## INQUIRY INTO FEASIBILITY OF UNDERGROUNDING THE TRANSMISSION INFRASTRUCTURE FOR RENEWABLE ENERGY PROJECTS

Name:Mr John GormlyDate Received:30 October 2023

Director, The Select Committee on the Feasibility of Under-grounding Infrastructure for Renewable Energy Projects. Parliament House Macquarie Street Sydney NSW 2000

Good morning Director,

My name is John GORMLY and I live at 'Rocklomond'

I wish to submit the following information, for Question (1), for a fair evaluation, within your Select Committee.

I am happy that you publish this submission, leaving personal particulars / telephone numbers out.

Our farm:

Our farm has land area of 280.2 hectares.

My wife and I purchased the farm in September 2000.

We purchased the farm, as it had a proven track record in cropping, hay making and grazing. It contains a 71.2 hectare cropping paddock on the northern side of the farm.

EnergyCo requirement for a portion of the farm, for electrical infrastructure:

In August 2022, EnergyCo officers advised that they proposed to build twin 500Kv power transmission lines, from south to north, effectively cutting 'Rocklomond' in half.

The powerlines are planned to cut across our cropping field.

Our cropping Contractor refuses to drive a combine harvester, under or near these very high voltage power lines.

Effectively, we will lose an income stream, that may make the farm economically marginal. Due to our farm being relatively small, compared with surrounding larger cropping and grazing farms, our agricultural income options, will have to change.

Data supplied by EnergyCo regarding twin 500kv, 6 Gigawatt, 5000 V /metre, above ground power lines:

\*Directly under the power lines, is a PREDICTED reading of 414 Milligauss, or 41.4u/T. EnergyCo Radiation Experts inform that,"It is BAD to stand under the power lines. if you stand there for too long, it will boil your skin".

\*The AECOM study predicts that 63 Milligauss or 6.3u/T, will be read, at the edge of the Easement. Note: This is more than enough electrical radiation energy, to make fluorescent tubes light. In fact, the TV show 60 minutes managed to make fluorescent tubes light, well outside 330Kv Transgrid Easements, in C2008.

The subject radiation reading is 15.75 higher than the allowable radiation reading allowed in a child's bedroom.

\*At 80 metres from the power transmission lines, the radiation measurement is 6mG, or 0.6u/T. \*Many websites indicate that there would seem to be universal acceptance that a child under the age of 15 years of age, should not be subjected to non-ionising radiation levels of 0.04u/T or greater, for long periods, such as sleeping hours. There is a medical acceptance that there is a demonstrated 69% increase in childhood leukaemia.

\*The Superior Health Council of Belgium, has legislated a 100 metre setback from 380Kv power lines, within the Netherlands and Belgium.

It can be found on the internet under: Superior Health Council of Belgium Advice no. 8081- Infofiche Electriciteit en gezonheld EN definitive version.pdf A Senior Belgium 'Green Energy' officer was contacted on 13 April 2023 and he advised the following: "The EU recommends that children, under the age of 15 years, not exceed the exposure limit of 0.4u/T (averaged over a long period), due to an increase in childhood leukaemia. There have been many opposing scientific reports on Non-ionising radiation, over varying durations of exposure. There have been reports of strong magnetic fields causing long-term ailments in humans and navigation effects on animals.

To this end, the Belgian Government is being proactive in protecting its citizens".

Germany has 380kv Magnetic Field and Radiation data published for 80 metres and 100 metres, measured 1 metre above ground level, directly under the power lines.

\* I have been advised that a single phase, electricity power box, cannot be placed in a bedroom, or on the outside wall of a bedroom. I understand that this Australian building code was enacted in 2000.

\*It would seem that the high levels of non-ionising radiation must be coupled with EXPOSURE time. A simple analogy would be advanced 'sunburn'.

