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SUBMISSION TO HOUSE OF REPRESENTATIVES COMMITTEE CONSIDERING  
THE STRATEGIC IMPORTANCE OF AUSTRALIA' URANIUM RESOURCES

Standing Committee on Industry and Resources

A new inquiry into developing Australia's non-fossil energy industry

Introduction:

It has long been known that Australia is rich in uranium deposits, and the mining of those resources has long been a controversial issue.

With increasing global awareness about the dangers of energy produced from gradually depleting fossil fuels, which cause harmful emission of greenhouse gases, it is natural that the nuclear industry has started to promote itself as a clean option for the future.

Having been at rock-bottom prices five years ago, the spot price for uranium is gradually climbing out of a long decline. Just a few years ago, the stockpiles of uranium oxide were plentiful, and new nuclear power stations were few and far between. That situation is changing, as national governments and energy providers get increasingly jittery about future energy sources.

Australian reserves:

Apart from Tasmania, Victoria and New South Wales, this country is rich in uranium deposits. Many are held in leases, in abeyance for the time being. Wherever uranium has been mined - Mary Kathleen, Rum Jungle, Nabalek, there are leftover issues of contamination. Where it is currently being mined, at Olympic Dam, Beverley, Honeymoon and Ranger, there are controversies due to the methodology being used (e.g. in situ leaching, which has grave implications for groundwater), or to tailings dams leaking, or to workers being contaminated due to sloppy work practices, or to the risk of radiation leaking out if there is a fire in any part of the operation. The proposed mine at Jabiluka became an international issue due to World Heritage Listing and indigenous concerns about disturbance of the Boyweg sacred site.

However, there are probably hundreds of deposits, none as spectacular as those already mentioned, but which may become economically viable as the world energy crisis deepens.

Markets:

These will become hungry for uranium, IF it is seen that nuclear energy can counteract energy shortages, and can do so without further damaging the greenhouse problems, which we are seeing worsen right round the globe. While there are plentiful supplies at the moment to service the 400 or so nuclear reactors currently operating, a shortage could occur in another decade (the time it takes to build a nuclear reactor) if there were a number of orders placed. Clearly, this is what the nuclear industry hopes for. There are many claims being made about the suitability of the nuclear industry to play a major role in meeting future energy needs.

Risks associated with the nuclear Industry:

This is nothing new from what has been stated many times by many people, in many places. The nuclear fuel chain is dangerous at every stage: from uranium

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mining, to milling, to transport, the the generation of nuclear power, to the use of plutonium as the raw material for nuclear weapons, the the decommissioning of power stations, to the dilemma about what to do with the low, medium and high level radioactive material which is produced. Added to that in the last decade has been the use of so called "depleted uranium" in every war fought by the United States since 1990. Depleted uranium use conveniently distributes a great deal of the waste which would otherwise be a problem for the nuclear industry. But it is re-distributed with devastating consequences, for the land and civilians in its path. Radiological particles become airborne, and are inhaled by anybody in the vicinity with long term medical effects, including gene damage. Or the radiological particles lodge in the soil, rendering it useless for agriculture for thousands upon thousands of years.

Apart from the immediate damage due to contact with radiation, the end stage of the nuclear fuel chain is the waste for which no country, no company, has any answer. Already, even if all nuclear materials production stopped right now, we have produced a ghastly legacy of contaminated material for future generations to deal with. Maybe they'll come up with solutions which have eluded scientists since the dawn of the nuclear age with the 1944 Manhattan project. So it has been a wild folly of the 20th century - an experiment gone badly askew, which I believe, we, as part of the global community have a responsibility to end in this century. It has been sixty years now, that attempts have been made to find a solution to the nuclear waste problem. One has not been found. Would it not then be prudent, with the huge masses of waste already accumulated, to desist from producing more?

Current claims of the nuclear industry:

The looming energy crisis is a great opportunity for the discredited, lying, filthy and very expensive industry to re-package itself and its product, to say to the world - our nuclear power stations don't produce any greenhouse emissions, so go nuclear. It's true that; an efficiently operating nuclear power station does not emit greenhouse gases. But that is only part of the story.

As stated earlier, every stage presents problems with continuation, especially when accidents occur, but even if they don't occur. It is dangerous material, even if very carefully managed.

