Gas Market Report

AUSTRALIAN ENERGY REGULATOR

31 July – 6 August 2022

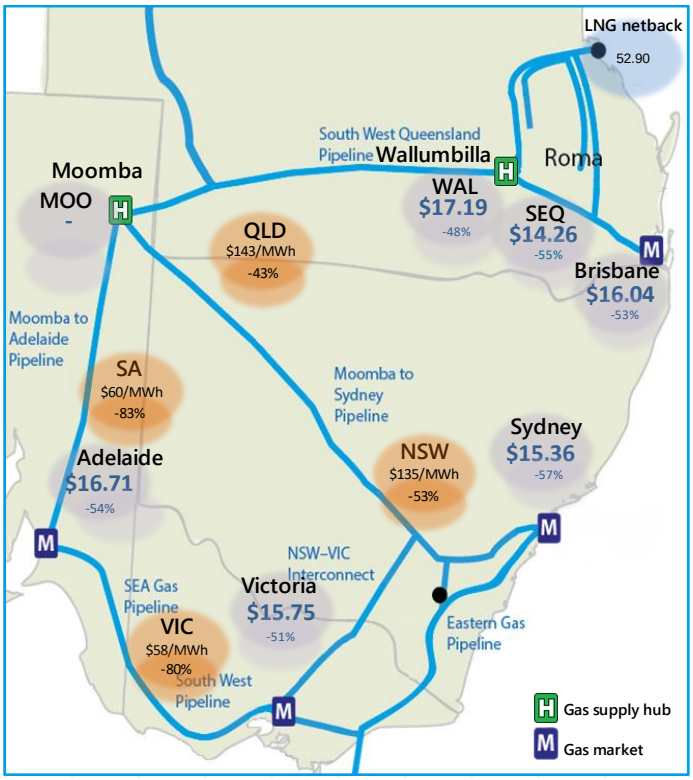
Weekly Summary

The Administered Price Cap (APC) of $40/GJ in the Victorian market was lifted on 1 August this week. All average spot prices dropped below $15/GJ on 3 August.

Downstream wholesale gas market prices (marked M on the map below) decreased significantly in all four markets (percentage change from previous week shown on map).

At the Wallumbilla upstream supply hub (marked H), the average price also decreased significantly at both the WAL and SEQ trading points. The map also includes National Electricity Market (NEM) prices for comparison across gas and electricity markets.

Map: Gas Market Prices, LNG netback price ($/GJ), NEM prices ($/MWh)



Note: The LNG netback price is the 29 July 2022 assessment for the front month forward (September) LNG netback price assessed: https://www.accc.gov.au/regulated-infrastructure/energy/gas-inquiry-2017-2025/lng-netback-price-series

The prices on the map for SEQ, WAL and MOO reflect only trades day ahead, to highlight price differentials between market and arbitrage opportunities.

Trading in the Wallumbilla gas supply hub was concentrated around shorter-term deliveries for products at WAL (171 TJ) this week (see section 6). There were also short-term deliveries at SEQ (33 TJ), SYD (30 TJ) and VIC (7 TJ), and 94 TJ of gas at WAL over 14-24 day delivery periods in August.

Mainland gas powered generation decreased this week, most significantly in South Australia. LNG export pipeline flows stayed below 3500 TJ per day this week as the APLNG outage continued (see more detailed map and table at figure 5.1).

Long term statistics and explanatory material

The AER has published an explanatory note to assist with interpreting the data presented in its weekly gas market reports. The AER also publish a range of longer term statistics on the performance of the gas sector including gas prices, production, pipeline flows and consumer demand.

Market overview

Figure 1 sets out the average daily prices ($/GJ) for the current week, and demand levels, compared to historical averages. Regions shown include the Victorian Declared Wholesale Market (or Victorian Gas Market - VGM) and for the Sydney (SYD), Adelaide (ADL) and Brisbane (BRI) Short Term Trading Market hubs (STTM).

Figure 1: Average daily prices and demand – all markets ($/GJ, TJ)[1]

	Victoria		Sydney		Adelaide		Brisbane	
	Price	Demand	Price	Demand	Price	Demand	Price	Demand
31 Jul - 06 Aug 2022	15.75	811	15.36	286	16.71	73	16.04	88
% change from previous week	-51	-13	-57	-15	-54	0	-53	-3
22-23 financial YTD	33.57	963	38.60	338	38.36	75	36.03	90
% change from previous financial YTD	136	1	150	11	141	-4	158	-7

Figure 2 sets out price and demand information for the voluntary Wallumbilla, South East Queensland and Moomba Gas Supply Hubs (GSH).

Figure 2: Average prices and total quantity – Gas Supply Hubs ($/GJ, TJ)[2]

	Moomba		South East Queensland		Wallumbilla	
	Price	Quantity	Price	Quantity	Price	Quantity
31 Jul - 06 Aug 2022	-	-	14.26	33	17.19	265
% change from previous week	-	-	-55	-70	-48	-66
22-23 financial YTD	31.21	188	35.24	367	33.96	3584
% change from previous financial YTD	71	3660	187	-59	162	69

1 Average daily quantities are displayed for each region. The weighted average daily imbalance price applies for Victoria.

2 The prices shown for the GSH in Moomba, South East Queensland and Wallumbilla are volume weighted average (VWA) prices for all products traded across the period. The total quantity contributing to the weighted price is displayed for these GSH. Reported values for Moomba are the aggregate of trades on the Moomba to Adelaide Pipeline (MAP) and the Moomba to Sydney Pipeline (MSP). Historic trades for RBP and SWQP are grouped under WAL, (including in-pipe trades on the RBP).

Figure 3 illustrates the daily prices in each gas market, as defined in figures 1 and 2.

Figure 3: Daily gas market prices ($/GJ)

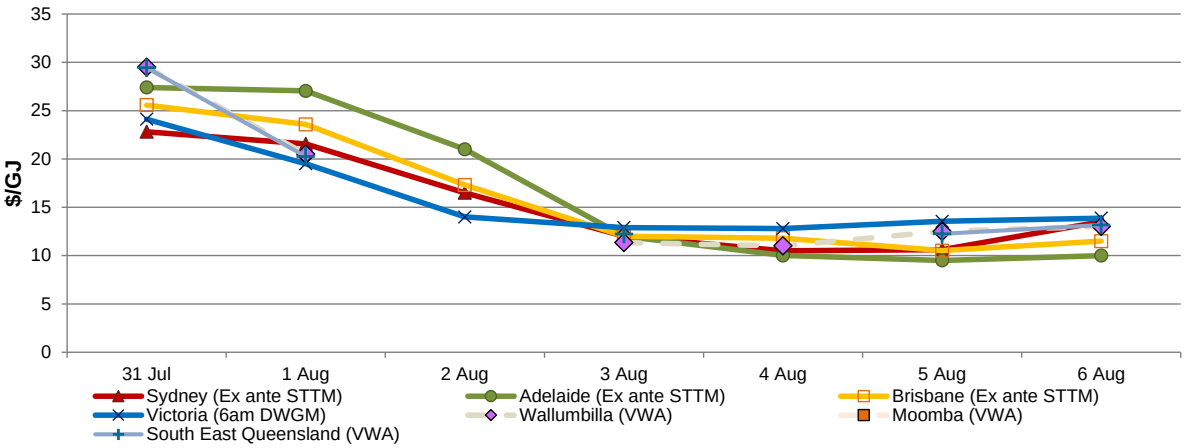


Figure 4 compares average ancillary market payments (for the VGM) and balancing gas service payments (STTM) against historical averages.

Figure 4: Average daily ancillary payments ($000)

	Victoria Ancillary Payments*	**Sydney** MOS	**Adelaide** MOS	**Brisbane** MOS
31 Jul - 06 Aug 2022	-	42.07	6.79	0.94
% change from previous week	-	-28	-25	-50
22-23 financial YTD		45.49	11.29	1.57
% change from previous financial YTD		43	132	81

* Ancillary payments reflect the compensation costs for any additional injections offered at a price higher than the market price. Note: only positive ancillary payments, reflecting system constraints will be shown here.

More detailed analysis on the VGM is provided in section 1.

Figure 5 shows the quantity and volume weighted prices of products traded in the Gas Supply Hub locations at Moomba, South East Queensland and Wallumbilla.

Figure 5: Gas Supply Hub products total traded for the current week ($/GJ, TJ)[3]

	Moomba		South East Queensland		Wallumbilla*	
	VWA price	Quantity	VWA price	Quantity	VWA price	Quantity
Balance of day	-	-	18.84	10.0	14.39	48.0
Daily	-	-	12.30	15.0	18.77	179.0
Day ahead	-	-	12.23	8.0	13.32	38.0
Weekly	-	-	-	-	-	-
Monthly	-	-	-	-	-	-
Total	**-**	**-**	**14.26**	**33.0**	**17.19**	**265.0**

* includes non-netted (off-market) trades.

Figure 6 shows Bulletin Board pipeline flows for the three LNG export pipeline facilities and the production output at related production facilities in the Roma region.

Figure 6: Average daily LNG export pipeline and production flows (TJ)*

	APLNG	GLNG	QCLNG	Total
Production	1506	923	1692	4121
Export Pipeline Flows	838	1101	1515	3454
% change from previous week (pipeline flows)	-31	9	26	1
22-23 financial YTD flows	1350	1023	986	3359

* Production quantities represent flows from facilities operated by APLNG, Santos and QGC. Gas from individual facilities may also supply the domestic market, other LNG projects or storage facilities.

[3] Further information about new product trading locations in Victoria (Culcairn) and Sydney (Wilton) is available in section 6. Gas Supply Hub).

