Gas Market Report

AUSTRALIAN ENERGY REGULATOR

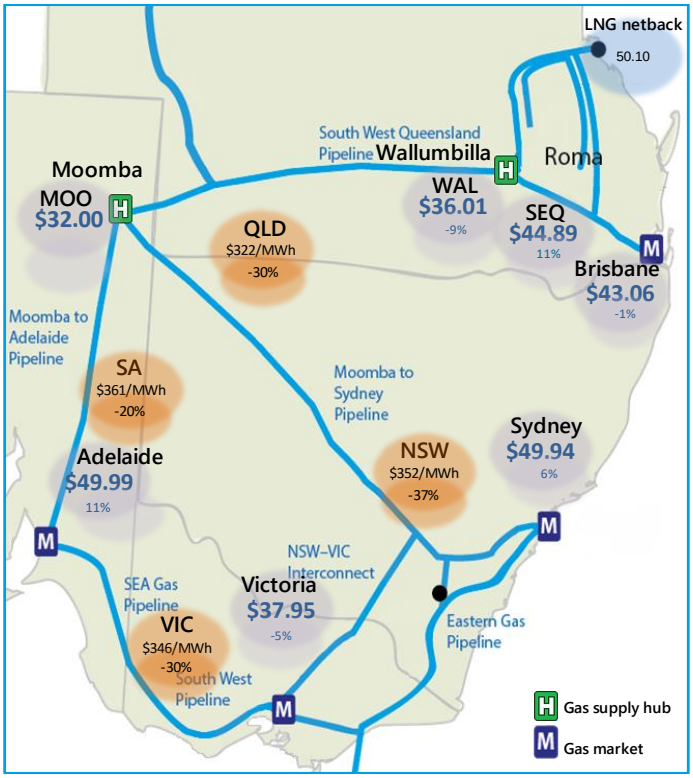
17 – 23 July 2022

Weekly Summary

The Administered Price Cap (APC) continued to cap prices at $40/GJ in the Victorian market this week. For the first time since the end of June, prices in the Victorian market dropped below $40/GJ on 22 July.

Downstream wholesale gas market prices (marked M on the map below) increased in Sydney and Adelaide and decreased in Victoria and Brisbane (percentage change from previous week shown on map). There was a record high price in the Sydney market of $59.49/GJ and in the Adelaide market of $59.23/GJ on 18 July. Prices started to come down off record highs after 18 July, with downstream prices averaging $34.75/GJ on 23 July. These high prices coincided with a decrease in mainland gas powered generation in all east coast states this week (for the first time in seven weeks, average daily gas usage by GPGs dropped below 500 TJ per day) and an increase in LNG export pipeline flows (corresponding with high international LNG spot prices). See more detailed map and table at figure 5.1. At the Wallumbilla upstream supply hub (marked H), the average price decreased at the WAL trading point and increased at the SEQ trading point. The WAL trading point recorded a record high price of $50/GJ this week. 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 15 July 2022 assessment for the front month forward 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 products at the WAL trading location, including 527 TJ of shorter-term trades and 577 TJ for longer term deliveries. this week (see section 6).[1] The longer-term trades included a mix of strip trades for deliveries across late-July to late-September (217 TJ) and monthly products for delivery across January, February and March 2023 (360 TJ). Other trades included smaller short-term deliveries for SEQ (18 TJ) and SYD (24 TJ), and two long-term trades of the Moomba non-netted[2] product for delivery over November and December 2022.

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)[3]

	Victoria		Sydney		Adelaide		Brisbane	
	Price	Demand	Price	Demand	Price	Demand	Price	Demand
17 Jul - 23 Jul 2022	37.95	1031	49.94	362	49.99	76	43.06	90
% change from previous week	-5	-1	6	0	11	4	-1	0
22-23 financial YTD	39.37	1018	46.47	353	45.66	76	42.79	90
% change from previous financial YTD	129	3	156	13	150	-4	176	-4

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

[2] The 'MOO Non-Netted' product traded was an off-market transaction not available on the trading exchange, which was assigned to an alternative delivery point (a point not included in AEMO's existing registry of GSH delivery points).

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

Figure 2: Average prices and total quantity – Gas Supply Hubs ($/GJ, TJ)[4]

	Moomba		South East Queensland		Wallumbilla	
	Price	Quantity	Price	Quantity	Price	Quantity
17 Jul - 23 Jul 2022	32.00	183	44.89	18	36.01	1104
% change from previous week	-	-	11	-91	-9	104
22-23 financial YTD	31.21	188	40.07	224	35.93	2532
% change from previous financial YTD	71	3660	214	-68	155	69

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

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

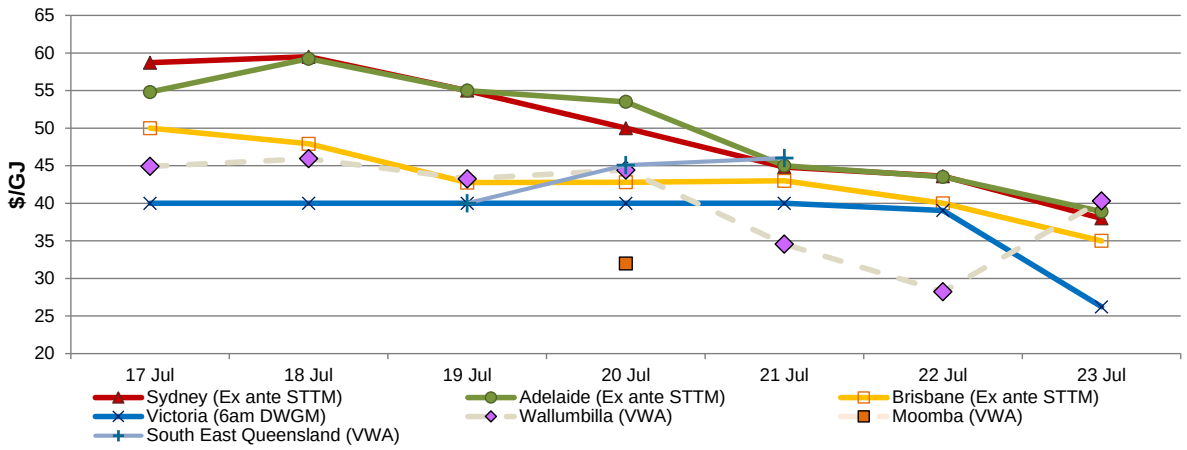


Figure 4 compares average ancillary market payments (for the VGM) and balancing gas service payments (STTM) against historical averages.

Figure 4: Average daily ancillary payments ($000)

	Victoria Ancillary Payments*	Sydney MOS	Adelaide MOS	Brisbane MOS
17 Jul - 23 Jul 2022	-	53.81	11.34	2.51
% change from previous week	-	52	-25	92
22-23 financial YTD		42.55	13.33	1.66
% change from previous financial YTD		37	213	168

* 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.

[4] 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 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)[5]

	Moomba		South East Queensland		Wallumbilla*	
	VWA price	Quantity	VWA price	Quantity	VWA price	Quantity
Balance of day	-	-	45.13	16.0	41.06	98.0
Daily	-	-	-	-	35.90	489.0
Day ahead	-	-	43.02	2.0	43.57	157.0
Weekly	-	-	-	-	-	-
Monthly	32.00	183.0	-	-	31.50	360.0
Total	**32.00**	**183.0**	**44.89**	**18.0**	**36.01**	**1104.0**

* 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	1497	875	1673	4045
Export Pipeline Flows	1593	982	793	3368
% change from previous week (pipeline flows)	9	-5	4	4
22-23 financial YTD flows	1548	1004	758	3310

* 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.

