

AEMC East Coast Wholesale Gas Market and Transmission Pipeline Frameworks Review

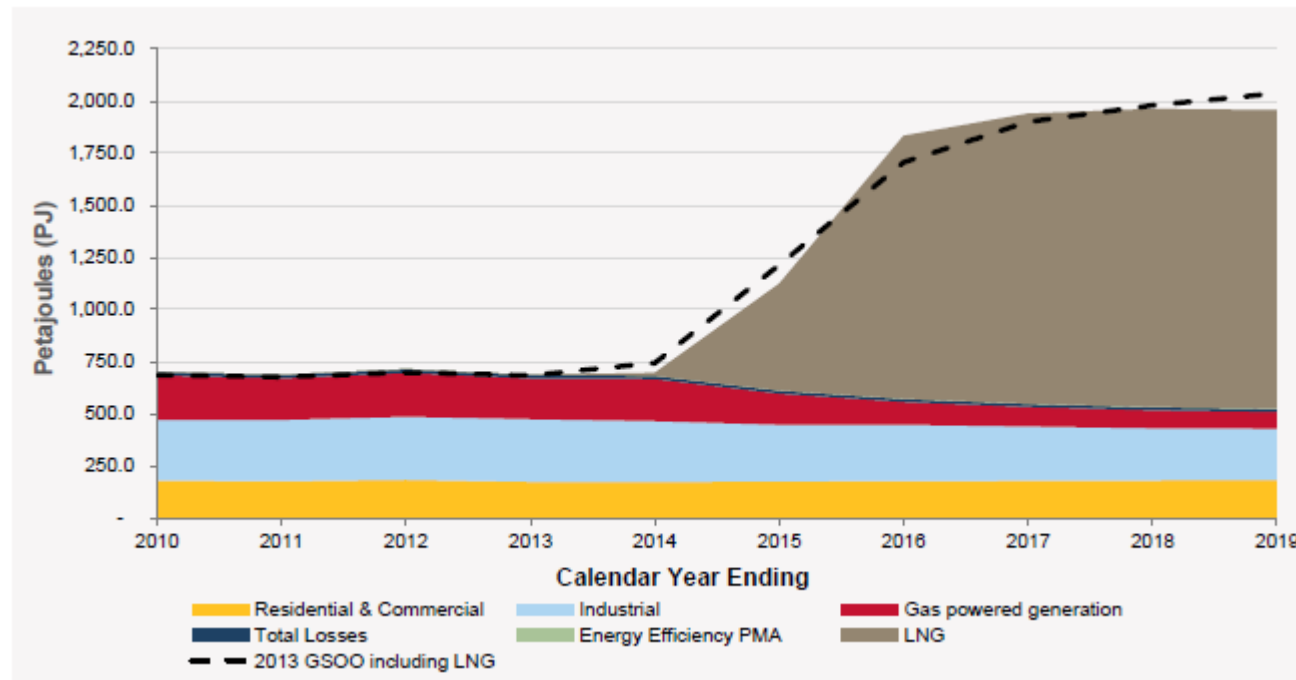
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What is the problem with gas markets in Australia?

LNG exports are here...

