Wholesale electricity – an uncertain outlook

Mark Collette
Group Executive Manager, Energy Markets
UBS Australian Resources, Energy & Utilities
Conference, Sydney
14 June 2013



Agenda

- About EnergyAustralia
- Key market drivers
- Outlook for marginal generators
- Case study: South Australia
- Conclusion

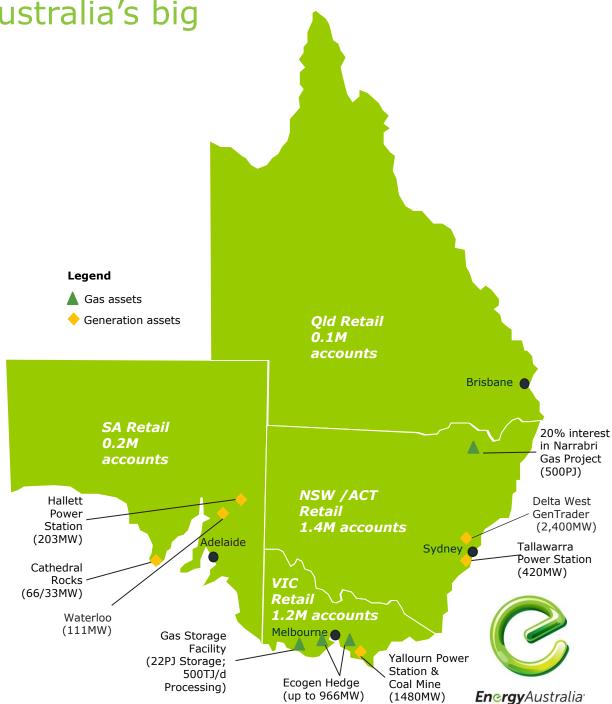


EnergyAustralia is one of Australia's big three energy companies

- ✓ One of Australia's largest gas and electricity utilities
- ✓ The largest privately held supplier of generation output to the National Electricity Market
- ✓ Australia's third largest energy retailer with market share of 22% across Eastern Australia by customer accounts
- ✓ Owns one of the largest underground gas storage facilities in Australia with long-term gas supply contracts
- ✓ Pipeline of development opportunities in retail, generation and coal seam gas
- ✓ Experienced management team

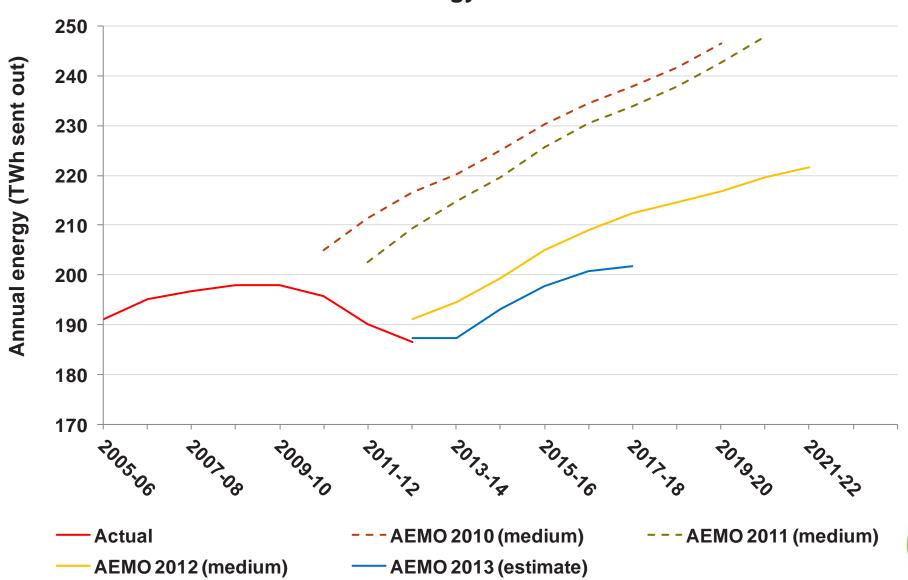
Owned by CLP Holdings Limited — listed on the HK Stock Exchange

Rebranded as EnergyAustralia in Q3 2012



Electricity demand has been falling since 2008/09



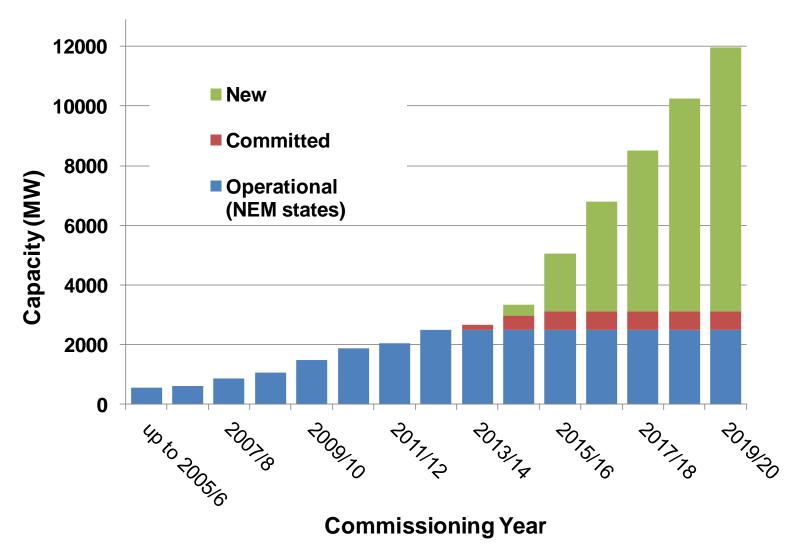






Renewables continue to be forced into a shrinking market by the Renewable Energy Target

