively outlined the benefits and disadvantages of the regulatory- and industry-led approaches?	AEMO considers that the benefits and disadvantages have been thoroughly considered and recorded. In addition, it should be acknowledged that the proposed reforms would be complex for industry (under an industry-led approach) to progress – with shippers and pipeline operators in the room together, parties are likely to be reluctant to disclose their commercial arrangements.
2.1.2, 2.1.3	How might the Commission weigh the relative benefits and disadvantages of the two approaches into an appropriately balanced implementation approach?	As a general approach: 1. Clear policy guidance and timelines are set out for the reforms, 2. Entity or industry group assigned responsibility to develop initiative, 3. Entity or industry group prepares proposal and, 4. Regulator (or other institution) approves proposal. Under this approach the regulator would ensure that the proposals are consistent and that they meet the goals of the reform.
2.1.4	Do you believe an industry-led approach could be effective at delivering this key suite of reforms? If not, what approach should be taken?	There are benefits of a pipeline-led approach. Pipelines are best placed to develop initiatives like the standardisation of transmission contracts across the east coast network. However, in the absence of regulatory oversight it is natural that the pipeline-led approach would favour



		arrangements that are in the interest of pipeline owners.
2.1.5	Should the implementation approach differ between the proposed reforms, and why?	The implementation approach should be common and coordinated across the initiatives to provide consistency and to avoid duplication, gaps and unintended consequences.
2.1.6	Should any enduring governance arrangements differ from the governance arrangements for the initial implementation of the reforms?	The enduring governance could be consistent with that applied to the implementation of reforms. Under this approach, changes sought by industry could be developed and then put to the regulator for approval.

Standardisation of capacity products and contract terms

Measures to facilitate the trading of pipeline services between shippers are important to support efficient trading operations and outcomes. However, standardisation alone is unlikely to improve capacity trading outcomes.

Primary capacity

In general, there is likely to be value in standardising primary capacity agreements across the east coast gas market. However, such a reform is likely to have challenges (in the form of impact on property rights) and could take a considerable amount of time to progress. As such, consideration could be given to a staged approach where standardisation of secondary trading agreements are prioritised and standardisation of primary capacity agreements is delayed and implemented for new contracts.

Secondary capacity trading

In addition to the key trading and operational matters to be standardised, consideration should also be given to the framework that will be used to form secondary transactions. Options include:

- · Bilaterally agreed master agreement,
- Multi-lateral agreement (like the Exchange Agreement),
- Regulation National Gas Rules and Market Procedures.

Ref.	Question	AEMO Response
3.1.2	To what extent will changes need to be made to allocation agreements between shippers at delivery points to facilitate more trade?	To effectively support short-term trading, allocation agreements should allow the automatic inclusion or removal of a trading participant. Common allocation rules and services levels may be desirable.
3.1.3	Is there value in also developing standard terms and conditions for hub services at the same time the terms and conditions are developed for transportation services?	Where standardised terms are progressed for transportation services, it seems efficient to incorporate hub services and storage services in the scope of this work.
3.1.4	Is it feasible to develop a single standard for each term and	Specification of a range may undermine the efforts to



	condition or is a range of standards more appropriate for some provisions?	standardise secondary trading arrangements.
3.1.6	Should shippers and pipelines be able to negotiate alternatives to any of the standardised provisions? If so, in what cases would this be relevant?	Allowing shippers and pipelines to negotiate alternatives may undermine the efforts to standardise secondary trading arrangements.
3.3.2	If greater receipt and delivery point flexibility can be achieved, will allocation agreements need to change? If so, how significant	Receipt and delivery point flexibility would allow a shipper to sell its point-to-point capacity right to another shipper with a different point-to-point transportation requirement.
	are these changes likely to be?	Delivery point flexibility could be achieved by allowing a trading participant to share its capacity right (MDQ) from one point to another within a zone or multiple points within a zone could be treated as one delivery point (and allocation agreement).
		If delivery point flexibility is delivered by allowing shippers to share MDQ across multiple delivery points then existing allocation agreements may not need to be amended. However, the ability to automatically include or remove a trading participant (as noted in 3.1.2) is likely to aid short-term trading.
3.3.3, 3.3.4	Should a pipeline operator's ability to reject a change be restricted to technical reasons only? If so, how should the criteria for rejection be developed?	Delivery point flexibility would ideally be approved in advance of a gas day to support short-term capacity trading between shippers. Approval of change should account for customer movements behind the meter.
3.5.1	To what extent should the operational, prudential and other contractual provisions in secondary capacity contracts (ie CTAs and, where relevant, Operational GTAs) mirror the standardised provisions developed for primary capacity trades?	AEMO considers that standardisation of secondary capacity contracts across pipelines is a higher priority than the standardisation between primary and secondary capacity contracts.
3.5.3	Are operational transfers the most effective way of dealing with trades executed through the capacity trading platform and the day-ahead auction, or are there other limitations with these transfers that the Commission should consider?	Where bids and offers are matched (rather than just introduced) then there is likely to be benefits in the use of operational transfers to support the delivery of transactions.
		The use of operational transfers would allow transactions to be communicated directly to the pipeline operator and for capacity to be transferred automatically between the shippers. This approach would allow trading counterparts to remain anonymous.
		However, AEMO understands there is a service fee associated with operational transfers and as such



