2015 Strategic Priorities for Energy Market Development

Mark Feather Executive Director,

Energy Policy & Programs

Victorian Department of Economic Development, Jobs, Transport and Resources



Contents

- 1) Gas market problems
- 2) Commitment to COAG's Energy Council Vision for gas markets
- 3) A more competitive, transparent and efficient gas market
- 4) Conclusion





1) Gas market problems

- 2) Commitment to COAG's Energy Council Vision for gas markets
- 3) A more competitive, transparent and efficient gas market
- 4) Conclusion



Gas market problems

4

	Eastern Australia	an gas
<u>Residential</u>	<u>markets</u>	<u>Commercial</u>
- Price increases mailead to disconnection		 Price increases to trade exposed industries
affordability, and financial distress		-unable to obtain long- term contracts
		 Lack of risk management mechanisms to manage
	<u>National Gas</u> <u>Market Reform</u>	future prices (no futures or forward market)
	- Lack of competition (oligopoly)	
	- Lack of transparency & price discovery	&
	- Fragmented markets	

Eastern gas markets are fragmented & lack transparency, liquidity & competition, & compare poorly with overseas markets



Wallumbilla trading – day ahead price

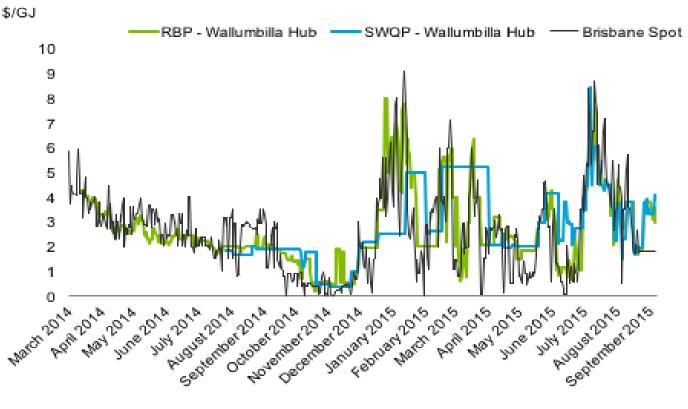
The transformation of the east coast gas market will lead to risks and opportunities

'Ramp gas' –

 The need for the CSG wells to be running flat out as soon as gas is required by the LNG plant creates a supply of socalled "ramp gas" in the months leading up to start-up.

'Wedge gas' -

 To cover potential shortfalls in CSG as CSG fields increase production.







1) Gas market problems

2) Commitment to COAG's Energy Council Vision for gas markets

3) A more competitive, transparent and efficient gas market

4) Conclusion



Commitment to COAG Energy Council's gas market 'vision'

Enhancing transparency & price discovery; improving risk management; removing unnecessary regulatory barriers

.... "establishment of a liquid wholesale gas market that provides market signals for investment and supply, where responses to those signals are facilitated by a supportive investment and regulatory environment, where trade is focused at a point that best serves the needs of participants, where an efficient reference price is established, and producers, consumers and trading markets are connected to infrastructure that enables participants the opportunity to readily trade between locations and arbitrage trading opportunities"



Commitment to COAG Energy Council's gas market 'vision' (continued)

12 specific outcomes that the Council will pursue, including amongst other things:

- Provision of accurate and transparent information on pipeline and storage facility operations and capacity
- Harmonised interfaces across Australian gas markets to facilitate inter-regional trading of gas
- Harmonised pipeline capacity trading arrangements which are flexible, comparable, transparent on price and non-discriminatory
- Development of liquid and competitive wholesale and forward markets for gas to provide tools for participants to price and hedge risks.