So, an extended stay under the 500Kv power line would yield 41.4u/t, a very high level of radiation. EnergyCo are reluctant to reveal the maximum time of exposure; or how many short exposures equal an excessive exposure.

So, a farmer, who crops, harvests or fences, within these critical distances from the power lines, may exceed exposure time.

Pregnant livestock, grazing the edge of the Easement, may exceed exposure time.

A vehicle, travelling, at speed under the power lines, will not exceed exposure levels.

Health Implications:

The internet is choked with mainly US studies, which are quickly rejected by the US Government. However, it seems likely that high magnetic fields and high non-ionising radiation have the ability to diminish melatonin production from the Pineal gland, in human brains.

I am informed that NSW Train Drivers are of the view that they have a cancer cluster, caused by overhead power lines. I am unsure of the 2023 Industrial Court determination.

At many power line information sessions and meetings and NSWFarmers meetings there have been genuine people, who have stories about family and friends, who had brain, or other cancer, that they attribute to high voltage power lines.

New South Wales Government and EnergyCo not taking responsibility for EMR:

\*When EnergyCo are asked about the radiation and magnetic field 'pollution', they hide behind ARPANSA and deny any knowledge of health implications or possibilities emanating from their new electrical infrastructure.

\*In 1991, during Premier Greiner's Government, three reports were tabled.

Reports on Asbestos, cigarette smoke and Health implications into 330Kv Transgrid power lines. All reports stated that there was no causal link, found between these substances and cancer.

The latter report was the Gibbs report, into high voltage Transgrid power lines.

The report was not well received by academics and practitioners, alike.

As a result, Transgrid would not entertain any detrimental health implications.

Due to the EMR information vacuum, Transgrid Cancer signs sprang up, near affected properties.

Government's Duty of Care Statement and the Precautionary Principle:

\*If you go to the beach, for a swim, there are locational signs that denote 'where to swim'. The Authorities don't put up signs denoting wave size, wave frequency, current direction, sand bank depth and distances, undertow and water temperature.

So a family would have to take Dr Karl with them, to interpret the data, before taking a dip. \*The NSW Government and agents, in not providing leadership and a Duty of Care statement on EMR health implications are perpetuating the 'knowledge vacuum', in thinking that they are avoiding a future cancer 'class action'.

\* EnergyCo are using phrases like: 'careful evaluation to avoid, 'wherever practicable', serious or irreversible damage to the environment'.

These statements would seem to conflict with the Government's own understanding of the 'Precautionary Principle'.

Undergrounding of very high voltage power lines:

Perceived advantages, as viewed by a layman:

\*Low EMR / Magnetic field readings.

\*Unsightly Infrastructure is under ground. Existing vistas maintained.

\*Less rural health issues/ mental health issues/ loss of productivity. (+\$)

\* Farmers and Livestock retain healthy lifestyle, either real or perceived. (+\$) \*Rural views maintained for air B&B rentals to continue. (+\$)

\* Would allow farmers to crop, uninterrupted cropping fields- no loss of productivity. (+\$)

\*Government proactivity limits future cancer cluster legal liability claims and would be well received by the public. (+\$)

\* NSW Government would be now viewed as making adult EMR safety decisions by EU countries and world leaders in power line reform.

\*No need for public radiation signage, or public education.

\* Insurance premiums for farmers would decrease, Government, self-insurers would benefit, from bush-fire claims, caused by lightning strike or arcing. (+\$) \*No Government embarrassment over property loss and death, caused by Government infrastructure. Especially relevant in times of drought. (+\$)

\* Apart from cost, Politicians would be remembered as innovators.

\* Would allow sedentary birds / bats to continue to feed , breed and exist.

\*Would be welcomed by helicopter pilots.

Power line under-grounding downside:

\* Initial Cost, caused by earthworks. (-\$)

\* Costs could be amortised over, say 10 years, as life expectancy of power lines, may be 40 - 50 years.

Kind regards John Gormly

Sent from my iPad