

Strategic priorities for Energy Market Development

AEMC/AERI Public Forum

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- AEMO is pleased to be a part of this public forum and recognises the value of today's discussion
- We recognise that there are, and should be, a range of reform priorities across the competitive energy markets and the related regulated service provision
- For today's discussion, I wish to focus on one simple proposition: that **gas market reform should be one of those strategic priorities.**

THE DRIVERS FOR GAS MARKET REFORM



- Gas demand is forecast to grow strongly this decade
 - Ongoing growth in domestic and industrial demand
 - Potential for significant growth in gas for electricity generation (although rate of growth is very dependent on scenario)
 - Very strong growth for LNG export – exports expected to exceed domestic demand by middle of decade
- Gas will be a large industry in itself as well as an important fuel for electricity generation
- Potential price rises and availability concerns arising from the linkage to international markets and large growth in exports
- Limitations in current gas markets

FORECAST GAS DEMAND IN EASTERN AND SOUTHEASTERN AUSTRALIA

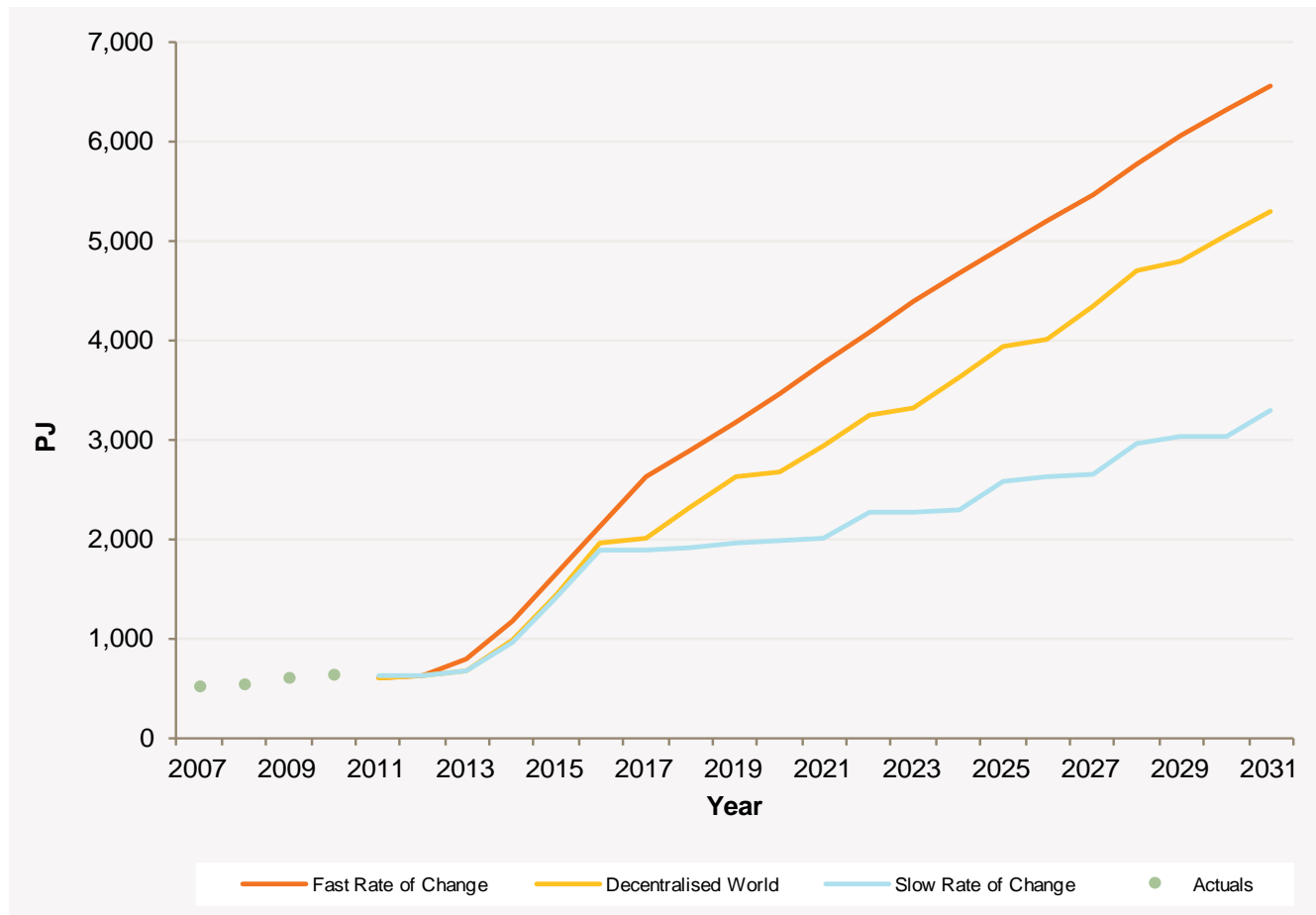
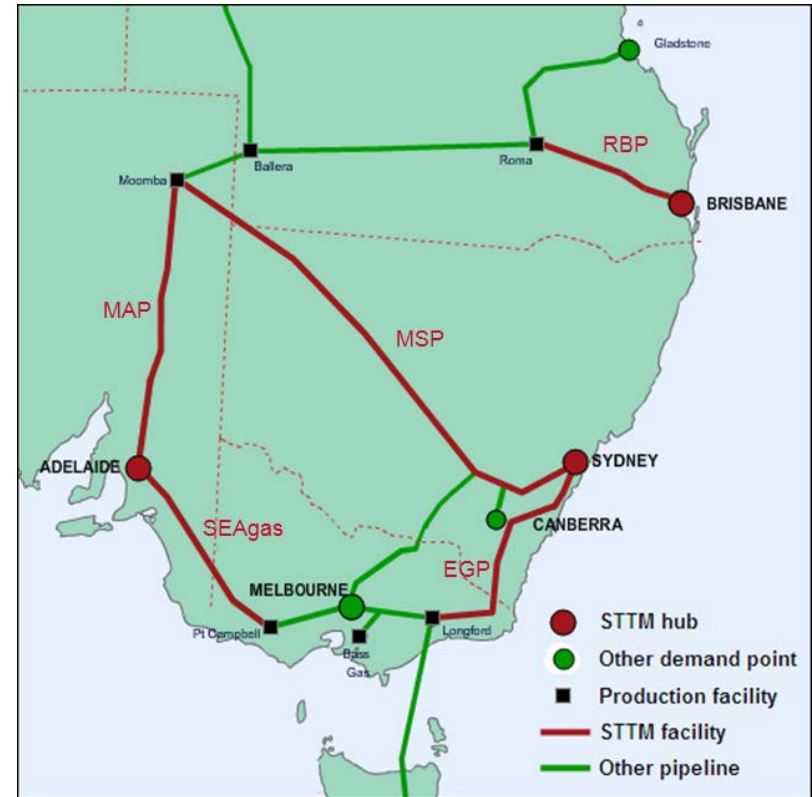