[5] 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
17 - 23 Jul	Administered Price Cap (APC) continues High Shadow prices	Victoria	Multiple schedules of high shadow prices leading to cumulative pricing threshold (CPT) continuing to be exceeded through week.
17 – 18 Jul	QCLNG ½ - 1 LNG train outage. Outage ended on 18 July.	East Coast (Supply)	Pipeline flows on the Wallumbilla Gladstone Pipeline projected to return to standard levels.
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.
18 Jul	Update to TTSS issued 11 July	Victoria	AEMO requested market information and data from market participants.
18 Jul	Threat to System Security	Victoria	AEMO notice critical at 7:42 PM – ended on 19 Jul at 6:53 AM. Reduction in Longford production.
18 Jul	Record high prices	Sydney and Adelaide	Record high price in the Sydney market of $59.49/GJ and in the Adelaide market of $59.23/GJ.
18, 20 Jul	High MOS payments	Sydney	MOS service payments exceeded $50,000 – counteracting MOS drove large MSP decrease allocations.
18, 19 Jul	Record high demand	Sydney	402 TJ on 19 July
19 Jul	Threat to System Security	Victoria	AEMO notice critical at 10:33 PM on 18 July for gas day 19 July. 133TJ shortfall at 12AM D+1 schedule - TTSS started at 6:00am on 19 July and ended 5:00am on 20 July.
19 Jul – 30 Sep	Gas Supply Guarantee	NSW, VIC, SA & TAS	Projected shortfall event in NSW, VIC, SA & TAS.
23 Jul	High shadow prices finish	Victoria	Last day of shadow price hitting maximum of $800/GJ.

Victorian Administered Price Cap continues – Multiple High Shadow Prices

The price in the Victorian market continued to be capped at $40/GJ this week as a result of high cumulative prices leading to the application of an Administered Price Cap (APC)**.**

High shadow prices of $800/GJ ended in the Victorian market after 23 July. However, the APC in the Victorian market continued to be in effect. 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 the price cap to be lifted in the declared wholesale gas market **(DWGM)**, the shadow price would have to be less than $40/GJ over the next 7-day period.

The cumulative price at the end of the week (23 July) of $13,688/GJ was significantly higher than the threshold of $1,440/GJ. There were sixteen $800/GJ shadow prices in the Victorian market through the beginning of this week, which drove the high cumulative price calculation.

Threat to System Security in Victoria on 18 and 19 July

There were two additional Threat to System Security (TTSS) events this week in the Victorian market.

18 July – Reduction in Longford production

AEMO issued a critical notice of TTSS at 7.42 pm for the DWGM for gas day 18 July. This critical TTSS was due to a reduction in production at the Longford gas plant in Victoria. With a reduction in Longford supply into the DWGM, injections were insufficient to meet demand across the gas day and achieve the end-of-day linepack target. This TTSS ended at 6.53 am on 19 July.

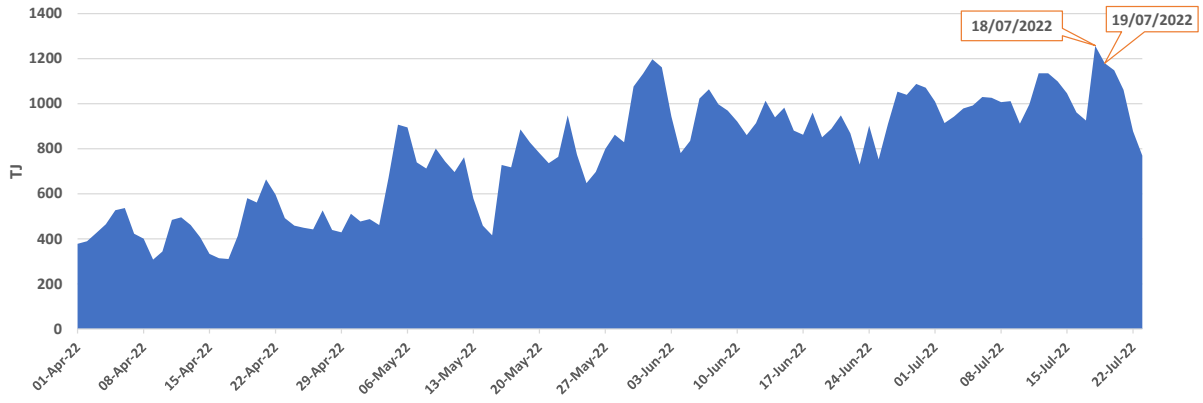
19 July – Insufficient offers to meet total forecast demand

AEMO issued a critical notice of TTSS on 18 July at 10.33 pm for the DWGM for gas day 19 July. This critical TTSS was due to insufficient available offers to meet total forecast demand at the 12 am D+1 (day ahead) schedule. There was a 133 TJ shortfall in offers to cover uncontrollable system demand, gas generation and the end-of-day linepack target. This TTSS ended at 5 am on 20 July.

High demand in Victoria on 18 and 19 July

On 18 and 19 July in Victoria, the 6 am schedule demand forecast was 1,257 TJ and 1,180 TJ respectively. The demand forecast on these days were high in comparison to the daily 6 am schedule average of 1,007 TJ since the beginning of July (Figure 7).

Figure 7: 6 am schedule demand forecast for the Victorian market



Source: AER analysis of DWGM data.

On these two days, the price was capped at $40/GJ in Victoria. However, prices in the Sydney and Adelaide market went to record highs of $59.49/GJ and $59.23/GJ respectively on 18 July, highlighting the significant price differential of ~$20/GJ between Victoria and the other downstream markets.

18 July – Update to TTSS issued 11 July

The TTSS event on 11 July due to storage inventory depletion at Iona continued to be in effect. The requirement for market participants to cease bidding for controlled withdrawals of gas from the DTS without corresponding gas supply scheduled for injection into the DTS remains.

AEMO requested each market participant to submit data and information on their planned injections and withdrawals to enable AEMO to complete a supply-demand analysis to inform their operational response. As per clause 341(3) of the National Gas Rules, market participants must not unreasonably withhold this information from AEMO and must provide it as soon as practicable after receipt of the AEMO notice. The data was due by 10 am Thursday 21 July.

East Coast Gas Supply Guarantee event – 19 July to 30 September

On the afternoon of 19 July, AEMO issued a notice of a potential Gas Supply Guarantee event[6] for NSW, VIC, SA and TAS regions from 19 July to 30 September 2022. This is the second time this event has occurred in the gas markets and was triggered due to:

- high gas demand expected for the 19 July – 30 September period
- Significantly increased National Electricity Market (NEM) gas generation demand over the last few months
- Depleting Iona storage inventory at an unsustainable rate
- NEM gas-powered generators advising AEMO that they cannot obtain sufficient gas supply to meet gas-powered generation demand and are needing to generate using diesel to fuel their gas generation
- Additional gas flows (average of an additional 100 TJ per day of gas flows) to the southern states during this period limiting pipeline capacity south

AEMO convened a gas supply guarantee assessment conference at 4.30 pm with market participants to assess the gas supply shortfall trigger event. LNG exporters committed to

6 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).

bring gas south at the assessment conference, indicating that gas could be purchased from them either via bilateral arrangements or from the Gas Supply Hub.

The day after the Gas Supply Guarantee assessment conference (20 July), a significant volume (41 TJ) of balance-of-day (on the day) gas supply was bought by market participants through the Wallumbilla hub. Of the total balance-of-day volume, 24 TJ was bought for delivery at the Wallumbilla high pressure trade point that is connected to the South West Queensland Pipeline. Another 17 TJ was bought for delivery at alternative delivery points[7].

High MOS service payments in Sydney market on 18 and 20 July

In the Sydney STTM on 18 and 20 July, there were high MOS service payments of $125,172 and $55,800 respectively.

On 18 July, collective over forecast demand by market participants pushed up the net decrease MOS requirement on the MSP by 30 TJ.