However, we need to look at the cost of building nuclear power stations, the time it takes, and the emissions which occur at every stage OTHER THAN THE GENERATION OF POWER. That is the only bit that doesn't emit greenhouse gases, which is why the industry is so keen to prote that aspect - understandably. But in the production of all the materials required to build a nuclear power station, there are harmful emissions occurring, over the ten to fifteen year span of construction. Same situation in the de-commissioning, which should happen after thirty years, but many power stations are working way past their use-by date. This is partly due to corporations being unclear about waste disposal, not only of the spent fuel rods and materials used by workers on a daily basis, but also because they don't know what to do with all the materials which make up the power station itself.... by de-commissioning time, these materials are literally too hot to handle. Where do you put it? How do you bury that mountain of concrete and steel?

Renewable sources of energy, which I understand your committee will be looking at later, are in many places as cheap or significantly cheaper than nuclear energy. When the United Kingdom nuclear facilities were privated, the market refused to support nuclear facilities. They are not economical. They operate generally at lower efficiency levels than other power sources, and because of the very long lead time to build them, they are extremely expensive.

I don't believe that nuclear power is any answer to either global warming or to the energy shortages. It is much more efficient to invest in renewable energy sources, which can also claim not to be producing greenhouse gases. Extensive studies have shown that each dollar invested in end-use efficiency displaces nearly 7 times more carbon than a dollar invested in nuclear power.

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It makes little sense to try to avoid one environmental threat (global warming) by embracing another problem energy source. Nuclear energy does not apply to land transport - a major source of both greenhouse gases, and source of major energy shortages. Investment in nuclear power swallows resources that could be dedicated to R & D into renewable energy technologies.

It is worth noting that the insurance industry worldwide will not provide cover for any incident involving nuclear weapons, nuclear fuel, nuclear waste or nuclear material. Makes you wonder about the wisdom of taking the nuclear path, doesn't it?

Which brings me to a final damning connection ---- that of nuclear weapons proliferation. Not everyone knows that you can't make nuclear weapons without nuclear power generation. The nexus has been clear from the beginning, but generally not to everyone. The industry has done a fine job in skating around the more contentious issues associated with it, and nuclear weapons production is one of those contentious issues. Plutonium extraction from the spent fuel rods in nuclear power stations cannot be arrived at any other way.

From the beginning, the nuclear power industry has been the benign "front" for the nuclear weapons industry.

Admittedly, there are about 10,000 less nuclear weapons on planet earth today compared with fifteen years ago. BUT, more countries are acquiring nuclear weapons, and no one, anywhere, wants to be threatened by the possible use of such terrifying weapons of mass destruction. So, there are still 30,000 nuclear weapons out there at the moment, many of them on high alert status permanently.

Right now, the world's leaders are gathering in New York for the Nuclear Non-Proliferation Treaty Review conference, held every five years. Unfortunately, it seems that the thirty year old treaty, which has kept the lid on proliferation to some degree, is at risk for its future existence. There are four nuclear weapons states now outside the NPT. The United States Government seems to have no intention whatsoever of abiding by the 13 points listed by the last NPT Review Conference in 2000, at which all nuclear weapons states gave an UNEQUIVOCAL undertaking to abide by Article 6 (charging NWS with getting rid of their nuclear stockpiles). The United States Government refers to this as an "historical" document only, not a binding agreement. So what hope; does the global community have in persuading new smaller players in the nuclear club, like India, Pakistan, and North Korea (and here I must mention Israel, the other non-signatory country which has had nuclear weapons for years, but won't admit it) to desist from increasing their nuclear arsenals.

All this relates straight back to uranium mining. The last thing the world needs now is more possibility of nuclear contamination. That's what we would be offering the world if we go ahead and exploit the many uranium deposits in this country. It's been made very clear to the international nuclear community that Australia does not want the likes of Pangea coming here, selling us the world's nuclear waste. That's a very strong point for leaving what uranium still exists here, right where it belongs, in the ground. Only safe place for it, as long as it's undisturbed.

#### Conclusion:

I believe that Australia has a moral responsibility to the global community to make the tough decision not to mine/export Australia's considerable uranium reserves. We need to proudly forego the dollars which such exports could earn - but we'd also be doing ourselves, our future generations, and our landscape a favour, but not furthering the exposure to dangerous radiation. It could act to spur companies both here and in other places, to explore other options, particularly for liquid fuel for road transport. Australia should be leading the world in renewable energy options, not trailing pathetically behind. I hope your committee comes to this conclusion also, and that you will recommend strongly that the Government promotes renewable energy alternatives to fossil fuels. Let us be ahead of the game, for a change, not playing catch-up, when

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other countries realize something innovative, and we just trail behind.

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