From: Bruce
To: fracking inquiry
Subject: Supplementary submission to the enquiry
Date: Tuesday, 12 December 2017 6:07:38 PM
Attachments: Supplementary Submission to the NT Fracking Inquiry December 2017.docx

Dear Justice Pepper and the NT fracking inquiry panel,
I was requested by the panel to keep them updated of any developments in the global and domestic gas industries.
Please find attached my supplementary submission that updates the panel.
I would be happy to update the panel in person if that is appropriate.
Regards
Bruce Robertson
Analyst Gas/LNG Australasia
IEEFA.org

Sent from Mail for Windows 10

Supplementary Submission to Scientific Inquiry into Hydraulic Fracturing in the Northern Territory

prepared by

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12 December 2017

Submitted to:

Hydraulic Fracturing Inquiry
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By email: fracking.inquiry@nt.gov.au

For further information on this submission, please contact:

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Introduction

I was asked by the enquiry to keep them updated on developments that affect the global and domestic gas industries.

My submission to the inquiry concentrated on the following key points:

- There is a global glut of LNG that now extends out to 2030
- Excess supply and faltering demand
- The Global Gas glut keeps getting bigger and longer
- Globally the contract pricing mechanism is breaking down
- The mistakes made at Gladstone are being repeated in the Northern Territory
- Producing high cost onshore gas is not economic in a low cost gas world
- Government support for the industry is a mis-allocation of limited government resources

It is of note that on every key point of my evidence there has been further reinforcement of the case from both market and government sources. The case is stronger now than at the time that I presented to the enquiry. The Federal and Queensland state governments made a terrible error in approving the three export plants at Gladstone with far ranging impacts on power prices and the balance of our economy. I urge the Northern Territory fracking enquiry not to repeat the mistakes of the past and reject the high cost onshore unconventional gas industry for all Territorians. It should not be recommended on economic grounds alone.

I would be happy to present to the inquiry on this new evidence if that is deemed appropriate.

New Evidence

1. The Global Gas Glut

The extent and longevity of the global gas glut has been outlined by IEEFA in the reports authored by myself in May 2016[1] and in the more comprehensive analysis in June 2017, "Australia's export LNG plants at Gladstone – The Risks Mount"[2]. Both reports detailed the extent of global over supply and concluded that the global gas market would be oversupplied out to 2030.

Recently Macquarie Securities has released a report entitled "Global LNG – The power balance has shifted". In this report they stated that:

"Looking ahead, **we see global oversupply from operating and under construction projects lasting until 2022, but including advanced projects, this extends until 2027**. Additionally, two factors could shift oversupply out further, export plants running above nameplate and the rise of renewables"

This new report has been written post a spike in LNG demand out of China. In spite of this Macquarie have concluded that the global gas glut is a long term (10 years plus) phenomena.

[1] http://ieefa.org/wp-content/uploads/2016/05/Pipe-Dream-A-Financial-Analysis-of-the-NEGI-MAY-2016.pdf
[2] http://ieefa.org/wp-content/uploads/2017/06/Australias-Export-LNG-Plants-at-Gladstone-The-Risks-Mount- June-2017.pdf

2. Contract Defaults/ "Renegotiations"

The major portion of LNG sold globally is under long term contracts linked to the oil price

The IEEFA report, "Australia's export LNG plants at Gladstone – The Risks Mount" detailed that the contracts for LNG are subject to renegotiation and that a number of contracts had defaulted. Buyers obtained lower levels of take or pay arrangements and significantly lower prices. In one case the price of the contract was halved.

Macquarie also see pricing risk in contracts under renegotiation:

"Adding an additional layer of risk are the volumes up for pricing reviews. There are 187MT of supply under long term SPA's that will come up for pricing review before 2020, and 146MT between 2021-2023. Though there is no standard form of a price review clause, publicly available arbitral decisions over the past few years have all been in favour of the buyers, with spot prices judged to be at least part of the market price."

Macquarie sites recent examples of pricing reviews which saw prices fall around 25% for long term contract gas. The financial sustainability of the high cost LNG plants at Gladstone will be severely challenged in such a low contract price environment.

The challenges faced by the high cost plants at Gladstone increase the risks of a Northern Territory onshore gas industry being a stranded asset. It may be developed for a market that evaporates.

3. Shale gas in the USA is not producing economic returns to producers.

Shale gas production in the USA is not producing returns for investors.[3] The shale gas "revolution" in the USA is often quoted as a model for the Australian market to follow. What is not clearly shown is that this industry has destroyed shareholder value. The Wall Street journal recently did an investigative piece on the Shale gas industry and found that $280 billion of shareholder wealth had been destroyed.

"In the past decade, the shale-fracking revolution has made the U.S. the world's largest oil-and-gas producer and reshaped markets. Yet shale has been a lousy bet for most investors. Since 2007, shares in an index of U.S. producers have fallen 31%, according to data provider FactSet, while the S&P 500 rose 80%. Energy companies in that time have spent $280 billion more than they generated from operations on shale investments, according to advisory firm Evercore ISI."

In my testimony to the inquiry I emphasised that one of the cost pressures of Shale and Coal Seam gas was the constant need to drill more wells as production decline sets in quickly. This is also true in the USA.

"Returns from individual wells can be good, but shale wells tend to pop online with a gush and then peter out fairly quickly. That has meant operators sink profits back into more new wells that can take another two years to become profitable, with shareholders told to hang on for a payday.