Detailed market analysis

Table 1: Key events this week

Date	Event	Market Affected	Description
1 Aug	Administered Price Cap (APC) removed	Victoria	Cumulative pricing threshold (CPT) was not exceeded. First time APC lifted since its application on 30 May.
28 Jul – 24 Aug	APLNG 1 LNG train outage	East Coast (Supply)	Creates greater available domestic supply if production maintained.
11 Jul – 30 Sep (or until AEMO removes)	Threat to System Security	Victoria	Reduction in Iona supply capacity and the risk of supply shortfalls due to Iona inventory depletion this winter.
2 Aug	Update to TTSS issued 11 and 18 July	Victoria	Market participants no longer requested to support controllable withdrawals to Iona Underground Storage with corresponding supply.
19 Jul – 30 Sep	Gas Supply Guarantee	NSW, VIC, SA & TAS	Projected shortfall event in NSW, VIC, SA & TAS.

Victorian Administered Price Cap lifted on 1 August

After first being applied on 31 May, the $40/GJ Administered Price Cap (APC) in Victoria was removed on the morning of 1 August.

When APCs are in place, a scheduled price continues to be calculated based on participant's offers and bids. The scheduled price also known as the shadow price reveals the price where the market would have cleared but for the price cap.

Shadow prices are used in the calculation of the 7-day cumulative price. For example, for a price cap to be lifted in the declared wholesale gas market **(DWGM)**, the shadow price would have to be less than $40/GJ over a 7-day period.

The cumulative price on 1 August was $1,055/GJ, lower than the threshold of $1,440/GJ.

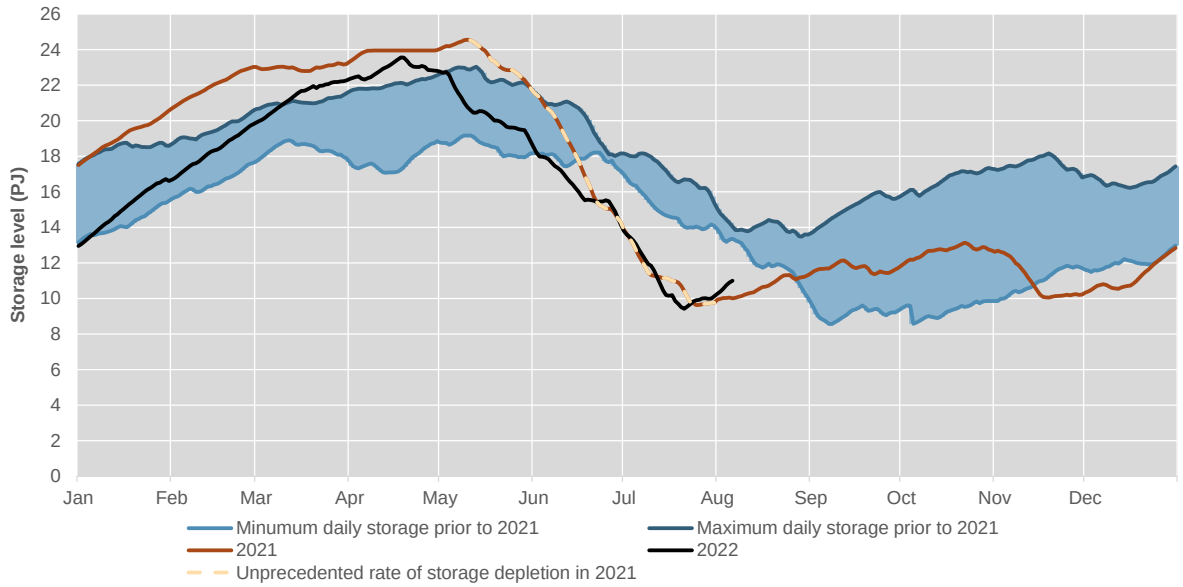
The price at the 6am schedule on 1 August was $19.51/GJ, which was considerably lower than Victorian prices throughout the last month. However, in comparison to historical Victorian prices, current levels are still very high.

Iona storage levels maintained

On 21 July, storage inventory at Iona started to increase after a week of rapid and unsustainable drawdown of gas (Figure 7). In August, storage inventory has increased to 11 PJ (6 August), higher than levels in August 2021. Despite the improving inventory levels at Iona, the risk of further rapid depletion remains in this climate of high spot prices and volatile demand.

From 13 to 23 July 2022, Iona storage levels dropped below 2021 levels. During this period in 2022, AEMO issued two Threat to System Security (TTSS) events in Victoria (in addition to the ongoing TTSS event that started on 11 July) as well as a notice of a potential Gas Supply Guarantee event[4] for NSW, VIC, SA and Tas from 19 July (see 17 – 23 July weekly).

Figure 7: Iona storage levels



Source: AER analysis of Bulletin Board data.

APLNG 1 LNG train outage continues

APLNG continued its 1 LNG train outage which started on 28 July and is expected to end 24 August.[5] Current spot market pricing aligns with lower priced deals (~$20/GJ) entered into in Q2 2022 to purchase gas covering its month outage at Wallumbilla. The outage creates greater available domestic supply if forecast production levels continue. Pipeline flows on the APLNG Pipeline connected to the LNG facility at Curtis Island dropped to average 838 TJ/day this week.

Threat to System Security in Victoria

The Threat to System Security (TTSS) event on 11 July due to unsustainable storage inventory depletion at Iona continued to be in effect. On 2 August, AEMO issued an update to the ongoing TTSS event. AEMO noted that they have reviewed the information provided by market participants as requested in the update to TTSS issued 18 July (see 17 – 23 July weekly) and assessed that the risk for Iona inventory depletion continues to exist. However, AEMO noted that the storage inventory has been maintained relatively flat at an average of

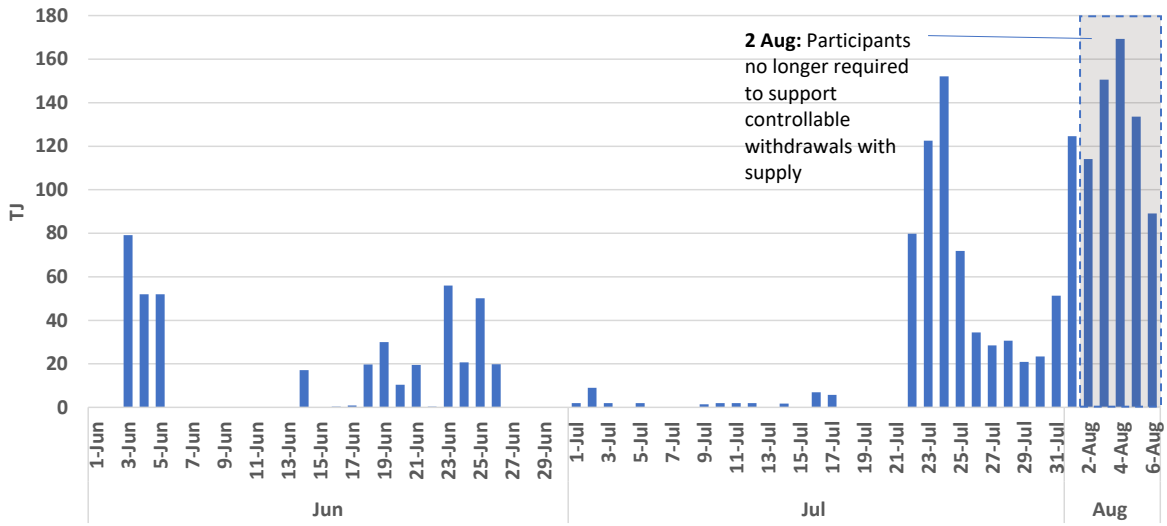
[4] The Gas Supply Guarantee is a mechanism to make gas available (by production facility operators and pipeline operators) to meet peak demand periods in the National Electricity Market (NEM).

[5] Australian Energy Market Operator, *LNG Maintenance Notice – APLNG update*, August 2022.

~10 PJ (see Figure 7 above) in the past week. Hence, AEMO has revised its TTSS notice so that market participants are no longer required to support controllable withdrawals from the DWGM into Iona storage with corresponding supply.

In the subsequent days, when prices were less than $15/GJ in the market, there were more withdrawals from the DWGM into the Iona storage facility (Figure 8). Average daily withdrawals for 11 July[6] were 35 TJ compared to the higher average daily withdrawals of 131 TJ from 2 August.

Figure 8: Withdrawals from the DWGM into Iona storage

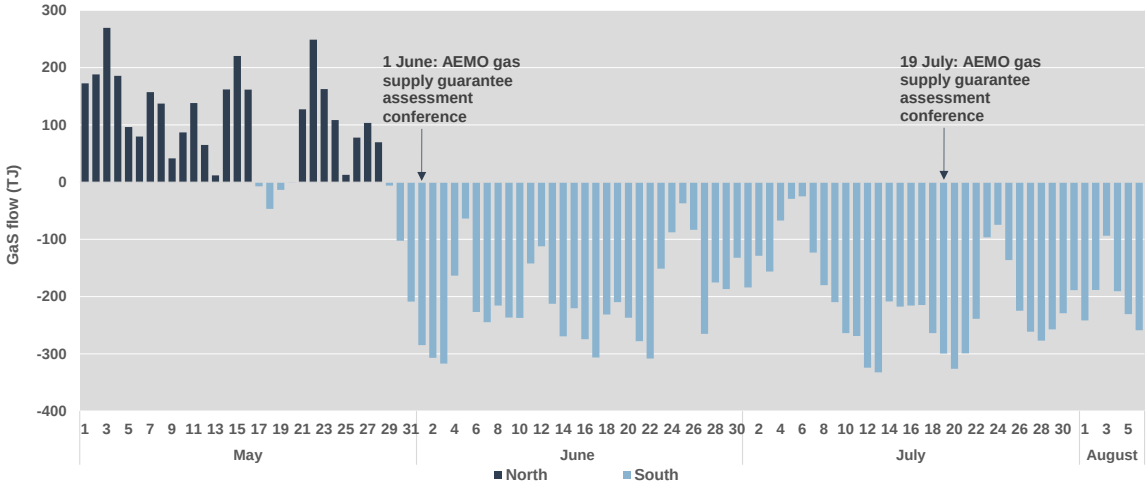


Source: AER analysis of DWGM data.

