Gas market challenges
– What does it mean for WA?

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Gas market challenges

Issues to be addressed in this presentation:

• Is our gas market in crisis?
• Gas market challenges
• Underlying causes
• National policy response
• What are the implications for WA?
• WA LNG exports
• WA to east coast pipeline
• Regas terminal
Is our gas market in crisis?

- Manufacturing industry particularly vocal about power prices
- State-wide blackout in South Australia
- Tesla battery storage in place
- Federal/state public disagreement
- Gas industry chiefs summoned to Canberra (twice)
- Power industry chiefs summoned to Canberra (twice)
Gas market challenges

major benefits.
First, it is simpler than the outdated US corporate tax system, which unnecessarily tries to tax foreign profits, has differing depreciation rules and byzantine international transfer pricing.

These deadweight costs enrich lawyers and accountants, but divert human capital into relatively unproductive tax evasion.

Fifth, the tax would raise $10 trillion over a decade—helping fund tax reform—and thus empower US consumers not to spend on imports, thereby reducing imports from China.

While the tax may appear regressive, in economic theory the greenback would spike 25% per cent for a 20% per cent tax rate, due to an associated increase in demand for the US currency.

Commerce last week that based on empirical evidence it was convinced the current tax code would adjust quickly. He also flagged transitional rules to smooth any adjustments.

Among a US dollar spike, big losers would be Americans holding assets overseas and foreigners who have borrowed in US dollar debt.

Winners would be foreigners holding US dollar assets who would receive a windfall wealth transfer. Politically, this is tricky, because American asset owners would effectively subsidize foreign owners. Too a likely lag in full currency.

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Strategic Energy Insights

Disruption and market failure squandering our golden age of gas

Jeanette Roberts

Australia should be in the middle of a golden age of clean, efficient gas, instead regulations have meant price hikes and shortages.

We are proud of the LNG industry we have developed and the export opportunities created for Australia. We stand at the world stage along with major LNG exporters.

Yet, we are disappointed with the current market. Since the start of last year, Victorian and Northern Territory gas has been regularly exported to supply the new LNG plants in Queensland.

This has been draining southern gas suppliers and forcing competition with export markets. Southern domestic users are complaining of an inability to access gas at a reasonable price. Major shifts have been made under way locally and internationally in the operating environment for oil and gas.

We need a stable, secure, and cost-effective supply to ensure our industries are not held back by lack of gas.

Power producers blame the price of gas and lack of opportunity in the market to justify modernising generation facilities. South Australia is lobbying for another link to the main grid on the eastern seaboard. Nevertheless, Australia should not be a country that faces such challenges.

We need to recognise this market failure and take proactive steps to address the underlying issues.

More than anything else, business requires certainty. No business can commit an investment without clarity on the financial and regulatory environment in which it will operate. The gas industry requires certainty from government and regulators, in order to make the long-term investment required to ensure supply is available.

These are major investments, amortised over many decades, and competing internationally for capital. Without clarity and confidence, business will choose to invest elsewhere.

Market regulators must continue to deliver independent, expert and robust oversight of the industry. The gas industry welcomes this oversight and assurance.

However, the regulatory process must be efficient, effective and most important, transparent.

But the overall answer in loads more gas. This can only be achieved by investment in exploration and development of reservoirs. Moratoria, uncertainty, lack of transparency and ineffective regulation all serve to ensure that investment capital moves elsewhere.

We now need to be the pragmatic, astute country, to ensure we can all reap the benefit of the golden age of gas.

Jeanette Roberts has more than 35 years’ international experience in the oil and gas industry, working with operators, FEED specialists and EPC contractors. She has been involved in project development at state and Commonwealth level.
Power prices

Vocal commentary about sharp increases in power prices:

Wholesale electricity prices up in Victoria since Hazelwood power station closure

By Ole Hartman
Updated 24 Mar 2016, 12pm

Wholesale electricity prices have shot up in Victoria since the closure of the coal-fired Hazelwood power station, which has also caused Victoria to rely on power from other states for the first time in almost a decade, according to a new report.

A year on from the closure of the 1600 megawatt station, Victoria’s wholesale power prices are now 15 per cent higher than before the closure.
Power prices

And some evidence

Source: ACCC
Blackout in South Australia

- Wednesday September 28, 2016 - state-wide blackout in South Australia
- Severe weather coincided with a planned outage of the Heywood interconnector pipeline to Victoria
- Chaos prevailed
Investments in battery storage

In response, the South Australian government invested in the world’s largest lithium-ion battery storage installation.
"Is this a bit awkward?", Mr Frydenberg is asked. "It's about to be," Mr Weatherill whispers.

