

Spring 2019 Market Review

September 2019

Key Messages for Spring¹ 2019

- Spring 2019 was colder than 2018 in Victoria and South Australia, milder in NSW and QLD
- Demand
 - Non GPG demand was higher at 80 PJ (+3 PJ)
 - GPG demand was higher (+15 PJ) due to increased coal outages in Vic and NSW
 - QLD LNG demand was up 22.5 PJ
- Supply was significantly higher
 - Vic production was down but Longford was up 1.7 PJ
 - LNG production was up 31 PJ, driven by fewer production facility outages
 - NGP contributed 6.5 PJ to east coast supply
 - Esso and BHP continued to offer gas throughout Spring with BHP pricing \$1.50/GJ below Esso.
- Gas prices were down
 - Average \$7.86/GJ, down ~\$1.85/GJ
 - Separation between north and southern prices continued, but started to converge in November
- Day Ahead Auction continues to be used; GSH increased but Oct and Nov saw a reduction in volumes

Gas Market Prices

	Average Price (\$/GJ)		Movement
	Spring 2019	Spring 2018	
DWGM	8.02	9.57	16% ▼
ADL STTM	8.72	9.83	11% ▼
SYD STTM	8.19	9.91	17% ▼
BRI STTM	7.20	9.71	26% ▼
GSH	7.17	9.56	25% ▼

- Price separation between Queensland and the southern markets continued, however converged as demand in the south decreased
- All markets except saw significant price decreases; Adelaide is the highest priced market

System Demand

Demand Region	System Demand (PJ)				Max Demand (TJ)	HDD and EDD*			
	2019	2018	Move			2019	2019	2018	Move
Brisbane	6.8	5.7	20%	▲	91	14	18	24%	▼
Sydney	19.3	20.6	6%	▼	293	107	149	28%	▼
Victoria	48.8	45.3	8%	▲	1,075	350	304	15%	▲
Adelaide	4.7	5.1	8%	▼	79	239	224	6%	▲
QLD LNG	342.8	320.3	7%	▲	4,023	-	-		

- Cooler weather in Victoria led to higher demand
- Milder weather in Sydney led to slightly lower demand
- Adelaide demand decreased despite an increase in HDD's due to lower industrial demand
- Brisbane increase due to higher industrial demand
- QLD LNG increased, however production also increased

GPG

Demand Region	Total State GPG (PJ)			Market GPG (PJ)		
	2019	2018	Move	2019	2018	Move
QLD	10	6.8	47% ▲	0	0	-
NSW	8	2.9	177% ▲	0	0	-
VIC	8	5.4	47% ▲	6.5	2	225% ▲
SA	15.2	11	38% ▲	0	0	-
TAS	0.3	0.44	32% ▼	-	-	-
ΣGPG	41.66	26.65	56% ▲	6.5	2	

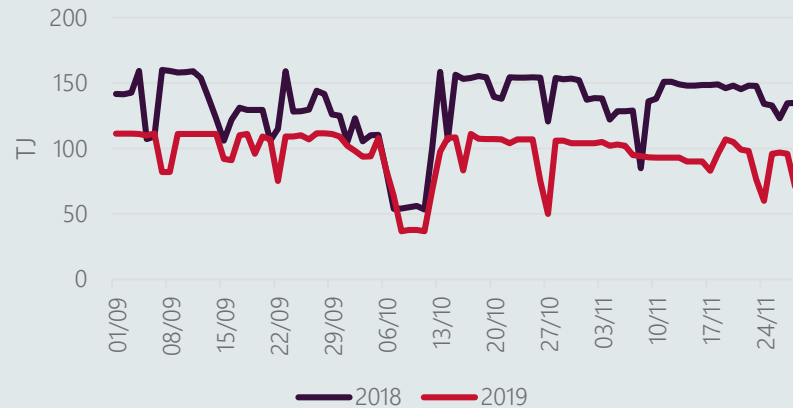
- Large increase in GPG demand in all regions except Tasmania
- Contributing factors include greater base load outages in NSW and VIC compared to 2018
- Most GPG sits outside markets