East Coast Gas Supply Guarantee event continues

The Gas Supply Guarantee event continues for NSW, VIC, SA and TAS regions this week. Gas has flowed south throughout the month of July, from the first Gas Supply Guarantee event on 1 June (Figure 9).

Figure 9: Gas flows south



Source: AER analysis of Bulletin Board data.

6 Market participants were requested to cease purchasing gas from the DWGM via controllable withdrawals from the DTS without corresponding gas supply scheduled for injection into the DTS.

Significant Price Variation analysis

This week, the AER significant price variation reporting thresholds were triggered in the Sydney short term trading market (STTM). The Significant Price Variations listed below were caused by participants rebidding between schedules to buy or sell gas. Specifically, the D-1 price in the Sydney STTM deviated from the D-2 forecast price by more than $14/GJ on a total of 6 occasions.

Table 2 provides a summary of the breaches. The schedule price variation is the difference between the D-1 ex ante price and the D-2 provisional price.

Table 2: Significant price variation threshold breaches – variation >$14/GJ between D-2 and D-1 price

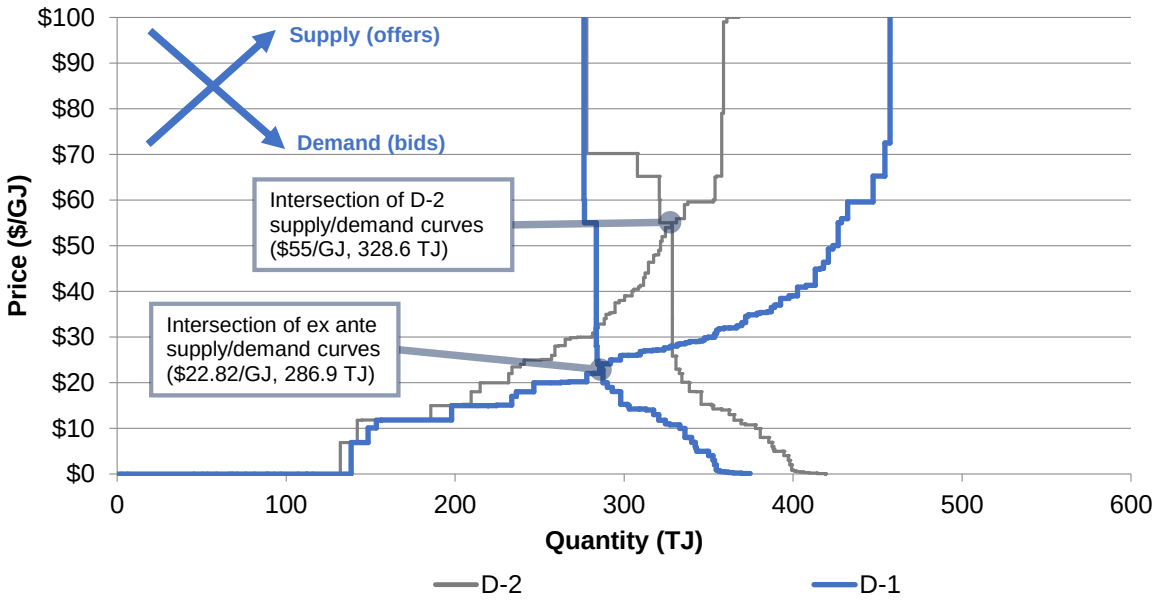
Gas day	Market	D-2 provisional price ($/GJ)	D-1 ex ante price ($/GJ)	Schedule price variation ($/GJ)	Threshold breach description
31-July	Sydney	55	22.82	-32.18	Supply offer and demand rebid
1-August	Brisbane	38.95	23.58	-15.37	Supply offer bid
	Sydney	36.36	21.57	-14.79	Supply offer and demand rebid
2-August	Brisbane	41.96	17.31	-24.65	Supply offer bid
	Sydney	31.09	16.5	-14.59	Supply offer bid
3-August	Brisbane	43.71	12	-31.71	Supply offer bid

For each breach, more detailed analysis is provided below. The AER will investigate and publish a further report on these events in or before September 2022. Our analysis below identifies drivers of these significant price variation events as a complement to this further reporting.

Significant Price Variation analysis

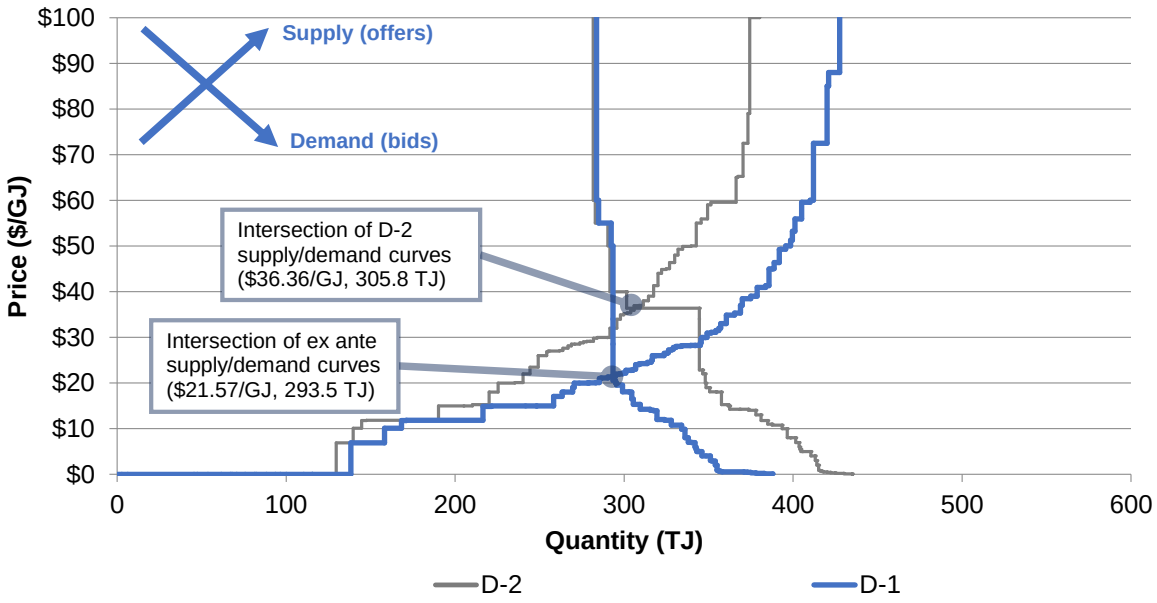
In Sydney rebidding of supply and demand influenced lower ex ante prices on 31 July and 1 August, with the downward price shift on 2 August driven by supply side rebidding. Exporter/producers and traders were the main contributors to the increased availability of lower priced supply in Sydney on these days. In Brisbane, rebidding of supply bids was the primary driver of lower ex ante prices over 1-3 August. Lower priced available capacity increases in Brisbane's ex ante schedules were largely provided by GPG gentailers, and capacity offered by Traders that was rebid to lower prices not offered under $30/GJ across provisional schedules.

Figure 10: Sydney provisional and ex ante bid and offer curves (31 July)



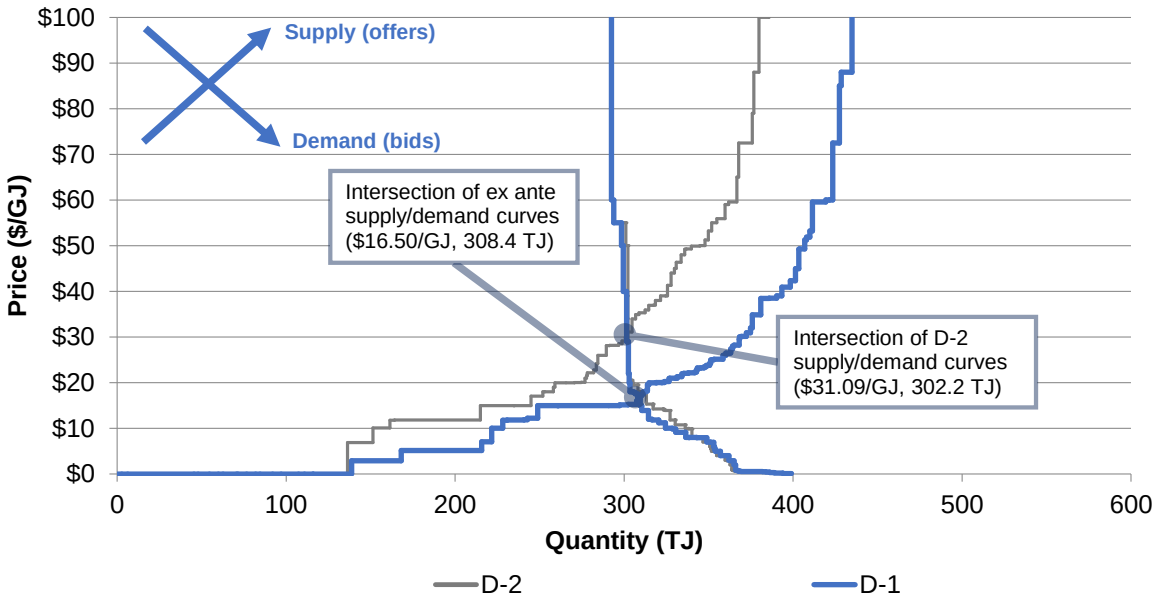
On 31 July in Sydney, an additional 65.4 TJ of supply was offered at $10-30/GJ in the ex ante schedule. Rebidding by Snowy Hydro also removed controllable demand bids priced around $65-70/GJ by 43 TJ, which reduced the potential ex ante price from just under $30/GJ to $22.82/GJ. The combined shift in supply and demand reduced the ex ante price by more than $30/GJ below the D-2 provisional schedule price. Additional supply capacity available below $30/GJ was offered by exporter/producers and traders, with smaller quantities also offered by GPG gentailer and industrial participants.

