Minutes

Day Ahead Auction Project Team Meeting No. 6

Date/Time: Wednesday, 31 May 2017, 10.00 am to 3.00pm
Thursday, 01 June 2017, 9.00 am to 2.00pm

Location: AEMC Office, Level 6, 201 Elizabeth Street, Sydney

Attendees:

Day 1

Project team
John Jamieson, APA
Deidre McEntee, APLNG
Leon Devaney, Central Petroleum
Andrew O'Farrell, Origin
Matt Sherwell, Santos
Nicholas Pope, specialist technical advisor
Tom Walker, specialist technical advisor
Veronika Nemes, external advisor auction design

GMRG
Daniela Moraes, analyst
Katherine Lowe, senior technical advisor
Sandra Gamble, facilitator

Day 2

Project team
John Jamieson, APA
Deidre McEntee, APLNG
Leon Devaney, Central Petroleum
Andrew O'Farrell, Origin
Matt Sherwell, Santos
Nicholas Pope, specialist technical advisor
Veronika Nemes, external advisor auction design
Jeff Cooke, SEAGas
Kevin Ly, Snowy Hydro
Erin Bledsoe, Shell^

GMRG
Daniela Moraes, analyst
Katherine Lowe, senior technical advisor
Sandra Gamble, facilitator

Apologies: Kevin Ly, Snowy Hydro
Jeff Cooke, SEAGas
Erin Bledsoe, Shell

Tom Walker, specialist technical advisor
^ attended by phone for 1 hour

Purpose: Auction product design.

Reference: DAA.6.20170601

	Agenda Item	Discussion	Actions	Decision/views
		Day 1		
1	**Recap on previous meeting**			
1.1	**Reflections from prior meeting**	• The facilitator reminded project team members to listen to one another, with a focus on understanding, rather than persuading. The facilitator also reminded the team that the meetings should be a safe place for everybody to speak. • Participants listened to a TED Talk from Celeste Headlee, on "10 ways to have a better conversation".		
1.2	**Minutes of the previous meeting and action list**	• The team discussed the minutes from meeting #5 and it was agreed that some changes would be made to the diagram in Annex 1 item 2. • Some team members raised questions about the next consultation paper to be published by the GMRG. Katherine noted that the next consultation paper would focus on the coverage of the auction and, if the group is sufficiently progressed, the design of the auction product.	• GMRG to update diagram in Annex 1, item 2 of minutes #5.	
1.3	**Transfer of information from other working groups**	• An update was provided on the issues discussed in the last capacity trading platform and standardisation project teams (see the minutes for these meetings for more detail).	• Invite members of this work stream to the next Capacity trading platform meeting, which is to be held in Melbourne.	• Circulate slides AEMO presented to CTP group on 30 May.
2	**Products to be sold through the auction**			
2.1.1	**What are the options?**	− The project team discussed the transportation contracts that can currently be purchased by shippers, which include firm, as available and interruptible services, and made the following observations: − Firm capacity has the highest priority in scheduling and is the last to be curtailed. The price for this service is usually capacity based (although in some cases shippers may also pay a throughput charge). − As available capacity (where it is offered) has second priority in scheduling and is the second last product to be		

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		curtailed. Project team members noted that there may also be different levels of priority assigned to these services, with some as available services having a higher priority than others. The price for this service is usually based on the volume of gas transported, with some pipelines requiring the payment of a minimum bill. − Interruptible capacity has the last priority in scheduling and is the first product to be curtailed. The price for this service is usually based on the volume of gas transported with some pipelines requiring the payment of a minimum bill. − The priority schedule for these services in terms of scheduling and curtailment can be found on Appendix A. − The team also discussed renominations and noted that on some pipelines renomination rights are firm, while in other cases they are offered on a best endeavours basis. It was also noted that these rights are used by gas fired generators and a range of other industrial customers. Some team members also observed that the current renomination tie-breaking rights are very valuable for shippers.		
2.1.2	**What are the commercial, financial and technical implications of each option?**	• The group discussed two potential auction products and the implications that each product would have for the purchaser, the capacity rights holders' whose capacity is released in the auction (auction donor) and the pipeline operator. The two options for the auction products that were discussed were: − Option 1: Firm product (purchaser's nomination/renominations higher priority than donor's renominations) – project team members noted that this option would not comply with the AEMC's recommendation that the auction should 'accommodate' renomination rights and would need to be		