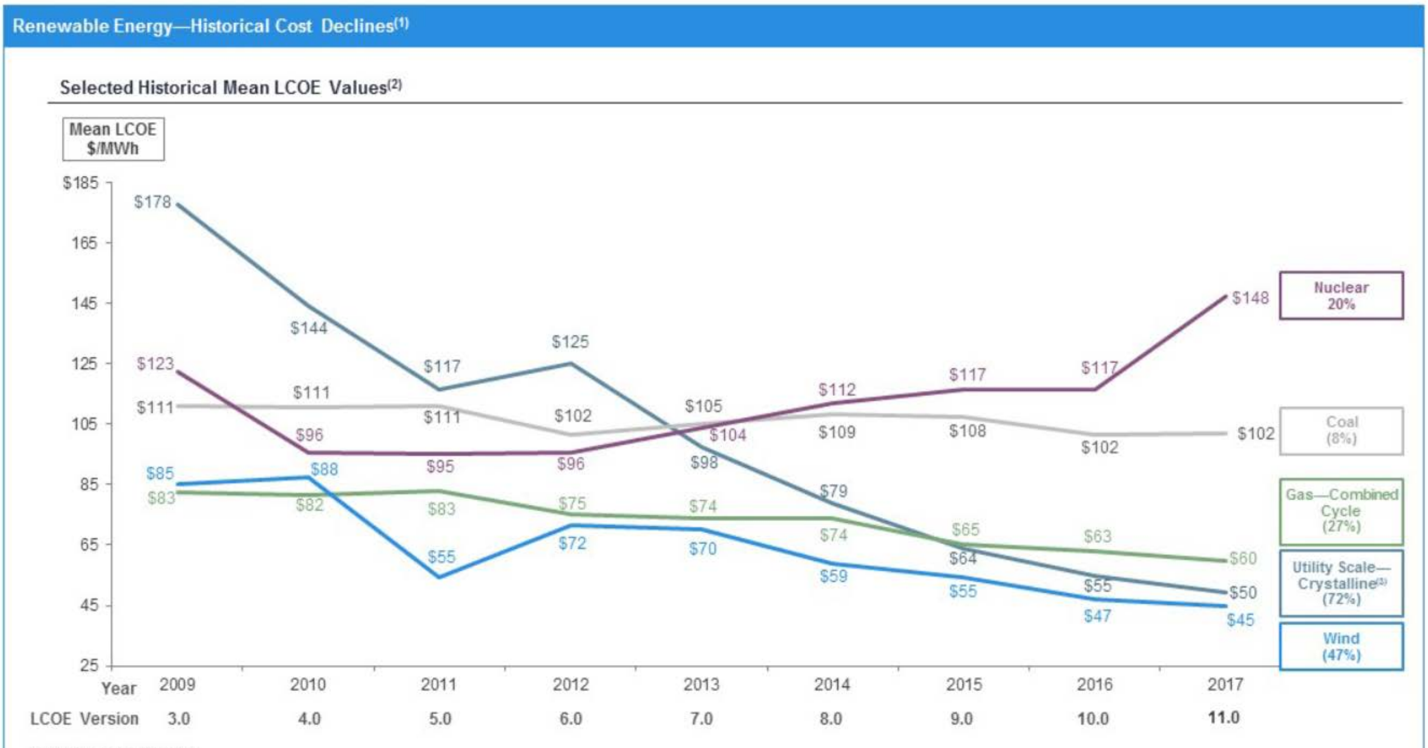
[3] https://www.wsj.com/articles/wall-streets-fracking-frenzy-runs-dry-as-profits-fail-to-materialize-1512577420?mod=&mg=prod/accounts-wsj

"The mañana never quite materializes," Mr. McMahon says."

Shareholders of Australian producers of Coal Seam Gas have suffered a similar experience to their US counterparts with billions of dollars of shareholder wealth destroyed through successive write offs and share price falls.

4. The rise of renewables will take market share away from more expensive fuels

Electricity production is the largest user of Natural gas. In the USA Electricity accounts for 36% of Natural gas use.[4] A fundamental change has occurred globally in electricity production with the production of electricity transforming from a commodity produced mainly by fossil fuels, to a technology such as solar and wind. The one truism that we are all familiar with is that over time the costs of technologies fall. The fall in the cost of solar and wind have been marked. The cost of unsubsidised generation of electricity by solar and wind is now below those of fossil fuels according to Lazard[5] and will continue to get cheaper. This analysis is done in the USA where natural gas is particularly cheap. In Australia and our LNG customers' countries, gas is far more expensive. It is the increasing competition over time renewables present that will crimp demand for gas. The global LNG industry is relying on fast and continued growth in demand a scenario that is implausible given the competition.



Source: Lazard estimates.
Note: Reflects average of unsubsidized high and low LCOE range for given version of LCOE study.
(1) Primarily relates to North American alternative energy landscape, but reflects broader/global cost declines.
(2) Reflects total decrease in mean LCOE since the later of Lazard's LCOE—Version 3.0 or the first year Lazard has tracked the relevant technology.
(3) Reflects mean of fixed tilt (high end) and single axis tracking (low end) crystalline PV installations.

[4] https://www.eia.gov/energyexplained/index.cfm?page=natural_gas_use
[5] https://www.lazard.com/perspective/levelized-cost-of-energy-2017/

Conclusion

It is the responsibility of the NT fracking inquiry to recommend the government not continue to support this industry with scarce government resources. Producing high cost gas in remote locations in the face of a lengthening global gas glut and depressed prices is no way to build wealth for Territorians. The reality is quite the reverse.

The government of Queensland rejected sound advice from its own public service when the CSG to LNG industry was approved, preferring to believe the industry when it stated that it would not affect the domestic supply of gas. The NT fracking inquiry must not blindly believe the gas and LNG industry, and their highly paid consultants, but rather assess the facts.

There are significant and real risks, if this inquiry recommend that the industry proceed, it will become a stranded asset as its export market evaporates.

This is not an industry of the future that can build wealth rather an industry of the past that will destroy it.