Figure 11: Sydney provisional and ex ante bid and offer curves (1 August)



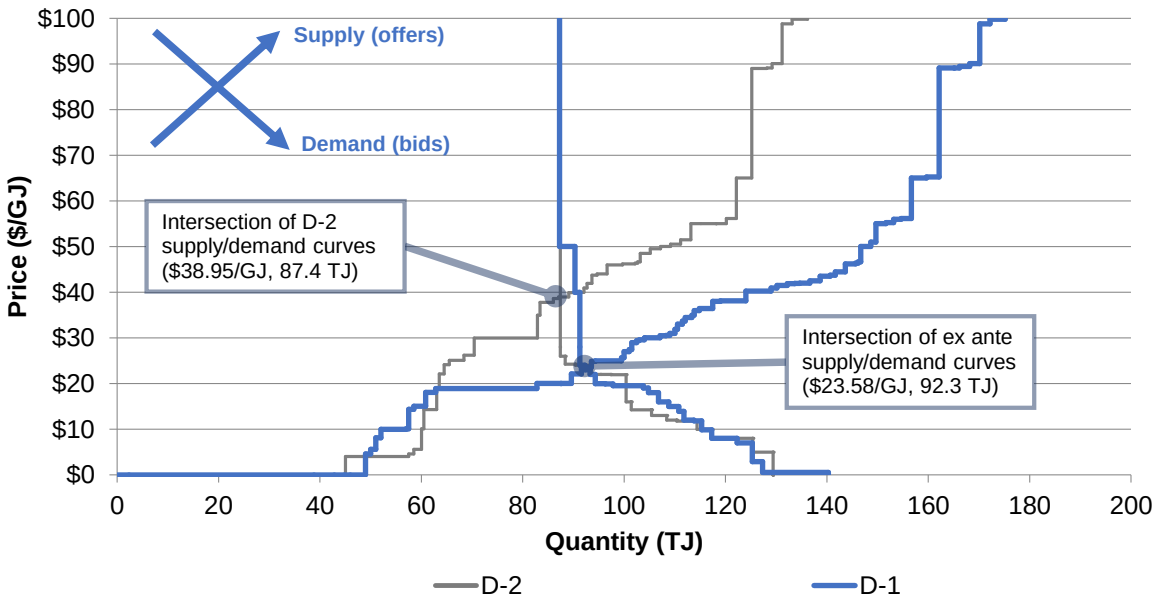
On 1 August in Sydney, an additional 48.9 TJ of supply was offered at $10-25/GJ in the ex ante schedule. Rebidding by Snowy Hydro and Aurora Energy also removed controllable demand bids priced at $36.36/GJ (43 TJ) and $39.99/GJ (10 TJ) respectively, which reduced the potential ex ante price from just under $30/GJ to $21.57/GJ. The combined shift in supply and demand reduced the ex ante price by $14.79/GJ below the D-2 provisional schedule price. Most of the additional supply capacity available below $30/GJ was offered by exporter/producers and traders.

Figure 12: Sydney provisional and ex ante bid and offer curves (2 August)



On 2 August in Sydney, supply offered below $30/GJ increased by 67.6 TJ in the ex ante schedule, of which 48.2 TJ was priced under $20/GJ. This reduced the ex ante price by $14.59/GJ below the D-2 provisional schedule price. Additional supply capacity below $20/GJ was offered by GPG gentailers, exporter/producers and traders.

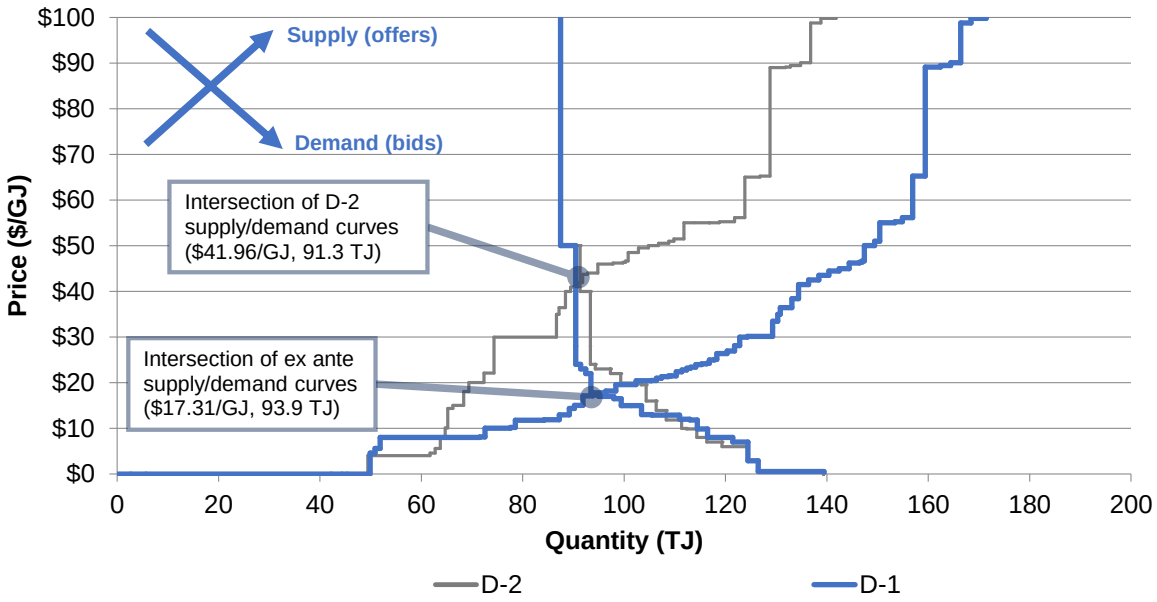
Figure 13: Brisbane provisional and ex ante bid and offer curves (1 August)



On 1 August in Brisbane, close to 40 TJ of additional supply capacity available below $25/GJ in the ex ante schedule was offered mainly by GPG gentailers (17 TJ), while smaller amounts came from exporter/producers and industrials (10 TJ), and traders (7 TJ)[7]. The additional supply capacity flattened the supply curve and resulted in the ex ante price decreasing by $15.37/GJ. Additional controllable bids priced at $40-50/GJ were offset by the same amount of supply provided at the floor price ($0/GJ),and did not impact the schedule price variation.

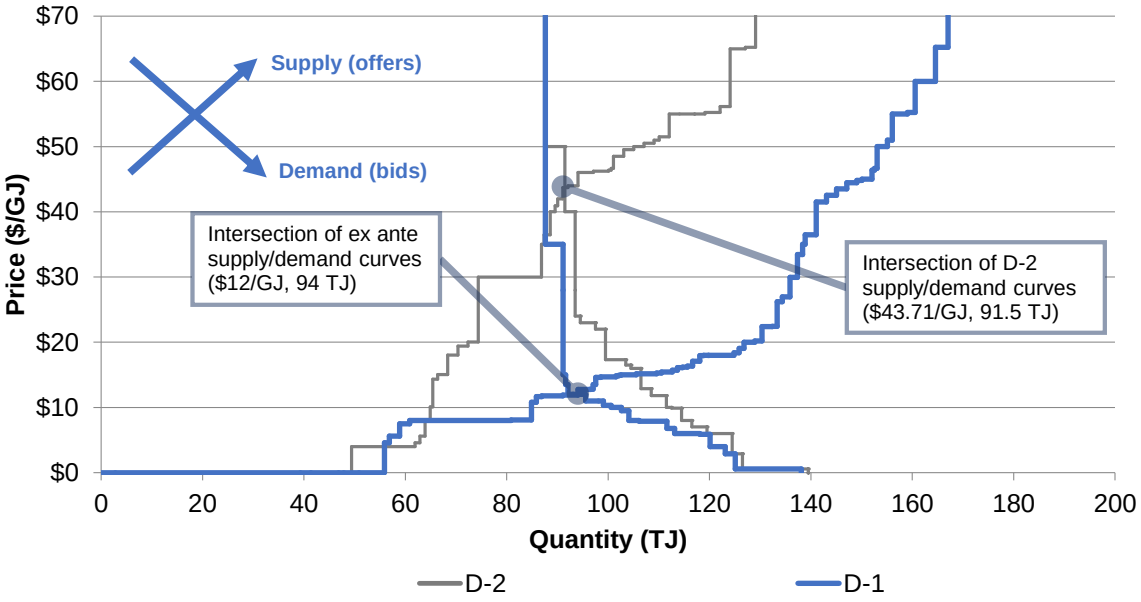
[7] Up from 0 TJ of offers below $30/GJ in provisional schedules offered by traders.