On 20 July, two participants nominated an extra 37.4 TJ of supply on the MSP which drove a large decrease MOS requirement. Further, a 22 TJ EGP backhaul nomination drove an increase MOS requirement on the EGP. This caused high counteracting MOS, with additional supply of 6.2 TJ into the Sydney STTM.

Record high ex ante scheduled quantity in Sydney market

The ex ante schedule for the Sydney market on 18 – 19 July hit record highs of 392 TJ and 403 TJ respectively.[8] This is the first time the scheduled quantity in the Sydney hub has exceeded 400 TJ. The record high ex ante scheduled quantity has been driven by both an increase in the price taker bid quantity as well as an increase in the scheduled controllable demand quantity.

A retailer drove the increase in the controllable demand quantity on these two days. The same retailer increased their price taker demand on the 18 – 19 July by ~9.4% in comparison to average price taker bids from 1 – 17 July.

The increase in price taker bids was driven by three retailers.

QCLNG ½ - 1 LNG train outage ended 18 July

QCLNG's ½ - 1 LNG train outage which started on 16 June ended on 18 July this week.[9] Despite the outage ending, pipeline flows on the Wallumbilla Gladstone Pipeline connected to the LNG facility at Curtis Island did not completely return to standard levels. Pipeline flows increased above 1,100 TJ/day by the end of the week (23 July) though this level is considerably lower in comparison to an average flow of 1,452 TJ/day in April 2022.

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7 AEMO's Gas Supply Hub Industry Guide notes that alternate trading points on the SWQP are the Wallumbilla Low Pressure trade point, Fairview, SWQP in Pipe Trade Point. Alternate trading points on the RBP are Run 3, Run 4, Run 7 and the EBP in Pipe Trade Point.

8 This compares to the previous daily record of 382 TJ set in August 2020.

9 Australian Energy Market Operator, *LNG Maintenance – QCLNG Update*, June 2022.

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 primarily driven by participants rebidding supply offers to lower prices in the ex ante schedules. 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 5 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

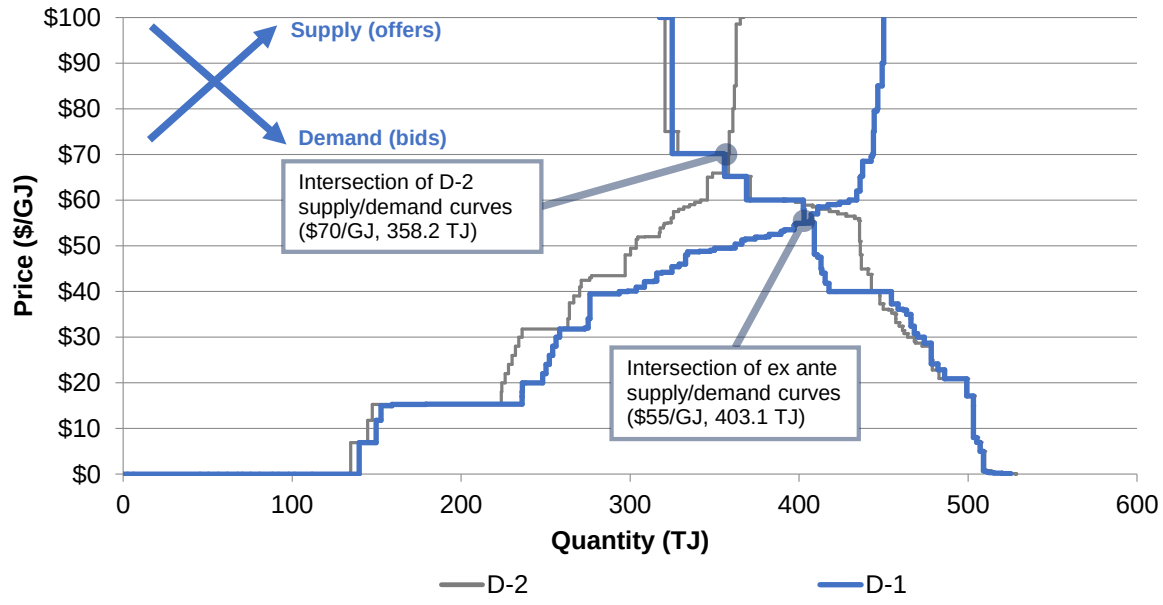
Gas day	Market	D-2 provisional price ($/GJ)	D-1 ex ante price ($/GJ)	Schedule price variation ($/GJ)	Threshold breach description
19-July	Sydney	70	55	-15	Supply offer bid
20-July	Sydney	70.10	50	-20.10	Supply offer bid
21-July	Sydney	65.22	44.80	-20.42	Supply offer bid
22-July	Sydney	65.22	43.61	-21.61	Supply offer bid
24-July	Sydney	65.19	37.99	-27.20	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

Rebidding reduced the price of available supply in ex ante schedules across the week, largely offered by exporter/producers, industrial and trader participants. This resulted in ex ante prices reducing by $15-27.20/GJ from D-2 provisional prices.

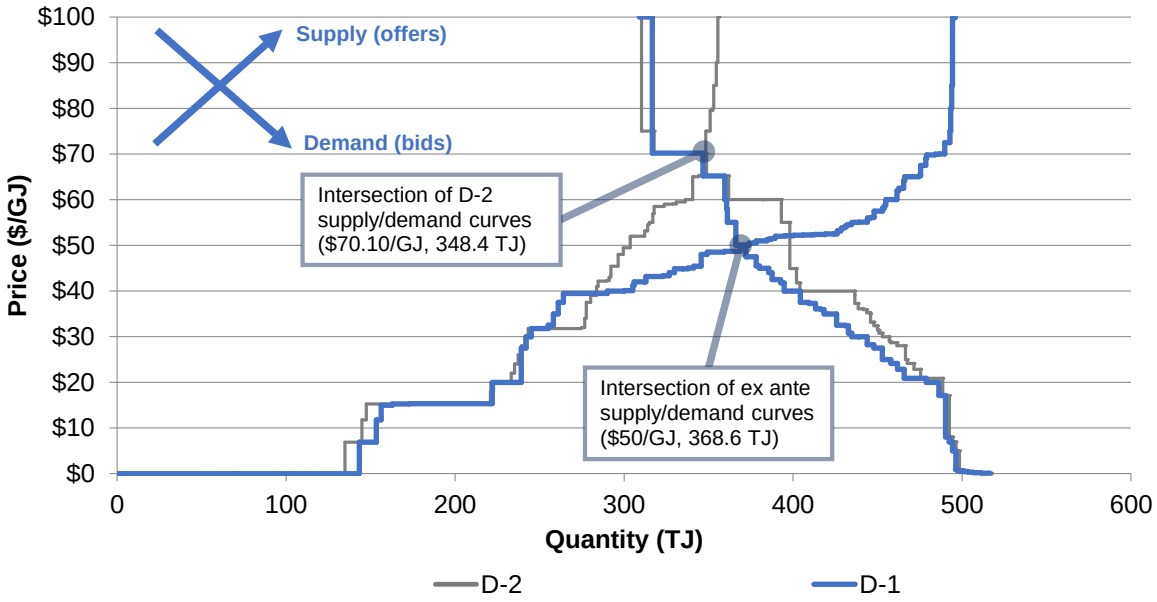
Figure 8: Sydney provisional and ex ante bid and offer curves (19 July)



On 19 July, gas supply offered between $45-60/GJ increased by over 60 TJ. This resulted in additional controllable withdrawal bids being scheduled, with an extra 45 TJ of demand