		there would be commercial implications for trading participants if this were to be the only option for facilitating secondary trade.
		If off-market transactions are permitted then bare-transfers could be used to deliver the service.
		As with existing as-available services, AEMO assumes that the day-ahead auction would result in a transaction between the pipeline operator and the shipper (rather than between shippers). As such, the day-ahead auction may not require capacity to be transferred (bare or operational) between shippers.
3.5.4	If all capacity trades were to be given effect through an operational transfer, would standardising the operational, prudential and other contractual provisions in Operational GTAs obviate the need to standardise these terms in the primary capacity contracts?	There is likely to still be value in standardising primary capacity contracts. For example, a shipper with a primary capacity contract on one pipeline may purchase secondary capacity contract on another connected pipeline. Standardisation of the primary and secondary capacity contracts would in this scenario support efficient trading and operations.
3.5.5	Is it feasible to develop a single standard for each term and condition or is a range of standards more appropriate for some provisions?	A range implies that parties would need to negotiate the specific contract terms within the range. This would diminish the value of standardisation and would not enable the exchange trading of secondary capacity rights.
3.5.7	Is there value in also developing standard terms and conditions for secondary trades of hub services at the same time the terms and conditions are developed for transportation services?	There are likely to be benefits in including hub services and storage services in the scope of work to standardise secondary trading arrangements. AEMO has commenced work on the standardisation of a secondary trading product for a Wallumbilla compression service.

Capacity trading platform(s) and secondary trade information provision requirements

Additional considerations for the development of a capacity trading platform are outlined below.

Capacity Trading Platform

There are currently three capacity trading platforms providing a 'listing' service to shippers. The platforms have had relatively little use since their implementation. AEMO considers that a new platform may not be warranted unless it provides trading participants with additional services and functionality, which could include:

- · Matching of bids and offers to form transactions,
- Integration with pipeline operator systems so that capacity transfers can be automatically processed by pipeline operators,
- Settlement and prudential services.

Challenge of matching transactions

As noted in the discussion paper, there are a large number of potential markets due to the many combinations of transportation paths and contracting periods. The large number of potential markets



could be resource intensive to manage for trading participants and could split potential buyers. A number of options to mitigate this potential issue are outlined below for further consideration.

The capacity trading platform could be complemented by a daily auction. The products auctioned day-to-day would be determined by trading participants. Sellers (and buyers) could specify the key terms (transportation path and contract period) of their spare capacity that they make available to the auction. The auction would be based on the standardised secondary capacity contract but would allow the seller to specify the transportation path and contract period. The products made available in the auction would be communicated to trading participants who would then have an opportunity to place a bid for these products in the auction.

Another alternative would be to facilitate the participation of brokers on the exchange and in the matching of capacity transactions.

Ref.	Question	AEMO Response
4.1.1	Should the capacity trading platform(s) be developed to enable: * transportation, hub and pipeline storage services to be sold, or should it only provide for a sub-set of these services? * services to be sold on a firm, as available and interruptible basis, or should it only provide for firm services to be sold? * primary capacity holders and pipeline operators to sell these services, or should it only provide for primary capacity holders to sell on the platform(s)?	Where the terms of a service can be standardised then it is possible to trade that service through the platform. This standardisation would appear to be possible for transportation services, hub services and storage services (pipeline and storage facilities). Firm services should be traded through the platform. In general, contracts for as available and interruptible services do not provide an exclusive right and as such are not likely to be a desirable trading product. Ideally all potential sellers (primary capacity holders and pipeline operators) would participate in the one market so liquidity is maximised.
4.2.1	Is there likely to be sufficient demand to introduce exchange based trading from day one, or should a staged approach be implemented as suggested in some submissions? If a staged approach is considered more appropriate, please explain why and outline how the staged approach could work in practice.	As there are already three platforms for listing spare capacity it would seem appropriate that the next step is to progress to a platform that allows exchange trading (or some ability to form transactions). If it is decided to delay this progress then the development of the new capacity trading platform should similarly be delayed. The large number of markets and fragmented / limited demand could impact on the liquidity of products traded through the platform. As outlined above, consideration could be given to allowing a daily auction and the participation of brokers (or other third parties for example aggregators) through the platform.
4.2.2	Apart from the factors outlined in Table 4.1 are there any other aspects of the capacity products that would need to be standardised to attract sufficient	* Give further consideration to the way in which services on bi-directional pipelines are traded. * Minimum contract parcels should be considered given administrative costs are largely fixed – as such,