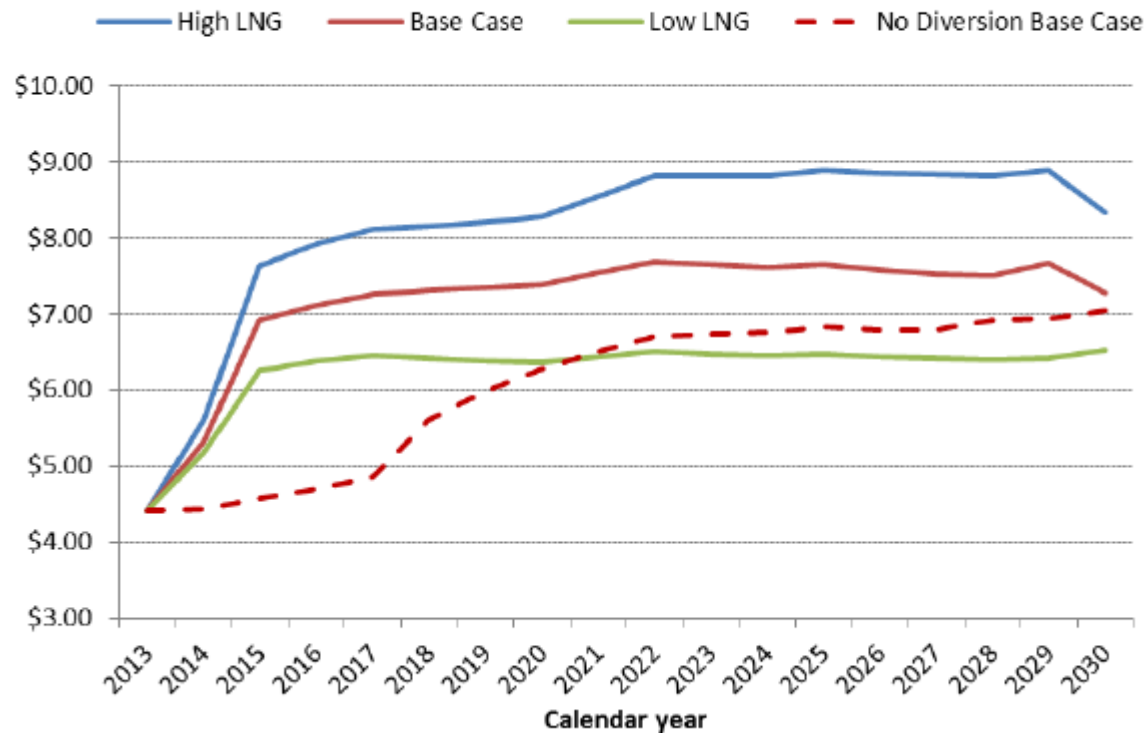
- AEMO's inaugural *National Gas Forecasting Report* indicates that significant ramp-up of LNG will occur in the next five years.



Gas price impacts

- The inadequate outcomes of the current market settings are being tested by price rises related to LNG exports.
- Note – important to understand impacts of drop in oil prices.

Figure 5-13 High contract diversion - average upstream contract prices for eastern Australia (\$/GJ, \$2013 real)