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		coupled with something else to do so (e.g. more frequent auctions). − Option 2: Interruptible product (donor's renomination rights higher priority than purchaser's nominations/renominations). It was noted that these two options were at either end of the spectrum and that there may be other options. • The group also briefly discussed the AEMC's recommendation to phase out as available and interruptible products but noted if this was to occur it should not affect existing rights. It was also noted in other contexts that there may be value in allowing shippers to continue to access as available services as a means of accessing primary capacity if their capacity purchased through the auction is interrupted. • Further detail on the issues that were discussed about these two options can be found in Appendix B and Appendix C.		
2.1.3	**Assessment of the options the AEMC identified for dealing with renomination rights**	• The team briefly discussed two of the solutions identified by the AEMC, which were to: − have more frequent auctions – this was viewed as too complex by some team members. − auctioning a mixture of firm and interruptible rights – this was also viewed by some team members as too difficult, particularly if an assumption had to be made about the probability the renomination rights would be used. It was noted that pipelines must already implicitly do this when scheduling as available services on a firm basis, but the pipeline operator representatives noted that they would not want to take that risk on going forward.		
2.2	**Options for hub service products that could be sold in the auction**	• Discussion deferred to next meeting.		

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2.3	**Other elements of the auction product (e.g. MDQ, MHQ factor)**	• Discussion deferred to next meeting.		
		Day 2		
6	**Auction design**			
6.1	**Primer on auction formats, pricing rules and auction algorithms**	• Veronika Nemes provided a presentation covering the following topics: − Market design and experiments − Reverse game theory − Why the "rules of the game" matter (rules, strategic behaviour, outcome) − The process of market design. − Experimental economics − Smart markets (where constraints are embedded in the price determination – i.e. NEM vs. DWGM). • Veronika noted that the challenge is to identify the rules that are required to achieve the objective knowing the likely strategic behaviour of the participants. • Veronika also noted the importance of testing the auction design.	• Circulate slides presented by Veronika Nemes on auction design.	•
6.2	**Identification of the auction designs for the day-ahead auction and consideration of interrelationship with product design**	• The team discussed the AEMC's required, preferred and suggested recommendations in the East Coast Review final report. • The team were also reminded that we are not starting with a blank sheet of paper, and that the AEMC did a lot of thinking on the auction design. • Veronika and the team discussed: − The price that shippers are likely to bid in the auction, with Veronika noting that the price parties will bid is likely to depend on their assessment of the probability of being the successful bidder (which will depend on who has nominated and been scheduled capacity), and will also depend on whether or not they know the amount of capacity that will		• Timing of day-ahead auction matters (if it is before or after as available capacity).

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		be made available in the auction – The options for interrupting auctioned capacity, which included pro-rating and using the bid stack established through the auction. – The use of a clearing price and pay as bid pricing rule. – The need for information on the bids and/or nominations to be revealed • The team also noted that if as available and interruptible capacity ranks above auction capacity and shippers with these services can buy capacity prior to the auction, then renominate their capacity down and use the capacity purchased in the auction instead then it could adversely affect other market participants (i.e. because it would reduce the volume of capacity available in the auction). The team noted that this should not be allowed and reinforced the need for regulatory oversight. Some team members noted that it is a similar situation to the rebidding problem in the electricity market and underscored the importance of nominations being made in good faith. One participant noted that in the electricity market there is a $1 million personal liability for traders that don't bid in good faith. • The team also discussed the temporal value of capacity and observed that: - the later the auction, the lower the value the original capacity and secondary capacity have relative to the auction product, because there is more information available as time goes by - If the auction runs concomitantly with nominations, then the value is the same. If after, there is information discovery and the value changes. • One participant noted that an auction purchaser needs supply flexibility in order to use the day-ahead product, and believes that 1 hour change in the time of the auction would not affect the flexibility much.		

