07 August 2019

Dear Committee members.

The article linked below describes the Thorium nuclear fuel option which it can be argued is a safer fuel source for nuclear power which generates considerably less waste issues.

The inherent safety of the thorium fuel cycle along with the reduced waste outcomes should make thorium-based nuclear power a more acceptable long-term energy solution for Australians.

https://en.wikipedia.org/wiki/Thorium-based\_nuclear\_power

I quote one section of the above-mentioned article:

## Thorium-based nuclear power projects

Research and development of thorium-based nuclear reactors, primarily the Liquid fluoride thorium reactor (LFTR), MSR design, has been or is now being done in the United States, United Kingdom, Germany, Brazil, India, China, France, the Czech Republic, Japan, Russia, Canada, Israel, and the Netherlands. Conferences with experts from as many as 32 countries are held, including one by the European Organization for Nuclear Research (CERN) in 2013, which focuses on thorium as an alternative nuclear technology without requiring production of nuclear waste. Recognised experts, such as Hans Blix, former head of the International Atomic Energy Agency, calls for expanded support of new nuclear power technology, and states, "the thorium option offers the world not only a new sustainable supply of fuel for nuclear power but also one that makes better use of the fuel's energy content."

It is also significant that Australia holds the greatest percentage of world Thorium reserves leading the reserves held by USA, Turkey, India and Brazil. The opportunities for the resource sector should not be underestimated here.

Please consider the hyperlinked article during your deliberations and include the Thorium fuel cycle as a potential clean, safe source of long-term energy.

Kind regards,

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