

Environmental and Other Legislation Amendment - (Removing Nuclear Energy Prohibition) Bill 2022

Submission:

The existing electricity market design is a failure unless it includes nuclear as a preferred option for base load power given the intent of removing coal fired and gas power generation from the existing mix of energy providers. Under current proposals there will be an electricity sector disaster which in turn will result in a national security disaster at time of heightened security concerns for Australia and the region.

Australia has a high reputation in all nuclear related areas and is currently a major exporter of uranium yellow cake to the nuclear power industry worldwide, based on Australia's unique uranium reserves, many of which remain undeveloped due the current legislative landscape including the "three mines policy" introduced in 1984. This would appear to be both a hypocritical and false position for Australia to take, where on the one hand we are happy to supply the fuel material but on the other are unwilling to allow its use in reactors with our boundaries.

Australia missed a great opportunity during the 1980s to establish a fully integrated nuclear industry (mining, processing, enrichment, fuel rod production and final recycling of waste) for purely ideological reasons. Such an industry could have earned Australia many billions of dollars while also underwriting a local nuclear power industry.

Australia is a highly respected and reliable supplier of nuclear medical isotopes from the Lucas Heights reactor, which has proved to be a safe and well managed facility, underpinning our nuclear science industry. Therefore there is an existing baseline nuclear science and engineering workforce available together with a sound regulatory framework to support an expansion into nuclear power generation based on the latest technology using small modular reactors (SMRs). Reference the expertise available from the CSIRO and ANSTO.

SMRs reflect 70 years of continuous evolution in design just like cars, trains, jet aircraft, computers and mobile phones. They are scheduled to appear on grids in Ontario Canada in 2028 and in the USA in the 2030s. Modern SMRs are cost competitive when designs are 100% complete and approved with skilled project management and supply chains in place before the first sod is turned.

SMRs could be installed into our current grid as "plug and play" replacement for retiring coal and gas generation facilities, saving billions of dollars as there would be no requirement to build extensive new grid in support of distributed wind and solar generation facilities.

To assume that the Australian community is totally incapable of managing the introduction of nuclear energy for electricity generation is a concept both odd and incomprehensible to say the least.

I therefore respectfully submit that all nuclear energy prohibitions or bans be removed from all Australian legislation, commencing at the federal level.

Signed:



John G Wood , Dip EE, MBA, FIEAust, MAusIMM, Chartered Professional Engineer (Retired).

Brief Resume:

Mr John Wood was for some 20 years a Senior Associate of Behre Dolbear Australia (BDA) with over 55 years' experience as a professional electrical engineer and project manager. He previously held senior management positions in mining companies, including General Manager Project Services, and has been involved in construction and management for mining and heavy industry operations throughout Australia. Mr Wood has managed the development of major resource projects in remote areas and is familiar with the challenges associated with their construction and operation. Mr Wood worked with BDA on infrastructure reviews and Independent Engineer assignments on a several major engineering projects in Australia and SE Asia including the original Fortescue T45 development. He retired from active consulting in late 2019.