Australian Energy Policy

Noel Williams

Australian Energy Policy has taken some rocky roads over the past few years, and it appears that this experience is likely to continue. Put simply, the change to renewable forms of energy production will require significant capital expenditure and will increase the cost of supply. The recent Finkel report indicates that wind and solar are becoming competitive if supply interruption cost is excluded and if compared with current high costs of wholesale gas (A$8-12/GJ previouslyA$3.50). Surprisingly the report seems to accept that the gas price will stay unreasonably high and uncompetitive and places very high financing costs on any new coal-fired power plant rendering it uncompetitive. This almost preordains the competitiveness of renewable energy in a world designed purely to accelerate its introduction irrespective of economic reality.

Notwithstanding a well-intentioned bias to ‘save the planet’, if we are to contribute to the reduction of atmospheric CO2 and thus global warming, there is currently a price to pay. No magical solution will allow a transition to lower CO2 production without significant cost to the community. Today we have significant capital devoted to fossil fuel power generation and its distribution (Around 76% of power is generated with fossil fuel). This entire infrastructure does not disappear when solar panels are placed on a roof.

The debate should be focused on the transition and the speed with which the community can manage and pay for the change. Mechanisms to pay for the modification may include subsidies (leading to higher taxes), higher utility costs, or higher taxes alone. None of these is particularly palatable for the community and even less palatable when the changes are a surprise.

Power produced using natural gas generates about half the CO2 of non-CCS coal-fired power. It then seems reasonable, in a country endowed with vast gas resources, that gas production should be prioritised over that of coal in any transition. Gas-fired power generation today provides about 20% of Australia’s power and can ramp up quickly to respond to power supply shortfall. Any thoughtful energy policy would ensure that gas supply was sufficient and growing to facilitate the transition. In addition, it is the preferred source of heating for industrial processes and facilitates manufacturing operations and the jobs that go with that activity.

We now know that over the last few years we have witnessed a spectacular market failure in gas supply catalysed by the approval and construction of world-scale LNG export facilities in Gladstone. The impact of these large projects on gas supply, which double the gas consumption on the eastern seaboard, was not a properly assessed. To be charitable, there appears to have been an assumption that in spite of this massive increase in demand, ‘market forces’ would restore the supply-demand balance with little economic disruption. This hypothesis could be considered a little naïve when you are expecting the same parties who will benefit from the lift in pricing to increase supply and bring pricing back down.

To add to this perfect storm, prohibitions on unconventional gas development and in some cases, conventional gas development have been enacted in some states. This has been a knee-jerk response to environmental and rural concerns and has not been well thought through or grounded in scientific assessment. However, this should not hide the obvious initial failure of policy and process.

While now we have the perspective of hindsight, the shortfall in gas supply was flagged very early in the history of this saga and any attempts to propose solutions were rebuffed as interventionist and counter to free market process. It was suggested that eastern Australia had been isolated from world gas markets and now would have to manage at an import parity position of LNG netback. This was a very convenient position for those supplying domestic gas and justified a competitive market between domestic gas and export. Notwithstanding the understanding of the impact of domestic gas shortfall, it initially appeared the government felt this was a reasonable position to take.

Unfortunately, the Australian natural gas market does not operate as a classic supply/demand market. Half the market is now locked into long-term contracts negotiated to underpin the LNG projects, and any increase in supply is complicated by development lead times, political prohibitions as per the “fracking” issue, delayed development of existing reserves due to commercial priorities, and limitations in pipeline infrastructure and access.

The US Gas Market, which is much larger and less constrained by LNG exports, does exhibit a more classic supply/demand behaviour. When supply is short, and prices rise, more wells are drilled with supply returning to balance. Numbers of drilling starts are well monitored and, with the wealth of shale gas in US basins, the market pricing responds more toward a cost-based benchmark rather than some external export based parity. This is exhibited by ‘Henry Hub’ price index as the benchmark for a competitively balanced market. In addition, the US requires a public National Interest test applied to all export gas projects, and even with their wealth of gas resources this has been a hotly debated topic.

In short, the “hands off” approach to market stability does not work in the Australian market, and this was pointed out at a very early stage. We now have limited offers of supply in the market and prices well over LNG net back parity. This threatens the viability of many manufacturing operations and is being seen in the monthly retail consumers’ accounts.

The government’s response has been LNG export controls which they hope will bring the gas industry operators to heel and have them recognise that as part of their privilege granted to develop natural gas resources they also have a to maintain a licence to operate that balances the needs of the Australian economy. The success of this intervention is yet to play out, but one would expect that more work will need to be done to ensure sufficient gas is available to the domestic market.

With this initial response, one would assume that the Finkel report does not reflect the thinking of government in accepting continued uncompetitive gas supply in a country which is rich in gas resources. Gas is critical to the successful transition to renewable energy, and by successful, that means the cost of energy does not impede the country in its pursuit of economic competitiveness and an improved standard of living.

While recent history has not been encouraging, some initiatives can be taken to move us forward. Clearly, progress needs to be made on opening up gas reserves currently under prohibition by using science rather than hyperbole. Fracking is currently undertaken successfully in other parts of the world and provides benefit to land owners. The industry has a clear responsibility to resolve this issue in association with the government. The government of the day warned the industry that they were performing poorly in this area well before the "shut the gate" movement took hold. One would hope that the oil and gas sector will recognise that their licence to operate in the country is dependent on addressing local concerns, fulfilling the needs of domestic gas supply and their practices being endorsed by the community as a whole.

Secondly, oil and gas leaseholders should be required to justify their schedule for resource development and "use it or lose it" provisions should be applied rather than allowing the warehousing of reserves.
Third, a pipeline infrastructure plan must be developed and implemented and, access and tariffs managed for the benefit of the community. Competition in this sector is paramount, but the initiative to develop the infrastructure has to lie with the government.

Addressing the competitive supply of gas to the domestic market is a critical issue facing the nation. From an environmental, economic and political perspective, few matters have more impact on the national landscape and action must be taken, especially as solutions are available.

Reports of companies looking at LNG receiving facilities in southeastern states indicate how badly the domestic gas market has failed. Our state and federal governments and their market regulators have a critical role ensuring that the fundamental elements of economic health such as energy supply continue to unpin the country's development. Perhaps we are seeing the first real recognition of this loss in Australia's competitiveness and the first steps to make restitution.

Noel Williams *has been a Senior Executive in a global material company with a career spanning 40 years in Australia, the US, Hong Kong, Thailand and Singapore culminating in regional management and business growth leadership.*

In addition to his supporting role at Dragoman, Noel serves on the University of Queensland Chemical Engineering School Advisory Board, the UQ Dow Centre Board for Sustainable Engineering Innovation and not-for-profit boards.