



Voice for Walcha
Email: us@voiceforwalcha.com
14 January 2023

Senate Environment and Communications Legislation Committee

Re: Inquiry into Environment and Other Legislation Amendment (Removing Nuclear Energy Prohibitions) Bill 2022

Dear Senators,

Submission on proposed amendment to remove the current ban on Nuclear Energy based power generation in Australia by Voice for Walcha (VfW).

The Voice for Walcha (VfW) is a community based group currently objecting to a recently submitted EIS by the Winterbourne Wind Farm for a proposed 750MW wind farm very close to the Walcha township.

We are not necessarily objecting to renewable energy but to how the EIS has been prepared and the economic, environmental and technical benchmarks issued by the Planning Department supporting it. One of the key objections is that the New South Wales Planning and Environment must, because of the ban on Nuclear, completely ignore the possibility that Nuclear Energy could be used to support or replace the current Wind Farm solution.

The proposed wind farm consists of up to 119 wind turbine generators (WTGs) with a maximum tip height of 230m and ancillary infrastructure, including substations, a battery energy storage system (BESS), new and upgraded roads, overhead cabling and underground cabling. Temporary construction facilities, including batching and crushing facilities will also operate during the construction period.

This Wind Farm and others planned in the vicinity will cause considerable environmental damage, cause significant visual impact, may impact property values, will cause health issues associated with audible noise and inaudible low frequency noise, will cause considerable traffic disruption during construction and most importantly has already caused community discord. There is also clearly an issue with the health risks associated with the shedding of cancerous chemicals as the blades deteriorate and associated with disposal of those blades.

The only Walcha people benefiting from the farm are those landowners willing to allow construction of the turbines on their land. The proposed project is directly adjacent the UNESCO protected Gondwana Rainforest and Oxley Wild Rivers National Park and the risk to wildlife including

endangered species is very high and hard to predict. The turbines are expected to kill hundreds of thousands of Wedge Tailed Eagles and other birds during their lifetime.

When our group suggests an alternative of 'Nuclear', we are told that even if Nuclear was allowed, it is much more expensive than renewables. A CSIRO report prepared for the Planning Committee that states that Nuclear Generators will cost over AU\$16,000,000 per MW which is as much as eight times the cost of a wind farm or solar farm and therefore is completely off the table. We are aware of many alternative reports that suggest Small Modular Reactors (SMR) are being built for as little as AU\$3,000,000.

Nuclear power is safe. Nuclear energy has resulted in far fewer deaths than that from dam failures, oil rig explosions and even, on some measures, the number of people that fall when installing solar panels or working on the installation of wind turbines. Nuclear does less damage to the natural environment than other energy options. Wind energy takes up 250 times more land than nuclear power and solar takes up 150 times more land.

The proponents of the wind farm prefer to say that these SMR generators are unproven and will take decades to build and costs will not be able to be controlled within budgets. We maintain that there are real risks including economic risks, associated with the building of such large scale wind farms and those risks are greater than the risks with Nuclear. The EIS does not provide any information on the economic model or the strategies for dealing with cost or time overruns. The particular risk that the Voice for Walcha sees as difficult to solve is the risk associated with the unreliable wind. We believe that in order for a wind farm to become reliable, it will need as much as seven days of storage to safeguard against periods of low wind. If this storage is provided by batteries the actual cost of the wind farm facility will soar to over AU\$8 million per MW. The only alternative will be Coal or gas with nuclear currently off the table. Once Australia sees that Nuclear is the way forward the need for these huge renewable projects will cease to exist. The current analysis is indicating that if around 75% of power is produced by zero emission Nuclear the 25% balance can be produced by renewables without any need for significant battery storage. Our group believes that if the Nuclear option is put back on the table, the Walcha Winterbourne Wind Farm could cease to be economically viable.

The relative costs of nuclear compare well to renewable energy. Between 1965 and 2018 the world spent \$2 trillion on nuclear compared to \$2.3 trillion for solar and wind, yet nuclear today produces around double the electricity than that of solar and wind. There is also the potential for costs to reduce soon. Our environmental laws should focus on protecting Australia's natural environment. Decisions about the relative profitability of different investments should be left to the businesses making those decisions.

Multiple companies in the US, the UK, Canada and China are at various stages of installing and trialling Small Modular Reactors. While Small Modular Reactors are still in a development phase, they remain somewhat high cost. VfW believes that if they become a commercial prospect, their modular nature may deliver substantial cost savings through mass production over the next few years.

The global Big Oil companies are not afraid of renewables because they expect them to fail leaving room for their carbon based polluting products. For this reason they indirectly support projects like Winterbourne Wind. They know that if Australia goes Nuclear that their ability to sell Hydrocarbons will diminish. Our group believe that readily available low cost electricity will be used to deliver

equally low cost Hydrogen and that this in turn is likely to fuel transport and heavy industry maybe one day aviation.

We consider that the current ban on Nuclear will inhibit the move towards truly zero carbon for Australia. It will also indirectly cause the cost of energy for Australian consumers both commercial and domestic to remain much higher than other parts of the world. There is also a high probability that Fusion energy will become a reality within fifty years. Fusion will provide almost unlimited clean energy with almost no risks and fifty years of experience with Fission based energy will form a foundation for the rapid implementation of Fission Reactors.

Nuclear energy is used to produce electricity in 31 countries from some 450 nuclear reactors, providing around 10 per cent of global electricity. Many nations are building new nuclear power plants because they provide reliable, emission free power. It seems very wrong to deny Australians the same benefit because of a decision made many years ago and well before all of the technical and commercial issues were resolved.

There are 54 nuclear power stations under construction. Over the next 30 years, the International Atomic Energy Agency predicts that global nuclear power capacity could increase by 80 per cent, and possibly triple in the Asia-Pacific region.

For these reasons Voice for Walcha believes that this bill should pass allowing a proper investigation to be made and sensible outcomes if it is found that Nuclear power generation is a better option than the current strategy.

Voice for Walcha