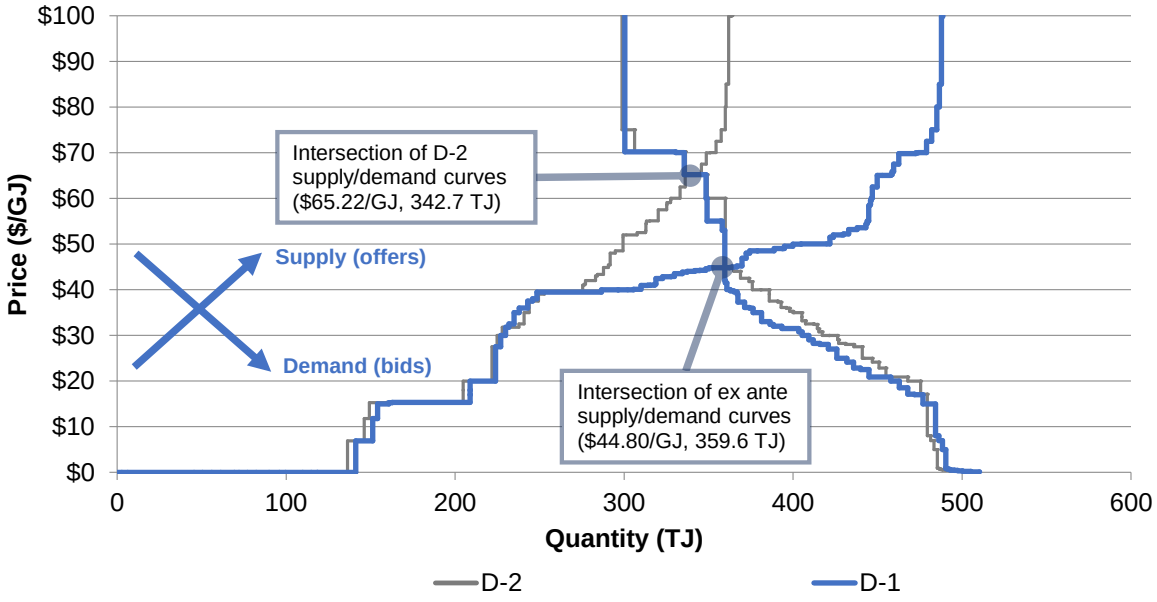
cleared in the ex ante schedule. The additional supply priced below $55/GJ in the ex ante schedule was offered by exporter/producer, industrial, and trader participants.

Figure 9: Sydney provisional and ex ante bid and offer curves (20 July)



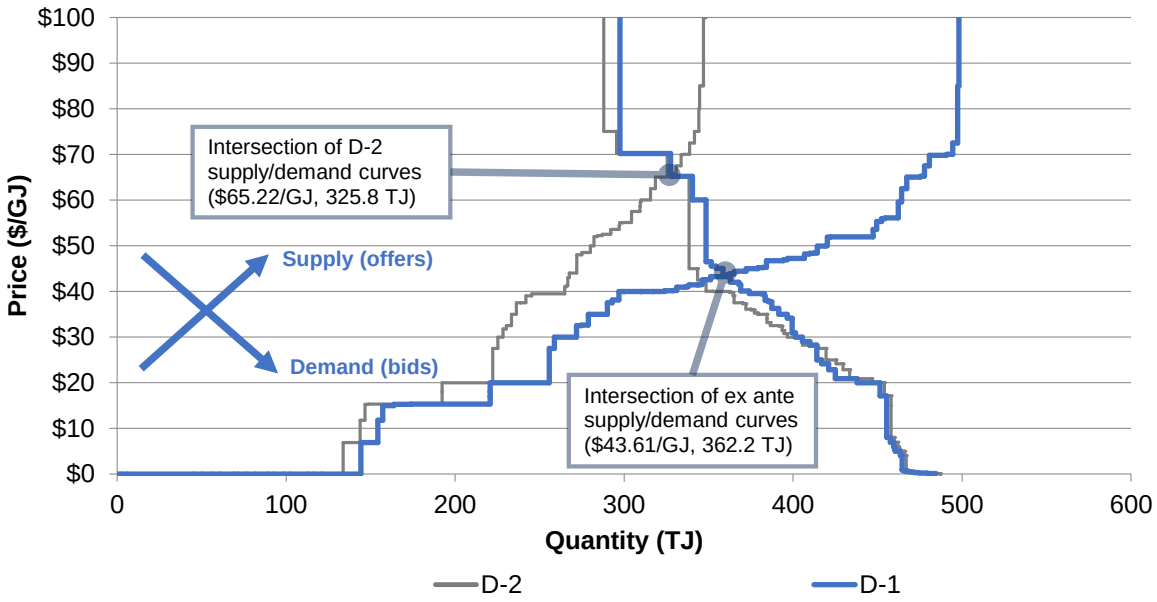
The majority of additional supply priced below $50/GJ in the ex ante schedule was offered by exporter/producer, industrial, and trader participants. Rebidding also reduced controllable withdrawals priced between $55-60/GJ by 9.7 TJ, contributing a small amount to the downward price shift.

Figure 10: Sydney provisional and ex ante bid and offer curves (21 July)



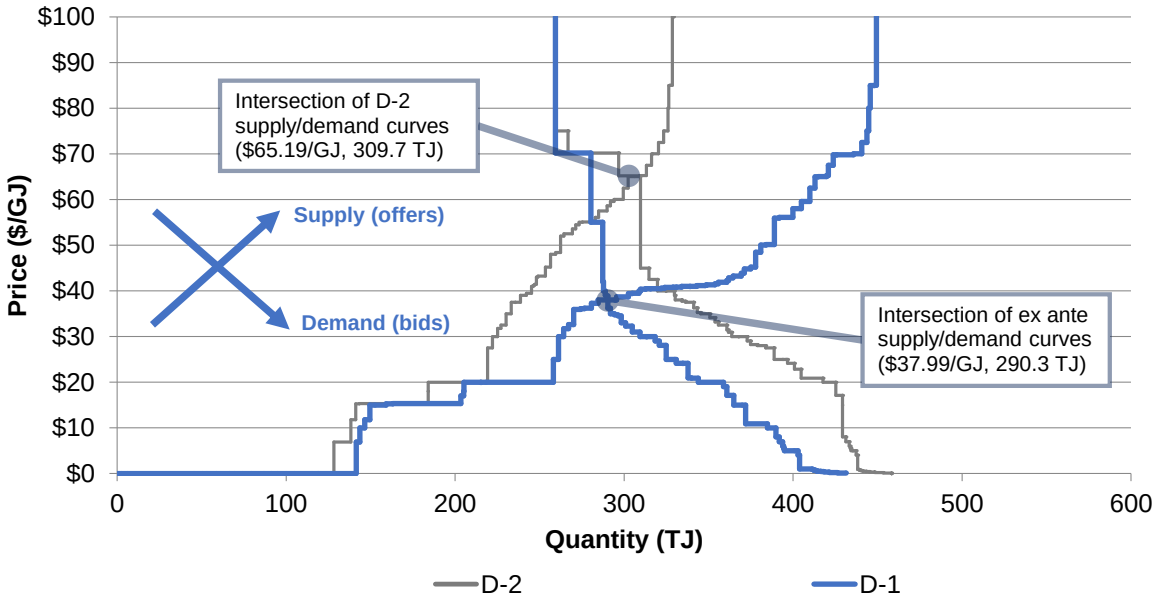
On 21 July, provisional merit order gas offer quantities under 360 TJ were priced up to $80/GJ, with around 85 TJ of these offers priced above $40/GJ in the D-2 provisional schedule. In the ex ante schedule, gas offers priced between $40-45/GJ and $45-50/GJ increased by 46 TJ in each price band, significantly flattening the supply curve, resulting in a decrease of more than $20/GJ in the ex ante schedule price. The majority of additional supply priced at $45-50/GJ in the ex ante schedule was offered by exporter/producers and traders.