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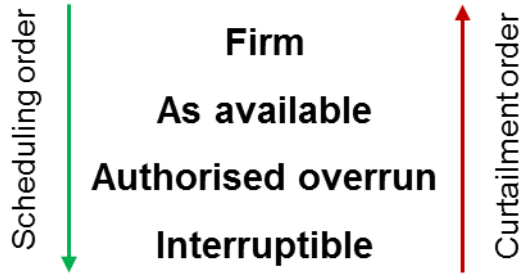
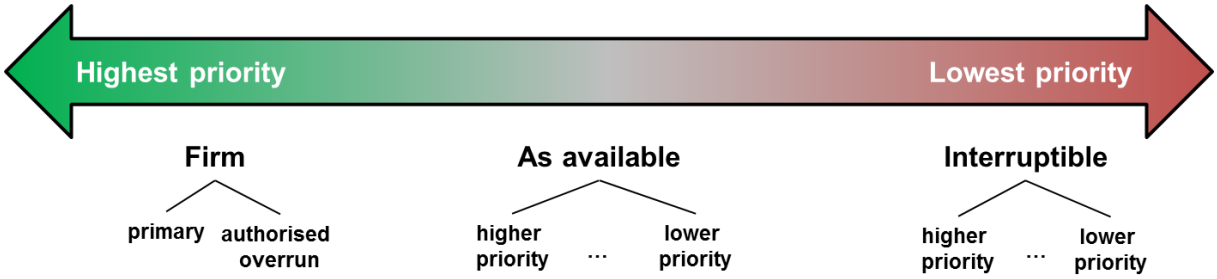
	Parking lot items	Topics to be discussed in future meetings: • Definition of contractual congestion in term of firm, as available and interruptible capacity. Does the contracted but un-nominated capacity used in the calculation of the capacity to be auctioned include as available and interruptible services nominated by shippers with these services at nomination cut-off time? What priority do as available and interruptible products have relative to the auction product at nomination cut-off time and after nomination cut-off time. • How MOS and the gas supply guarantee can be accommodated by the auction. • Other mechanisms participants can use to manage intraday variations / can pipelines deal with intraday volatility. • Making option 2 (interruptible product) a credible threat • Consider the other solutions identified by the AEMC for dealing with renomination rights. • Consider the impact of interruptibility in the case of a combinatorial auction • The group also briefly discussed swap products, and the value they have for market participants. It was suggested that this could become a product in the capacity trading platform.		
11	**Next Meetings** **Wed-Thu, 14-15 1 Jun 2017 – Day-ahead auction Project Team meeting (Brisbane)**	• Members were reminded of 2-day working group face-to-face meeting in Brisbane on 14-15 Jun.	• Request team members to listen carefully to each other.	

Appendix A

Priority order for scheduling and curtailment



Appendix B



Auction products options

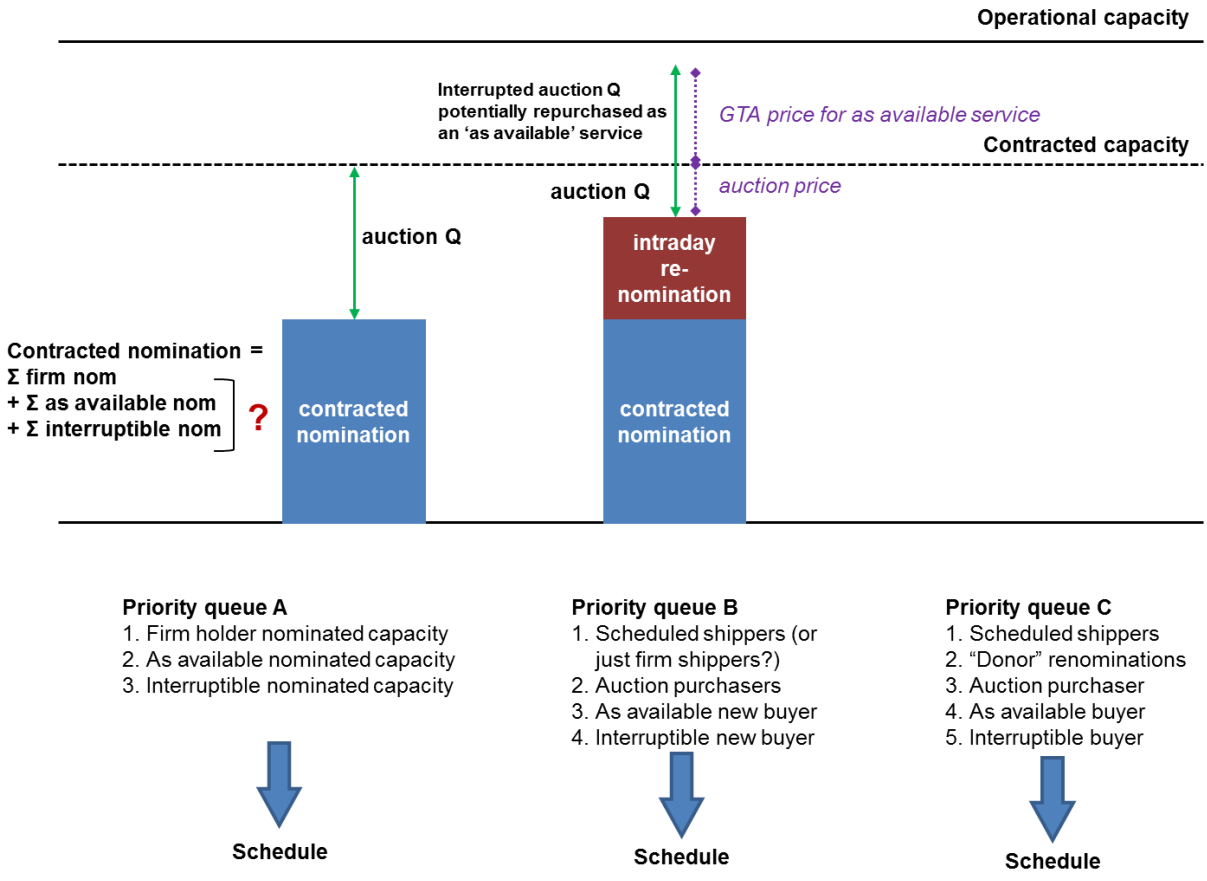
Option 1 (Highest priority) **Firm product (purchaser's nomination /renominations higher priority than donor's renominations)**	Option 2 (Lowest priority) **Interruptible product (donor's renomination rights higher priority than purchaser's nominations/renominations).**
AUCTION PURCHASER	
• Uncertainty of availability of auction capacity/price. • Difficult to match with gas supply. • Opportunity for gaming by auction purchasers? • Bid price ≤ willingness to pay (bid price for firm service likely to be higher than interruptible service).	• Uncertainty of availability of auction capacity/price. • Difficult to match with gas supply. • Opportunity for gaming by donors? • Bid price ≤ willingness to pay (bid price for interruptible service likely to be lower than for firm service).