	interest in the products? * Are the contract paths identified in Table 4.1 likely to be appropriate in the initial stages of the life of the platform(s), or should it be more limited or expansive? * Is there any value in establishing a minimum parcel size for capacity trades? * Should the standard product be assumed to have no renomination rights?	transaction costs for the seller could be high where the transaction quantity is small. However, the more streamlined the trading process is (for instance, the direct communication of trades to pipeline operators and automated transfer of capacity) the lower the administration costs and the less likely it is that a minimum parcel size is required by the buyer. * The product traded on the platform should be as per the standardised terms for secondary trading. Where renominations are granted with the pipeline operator's on-the day approval, it would seem reasonable to at least provide a process for the buyer to request a renomination.
4.2.3	How long is it likely to take to develop standardised services and should industry take the lead on this?	Implementation of a standardised, capacity trading product through the Gas Supply Hub could be implemented in a relatively short period of time. AEMO is targeting the implementation of a standardised product for the trading of Wallumbilla compression services in October 2016 – it is possible that other services could utilise this framework. However, as noted in 3.5.6 the documentation of standardised terms for secondary pipeline capacity trades could take a considerable amount of time.
4.2.4	Are there any other contractual or settlement and prudential issues that the Commission should consider, or any other matters more generally that the Commission should take into account when forming its view on whether to recommend exchange based trading?	Contracts to an STTM hub should be given further thought. The STTM currently supports a bare transfer of capacity between shippers. Operational transfers in the context of the STTM requires further thought. May require changes to the NGR and the market systems to reflect the transfer of facility service capacity between shippers.
4.3.1	Is a single trading platform likely to be the most effective and efficient way for shippers to trade capacity, or should further consideration be given to the multiple trading platforms option?	AEMO support a single platform for the reasons outlined in the discussion paper.
4.4.1	If a single trading platform was to be adopted, should the platform form part of the GSH, or should the pipeline operators be required to jointly develop a platform?	Regardless of who the operator of the trading platform is, the involvement of pipeline operators in the platform's development would be beneficial. If the standardised contract for secondary trading of capacity is based on operational transfers then ideally trades would be communicated directly to pipeline operators so that the transfer of capacity from the seller to the buyer can be processed automatically.



4.5.1	Is the issue of discriminatory access to secondary capacity likely to be problematic if bilateral trades continue to occur?	At this point in time incentives for shippers to sell contracted capacity and incentives for pipeline operators to facilitate these trades are likely to be more material considerations in relation to accessing secondary capacity.
		Pooling potential buyers and sellers into a single market should be beneficial for all participants.
		However, the platform may not be able to meet all the potential requirements of trading participants. For example, a buyer may need to pair together multiple capacity and commodity deals – this type of deal may be more suitable to a bilateral or OTC brokered market.
4.6.1	How frequently would counterparties be discouraged from undertaking a trade because it required that commercially	Operational transfers allow the buyer to not disclose commodity trading activity to the seller and they reduce the operational risks of the shippers (compared to a bare transfer).
	sensitive information to be revealed through a bare transfer?	However, to date there has been little use of the operational transfer service. In addition to seeking feedback from potential buyers, it is important for the AEMC to also seek feedback from shippers as to why there has been limited use of operational transfers.
4.8.1	Should the terms and conditions that have the greatest bearing on price be published alongside the prices specified in the trades, or should the entire contract be published?	Key terms and conditions would be more modular and simpler to report to trading participants.
4.8.4	From a price discovery process, is there value in having information on more bespoke arrangements or would it be appropriate to limit the reporting requirement, at least for secondary trades, to standardised products?	It should at least be reported that a deal contained bespoke terms.
4.8.6	Do the reporting obligations in the NGR need to prescribe the type of information that shippers are required to report, or could this be left to the Bulletin Board Procedures with some guidance provided in the NGR?	AEMO's preference is for the rules to clearly outline the information that shippers are required to report, the BB procedures would then be updated to describe how this information is reported.
4.9.1	Should the information on secondary capacity trades be reported at the time of the trade,	If confidential information isn't reported then no lag is required.
	or with a lag?	The longer the reporting occurs after the time of the transaction the less valuable the information is to other trading participants.