- 1) Gas market problems
- 2) Commitment to COAG's Energy Council Vision for gas markets
- 3) A more competitive, transparent and efficient gas market
- 4) Conclusion



Importance of pipeline access – short, medium and long term

The competitiveness of gas markets are largely defined by its conduits – the high pressure pipeline systems for gas transportation

Contracts are bespoke, which impedes buyers from trading capacity – no uniform terms and conditions that can facilitate trading across regions

Lack of liquid capacity trading hubs, lack of anti-hoarding rules

Without efficient and non-discriminatory access to transport, liquid and competitive upstream and downstream markets will struggle to develop

This is not only about short term access – it is also about long term access and signals for investment in pipeline infrastructure

Australia's pipeline capacity trading arrangements are opaque and there is no uniform system for pipeline access

10



Anti-hoarding of pipeline capacity

Capacity allocation mechanisms are required to prevent anti-hoarding

Mandate for pipeline owners to auction spare capacity at a zero reserve price –

• This will assist with non-discriminatory access.

Allocating daily 'use it or lose it' will not cause free-rider problems –

- Shippers would be highly unlikely to back their trading portfolio on 'UIOLI'.
- UIOLI can also be defined so as not to affect firm rights

Offering short term 'as available' capacity at a premium to firm capacity is uncompetitive –

• This does not represent marginal cost.

11

In the UK, short term interruptible or daily capacity is released at a zero reserve price via auction



Creating valuable and tradable pipeline capacity products - Makholm observations

Define physical gas transport rights -

• Define the physical pipeline capacity, and the nature of the capacity rights and shippers' rights and obligations – standardise this across pipelines

Predictable cost basis for capacity rights –

• Set distanced-based pipeline tariffs to recover publicly disclosed historical nominal costs.

Frictionless exchange –

12

• Mandate shippers trade capacity on a transparent web-based platform.

The flexibility to trade and transport gas to those parties that value it most is vital for managing risks and promoting efficiency



Standardised terms and conditions

Standardisation of rights can assist with facilitating competition and enhancing allocative efficiency –

- It achieves this by allowing comparisons between rights at different prices and at different locations
- It also means that that rights can be more easily transferred and traded between parties, which reduces transaction costs
- Standardisation may also assist with facilitating transparency and promoting liquidity.



Robust governance

Standardisation of contracts will need to be supported by uniform governance arrangements

This cannot be achieved by industry led initiatives

For example, a **single east coast pipeline access code** that standardises the terms and conditions to promote ease of trading –

• Shippers, pipelines and participants could propose changes to the 'code', which would be independently assessed by the AEMC.



Enhancing transparency

The effectiveness of the market also requires detailed and transparent information to be readily available. This includes:

 Accurate market making information on pipeline and large storage facilities operations and capacity, upstream resources, and the actions of producers, export facilities, large consumers and traders.

Arguments made by market incumbents against the release of information on the grounds of commercial sensitivity should be robustly assessed and evaluated against potential benefits

World's best practice in this regard should be explored and pursued:

• Further consideration of analogous markets (UK, Continental Europe and USA gas markets) or analogous industries (electricity) is required.



Information provision – international best practise

UK – real time information made available on injections, withdrawals and flows, with integrated projections