Figure 14: Brisbane provisional and ex ante bid and offer curves (2 August)



On 2 August in Brisbane, 33 TJ of additional supply capacity available below $20/GJ in the ex ante schedule was offered mainly by GPG gentailers (18 TJ), while smaller amounts came from exporter/producers (3 TJ), and traders (12 TJ)[8]. Rebidding reducing controllable withdrawal bids had a small influence on lower ex ante prices, which reduced $14.59/GJ below the D-2 provisional price.

Figure 15: Brisbane provisional and ex ante bid and offer curves (3 August)



On 3 August in Brisbane, 39 TJ of additional supply capacity available below $15/GJ in the ex ante schedule was offered mainly by GPG gentailers (20 TJ), while smaller amounts came from exporter/producers (6 TJ), industrials (1 TJ), and traders (12 TJ)[9]. This saw the ex ante price decrease by $31.71/GJ compared to the D-2 provisional price. Rebidding decreased quantities of controllable demand bids priced around $15-50/GJ, which had a small influence on the lower ex ante price ($3/GJ lower).

[8] Up from 0 TJ of offers below $35/GJ in provisional schedules offered by traders.

[9] Up from 0 TJ of offers below $35/GJ in provisional schedules offered by traders.

1. Victorian Declared Wholesale Market

In the Victorian gas market, gas is priced five times daily at 6 am, 10 am, 2 pm, 6 pm and 10 pm. The imbalance weighted price on a gas day tends towards the 6 am price[10] which is the schedule at which most gas is traded.

The main drivers[11] of price are demand forecasts and bids to inject or withdraw gas from the market. Figures 1.1 to 1.4 below show the daily prices, demand forecasts[12], and injection/withdrawal bids for each of the five pricing schedules. Figure 1.5 provides information on which system injection points were used to deliver gas, in turn indicating the location and relative quantity of gas injection bids cleared through the market.

Ancillary payments for gas injected above the market price are shown above in figure 4.

Figure 1.1: Prices by schedule ($/GJ)

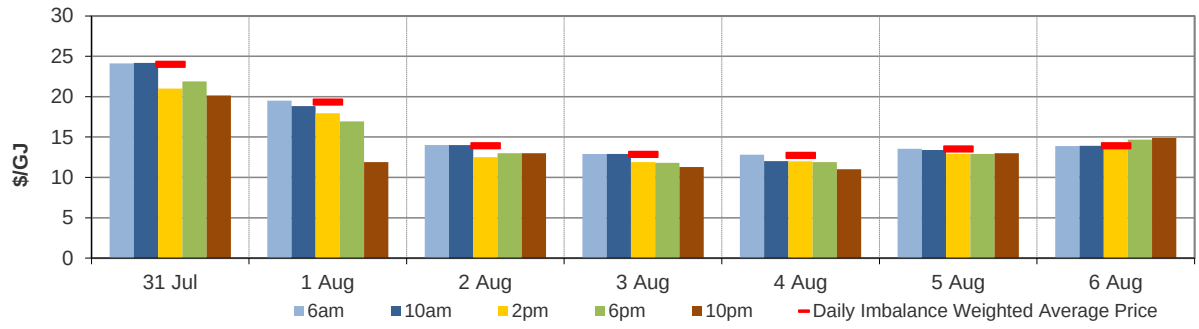
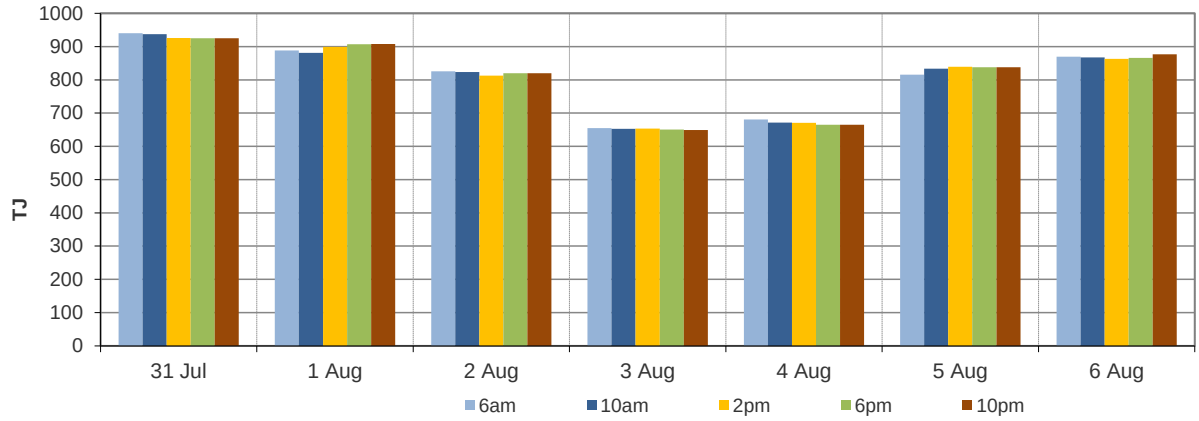


Figure 1.2: Demand forecasts (TJ)



10 Prices for subsequent schedules are applied only to the differences in scheduled quantities (imbalances) to calculate the weighted price. The 6 am price applies to the entire scheduled quantity in the initial schedule.

11 The price might also be affected by transmission or production (contractual) constraints limiting how much gas can be delivered from a locale or System Injection Point (SIP) from time to time.

12 These are market participants' aggregate demand forecasts adjusted for any override as applied by AEMO from time to time. These forecasts must be scheduled and cannot respond to price like withdrawal bids.

Figure 1.3: Injection bids by price bands (TJ)

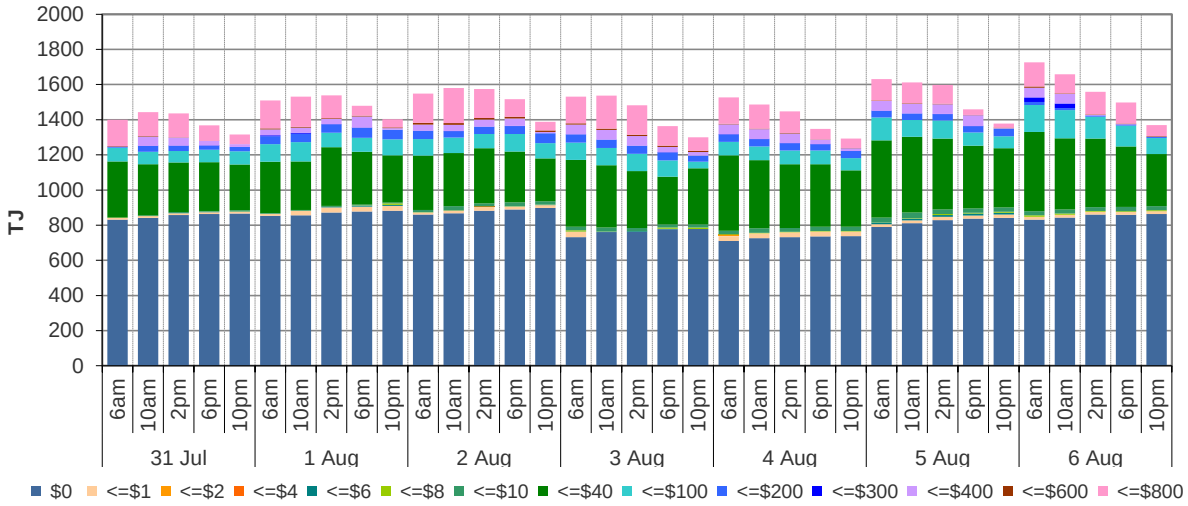


Figure 1.4: Withdrawal bids by price bands (TJ)

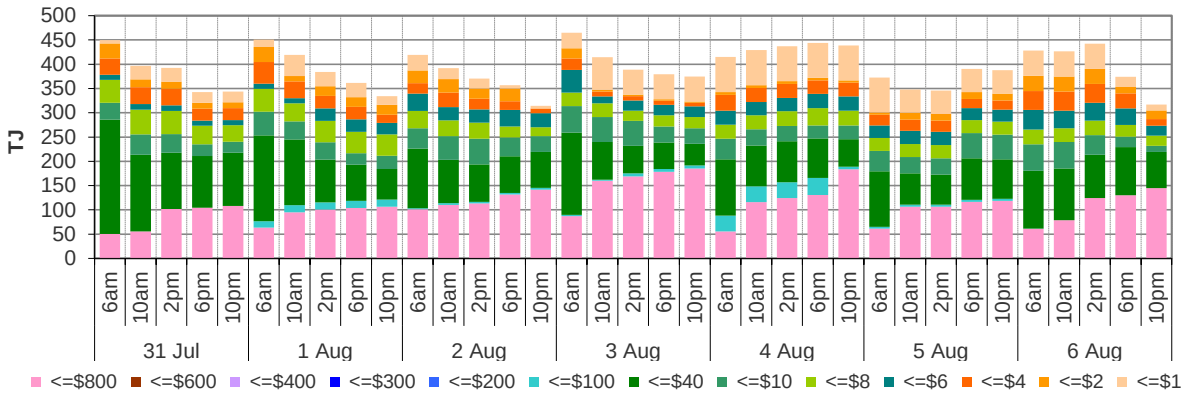
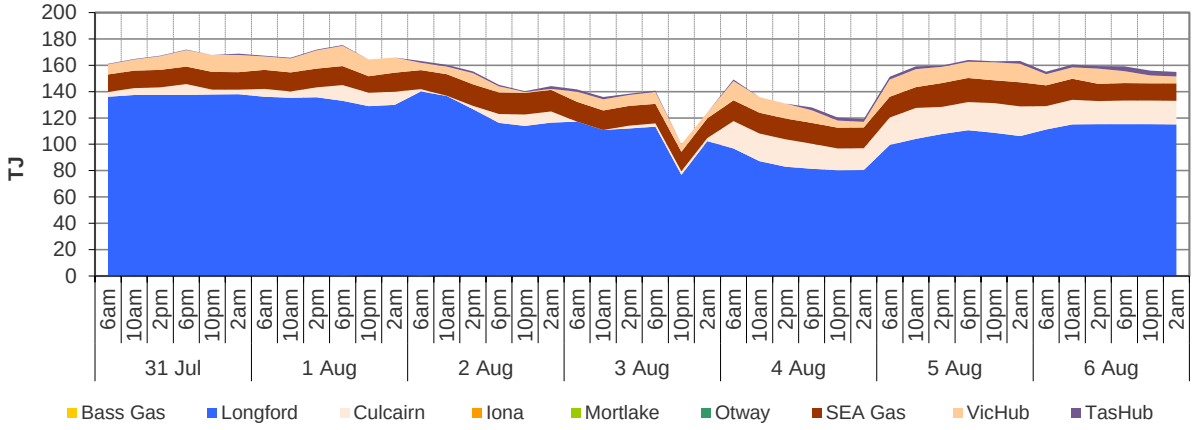


Figure 1.5: Metered Injections by System Injection Point (TJ)



Note that in figure 1.5, the last 8-hour schedule from 10 pm has been separated into two 4-hour blocks to provide a consistent comparison with earlier scheduled injection volumes.