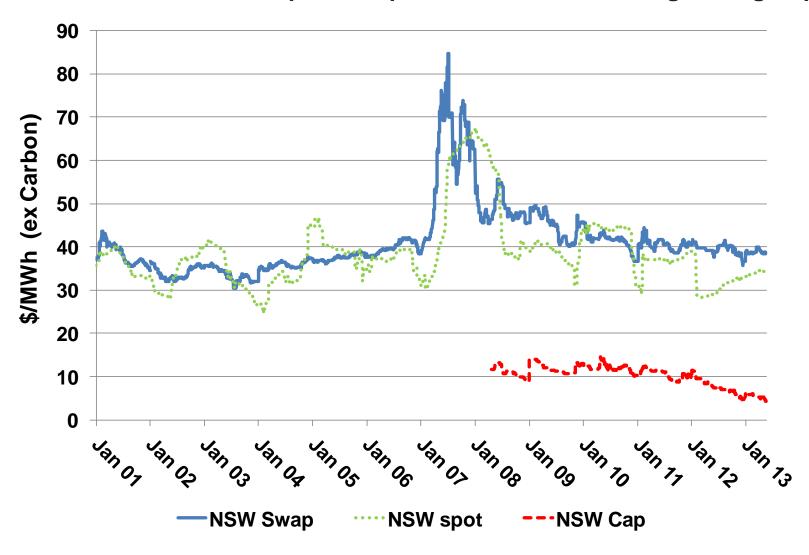
Existing and Required Wind Capacity to meet 2020 RET target





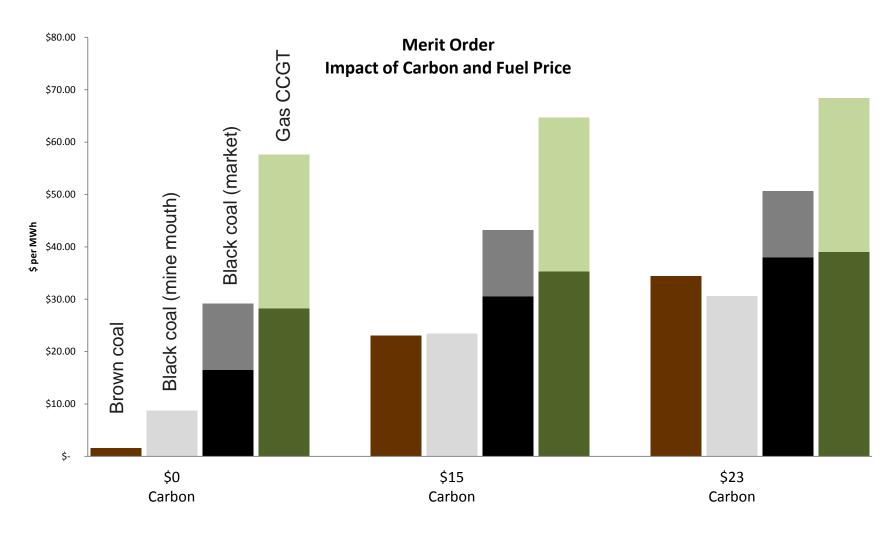
Unsurprisingly, electricity prices remain subdued in response to these conditions

1 Year Forward Swap and Cap Prices vs 1 Year Rolling Average Spot





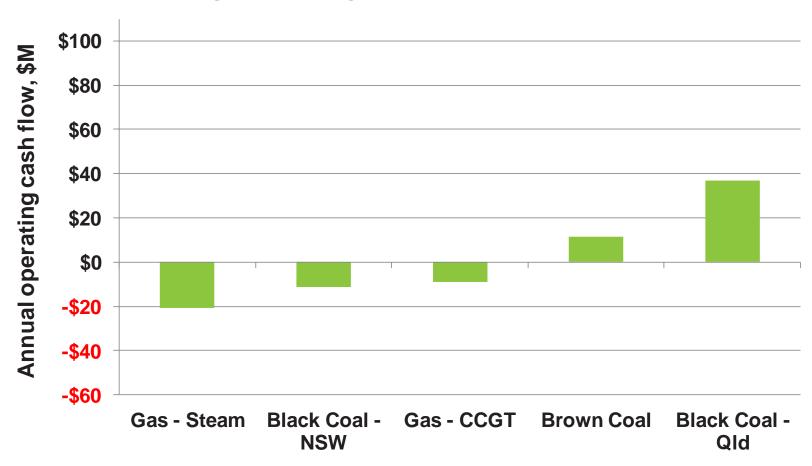
Fuel prices, particularly in gas, will drive increasing generation costs in the next two to three years