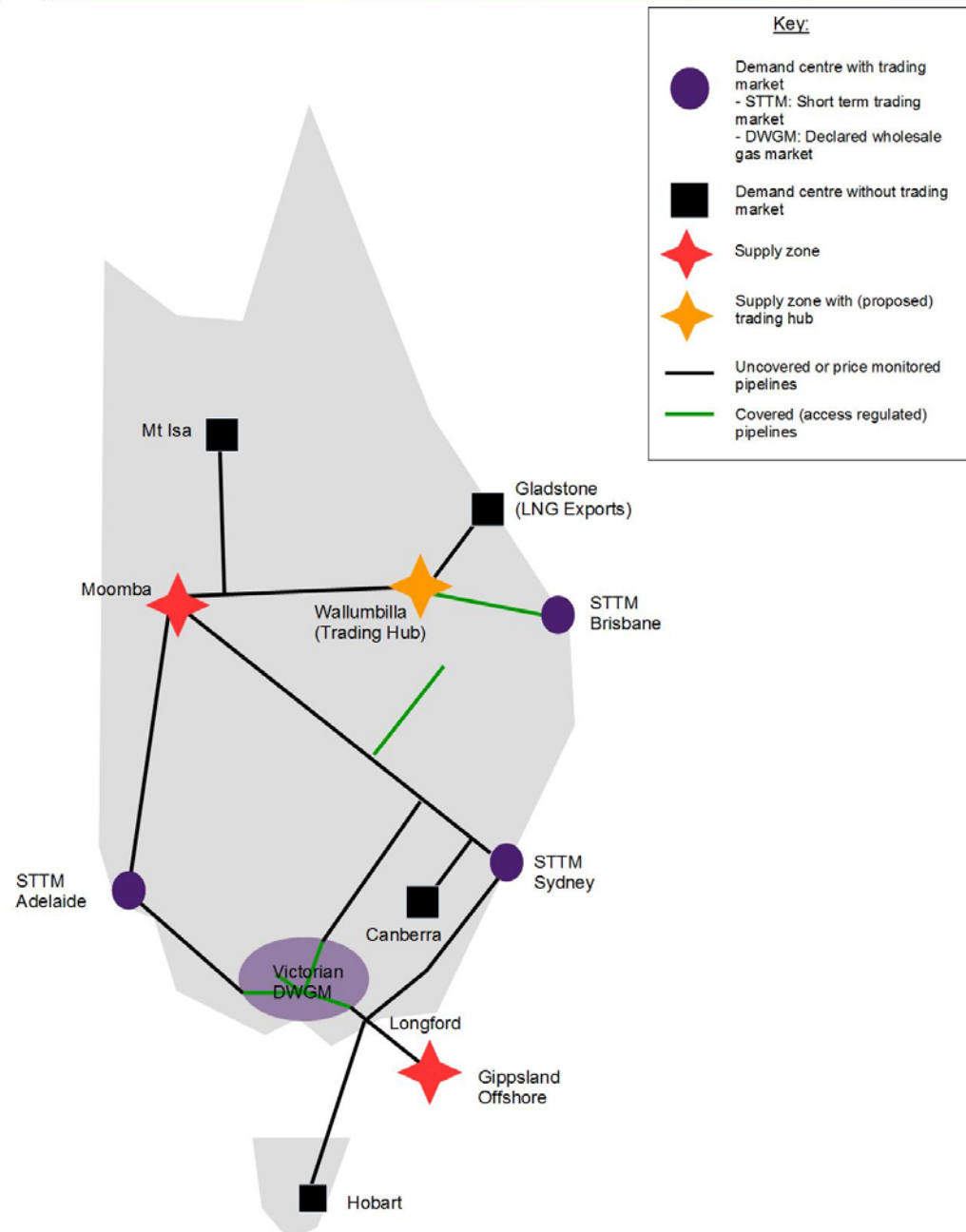


Defining the problem

Fragmented market arrangements

- The east gas market is characterised by:
 - Multiple trading arrangements across jurisdictions – STTMs, Vic DWGM, Wallumbilla gas hub and bilateral contracts
 - Facilitated markets seek to facilitate short term trading of gas – however different trading arrangements and rules potentially create barriers to trade across regions
 - What steps can be taken to integrate these markets better?
 - Is there an optimal number of markets?
 - Should there be a single market design that enhances price discovery and competition?

The market and carriage arrangements are overly fragmented



- East Coast markets a mix and match patchwork of market and carriage arrangements.
- Makes transparent price signals difficult.

Importance of pipeline access – short, medium and long term

- Gas markets and their competitiveness are largely defined by its conduits – the high pressure pipeline systems for gas transportation
- Barriers to trading across regions can be fundamentally affected by ability to access pipeline capacity and transport gas
- Substantial economies of scale in pipeline operation tends to favour pipeline monopolies.
- Investment in pipelines traditionally underpinned by bespoke long term contracts – large area, few pipelines, few producers – no uniform system of access.
- Access regulation stripped away following Duke decision
- Market is undergoing substantial change – flexibility to trade and transport gas in response to change supply and demand conditions.
- Commercial and regulatory arrangements for transportation across transmission pipelines critical to facilitating trade in gas and competition in upstream and downstream gas markets.

Problems associated with pipeline access

- Australia's pipeline capacity trading arrangements are opaque
- Progress being made on pipeline capacity information and trading (e.g. APA initiatives) but much more to do.
- Contracts are bespoke, which impedes buyers from trading capacity or delivery across pipelines to access gas supply sources.
- No uniform system of pipeline access – 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.