4.10.1	Should the reporting obligations be expanded to include secondary sales of:	To aid the pricing of transactions, it would seem beneficial to extend a reporting requirement to hub service and storage service deals.
	* hub services?	
	* storage services?	
	* any other services provided by pipelines?	

Auction for contracted but un-nominated capacity

Additional considerations for the design of the auction are outlined below.

What happens to successful auction bids?

Consideration should be given to the process that occurs following the auction to incorporate successful auction bids into the pipeline operator schedule. The results of the auction could be communicated directly to the trading participant and the pipeline operator.

AEMO understands that the auction will run daily following the completion of the regular day-ahead nomination process for pipelines. As such, successful auction bids could be treated as a nomination or as an allocation of transportation capacity.

Treated as a nomination

If successful bids are treated as a nomination then they could be communicated directly to the relevant pipeline operator to include in their pipeline schedule.

This approach would reduce administration for trading participants and the pipeline operator. Under this option, auction results could be quickly incorporated into the pipeline schedule allowing the pipeline operator to make any necessary operational arrangements (for example, compressor use) to support the additional pipeline flows.

Treated as an allocation of capacity

An alternative approach would be to treat successful bids as an allocation of capacity. The successful bidders and their allocated capacity would be communicated to the pipeline operator so that nominations can be verified by the pipeline operator and for settlement purposes. At some stage after the auction trading participants would make nominations to the pipeline operator.

Auction Design - Bidirectional and backhaul services

The discussion paper outlines elements of the design for the proposed contracted un-nominated capacity auction. AEMO encourages the commission to also consider the way in which bidirectional services and backhaul services are included in the auction design.

On bidirectional pipelines, AEMO assumes that contracted un-nominated capacity in two directions would be made available to the auction. If this is the case, the amount of capacity that can be auctioned in a one direction is dependent on the amount of capacity auctioned in the opposite direction. Where the successful bids are treated as a nomination, capacity in each flow direction on the pipeline could be allocated as offsetting flows.

For single direction pipelines, the scheduling of flows on the pipeline allows the pipeline operator to provide backhaul services to other shippers on that pipeline. To schedule a backhaul service, the pipeline operator reduces the forward haul flow and redirects (reallocates) gas at the receipt and delivery point. As such, the availability of backhaul services is contingent on the scheduling of flows. Where successful auction bids are treated as a nomination, the allocation of backhaul services could also be considered in the design of the auction.



Ref.	Question	AEMO Response
5.3.2	How strong are the complementarities between different pipelines?	AEMO considers that it is likely that complementarities between pipelines will become stronger as we increasingly observe gas flow between southern and northern gas markets across multiple pipelines.
		However, the added complexity of a combinatorial auction may not be warranted if there are limitations placed on the implementation of the auction.
5.6.1	Is a single round appropriate for the auction of contracted but unnominated capacity?	A single round is likely to be appropriate given the potential complexity and timing of the auction.
5.7.1	If the auction is conducted on a per pipeline basis, how can complementarities between	AEMO is not aware of a potential solution.
	different pipelines and hub services be managed?	Other advantages of a single platform for the auctions include:
		* Single interface for participants to submit auction bids,
		* Common reporting system,
		* Combine interface and functionality with the capacity trading
		* Single settlement & prudential arrangements
5.7.2	If the auction is conducted on a network basis, how can the harmonisation of rights between different pipelines be achieved?	The standardisation of terms across pipelines would aid the auctioning of capacity on a network basis
5.7.3	How frequently do shippers require capacity on multiple pipelines?	The trading of gas between northern and southern gas markets appears to becoming more common. If this trend continues then it would be expected that demand for capacity across multiple pipelines would increase.
5.8.1, 5.8.2	What is the appropriate body to operate the auction?	Single party should run the auction – that could be AEMO or a joint venture between the pipeline
	Are there any inter-linkages in with the institutional settings for the auction	operators. Further, the operation of the auction should be combined with operation of the capacity trading platform.
5.9.1	How should residue be allocated?	Allocation of residue to pipeline owners is likely to encourage primary contract holding shippers to participate in the secondary trading market ahead of the auction.