2. Sydney STTM

In each STTM hub, a daily gas price is calculated before the gas day (the ex ante price) and after the gas day (the ex post price). The main drivers of these prices are participant demand forecasts and offers to inject or bids to withdraw gas traded at the hub.[13] Divergences in ex ante and ex post prices for a gas day may occur due to differences in scheduled (forecast) and allocated (actual) quantities. Pipeline acronyms are defined in the user guide.

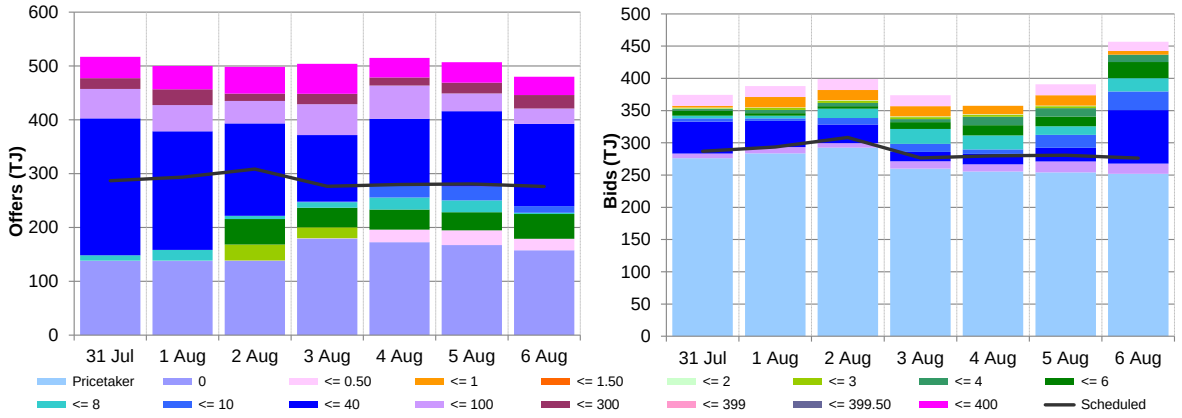
Market Operator Service balancing gas (MOS) payments arise because the amount of gas nominated on pipelines for delivery on a gas day will either exceed or fall short, by some amount, of the amount of gas consumed in the hub. In such circumstances, MOS payments are made to participants for providing a service to park gas on a pipeline or to loan gas from a pipeline to the hub.[14]

Figures 2.1 and 2.2 show daily prices, demand, offers and bids. Figures 2.3 and 2.4 show gas scheduled and allocated on pipelines to supply the hub, indicating the location and relative quantity of gas offers across pipelines and also the amount of MOS allocated for each pipeline.

Figure 2.1: SYD STTM daily ex ante and ex post prices and quantities

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Ex ante price ($/GJ)	22.82	21.57	16.50	12.00	10.50	10.61	13.50
Ex ante quantity (TJ)	287	293	308	276	280	281	276
Ex post price ($/GJ)	22.82	21.57	15.12	11.81	10.11	10.22	13.00
Ex post quantity (TJ)	287	294	300	267	277	269	269

Figure 2.2: SYD daily hub offers and bids in price bands ($/GJ)



13 The main driver of the amount of gas scheduled on a gas day is the 'price-taker' bid, which is forecast hub demand that cannot respond to price and which must be delivered, regardless of the price.

14 MOS service payments involve a payment for a MOS increase service when the actual quantity delivered exceeds final gas nominations for delivery to a hub, and a payment for a MOS decrease service when the actual quantity delivered is less than final nominations. As well as a MOS 'service' payment, as shown in figure 2.4, MOS providers are paid for or pay for the quantity of MOS sold into the market or bought from the market (MOS 'commodity' payments/charges).

Figure 2.3: SYD net scheduled and allocated gas hub supply (excluding MOS)

Figure 2.3 shows the daily scheduled and allocated quantities sorted by facility for Sydney this week. For a more detailed description of this figure, please refer to the user guide.

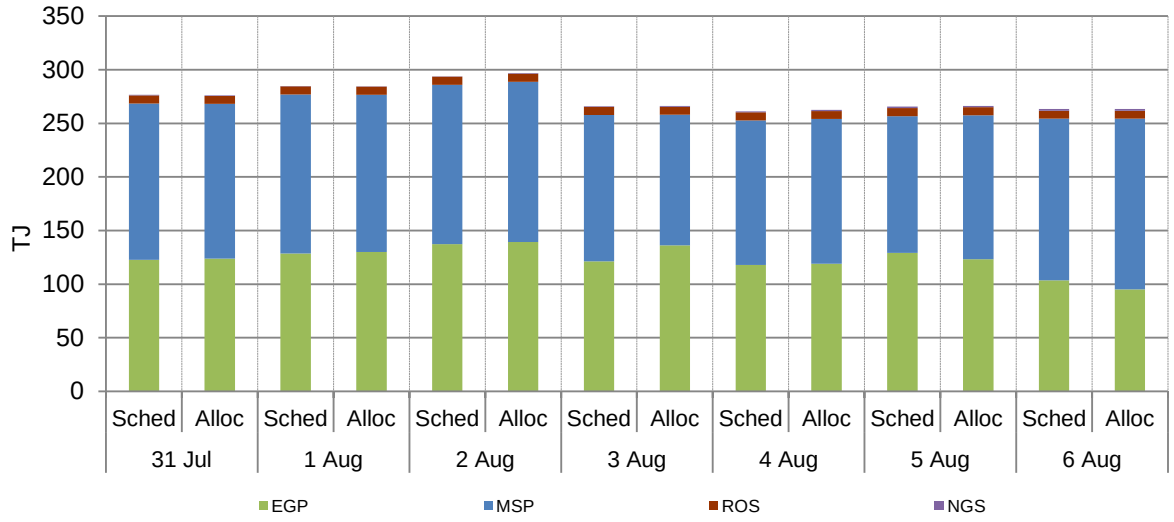
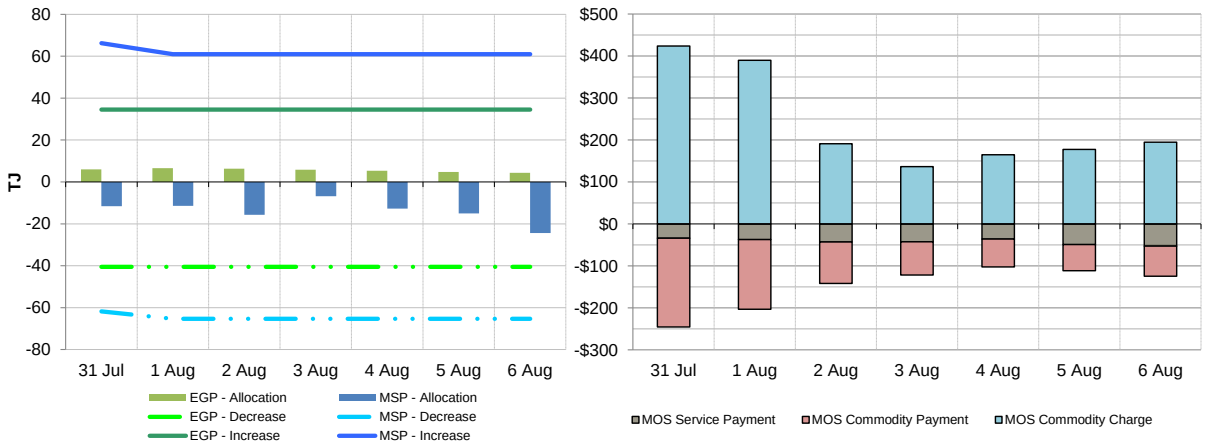


Figure 2.4: SYD MOS allocations (TJ), service payments and commodity payments/charges ($000)[15]



[15] The commodity cost of MOS illustrated on the right of the figure represents the commodity quantity at the D+2 ex ante price. Commodity payments and charges for a given gas day relate to quantities traded two days earlier. That is, the commodity cost for services provided on Sunday will appear in the chart for Tuesday, when the D+2 price is set. In contrast, service payments are shown alongside the day they occurred.

3. Adelaide STTM

The Adelaide STTM hub functions in the same way as the Sydney STTM hub. The same data that was presented for the Sydney hub is presented for the Adelaide hub in the figures below.