Supply

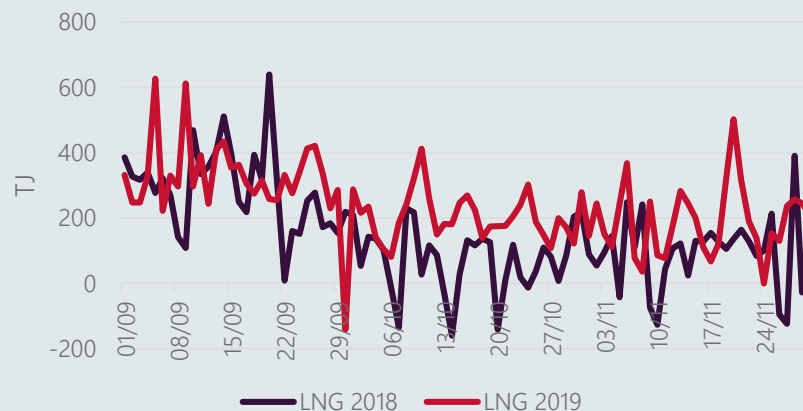
Longford Production



Otway Production

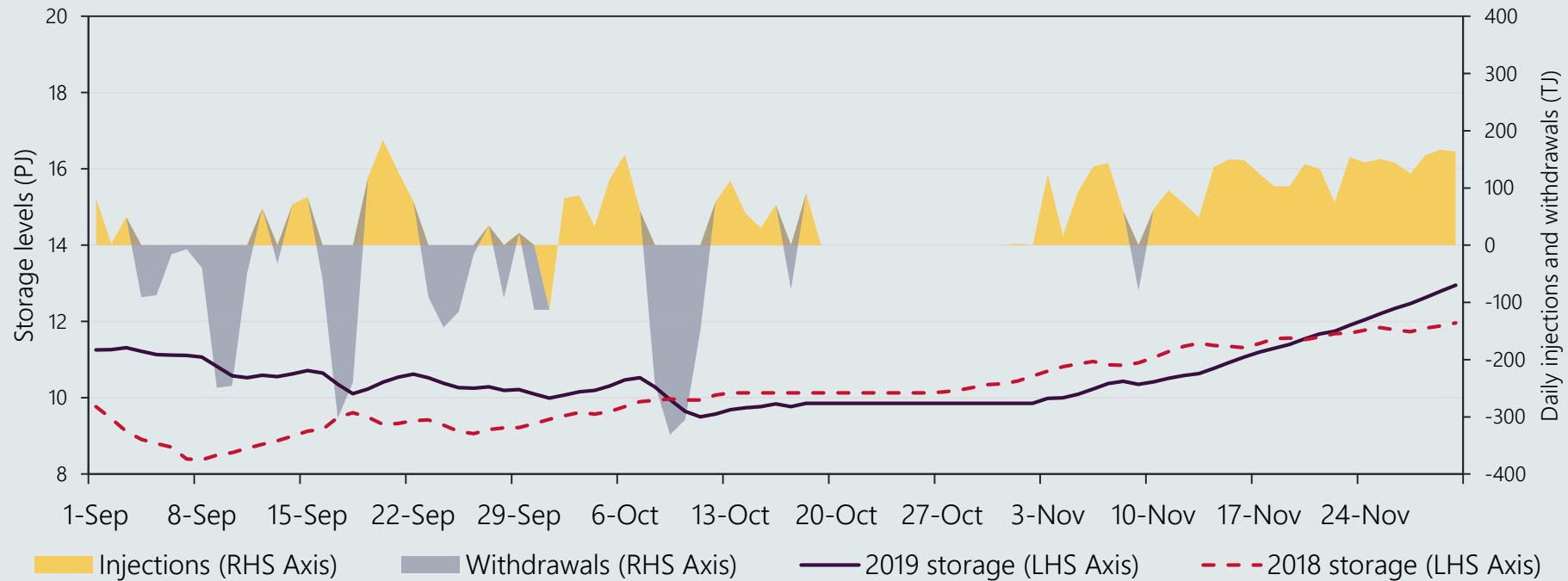


LNG Production Excess



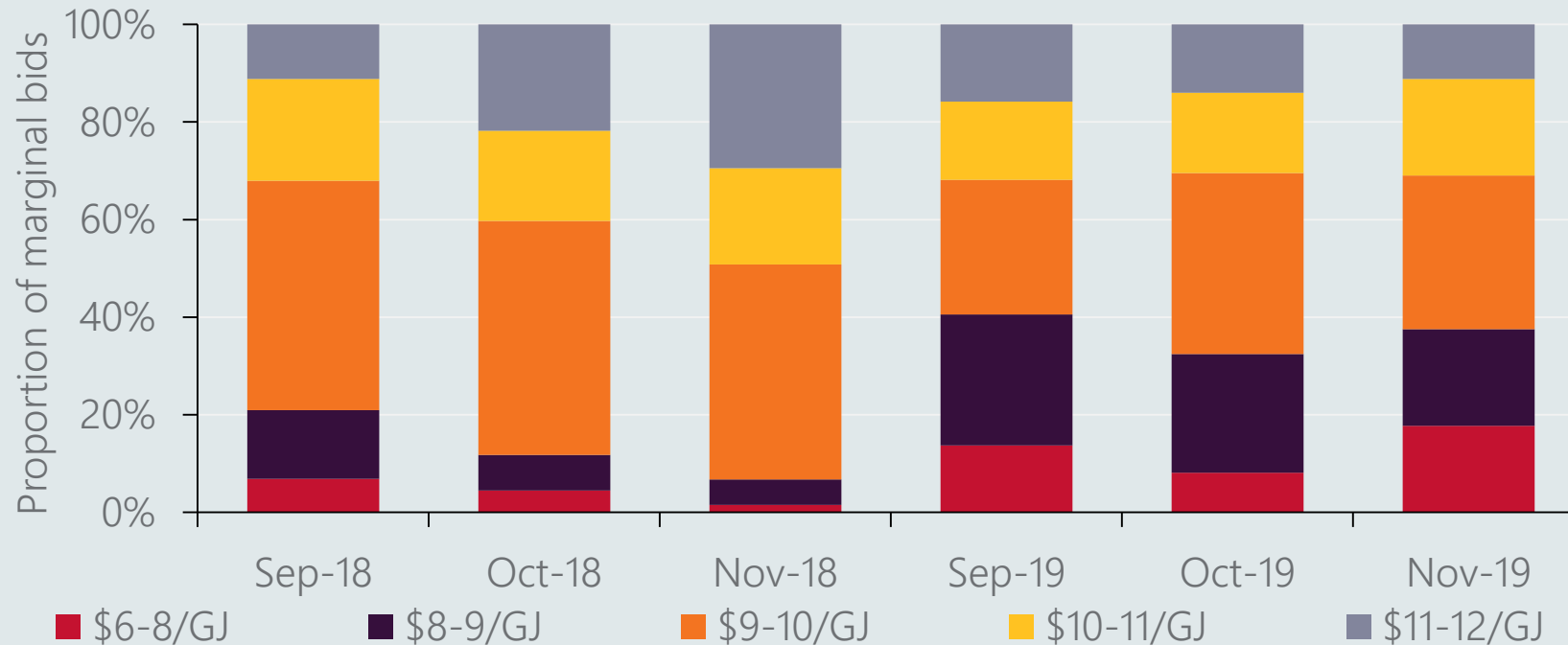
- Longford production higher (+1.7 PJ)
- Otway and Bass Gas production lower (-4 PJ)
- LNG production excess to the domestic market higher (+8 PJ)
- Northern Territory supplied 6.5 PJ
- Minerva ceased production on 4 September