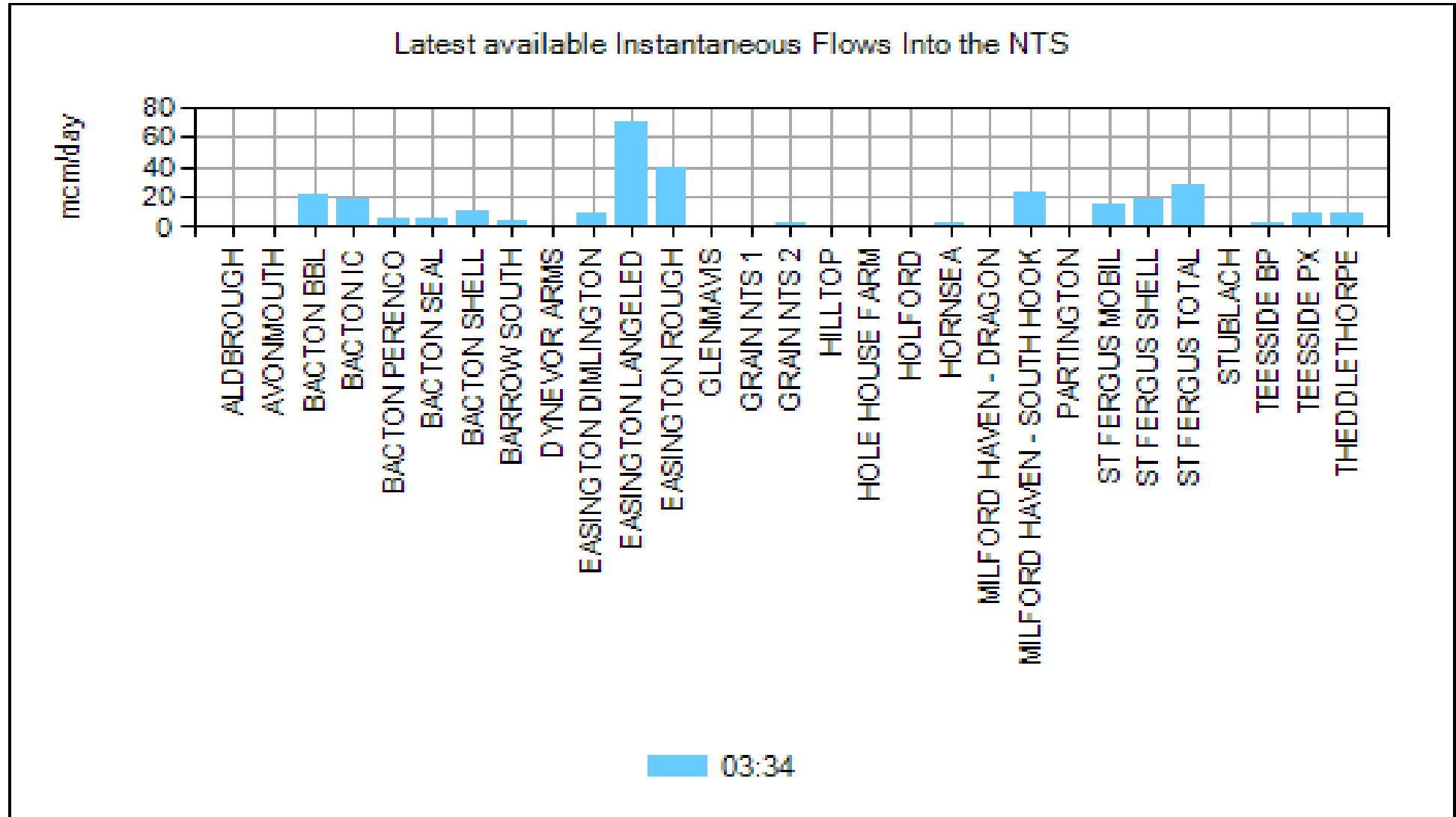
Information provision could be better

System Status		Forecast Map		Actual Map		Actual	
	Today	Tomorrow	Demand	Supply	Demand	Supply	
	23/02/2015	24/02/2015					
GDW	NONE						Demand (mscm) Graph 21/02/2015
MN Trigger	440.00						Actual Demand 283
							Seasonal Normal Demand 275
							Actual CWV
							CWV Seasonal Normal 5
							Supply (mscm) Graph 20/02/2015
							Beach including Norway 185
							LNG Imports 26
							Interconnectors 17
							Storage 62
							Linepack (mscm) Graph 23/02/2015
							Opening 350.6
							EOD Export Physical Flows (mscm) 21/02/2015
							Bacton 8
							Moffat 17
							Storage Stock Levels (GWh) Graph
							21/02/2015 22/02/2015
							Short 85 85
							Medium 5,865 5,624
							Long 12,963 12,673
							Actual Storage Stock (GWh) Graph
							Aggregate LNG Importation Stock (GWh) Graph
							21/02/2015 22/02/2015
							6,150 5,884
							Price Graph 21/02/2015
							SAP SMP Buy SMP Sell 7 day Avg
							p/kWh 1.7642 1.7978 1.7308 1.7500
							p/thm 51.70 52.69 50.72 51.29
Forecast		Graph					
Demand (mscm)							
Forecast Demand	300.9 (05:03)						
Seasonal Normal Demand	290.0	288.0					
Supply (mscm/d)							
Forecast Flow	291.4 (06:00)						
Physical Flow							
Linepack (mscm)							
PCLP	357.7 (05:03)						
Long Term Demand							
System Entry Point Flow Data							
Forecast Annual Peak Demand							
Real Time Flow Data							
ANS Messages							
NONE							