Figure 5.5 – 2011 Gas Statement of Opportunities
Includes gas for LNG

THE NEED FOR REFORM

- Disparate range of gas markets with:
 - Victorian Declared Wholesale Gas Market
 - STTM's operating in Adelaide, Sydney and Brisbane
 - Potential Gas Supply Hub being developed for Wallumbilla
- Limited financial trading around the gas markets
- Poor integration with the National Electricity Market



Without a new market at Wallumbilla (or an alternate), the current gas markets will only provide for 10% of gas in eastern and south-eastern Australia in 2020

SCER Communique June 2012 Australian Gas Market Development

Ministers noted the significant developments occurring in Australia's gas markets which are putting increasing pressures on the supply-demand balance.

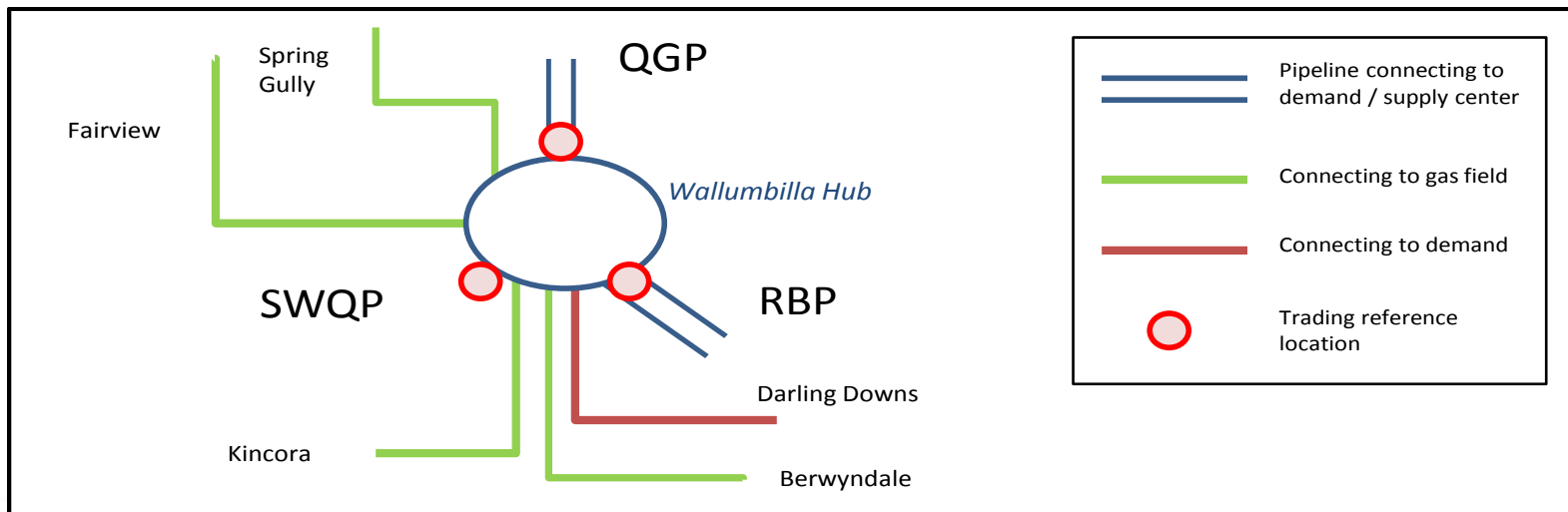
Ministers further noted that Australia has access to extensive gas resources and acknowledged the importance of streamlining regulatory approval processes and attracting investment in gas projects to ensure adequate domestic gas supplies. In this context, Ministers agreed on two core gas market policy principles of:

- (1) ensuring that supply can respond flexibly to market conditions; and
- (2) promoting market development.

- AEMO Cost and Scoping submitted to SCER in May 2012
- SCER approves further development of 'Path 1' in June 2012 starting with the Brokerage Model
- Three phases for the project:
 - Phase 1: Cost and Scoping report => completed
 - Phase 2: Detailed Design => underway
 - Phase 3: Implementation => subject to SCER approval - market go live March 2014
- Detailed design
 - Draft report due October 5th
 - Final report due October 19th
 - SCER decision in December 2012

Proposed Wallumbilla Market Framework - Brokerage model

- Three trading locations making up the ‘hub’
- Standardised contract for each product
 - Traders must have access to relevant transportation rights and gas
- Trades matched on price
 - Prices generated at each point from daily trades
- Market operates 9am to 5pm on business days (maybe 7 days)
- Voluntary participation



Demand hubs for local gas pricing and balancing.

Victorian Gas Market

Short Term Trading Market (STTM)

Gas Supply Hub

Trade and pricing at major production regions,
pipeline connections

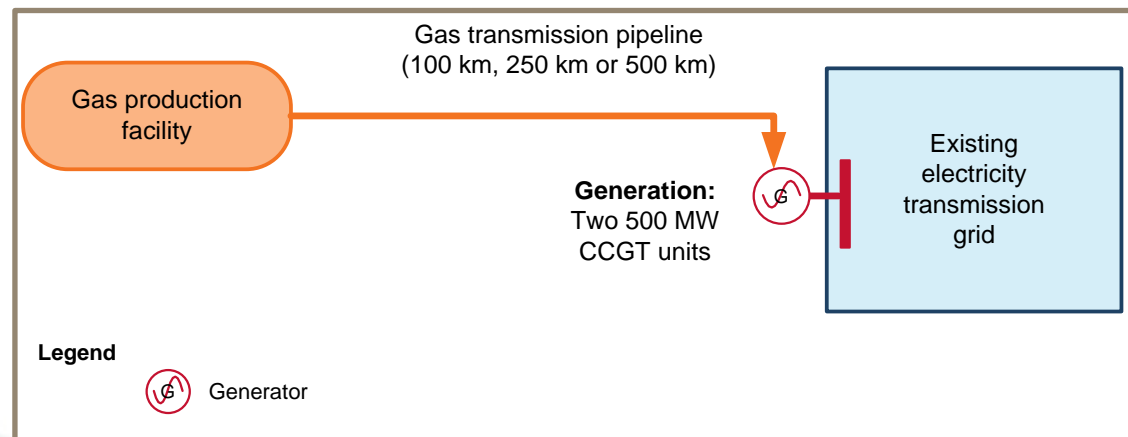
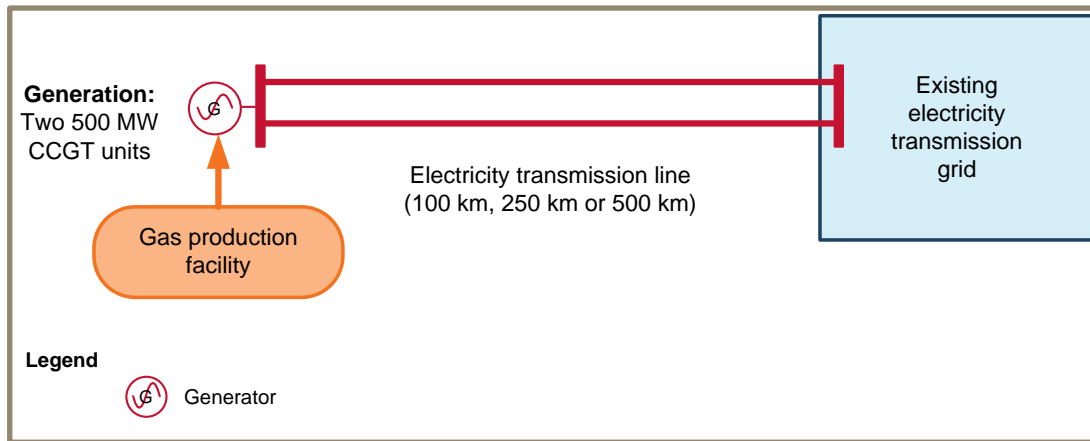
Transparency - Efficiency - Competition