Iona Gas Storage



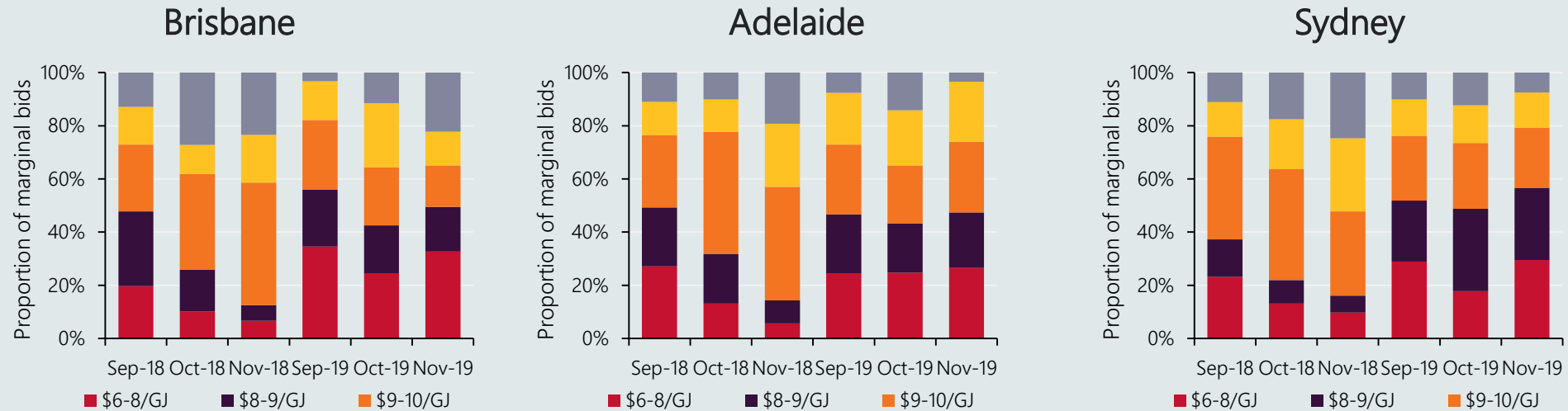
- Iona was used sporadically for supply on days of higher demand, mainly before mid October
- Since returning from a 2 week maintenance outage Iona has been largely refilling, and contains 1 PJ more than at the end of Spring 2018