Figure 11: Sydney provisional and ex ante bid and offer curves (22 July)



On 22 July, close to 105 TJ of additional supply capacity priced at $25-50/GJ became available in the ex ante schedule. While rebidding slightly increased controllable withdrawal quantities priced at $40-60/GJ (up 19.5 TJ), the shit in supply capacity significantly flattened the supply curve across the $40-50/GJ price range, resulting in a decrease of more than $20/GJ in the ex ante schedule price. Additional supply capacity below $45/GJ was offered by GPG gentailers, exporter/producers, industrial and trader participants.

Figure 12: Sydney provisional and ex ante bid and offer curves (23 July)



On 23 July, $15-40/GJ gas offers increased by 46.6 TJ in the ex ante schedule, with another 57 TJ also available at $40-45/GJ, resulting in close to 375 TJ of supply becoming available below $45/GJ. Rebidding also reduced controllable withdrawals priced between $40-70/GJ by 14.5 TJ, contributing a small amount to the downward price shift and lower scheduled demand. Additional supply capacity below $40/GJ was offered by GPG gentailers, exporter/producers, industrial and trader participants.

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)

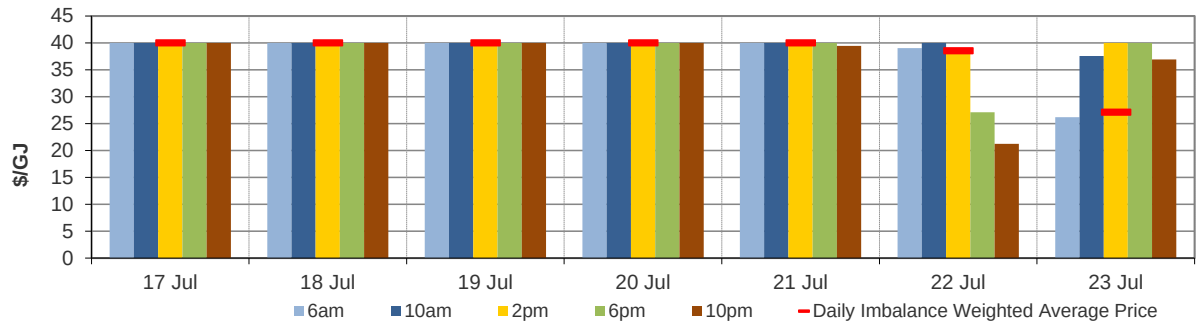
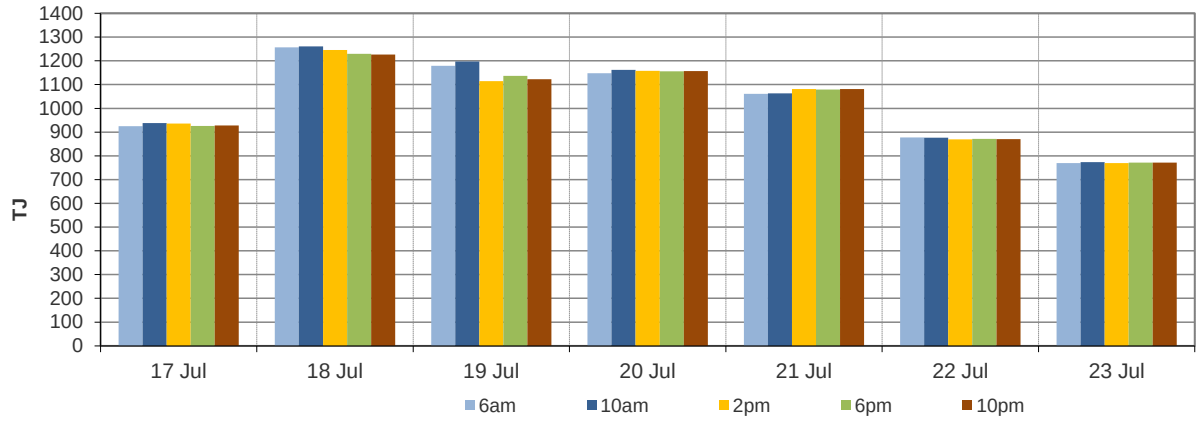


Figure 1.2: Demand forecasts (TJ)



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)

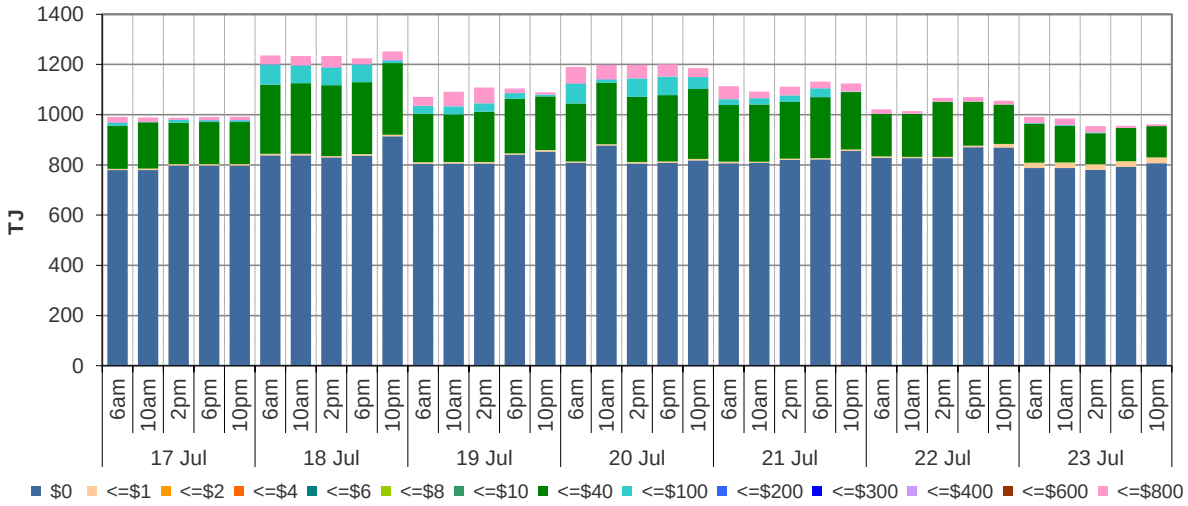


Figure 1.4: Withdrawal bids by price bands (TJ)