Option 1 (Highest priority) **Firm product (purchaser's nomination /renominations higher priority than donor's renominations)**	Option 2 (Lowest priority) **Interruptible product (donor's renomination rights higher priority than purchaser's nominations/renominations).**
• Capacity not quite as firm as capacity nominated before nomination cut off time due to technical requirements for pipeline set up. • Because the service is firm, the purchaser can't be bumped on one leg of a combinatorial auction bid. • Open up capacity for new business models.	• Additional risk due to interruptibility of product. Is the interruptibility of the product an acceptable risk noting that it could have financial implications (i.e. penalties and reneging on supply)? • Question as to whether the AER can play an effective surveillance role / threat? • Question as to whether this product will provide the "credible threat" shippers need to encourage them to sell capacity on the trading platform? • The team noted that if the pipeline has uncontracted capacity and the purchaser gets bumped because a donor has renominated up and the pipeline is utilised up to the contracted capacity, then the pipeline could offer the auction purchaser an as available or interruptible product at the price determined by the GTA. • The team also noted that if curtailment amongst auction purchasers is required, it could occur on the basis of the auction bid stack.
AUCTION "DONOR" (firm capacity holder, either primary or secondary)	
• Un-nominated MDQ goes to auction. If sold, loses preferred tie-breaking renomination rights. • GFG donors cannot bid capacity into the NEM.	• Un-nominated MDQ goes to auction, but donor retains the right to make an intraday renomination. • GFG donors can continue to bid gas generator into the NEM.
PIPELINE	
• Lose revenue from as available and interruptible sales but gain auction revenue net of costs. • Concerns about devaluing the firm capacity contracts & investment (current paradigm).	• Same, but less concerned because the value of firm capacity would be preserved.
OTHER OBSERVATIONS	

Option 1 (Highest priority) **Firm product (purchaser's nomination /renominations higher priority than donor's renominations)**	Option 2 (Lowest priority) **Interruptible product (donor's renomination rights higher priority than purchaser's nominations/renominations).**
• Does not comply with AEMC's recommendation that the auction accommodate renomination rights, so would need to be coupled with something else. • Auction provides a credible threat to primary capacity holders but shippers may not have a strong incentive to buy through the trading platform if they can get a superior product through the auction.	• Risk of interruption on a pipeline that is not physically congested could be reduced if the auction purchaser enters into an as available contract that allows the purchaser to access primary capacity if interrupted on contracted but un-nominated capacity. • Auction may not provide a credible threat to primary capacity holders but shippers should have a stronger incentive to buy through the trading platform because they will be able to access firm rights. • If as available and interruptible services continue to be offered, they will place a cap on the auction price.

Appendix C

Interruptible auction product option 2, if capacity needs to be curtailed because of firm intraday renomination, the pipeline can offer 'as available/interruptible' capacity



Whiteboard photos for reference