DWGM Marginal Injection Bids



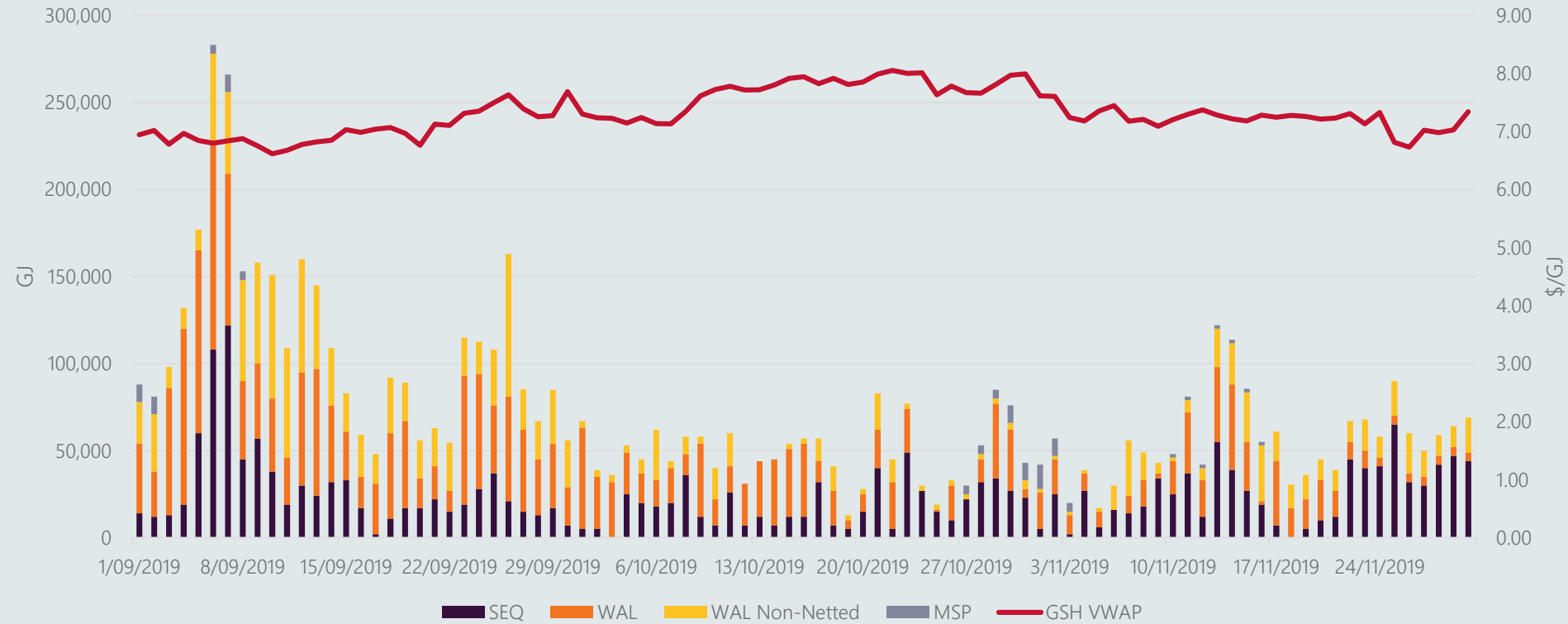
- Lower 2019 prices influenced by large increase in marginal bids priced between \$6-9 across all months
- BHP offering gas \$1.50/GJ below Esso since 9 August

STTM Marginal Injection Bids



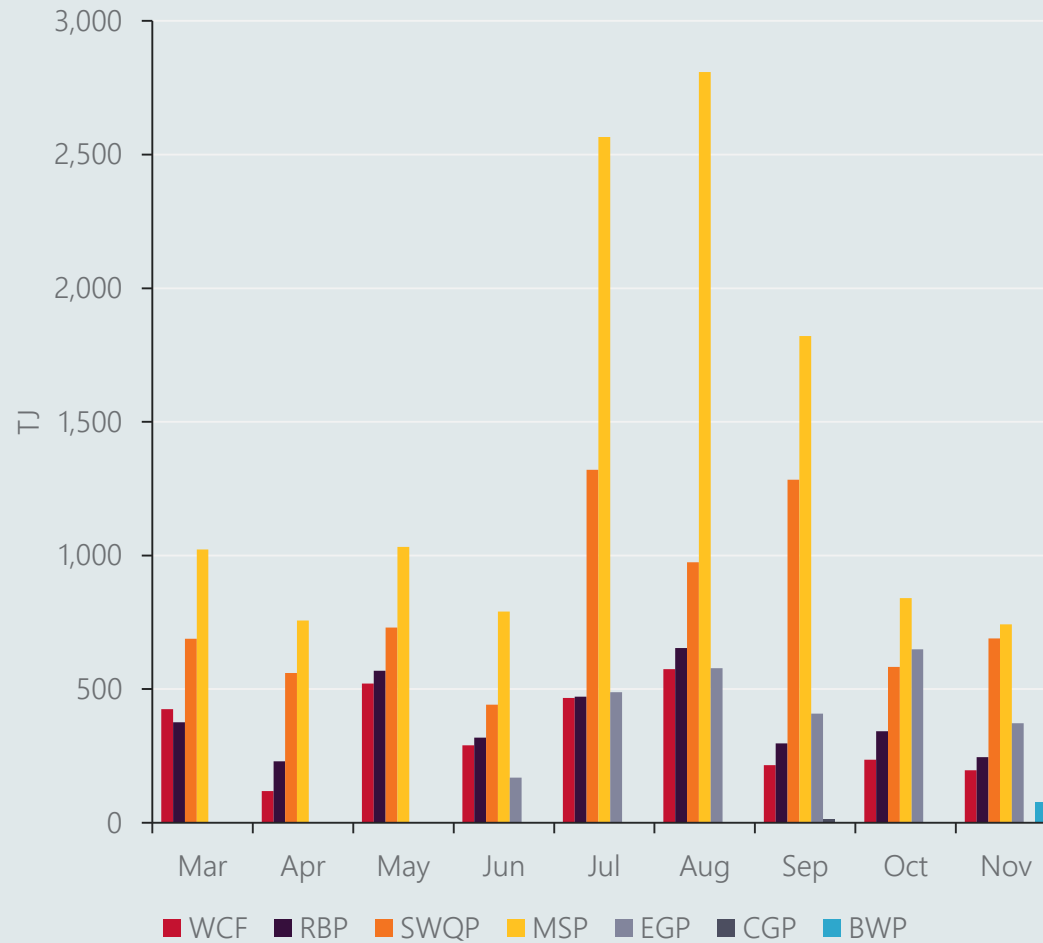
- All hubs have seen substantial shift in volumes priced below \$8
- November in particular has seen a marked shift between 2018 and 2019