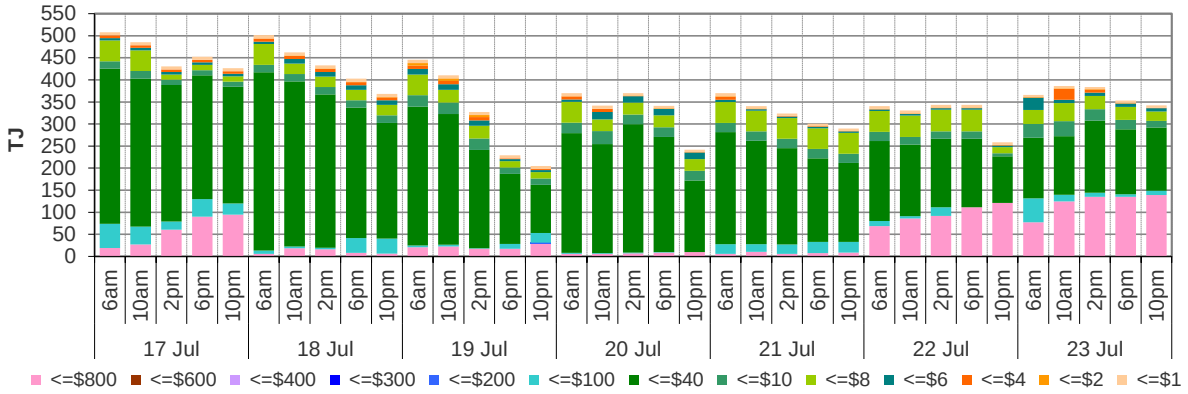
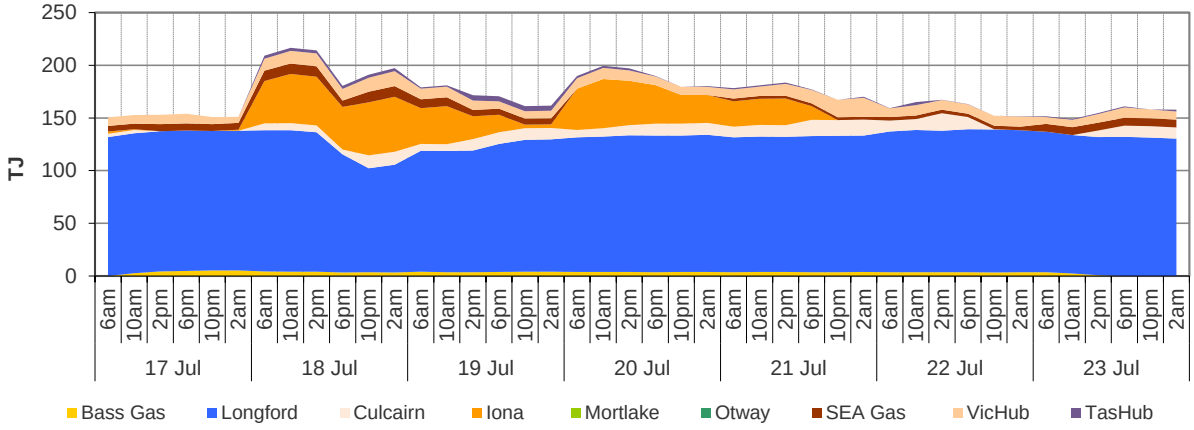


Figure 1.5: Metered Injections by System Injection Point (TJ)



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.

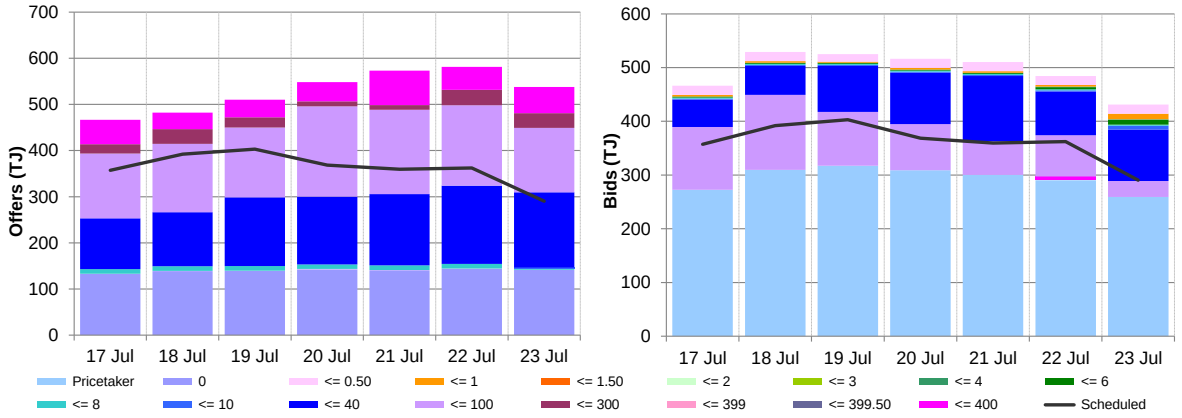
Market Operator Service balancing gas (MOS) payments arise because the amount of gas nominated on pipelines for delivery on a gas day will either exceed or fall short, by some amount, of the amount of gas consumed in the hub. In such circumstances, MOS payments are made to participants for providing 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 ($/GJ)	58.70	59.49	55.00	50.00	44.80	43.61	37.99
Ex ante quantity (TJ)	357	392	403	369	360	362	290
Ex post price ($/GJ)	56.00	58.50	55.40	51.51	44.99	41.44	39.40
Ex post quantity (TJ)	335	363	406	390	364	337	304

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.

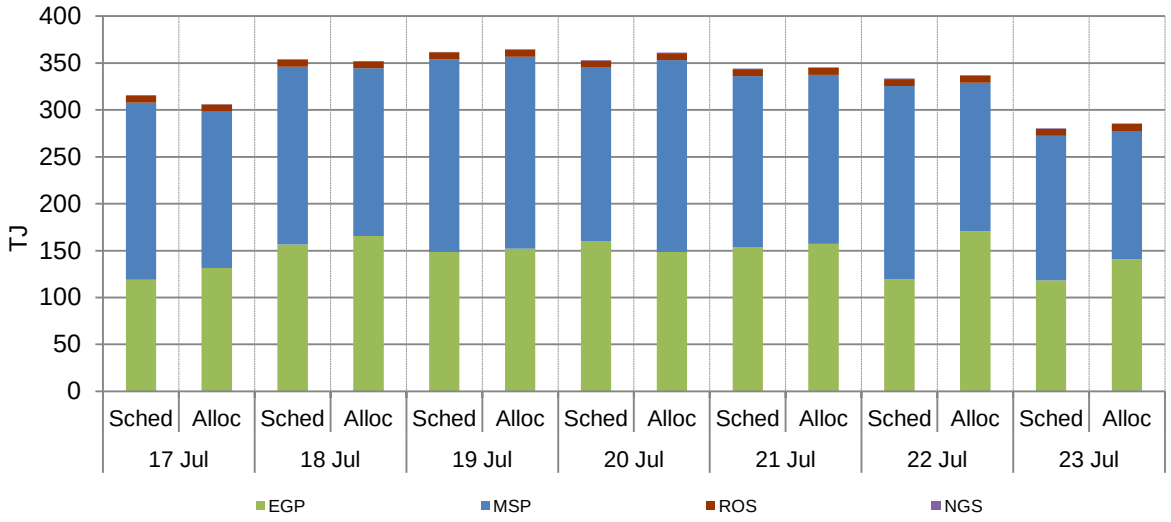
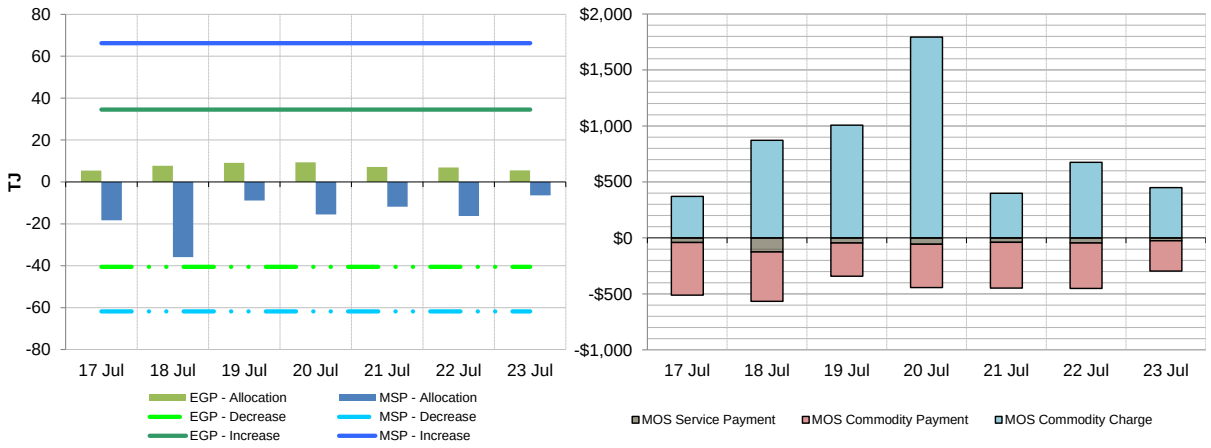