- Guiding Principle
 - *Gas market participants should be able to freely trade between pipelines, regions and basins;*
- Gas supply hub
 - Industry articulated concerns with access to capacity to facilitate trade and liquidity
 - Need greater flexibility to trade unutilised capacity on a daily basis
 - Commonwealth embarking on process to look at concerns

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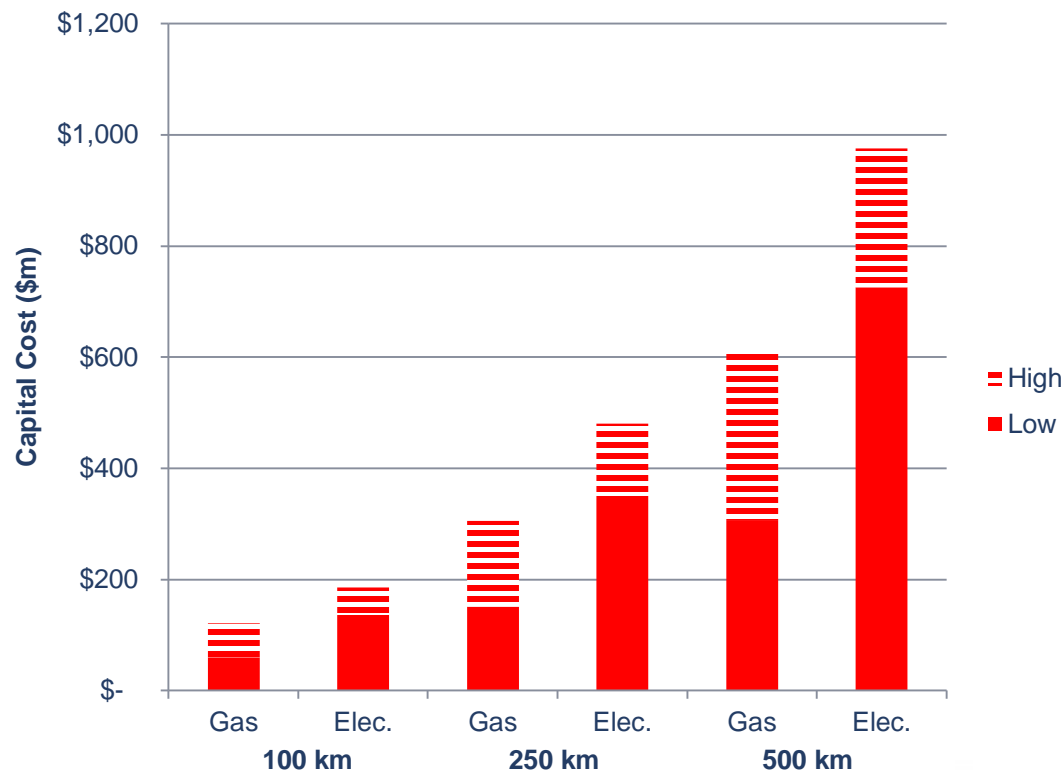
INTEGRATE CONSIDERATION OF GAS INTO NATIONAL PLANNING

Framework needs to better accommodate integrated gas and electricity transmission development.



GAS TRANSPORT vs ELECTRICITY TRANSMISSION

AEMO undertook an analysis of the comparative costs of the two cases above. Indicative capital cost estimates (high and low estimates) for electricity and gas connections were evaluated for three distances.



In all cases, there was a clear capital cost advantage with gas.

Analysis in real cases is more complex.

However the lower cost indicates that gas transmission warrants serious consideration as an alternative to electricity transmission.

Gas demand is growing strongly

Gas is the key transition fuel to a lower carbon future

It has had and will have a key role in electricity generation with future projections showing wind and gas as the two key generation sources this decade

Without change, the existing gas markets will decline in relative importance and will not meet the needs of the sector.

Gas market reform should be one of the strategic priorities