Figure 3.1: ADL STTM daily ex ante and ex post prices and quantities

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Ex ante price ($/GJ)	27.40	27.04	21.01	12.01	10.01	9.50	10.00
Ex ante quantity (TJ)	68	77	77	69	71	77	69
Ex post price ($/GJ)	27.12	24.20	21.01	11.45	10.21	8.99	10.99
Ex post quantity (TJ)	67	71	75	63	72	73	71

Figure 3.2: ADL daily hub offers and bids in price bands ($/GJ)

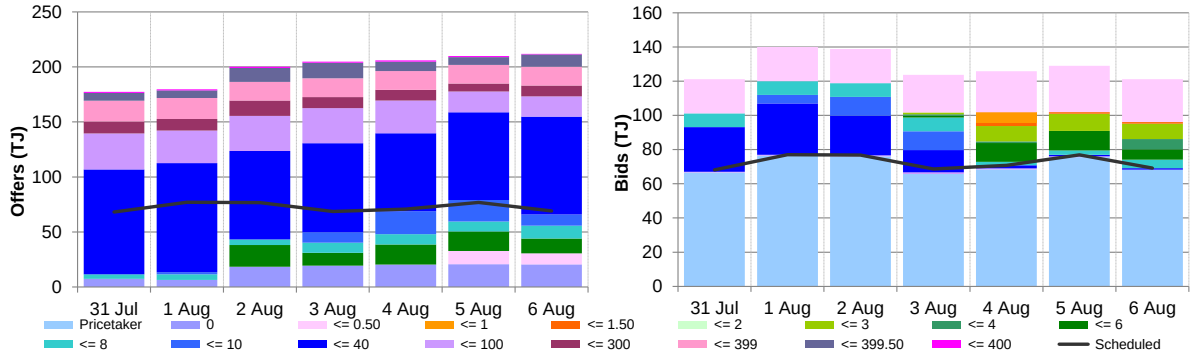


Figure 3.3: ADL net scheduled and allocated gas hub supply (excluding MOS)

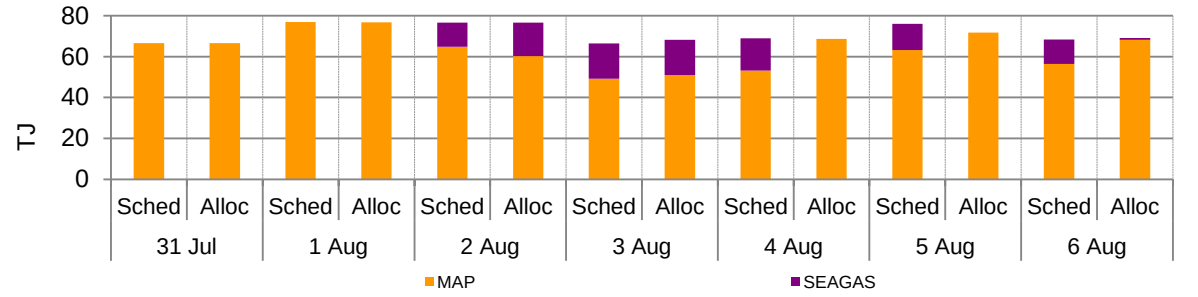
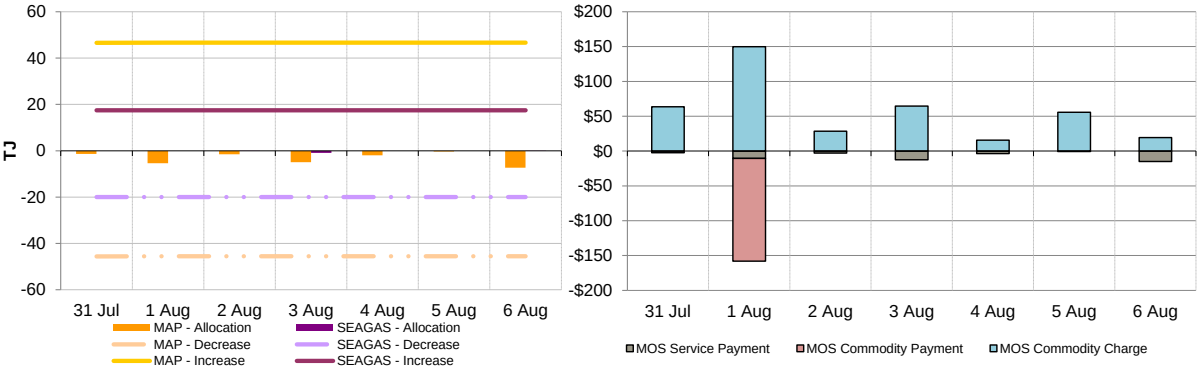


Figure 3.4: ADL MOS allocations (TJ), service payments and commodity payments/charges ($000)



4. Brisbane STTM

The Brisbane STTM hub functions in the same way as the Sydney STTM hub. The same data that was presented for the Sydney hub is presented for the Brisbane hub in the figures below.

Figure 4.1: BRI STTM daily ex ante and ex post prices and quantities

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Ex ante price ($/GJ)	25.58	23.58	17.31	12.00	11.80	10.51	11.50
Ex ante quantity (TJ)	79	92	94	94	92	87	79
Ex post price ($/GJ)	25.58	22.00	17.00	11.89	11.61	10.24	10.28
Ex post quantity (TJ)	78	88	90	91	89	84	65

Figure 4.2: BRI daily hub offers bids in price bands ($/GJ)

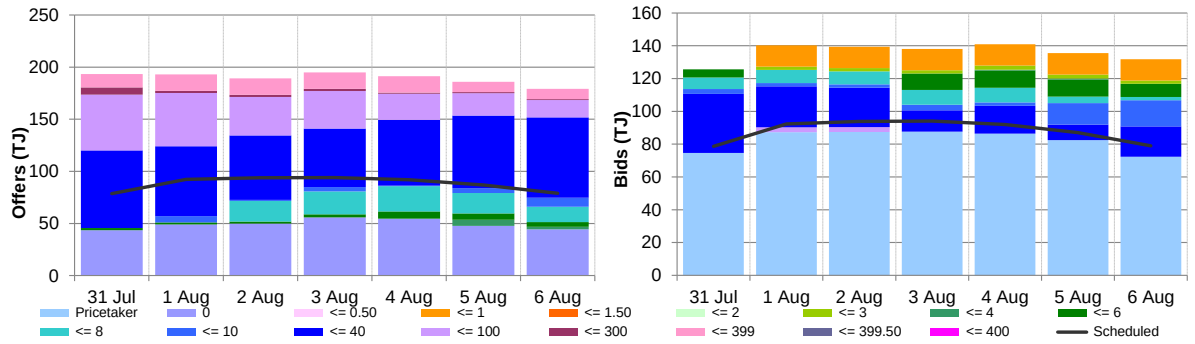


Figure 4.3: BRI net scheduled and allocated gas hub supply (excluding MOS)

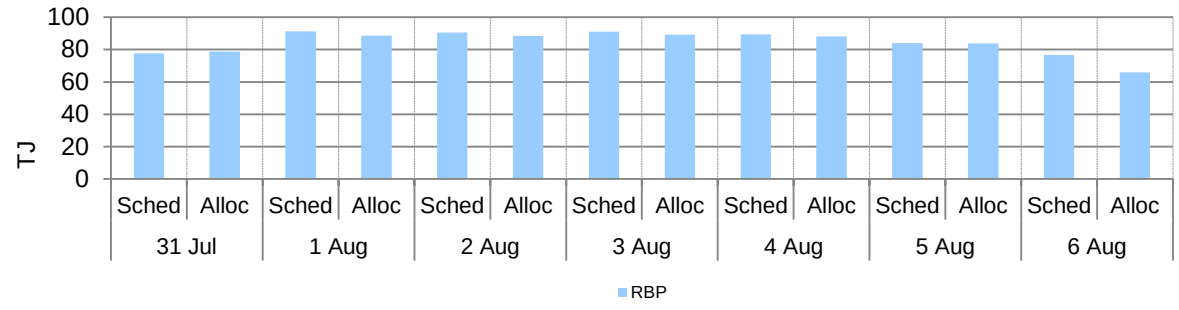
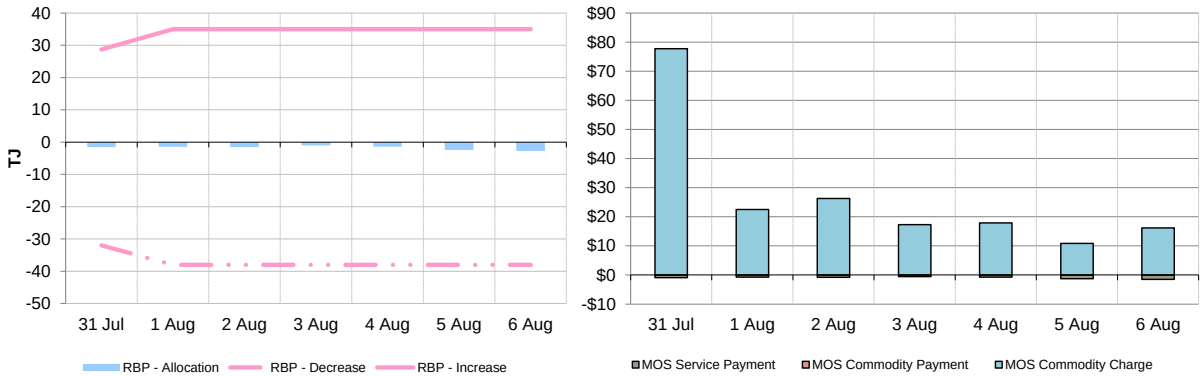


Figure 4.4: BRI MOS allocations (TJ), service payments and commodity payments/charges ($000)



5. National Gas Bulletin Board

Figure 5.1 shows average daily actual flows for the current week[16] from the Bulletin Board (changes from the previous week's average are shown in brackets). Average daily prices[17] are provided for gas markets and gas supply hubs. Average daily quantities are provided for gas powered generation for each region.