Figure 2.4: SYD MOS allocations (TJ), service payments and commodity payments/charges ($000)[15]



[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 ($/GJ)	54.80	59.23	55.00	53.50	44.99	43.52	38.90
Ex ante quantity (TJ)	69	87	87	86	75	70	59
Ex post price ($/GJ)	51.44	55.00	54.20	45.51	48.20	42.51	35.52
Ex post quantity (TJ)	66	84	85	80	82	66	47

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

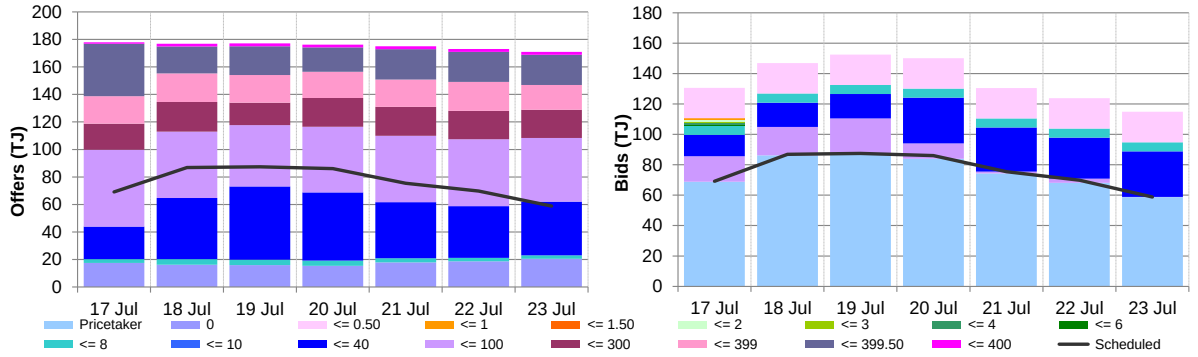


Figure 3.3: ADL net scheduled and allocated gas hub supply (excluding MOS)

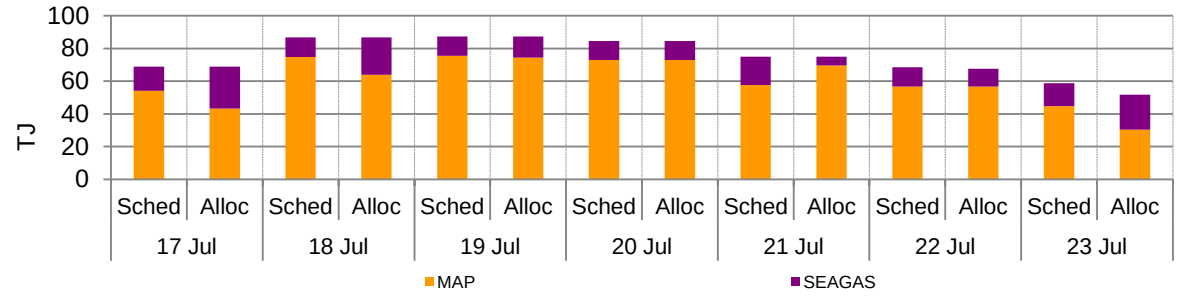
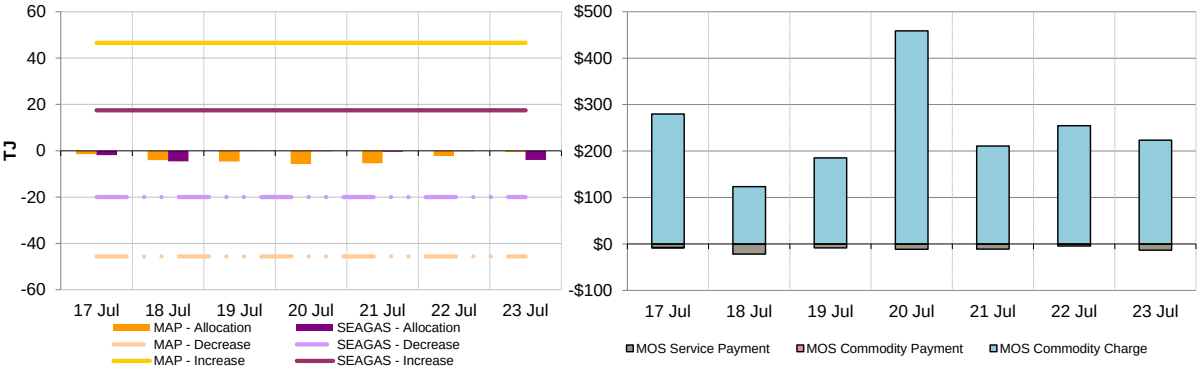


Figure 3.4: ADL MOS allocations (TJ), service payments and commodity payments/charges ($000)



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 ($/GJ)	50.00	47.92	42.75	42.80	42.99	39.99	35.00
Ex ante quantity (TJ)	79	91	92	95	93	92	85
Ex post price ($/GJ)	49.90	47.92	42.00	42.75	43.60	37.10	35.00
Ex post quantity (TJ)	76	89	88	94	96	88	80

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

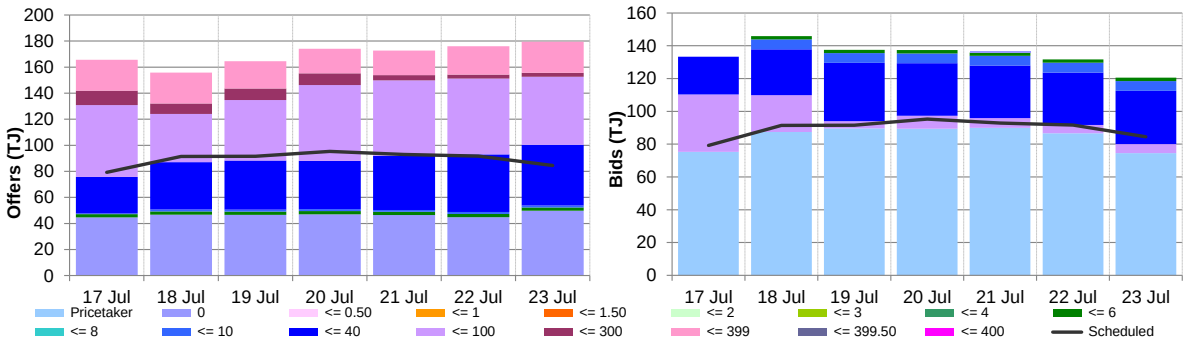


Figure 4.3: BRI net scheduled and allocated gas hub supply (excluding MOS)

