

To: Hydraulic Fracturing Inquiry

From: Geoff Farnell, Darwin

31 August 2017

I am writing this submission in my personal capacity as someone who has lived in Darwin since 1996 and someone who has worked in the resources sector in environmental, policy, operations, senior roles in Government and consulting since graduating from University.

The reasons for my submission are my concerns about:-

1. the future of the NT's small economy and its reputation with investors
2. the misinformation being spread by anti-gas / anti fossil fuel lobby groups
3. the hopeless state of Energy policy in Australia which is largely a product of our political system and our Commonwealth of States

It is the above 3 major concerns that leads me to make the following series of observations and comments to your Commission of Inquiry in the expectation that they are helpful and useful to your work.

I will not repeat the factual information about the number of petroleum wells drilled in Australia and the USA that have utilised Hydraulic Fracture Stimulation (HFS) techniques and the lack of evidence about groundwater contamination and environmental impacts associated with these wells and HFS. Such matters have been covered adequately by industry submissions.

Energy Supplies and investors

Australia is a globally important reliable supplier of energy to the world, through our Uranium, Coal and Gas exports. These exports in turn create a high standard of living and employment for our country and its people.

The Northern Territory is already a part of this important trade and its importance will increase when the Inpex project starts producing.

Australia depends upon local and foreign investment capital to create industry and jobs - and decisions that threaten future investment in our energy sector - do not enhance our countries reputation in global capital and global energy markets.

It is cheap reliable energy supplies for domestic consumers that are very important to maintaining our cost and standard of living and to underpin our manufacturing industries.

Energy Policy

The debate and controversy around Hydraulic Fracture Stimulation (HFS) is hard to fathom .

Why do some people regard HFS as unacceptable for unconventional reservoirs but as acceptable in conventional reservoirs - as it is essentially the same process?

Why is it that HFS is acceptable in Queensland and South Australia but not Victoria and NSW and why has the new Western Australian Government recently implemented a moratorium on HFS in that state ?

Unfortunately the answers are related to politics and not matters of fact about risk, management of the risk, petroleum engineering and science.

Mereenie, Palm Valley, Dingo

These onshore NT petroleum fields have had many, many wells drilled, that have undergone HFS and these fields have supplied gas and hence electricity to the NT and its towns and cities for many years, and in fact they still supply Alice Springs with electricity. No evidence exists of any deleterious impacts of the operations of these petroleum fields and their HFS activities.

I assume that people in the NT who used and still use electricity generated by the gas from these fields are grateful for the electricity – unless of course they have no need for such electricity.

I wonder if people who want to ban HFS in Central Australia realize the above ?

I also understand from expert hydrologists that in future HFS maybe used in the Amadeus basin and in other sedimentary basins in the NT in order to develop water supplies in remote communities.

So yes, HFS is a very important activity for the wellbeing of our modern society.

Given the track record of HFS in the Central Australian petroleum fields, I understand that the current fuss and controversy now about HFS operations by elements of our society is about stopping the use of fossil fuels and hence gas by objecting to the HFS activity / process.

The NT Economy

Unfortunately the NT is a mendicant state, dependent upon the welfare of other taxpayers in the Commonwealth of Australia to subsidize our local economy and lifestyle and as our population has recently declined then so does our GST receipts from the Commonwealth. Some commentators then complain about the shortfall in Commonwealth revenues.

Instead of complaining about GST shortfalls, we should focus on growing the NT economy to provide industry and jobs – outside of the public sector. The claims by others that an onshore gas industry would threaten other industries and their jobs are fanciful and scaremongering by the anti onshore gas / anti fossil fuel lobby groups. For example - has central Australian tourism and pastoral activities declined due to HFS activities since 1967 ?

Why should other taxpayers in our nation keep subsidising the Northern Territory, when we aren't prepared to develop our own industries such as onshore gas and its associated support sectors? Or is part of the anti-onshore gas industry logic – offshore petroleum fields and associated industries that supply and support projects such as Inpex and COP / Darwin LNG are good (ie out of sight, out of mind) but onshore fields and developments are bad?

The Beetaloo Basin

I can understand the Commission of Inquiry has a focus on the Beetaloo Basin, as that is where the recent high profile (Origin, Santos, Pangaea) wells have been drilled.

However in the minerals exploration industry, Governments do not limit commodity exploration such as iron ore, gold, coal, copper, zinc, nickel, rare earths etc to particular regions in the Northern Territory. Governments who actually own the commodity / mineral - just issue an Exploration License with a set of rules and the activity happens.

Given that approximately 200 petroleum wells have been drilled in the NT in total, which has a land mass approximately 2.5 times the size of Texas, then to limit the future wealth and energy production from a future onshore petroleum industry confined to Beetaloo only - seems a very

short-sighted and narrow approach, particularly when our nation is short of gas and the NT is short of people, jobs and industry.

Co-existence

The Central Australian petroleum fields exist both on pastoral leases and in a nature reserve (Palm Valley) and no deleterious impacts have been recorded or known with regards to fauna and flora and aquifers and surface waters.

In Western Australia, more than 780 wells have been hydraulically fractured since 1958. Most of these were (around 750) in conventional oil and gas wells on Barrow Island in the 1960s. It is worth noting that Barrow Island remains one of Australia's finest A-Class nature reserves, even with the existence of the Gorgon LNG and domestic gas project.

In the Cooper basin, various beef cattle enterprises have obtained organic certification as they co-exist alongside petroleum activities.

Co –existence does successfully occur in the NT petroleum industry – and it can successfully occur in future.

Technology and Track Record

It is now some 50 years since wells were first drilled and fracked at Mereenie and as mentioned previously, the track record of these fields in terms of minimal environmental impact are first class. More recently deep petroleum wells have been drilled in Beetaloo by Santos, Pangaea and Origin and some wells have undergone HFS.

The industry's historical and recent track record is good and the technology, systems and controls are ever improving so that risks are manageable and the impacts from exploration and production wells are low.

Regulatory Reform

I note that some people are calling for more regulatory reform in the NT petroleum sector. This seems like a never-ending ploy for work by some, a bit like continuing to ask the Commonwealth for more and more money. Given the track record of the Central Australian petroleum fields since 1967, and the recent Beetaloo wells by Origin / Pangaea / Santos, and the recent comprehensive regulatory reforms and process undertaken in 2013 – 2016, then why is more regulatory reform needed?

If an onshore gas industry is to proceed in the NT, then rather than having more people doing more and more regulatory reform – I suggest that they visit more petroleum operations and nearby communities instead.

I also suggest that many higher priorities exist in terms of regulatory reform in the legislation that controls and regulates the activities of people and organisations in the Northern Territory , rather than reforming the Petroleum Act.