Figure 5.1: Gas market data ($/GJ, TJ/day); Bulletin Board flows (TJ/day)[18]

Totals	Current Week	Change (TJ)
Domestic gas flows	1720	(-189)
Export gas flows	3454	(+29)
Gas production	5400	(-105)
GPG gas usage	250	(-130)
Pipelines		
Queensland		
Gladstone		
APLNG	838	(-377)
GLNG	1101	(+95)
QGP	130	(-2)
WGP	1515	(+312)
Mt Isa		
CGP	88	(+6)
Brisbane		
RBP	88	(-3)
South West		
SWQP	71	(+8)
Wallumbilla		
BWP	89	(-49)
CRWP	35	(+85)
DDP	182	(+83)
QGP (WAL)	33	(+1)
RBP (WAL)	-13	(+17)
SWQP (WAL)	287	(+11)
New South Wales		
MSP	194	(-39)
EGP	213	(-12)
Victoria		
LMP	755	(-120)
SWP	-20	(-23)
South Australia		
MAP	149	(-21)
SEAGas	31	(-11)
Tasmania		
TGP	25	(+3)

Storage (held volume)		
Moomba LDB	12072	(-48)
Iona UGS	10572	(+622)
LNG Storage Dandenong	382	(-3)
Silver Springs	16073	(-21)
Roma UGS	25620	(-177)

16 **Domestic gas flows** are calculated as the total of: **SA** = MAP + SEAGAS; **VIC** = SWP + LMP + (flows towards Victoria on the 'NSW-VIC interconnect'); **NSW/ACT** = EGP + MSP; **TAS** = TGP; **QLD (Brisbane)** = RBP; **QLD (Mt Isa)** = CGP; and **QLD (Gladstone)** = QGP.
Export gas flows are calculated as the total of: the APLNG pipeline; the GLNG pipeline; and the Wallumbilla to Gladstone pipeline.
GPG volumes may include gas usage that does not show up on Bulletin Board pipeline flows.

17 GSH supply is the average daily volume of gas 'traded', while price is a volume weighted average. Optional hub services (for compression and redirection) are shown separately from commodity trades.

18 Net flows are shown for Bulletin Board facilities, as outlined in the user guide.

6. Gas Supply Hub

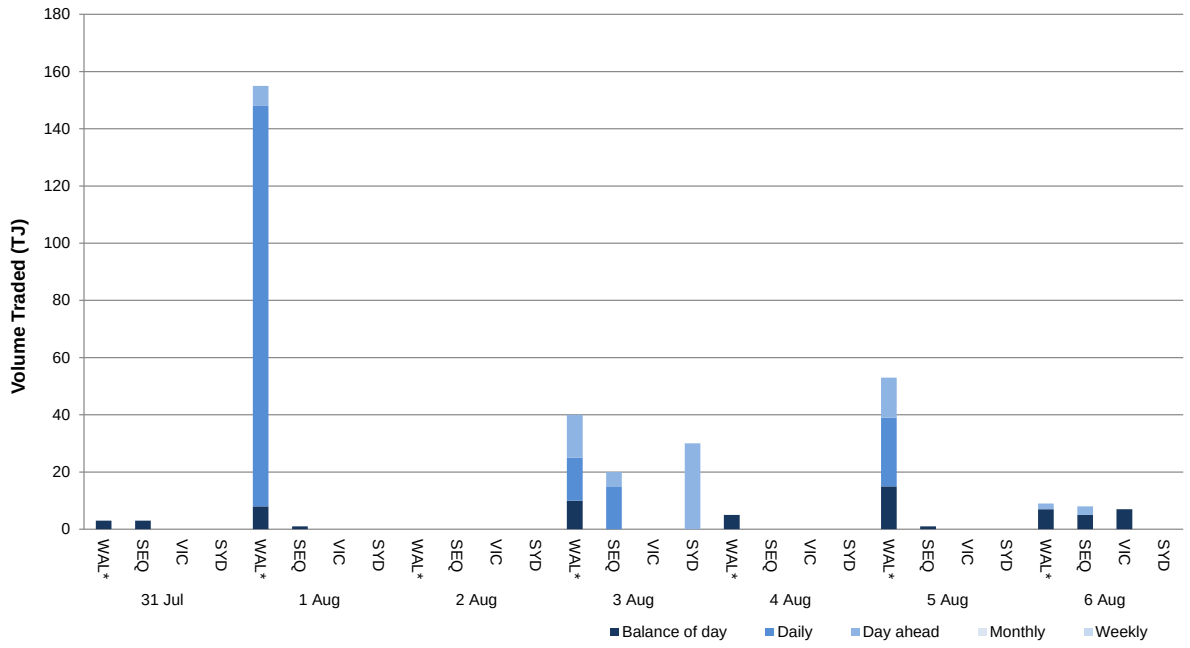
The gas supply hub was established at Wallumbilla in March 2014 to facilitate the voluntary trading of gas between participants, with products listed for sale and purchase at delivery points on three major connecting pipelines. There are separate products for each trading location and delivery period (daily, day-ahead, balance-of-day, weekly and monthly products).[19]

The Moomba hub commenced operation from June 2016 to further facilitate trading on the MAP and MSP, with trading between the two hubs on the SWQP via a spread product (representing the price differential between the hubs). From October 2016, the addition of a Wallumbilla Compression Product was introduced to facilitate the supply hub's transition from three different trading locations into one. From March 2017, Wallumbilla transitioned into an optional hub services model, replacing the three trading locations (QGP, SWQP and RBP) with a single product at Wallumbilla (WAL) and an in-pipe RBP trading location at South East Queensland (SEQ). On 28 January 2021, trading locations at Wilton (Sydney) and Culcairn (Victoria) were introduced.

This week there were 44 trades for 335 TJ of gas at a volume weighted price of $16.30/GJ. These consisted of 31 trades at WAL (265 TJ at $17.19/GJ), 10 trades at SEQ (33 TJ at $14.26/GJ), 2 trades at VIC (7 TJ at $15/GJ) and 1 trade at SYD (30 TJ at $11/GJ). There were 2 spread trades this week between SEQ and WAL.

Figure 6.1 shows the quantity of gas traded by product type for each trading day on pipeline trading locations in the Wallumbilla and Moomba Gas Supply Hubs.[20]

Figure 6.1: GSH traded quantities



19 Additional information on trading locations and available products is detailed in the user guide.

20 Non-netted (off-market) trades, allowing the selection of specific delivery point at a trading location, are included with other Wallumbilla trades (WAL*). Non-netted trades at Moomba are shown separately (MOO) from MAP and MSP.

7. Day Ahead Auction

The DAA is a centralised auction platform providing the release of contracted but un-nominated transportation capacity on designated pipelines and compression facilities across eastern Australia. The auction enables transportation facility users to procure residual capacity on a day-ahead basis after nomination cut-off, with a zero reserve price and compressor fuel provided.

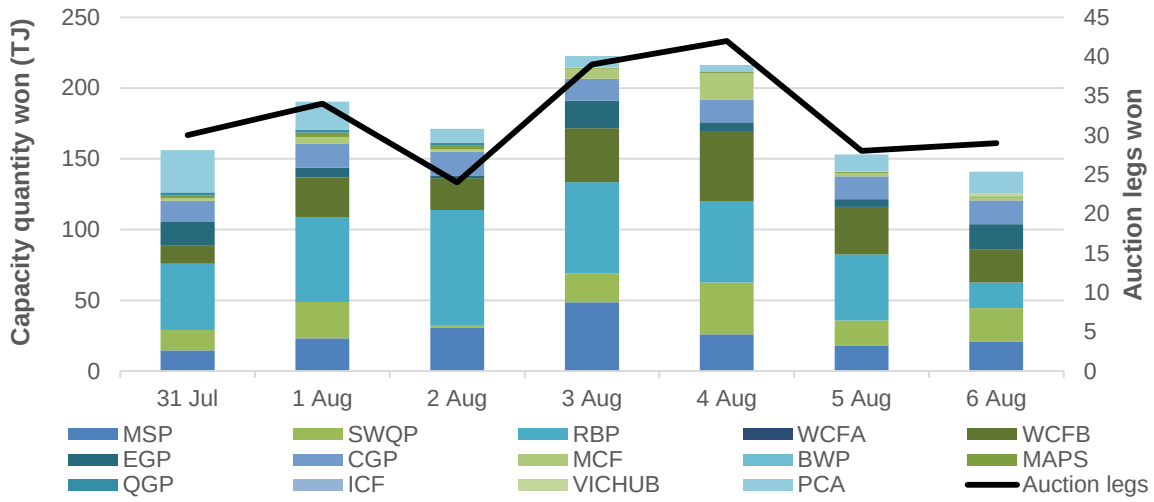
Participants may bid in to the DAA in order to procure the following services:

- park services;
- forward haul pipeline services with products offered in both directions on bi-directional pipelines;
- interruptible backhaul services; and
- stand-alone compression services.

This week, 16 participants took part in the DAA, winning 1251 TJ of capacity across 11 different facilities.

Figure 7.1 shows the quantities of gas and auction legs won through the DAA by gas date, with gas deliverable up to the level of capacity procured. Auction legs reflect each individual facility transaction.[21]

Figure 7.1: DAA traded quantities (TJ) and auction legs won



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[21] Additional information is available in the user guide to the AER gas weekly report.