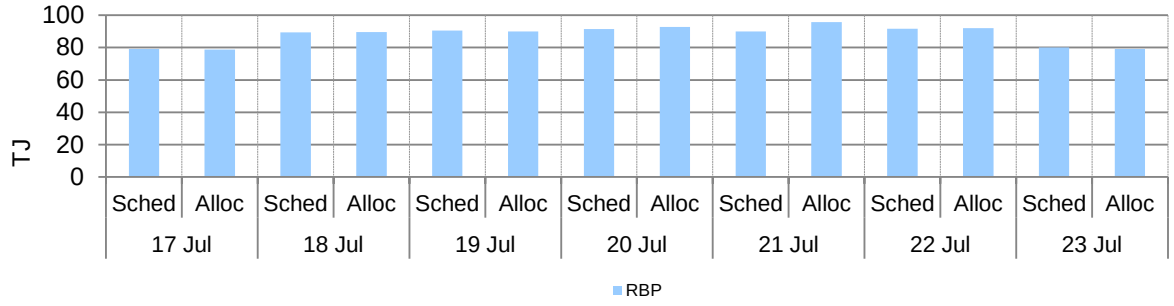
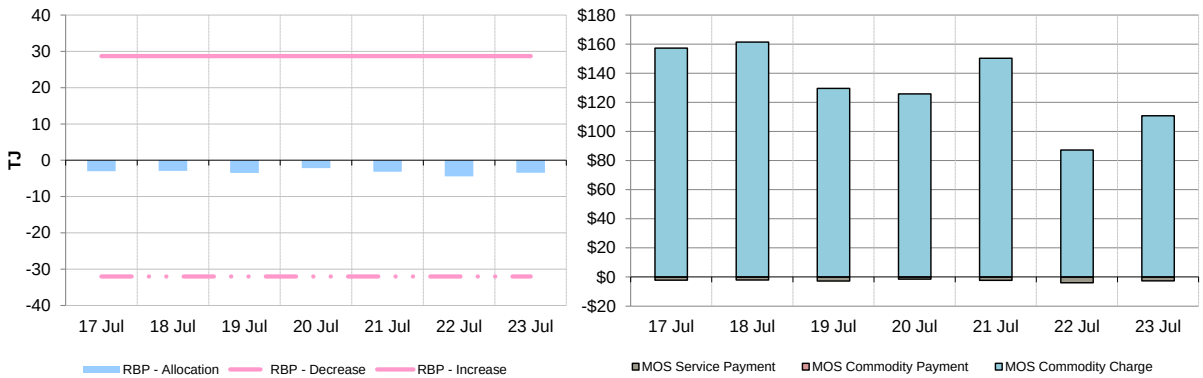


Figure 4.4: BRI MOS allocations (TJ), service payments and commodity payments/charges ($000)



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	2020	(-178)
Export gas flows	3368	(+117)
Gas production	5478	(+77)
GPG gas usage	439	(-252)
Pipelines		
Queensland		
Gladstone		
APLNG	1593	(+136)
GLNG	982	(-50)
QGP	130	(-3)
WGP	793	(+32)
Mt Isa		
CGP	84	(+1)
Brisbane		
RBP	92	(-7)
South West		
SWQP	57	(+4)
Wallumbilla		
BWP	172	(+1)
CRWP	-66	(-47)
DDP	84	(+1)
QGP (WAL)	30	(-5)
RBP (WAL)	-102	(-35)
SWQP (WAL)	325	(+17)
New South Wales		
MSP	232	(-39)
EGP	243	(-25)
Victoria		
LMP	858	(+14)
SWP	89	(-137)
South Australia		
MAP	177	(-15)
SEAGas	42	(-18)
Tasmania		
TGP	28	(+6)

Storage (held volume)		
Moomba LDB	12166	(-36)
Iona UGS	9700	(-1184)
LNG Storage Dandenong	358	(+36)
Silver Springs	16156	(-57)
Roma UGS	25986	(-118)

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

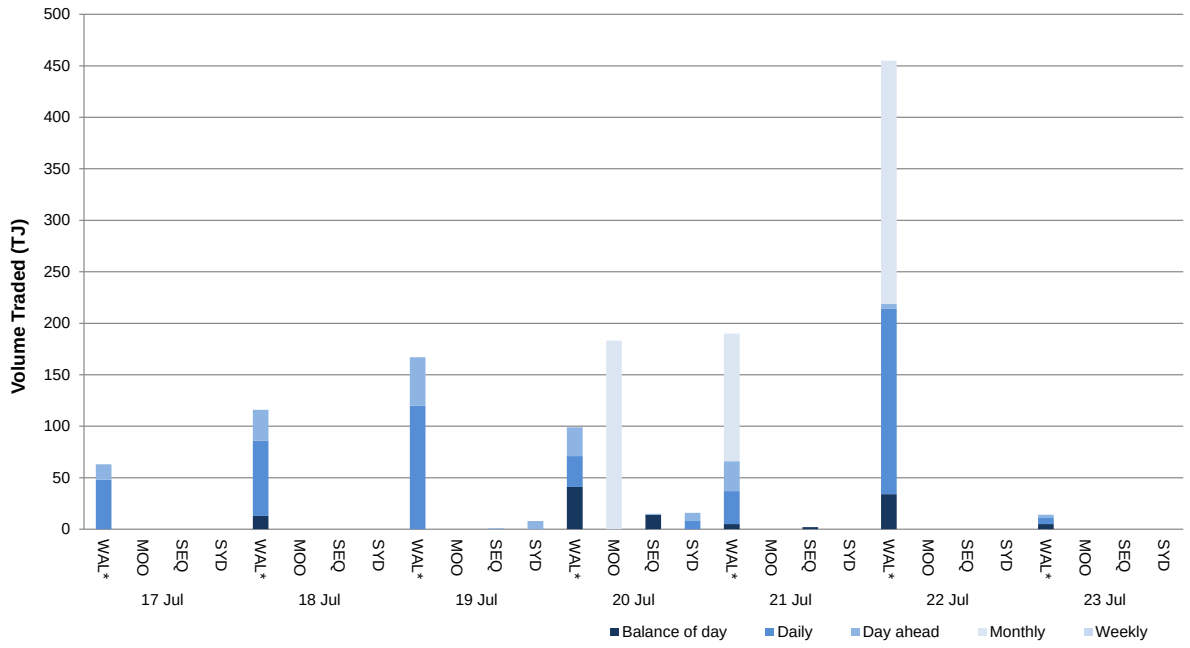
The gas supply hub was established at Wallumbilla in March 2014 to facilitate the voluntary trading of gas between participants, with products listed for sale and purchase at delivery points on three major connecting pipelines. There are separate products for each trading location and delivery period (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 99 trades for 1329 TJ of gas at a volume weighted price of $35.80/GJ. These consisted of 87 trades at WAL (1104 TJ at $36.01/GJ), 7 trades at SEQ (18 TJ at $44.89/GJ) and 3 trades at SYD (24 TJ at $48/GJ). There was one spread trade 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.

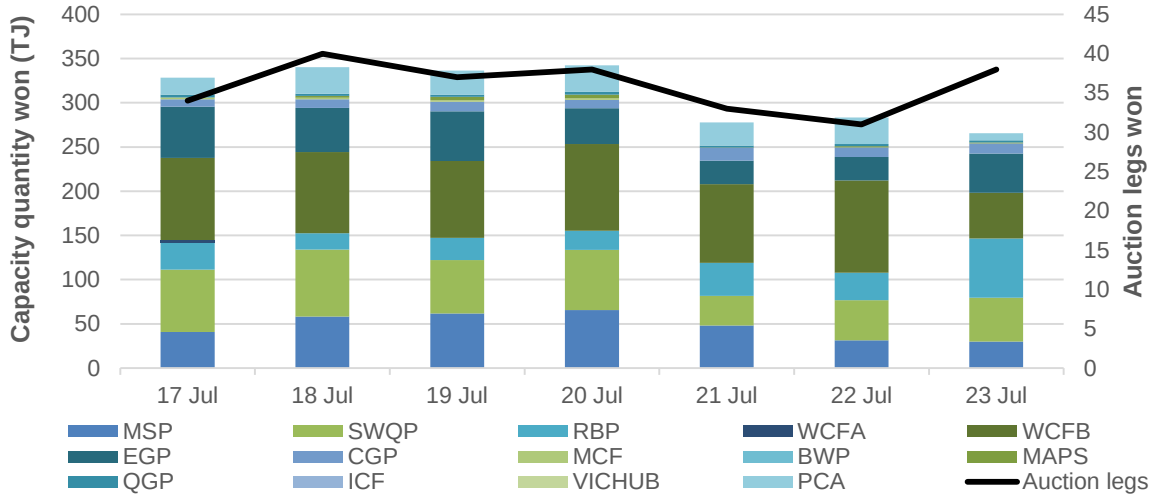
Participants may bid in to the DAA in order to procure the following services:

- 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, 14 participants took part in the DAA, winning 2174 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



Australian Energy Regulator
September 2022

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