Gas Supply Hub



- 5.24 PJ was traded and delivered across spring, compared to 4.6 PJ in 2018
- September accounted for 61% of volume – October and November quieter as price differential between QLD and southern markets decreased

Day Ahead Auction Results



Summary

- A MSP continues to be the most utilised pipeline, though volumes have reduced compared to winter
- B Average auction clearing prices continue to be zero on most days on MSP and SWQP; on RBP price has averaged \$0.06/GJ
- C No CTP trades have occurred yet

Web Links

Pipeline Flows, Production Flows, Capacity and GPG Data

<https://www.aemo.com.au/Gas/Gas-Bulletin-Board/Reports>

DWGM

Gas Held in Storage

<https://www.aemo.com.au/Gas/Gas-Bulletin-Board/Reports>

Market Price (INT310), Bid Stack (INT314)

<http://aemo.com.au/Gas/Declared-Wholesale-Gas-Market-DWGM/Data>

STTM

Ex-Ante Market Price (INT651) & Schedule Quantity (INT652)

<http://aemo.com.au/Gas/Short-Term-Trading-Market-STTM/Data>

Gas Supply Hub

Traded Volume and Volume Weighted Average Price

http://nemweb.com.au/Reports/Current/GSH/GSH_Historical_Trans_Summary/

Other Items

BB Data Submission Procedure Consultation

- The primary aim of this change is to merge the Guide to Gas Bulletin Board Data Submissions into the Procedure to improve ease of use and readability to create **BB Data Submission Procedures v4**
- Additionally, the new procedures include an update to reflect the extended timeline for reporting of uncontracted pipeline capacity from the next 12 months to the next 36 months (see National Gas Rules (NGR) version 46 which came into effect on 21 June 2019) as a result of a review into the regulation of covered pipelines.