Previous Welcome to National Grid										Next	
System Status			Forec	ast Map	Actua	I Мар	Actual				
	Today 20/09/2019	Tomorrow 5 21/09/2015	Demand	Supply	Demand	Supply		d (mscm) Demand	Graph		19/09/2015 195
GDW	NONE	NONE		S.	8		. Socoo	nal Norm	al Demand		149
MN Trigger	449.00	450.00		· 🖉	5				ai Demanu		145
wini mggei	445.00	450.00		- marine			Actual	CWV			
Forecast	Graph	1	5				∗ CMA	Seasonal	Normal		14
Demand (mscm)			· An	From 2	St Fergus		Supply	(mscm)	Graph		17/09/2015
 Forecast 	199.2 (05:0	01) 200.1 (00:01)	316	₩ - //	\sim		Beach	h including	Norway		154
Demand	100.2 (00.0		0.0	4 7	-1		ENG	Imports			34
 Seasonal Normal 	149.0	162.0	e de	Glenmavis	1		Interc	onnectors			0
Demand	140.0	102.0	100	1. 1/5			⊩ Stora	ge			4
Supply (mscm/d)			5	Ast that	5		Linepac	k (mscm)	Graph		20/09/2015
* Forecast Flow	196.7 (05:0	00)	2	103 11 -	2)		Openi		. _		347.0
Physical Flow	187.3 (05:0	00)		1 5	10			·	leal Flam	- ()	
Linepack (mscm)				for the	Teesside				sical Flow	s (mscm)	19/09/2015
+ PCLP	344.5 (05:0	01)		1	1 Her		Bactor				38 15
		,		Barrow	Horn	sea rough	Moffa				15
Long Term Demar				5	Eas	ington	Storage	Stock Le	vels (GW	h) Gra	ph
System Entry Poir	nt Flow Dat	a		(mapa	tington Holford	ddlethorpe			19/09/201	5 20/09/	/2015
System Entry P	oint Flow	Data for		6 -	Stublach	Bacton	Short	t	40	4	0
	OIL FION			5	- Har	231	Medi	um	10,057	10,2	297
21/09/2015			Mi	ilford Haven	P H	12	Long		30,387	30,3	387
System Entry Name		w Rate (mscm/d)		2000	K STA	The		Storage S	tock (GW	5	Graph
ALDBROUGH AVONMOUTH	0.0			N	Avonmouth	sle of Grain		-			Graph
BACTON BBL	0.0)1		~~		~		ate LNG I	mportatio	n Stock	Graph
BACTON IC	0.0	-		1 18	m		(GWh)				
BACTON PERENCO	4.4	-		In					19/09/201	5 20/09/	/2015
BACTON SEAL BACTON SHELL	13. 9.2		l.	~~					6,765	6,3	89
BARROW SOUTH	0.0		E	ual Peak Deman		100	Price		• •		40/00/2045
DYNEVOR ARMS	0.0	0			0	499 mscm	Price		Graph		19/09/2015
EASINGTON DIMLINGTO			Real Time Flo	ow Data					SMP Buy	SMP Sell	7 day Avg
EASINGTON LANGELED	47.		ANS Messa	des			p/kWh	1.3865	1.4467	1.3530	1.4327
EASINGTON ROUGH GLENMAVIS	0.0		NONE				p/thm	40.64	42.40	39.65	41.99
		-		ASSIFIED			П				'

16

Development of liquid and competitive wholesale and forward markets?

This will take time. First we need the fundamentals in place –

Confidence in ability to transport gas (physical rights)	Sufficient buyers and sellers	Wholesale reference price	Financial products	
---	-------------------------------------	------------------------------	-----------------------	--

ASX Wallumbilla Natural Gas Calendar Quarter Futures

REFRESH

<u>Expiry</u>	<u>Bid</u>	<u>Ask</u>	<u>Open</u>	<u>High</u>	<u>Low</u>	<u>Last</u> Trade	<u>Last Trade</u> <u>Date</u>	<u>Last</u> <u>Trade</u> <u>Time</u>	<u>Change</u>	<u>Traded</u> Volume	Previous Settlement
Sep 15											4.50
Dec 15											6.00
Mar 16											7.00
Jun 16											5.50
Sep 16											5.00
Dec 16											6.50
Mar 17											7.00
Jun 17											5.50
Sep 17											5.00
Dec 17											6.50
Mar 18											7.00



- 1) Gas market problems
- 2) Commitment to COAG's Energy Council Vision for gas markets
- 3) A more competitive, transparent and efficient gas market
- 4) Conclusion



Conclusion

Meaningful and ambitious reform may be challenging, but the benefits for gas users will be substantial

The AEMC reviews should be comprehensive and strategic in its approach – we expect clear recommendations that are underpinned by solid analysis and evidence

International experience should be given due consideration:

 Both the USA and Europe have pursued significant reform over the past decades, and the outcomes and applicability to Australia of different models trialled overseas should provide useful material for the AEMC to understand where improvement can be made.



