ANDIAL HOLDINGS PTY LIMITED C/- Level 6, 10 Bridge Street Sydney NSW 2000

17 May 2017

TO WHOM IT MAY CONCERN, NSW Department for Planning and Environment

Dear Sir or Madam,

NARRABRI GAS PROJECT – DEVELOPMENT PLAN AND EIS ASSESSMENT

I am writing in connection with your review and assessment of the Development Plan and EIS for the Narrabri Gas Project (NGP).

I am a resident of NSW and have a rural heritage of some 7 generations as farmers and graziers in NSW; as well as experience in the unconventional oil and gas industry in Australia, USA and Europe.

You will no doubt be made aware of the more obvious concerns and benefits of the Narrabri Gas Project – both factual and unfounded in fact, as part of your review and assessment. I therefore do not propose to address them in this letter. However, I would like to draw your attention to some independent studies and responses made in the UK in relation to the debate regarding commercial exploitation of unconventional gas in the USA and the UK. I respectfully recommend that you consider these documents in your review. These include:

 Assessment of the Potential Impacts of Hydraulic Fracturing for Oil and Gas on Drinking Water Resources – Unites States Environmental Protection Agency; June 2015

https://drive.google.com/open?id=0B8G-Z4RfxXOMT3ZkSG05NnRPemM

2. Shale gas extraction in the UK: a review of hydraulic fracturing – The Royal Society and Royal Academy of Engineering; June 2012

https://drive.google.com/open?id=0B8G-Z4RfxXOMWmxvUGVSZDQ1S1U

3. Cuadrilla Resources Shale Gas Life Cycle- Cuadrilla Resources Holdings Limited

https://drive.google.com/open?id=0B8G-Z4RfxXOMYk9pZy1wOEVHVEU

4. Shale gas extraction in the UK: Cudrilla's response to the report by The Royal Society and Royal Academy of Engineers

https://drive.google.com/open?id=0B8G-Z4RfxXOMNW1JODZRWTczVFU

You should be aware that I was Chairman and a founding shareholder of Cuadrilla Resources Holdings Limited. In addition, I was Chairman and CEO of A J Lucas Holdings Limited during the period (2001- 2009) when that company owned and commenced development on several coal seam gas properties in NSW and Queensland. Lucas has been a pioneer of

drilling techniques employed in liberating gas deposits – for both coal mining and oil and gas development.

The Development Plan and EIS lodged by Santos for the Narrabri Gas project indicates:

- 1. The importance of gas for NSW and that the Narrabri Gas project can deliver on those requirements in a cost efficacious manner.
- 2. Narrabri (PEL 238) / the Pilliga Scrub is an ideal place for a gas project of this nature.
- 3. The EIS has concluded that the Project can be developed safely and with minimal and manageable risk to the environment.
- 4. The technology and engineering exists such that this project can not only be safely developed, it can make a major contribution the NSW economy.

Oil and gas development- drilling, completions, pipelines, compressor stations and associated infrastructure – can all be safely installed and operated with no or minimal risk to the environment or water table; provided the engineering and execution (construction) is correct.

The latter aspect is a matter for regulation and we, the people of NSW, look to the government to see that the appropriate legislation is in place and that it is properly administered.

The correct analogy is an aeroplane. While it is physically impossible to design an aircraft which will not fall out of the sky, we deem it an acceptable risk to fly. Why? Because, based on the engineering and design that goes into building an aeroplane, the construction of the aeroplane itself, the QA systems, the pilot training, the airports and air traffic control is all in place and at an appropriate standard, the regulations applying to age of aircraft, maintenance etc......all combine to satisfy us as prospective commercial paying customers, that it is an acceptable risk to fly with airlines that operate to such standards.

The same is true in oil and gas exploration and development.

In closing, I would like the Department to consider in its deliberations one additional dimension that is not, in my opinion, sufficiently addressed in the Development Plan and EIS, viz; the development of agricultural / horticultural project(s) alongside the gas development and as part of the gas development.

An ecosystem is defined as "a biological community of interacting organisms and their physical environment".

A combined gas, beef and berry and tomato farm is a perfect way in which the benefits of such a development can be shown to co-exist harmoniously and significantly benefit the local community for the long term – a perfect ecosystem.

I estimate that a fully scaled agricultural project of this nature would generate revenue in excess of \$50 million pa and directly employ in excess of 350 people full time. Substantial opportunities for local and indigenous employment could be created – creating skills which are kept in town and opportunities for further businesses to come on the back of this enterprise – trucking, packaging, contracting, cleaning, fabrication/ engineering etc. And money would be spent in the town; not in Sydney or elsewhere.

I have discussed this concept with Santos on more than one occasion yet they do not seem to embrace the total concept. I have done a lot of work on it and even made a proposal to Santos in this regard, subject to finance.

I believe that an ecosystem – comprising a beef project (feedlot and fodder cropping), a horticulture project (berry farm and possibly high tech greenhouses) alongside and, as part of the gas project, will demonstrate to NSW residents a social licence for this type of activity and good public leadership from a responsible government.

I would be more than happy to discuss with you any aspect of the above should you so desire. My mobile telephone number is 0413 616 616.

Yours faithfully

Allan Campbell