Indicative consultation timeline

- Impact and Implementation Report (IIR) issued 12 December 2019
- IIR responses due 20 January 2020
- AEMO Decision issued 17 February 2020
- Effective date of 2 March 2020


API Password Update

- Email sent to all Day Ahead Auction Facility Operators on 26 November
 - The Change Password API has now been released to **PreProd** and can be used by participants.
 - This change will allow the password to be updated via API.
 - The API detail has been published in the AEMO API Portal.
 - Available below – under the “Common” section.
- <https://apiportal.preprod.aemo.com.au/#default/gallery>

Home / API Gallery

API Gallery

– Common

 identityService

API for URM Change Password

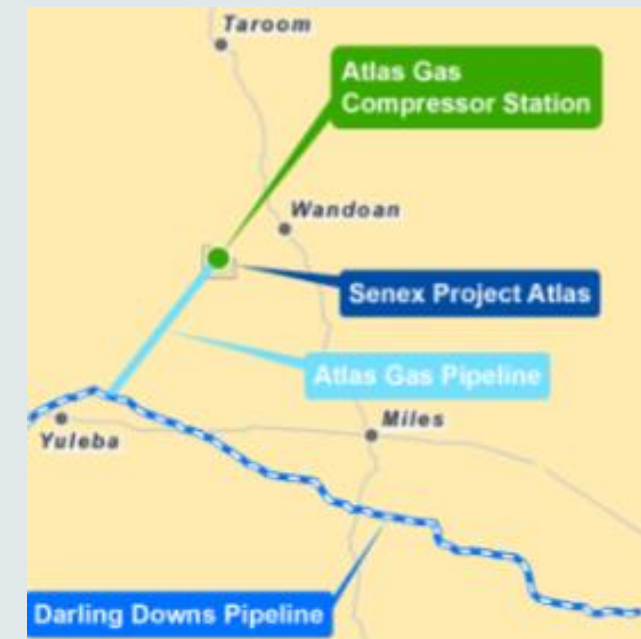
+ Electricity - Wholesale

+ Gas Bulletin Board

New Receipt Point for DDPL

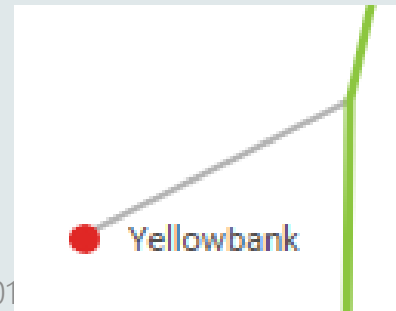
- The Atlas Project has recently connected to the Darling Downs Pipeline
- New connection point
 - will need to be added to PCT Register (TSPR)
 - should be added to RZ-02
 - does not affect DDPL's zones and segments
- Production is still less than 10TJ/d
- Any concerns, please contact bbo@aemo.com.au

GasDate	FacilityName	ConnectionPointName	ConnectionPointId	ActualQuantity	FlowDirection
25/11/2019	Darling Downs Pipeline	Atlas Lateral PPL134 Receipt Point	1404297	0	RECEIPT
26/11/2019	Darling Downs Pipeline	Atlas Lateral PPL134 Receipt Point	1404297	0	RECEIPT
27/11/2019	Darling Downs Pipeline	Atlas Lateral PPL134 Receipt Point	1404297	0	RECEIPT
28/11/2019	Darling Downs Pipeline	Atlas Lateral PPL134 Receipt Point	1404297	2.057	RECEIPT
29/11/2019	Darling Downs Pipeline	Atlas Lateral PPL134 Receipt Point	1404297	2.563	RECEIPT
30/11/2019	Darling Downs Pipeline	Atlas Lateral PPL134 Receipt Point	1404297	2.294	RECEIPT