Implementing the auction

AEMO supports the proposed auction of contracted un-nominated pipeline capacity. However, AEMO is concerned that watering down its application would undermine its potential benefits. More complex elements of the auction design (as set out in section 5 of the discussion paper) may be difficult to justify if there is limited implantation of the auction.

Ref.	Question	AEMO Response
6.2.1	Is the auction necessary on a pipeline when capacity has not been fully contracted?	AEMO agrees that contractual congestion is not an issue on pipelines that are at most only 'moderately' contracted. However, AEMO considers that there are benefits to implementing the auction on all pipelines.
		A combinatorial auction design would allow bids for multiple connected pipelines to be linked by trading participants. Exemptions to some pipelines would undermine this benefit, the extra complexity of this design feature may not be warranted if exemptions are to be granted to pipelines that are not fully contracted.
6.2.2	If not, what criteria should determine exemption if a	AEMO considers that the exemption of pipelines from the auction should be avoided because:
	pipeline is not fully contracted? What is the appropriate governance of this decision?	* there would be costs associated with setting up and maintaining the regulatory framework for providing exemptions.
		* there is potential for unintended consequences of exemptions. For example, the timing of long-term contracting for pipeline services may be amended so that the pipeline qualifies for an exemption.
6.2.3	Are there any other circumstances where pipeline	An exemption of pipelines from the auction does not appear to be necessary because:
	owners should be exempt from undertaking the auction?	* on pipelines with low contracting levels there is likely to be a small amount of capacity available to the auction,
		* the auction is likely to aid short-term optimisation of trading between hubs. As the volume available to the auction would be uncertain there would be a risk to a trading participant that relies on the auction over a long-term contract.
6.2.4	Are there any practical difficulties or differences in applying the auction for contracted but un-nominated capacity to hub services?	AEMO has not identified any issues in the work carried out to date to develop a standardised product for secondary trading.
6.4.1	Is the Commission correct in suggesting that determining the amount of contracted but unnominated capacity is relatively straightforward?	Determining the amount of contracted but unnominated capacity would appear to be similar to the task that pipeline operators currently perform when determining the STTM pipeline hub capacity. The task also seems similar to that which would be



		performed now by pipeline operators when they assess and schedule nominations for as-available transportation services.
6.4.2, 6.4.3	Do you agree with the proposed approach to determining the amount of capacity to be auctioned? How should this process be governed?	Agree with proposal for methodology to be approved by AER with periodic audits by AER.
6.8.1	How material is the issue of re- nomination rights, and has the Commission accurately characterised the issue?	Greater utilisation of pipelines resulting from the proposed day-ahead auction could mean that renominations take the total nominations above the capacity of the pipeline. Such a scenario is likely to be infrequent, whereas measures to mitigate concerns relating to renominations (like the withholding capacity from the auction) are likely to undermine the potential benefit of the auction.
6.8.2	Has the Commission identified all possible solutions to this issue?	Ultimately the most efficient outcome is to allocate capacity to the shippers that value the capacity the most.
		As such, ideally all of the contracted un-nominated capacity would be allocated in the day-ahead auction and there would be a mechanism for reallocation of capacity on-the-day to facilitate the requirement for a renomination.
		On-the-day trading could occur through the proposed capacity trading platform or could occur through a timetabled auction/s.
		Given the time pressures likely to be associated with on-the-day trading it would be important to consider the incentives for scheduled shippers to make capacity available to other shippers (i.e. does the auction need to be mandatory?) and can operational processes (i.e. direct communication of transactions, automatic capacity transfer) be streamlined?
6.8.7	Are the MSVs appropriate mechanisms through which shippers should renominate	MSVs are likely to be the only mechanism available to facilitate the participation in the STTM using capacity allocated in the auction.
	additional gas into the STTM in light of additional capacity secured through the auction? What possible advantages and disadvantages might this approach have?	As the auction would run soon after the ex ante schedule there is likely to be relatively little participation in the auction by participants looking to change their position at an STTM hub.

Information on primary capacity purchases

Reporting of information relating to primary capacity is likely to be beneficial to trading participants. However, as noted previously in some pipeline operator submissions, primary capacity is one input



into wholesale gas pricing. If information about primary capacity is to be published then it would seem reasonable to also consider publication of wholesale gas commodity deals.