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

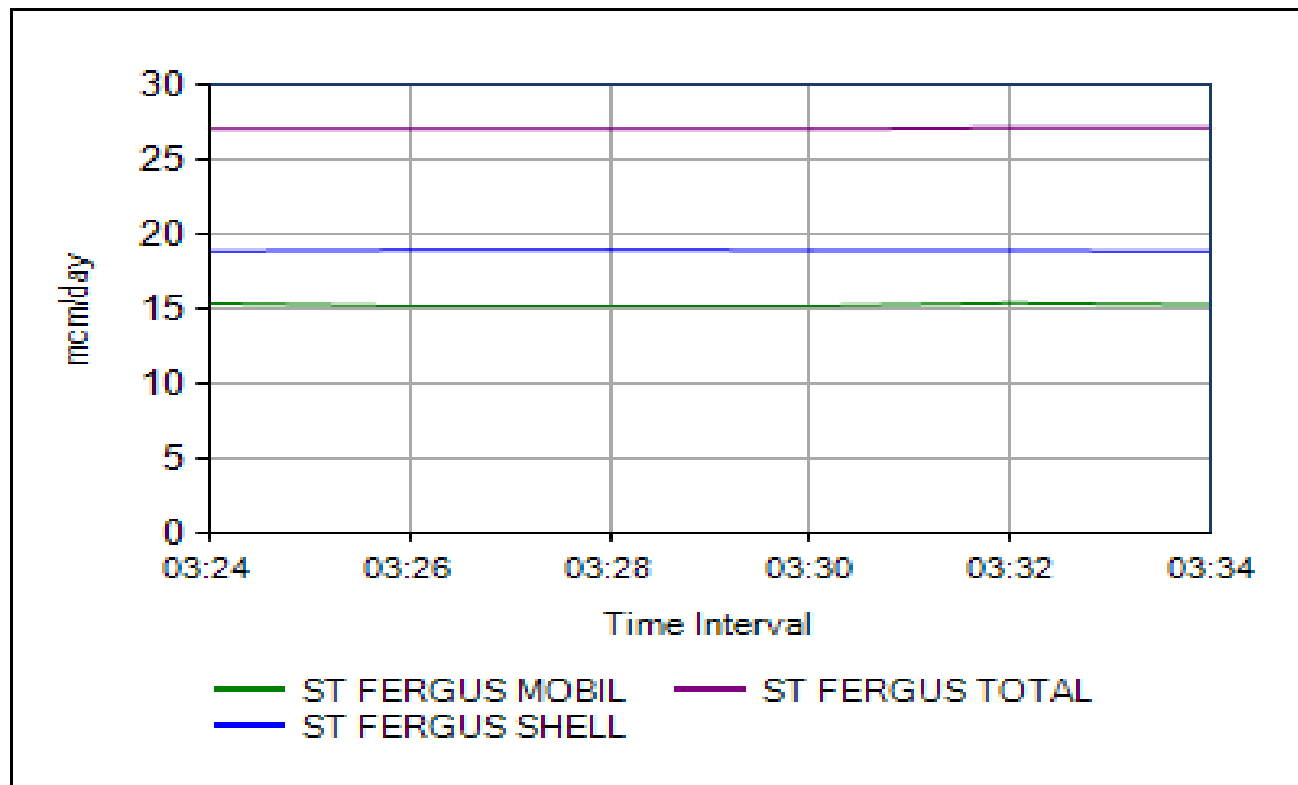
Essential information for participants to manage their risks.

Instantaneous Flows Into the NTS in Great Britain



Entry Zone Graphs: St Fergus Sub Terminal Flows

St Fergus Sub Terminal Flows



COAG Energy Council's vision for Australian gas markets

- At its meeting of 11 December 2014, the COAG Energy Council issued its gas market Vision statement.
- This vision specifies 12 specific outcomes, and the addition of new actions to the Australian Gas Market Development Plan to improve their visibility and accountability.
- One key action is to: *task the AEMC to review the design, function and roles of facilitated gas markets and gas transportation arrangements.*
- This is not another review for its own sake. The purpose of the review is to facilitate reform of the market, so that the relevant outcomes heralded in the Vision statement are delivered.

COAG Energy Council vision

....“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”

The context for the AEMC review – COAG Energy Council Vision Statement and outcomes

- AEMC review forms part of “Improving risk management” workstream
- Importance of establishing the necessary enabling conditions that would allow the development of a liquid trading hub and reference price for gas.
- What are the outcomes the COAG Energy Council is seeking to specifically facilitate in this workstream:
 - Liquid and competitive wholesale spot and forward markets – tools to manage risk
 - Access to markets through more harmonised pipeline capacity contracting arrangements – flexible, comparable, transparent, non-discriminatory
 - Harmonised market interfaces – facilitating trade between regions
 - Development pathways to improve interconnectivity between supply and demand centres.

Conclusion

- Victoria is committed to pursuing reforms to deliver the gas market Vision.
- This will not be an overnight process – the review itself will extend beyond a year – but there will be short term actions that are identified along the way that may deliver incremental benefits to the operation of Australia's gas markets.
- These reforms will ensure that the Australian economy benefits from more efficient use and trade of gas, while receiving the unquestionable benefits of export LNG.
- Any questions?