In this environment (with nothing else changing), generators exposed to market coal and gas face significant medium term losses

Average Operating Cash Flow for 1000 MW Generator



Source: EnergyAustralia modelling. Includes carbon cost. Excludes Energy Security Fund payments

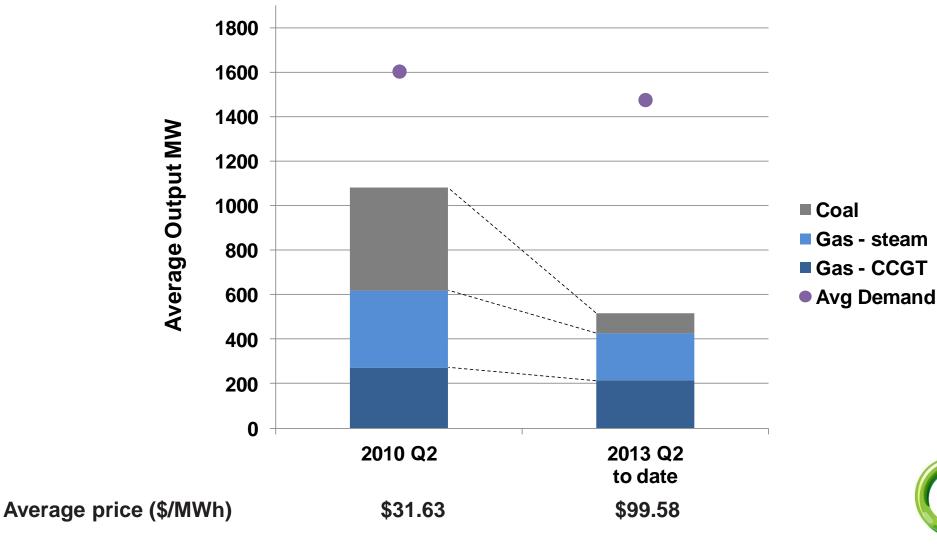


With this outlook, generators are likely to minimise costs. This will lead to increased forced outages and over the medium term (5 years+) unit shutdowns.

Outlook	Investment	Performance	Closure mode
Positive cash flow outlook	Invest in the asset to maximise economic production over the asset life (~20 years)	Low forced outage rates, primarily planned outages	Unlikely unless outlook changes
Weak / negative cash flow outlook	Minimise capex, fund the asset on enough to keep running on a 'bare bones' basis until the next outage (~5 years)	More frequent and longer forced outages.	If outlook remains weak, eventually units will break and not be worth repairing

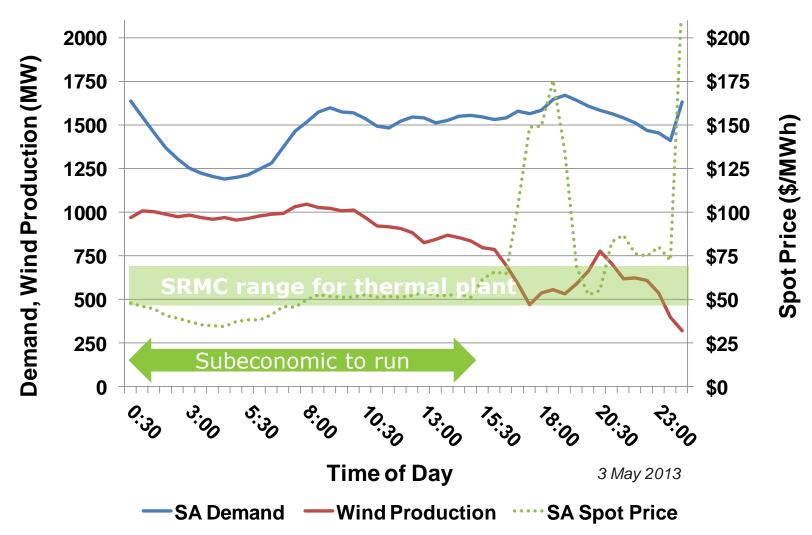
The changes that result under these market conditions are difficult to predict but potentially large – consider South Australia

SA Large Thermal Generation Output – Q2 2013 vs 2010



The SA price increases are driven by an unwillingness to run below cost







Market conditions will place generators under pressure; EnergyAustralia's response is to continue driving our portfolio to lower cost and higher flexibility operations

Market outlook

- Subdued prices with rising fuel costs
- Generators will focus on minimising costs and subeconomic operations
- Marginal generators face mothballing and shutdown signals
- Market conditions will become increasingly uncertain in response

Key performance drivers

- Lowest cost operations (both fuel and operations)
- Fuel and portfolio flexibility
- Channels to market
- Policy supporting efficient,
 economic and sustainable returns
 to generators