From: Allen
To: Committee, Environment (REPS)
Subject: Fwd: [redacted] re nuclear power inquiry.
Date: Monday, 19 August 2019 8:52:47 AM

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Subject: [redacted] re nuclear power inquiry.
Date: Mon, 19 Aug 2019 08:50:42 +1000
From: Allen [redacted]
To: [redacted]

The Standing Committee on Environment and Energy.

Thank you for considering my submission to the inquiry into the prerequisites for nuclear energy in Australia.

As we move to increasing amounts of renewable sources of electrical power in Australia (mainly solar and wind turbines) we still have to have reliable sources of base load power for such times when "the sun doesn't shine and the wind doesn't blow". The use of battery storage appears to me to be exorbitantly expensive and other options such as "pumped hydro" also seem to have many drawbacks, especially as we live in the driest inhabited continent on earth. The only option at the moment is coal fired power but as our aging infrastructure and concerns about CO2 emissions become more of a problem then other sources of power need to be investigated. To my mind the solution is obvious, i.e. we should have a very detailed investigation into building a number of nuclear powered electricity generating facilities in our country.

The advantages are obvious. We live in one of the most stable of continents, both from a political and geological point of view. As well, we have some of the largest reserves of Uranium on the planet that are currently fueling such facilities in other countries, so why not use these reserves to our own advantage? One of the reasons used against this idea is that because we do not have a current nuclear program then we would not have the expertise required to operate such facilities. I find this argument to be somewhat spurious as we have one of the most highly educated workforces on earth, and we are not looking at designing an industry from the ground up as the technology already exists and has been in use for over 60 years. Another argument often used against nuclear power is that it is too expensive compared with other sources. However, when I did some research the opposite seems to apply. eg the cost of nuclear power in the U.S. is around $36 U.S. per MWH(which equates to around $54 Australian per MWH at the current exchange rate). Most sources appear to quote a cost of around $79 Australian per MWH for coal fired electricity in Australia which seems to imply that nuclear energy is actually less expensive than the coal fired alternative!

Another argument often used against nuclear power is that it is too dangerous compared with other sources of power. No one would deny that such facilities have to be well operated and carefully maintained but in the U.S. around a hundred nuclear power stations are currently in use and produce 20% of all power used in that country. As far as I can determine there has never been any deaths or injuries caused by a nuclear accident in any

of these facilities yet somehow they are thought of as dangerous. Compare this with the statistics that show that thousands of Australians are killed or seriously injured every year in traffic accidents but this has not stopped people from using this as a form of transport! The biggest nuclear "disaster" on record is probably the one that occurred in Chernobyl, an accident caused by poorly trained staff and such a flawed reactor design that such an incident could not have happened in any other country or in any other newly designed reactor. As it turns out, even this incident was probably not the catastrophic event that has been portrayed as it appears the death toll which was predicted by some to be in the hundreds of thousands was possibly even less than one hundred and was mostly confined to some workers at the site and to the "first responders" to the accident.

Another argument often quoted against the use of nuclear power in Australia is that it would be detrimental to our tourist industry, i.e. tourists might be loathe to visit our country if they knew that we had a nuclear power industry. This is obviously totally spurious as one of the most visited countries on earth is France with a much larger tourist industry than ours and they get 75% of their electricity from nuclear reactors in their country. I have yet to hear of anyone not wishing to visit France because they were worried about a problem that might occur with one of their nuclear power stations!

The problem of the storage of waste products from these reactors is also used as a reason why we should not have a nuclear power industry. From what I can determine it seems that much of the waste material can be re-processed and used again. Also, huge areas of inland Australia are almost uninhabited so I find it hard to believe that we could not find a few square kms of ground or disused mines that could be used to safely store such waste.

In conclusion, I would just like to say that I have no association with any parts of the power industry. I am a retired Medical Scientist with an interest in how we can maintain a constant supply of electrical power at a price that does not negatively impact on our standard of living or damage the ability of our manufacturing, mining and farming sectors to compete in a global economy.

Thank you for accepting my submission to your inquiry.

Regards, Allen Tripp, Bundaberg.

(If you need to contact me for any reason please use my email address, or postal address [redacted])