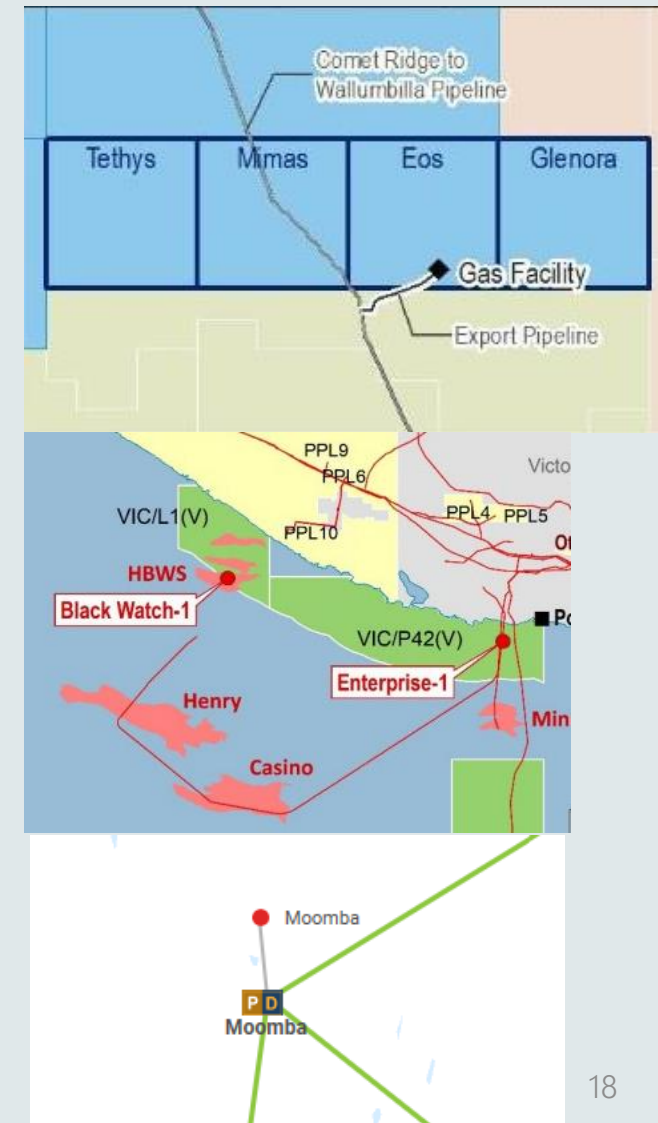
New BB Facility Registration

- There has been on-going debate about how to register pipelines connected to production facilities (or storage facilities).
- Do we need to register the production and the lateral as separate facilities?
- AEMO has taken the view that the lateral pipeline and the production facility will be treated as one facility - the production facility.
- This will only be the case if there is a one-to-one relationship.
- Existing registrations will remain in place.
- As soon as the one-to-one relationship ends, the pipeline will need to be registered.



Current BB Facility Registration

- Silver Springs Storage and Silver Springs Pipeline
 - Registered as separate facilities given the pipeline is connected to two separate pipelines
- Kincora
 - Registered as one facility – the production, storage and pipeline
- Casino Production
 - Can be calculated by using formula on the GBB
- Roma North / Atlas Gas Project
 - Production and Lateral treated as production facility.
- Iona to Otway Interconnect
 - Not currently registered



BB Defect Fix - Implemented

1. Performance of BB reports
 - a) Pipeline Connection Flow report restricted to one month with additional information in static report
 - b) Actual Flows has a greater date range
 - c) Uncontracted Capacity
2. Exemptions
 - a) Logic implemented for actual flows and nominations since 24 July
 - b) Retrospective data yet to be populated
3. Daylight saving display for MTCO
4. Effective dates logic
5. Connection points with zero flows do not display the CP name
6. LastUpdated field returns 1/1/1 as the date
7. Markets portal incorrectly displays the date

BB Defect Fix and Enhancement – In Pipeline

1. The date picker
2. Automatic upload of archived historical 'pipeline connection flow' reports
3. Gate Station owner
4. Effective dates logic
5. Cut-off time for submitting updated nominations to be as per the gas day
6. Map enhancements
 - a) Pipeline colour change based on LCA flag
 - b) Adding Northern Gas Pipeline arrow to the map
7. Enhancement of aggregation logic
8. Enabling nomination and forecast flow and STCO submissions for any future gas date
9. Removal of low and high range fields, updates to validation for submissions
10. Legacy locations to be removed
11. Removal of the completeness field