"It is the most anti-South Australian Commonwealth government in living history."

Mr Frydenberg later described Mr Weatherill's actions as "unbecoming, childish and unacceptable".
Underlying causes

• In the long term, supply issues can only be solved by access to resources.
• There is plenty of gas in the ground.
• In Victoria alone, there are sufficient reserves to meet the east coast demand for 200 years.
• Bans and moratoria are in place in Victoria, New South Wales, Western Australia and Tasmania
• Exploration is at a thirty-year low

• The gas industry has been warning for many years that exploration restrictions will eventually result in shortages
• Now that time has come
• However, if the restrictions were lifted today, there would still be many years before gas is available to the market.
National policy response

Gas industry chiefs twice called to Canberra

• Threats to impose export restrictions
• Gas companies provided assurances that they will increase domgas supply (to the east coast)
First gas, now power: Malcolm Turnbull calls electricity bosses to Canberra

Prime Minister Malcolm Turnbull has ramped up his government's intervention in the energy market by summoning electricity bosses to Canberra next week to demand they give customers the information they need to reduce their power costs.

In a letter sent yesterday to seven retail electricity chief executives plus the Australia Energy Council, the Prime Minister said the companies' various hardship programs available to customers who struggle to pay...
What are the implications for WA?

Is the WA market different?

• Yes and no

• 15% domestic gas (domgas) reservation in WA

• Policy was resisted by gas companies for many years, but is now welcomed

• Domgas market is small due to population size and spread

• LNG still the main game
WA to east coast pipeline

- Commonwealth funded study on WA to east coast gas pipeline
- Technically feasible, plenty of international analogues
- Very unlikely to be commercially viable
WA to east coast pipeline

- Feasibility study underway with GHD and Acil Allen
- Former Premier Barnett vocal supporter
- Current Premier McGowan using as leverage for greater GST share
- Woodside supportive – a good opportunity for them to sell gas
WA to east coast pipeline

• Very long lead time
• Large distances, remote routing
• Logistics very challenging
• Proposed routing – Dampier-Geraldton-Kalgoorlie-Perth
• Distance approx 4,000 km
WA to east coast pipeline

Technical analogues:
Nabucco pipeline
• Azerbaijan to Austria
• Distance approx 3,800 km

Power of Siberia pipeline:
• Irkutsk and Yakutia to Russian far east
• Distance approx 3,000 km
• Currently under construction
• Would be an excellent analogue
• However Russian sanctions will limit how Australia can leverage this experience
WA to east coast pipeline

Technical analogues:

Nord Stream
- Russia to Germany
- Distance 1,224 km
- Offshore rather than onshore

European gas grid
- Very complex network
Regas terminal

• AGL developing LNG regas terminal
• Technically relatively simple
• LNG regas terminals in Indonesia, including Bali, despite Indonesia being a major LNG producer (like Australia)
Regas terminal

• LNG regas terminal could be established very quickly

• Various options for technology:
  • Traditional onshore facility
  • Nearshore eg Adriatic LNG
  • FSRU – floating storage and regas unit
Technical analogues

JSK
• Floating regas unit and floating storage unit on Bali

Independence LNG
• Floating storage and regas unit
• Klaipeda port Lithuania
FSRU

Technical analogues

KRK LNG import terminal

• Floating storage and regas in Croatia

• Project under development – startup 2019

Hoegh LNG

• Currently building 8 FSRUs at Hyundai yard in Korea
Implications for WA energy policy

• Despite, until recently, strong industry resistance, domgas reservation has worked in WA

• But in all jurisdictions, increasing supply is the long term solution

• In WA, this means supporting development of major offshore fields such as Browse and Scarborough

• Realistically that cannot be achieved without significant investment of foreign capital
Implications for WA energy policy

• Onshore development is also important for WA
• The WA fracking inquiry is unnecessary.
• Countless inquiries have concluded that properly managed fracking is safe
• The NT inquiry came to the same conclusion recently
Wider policy implications for WA

• Gas investment enables economic prosperity for WA

• There is an opportunity to support McGowan’s mantra of local content, local jobs and local gas.

• The real prize is in the Inspection Maintenance and Repair (IMR) services that support the 40+ year field life

• We need a competitive cost base, particularly relative to Singapore
Wider policy implications for WA

• But in the local jobs debate, let’s not focus on low level skills.
• Let’s focus on world class skills and technology that we can export to the world
• We want our local jobs to be skilled, professional, world class
• That enables opportunities right across the economy